INDUSTRY
COMMISSION

AVAILABILITY OF CAPITAL

REPORT NO. 18

9 DECEMBER 1991

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INDUSTRY COMMISSION

9 December 1991

Honourable Ralph Willis MP
Treasurer
Parliament House
CANBERRA ACT 2600

Dear Treasurer

In accordance with Section 7 of the *Industry Commission Act 1989,* we have pleasure in submitting to you the Commission's final report on the Availability of Capital for Australian business.

Yours sincerely

Gary Banks
Presiding Commissioner

Ed Visbord
Associate Commissioner

COMMISSIONER

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ABBREVIATIONS

ABA	Australian Bankers Association
ABS	Australian Bureau of Statistics
ACMA	Australian Council of Manufacturing Associates
ACTV	Australian Council of Trade Unions
AGPS	Australian Government Publishing Service
AIDC	Australian Industry Development Corporation
AMBA	Australian Merchant Bankers' Association
AMC	Australian Manufacturing Council
APT	Arbitrage Pricing Theory
ASBA	Australian Small Business Association
ASC	Australian Securities Commission
ASFA	Association of Superannuation Funds of Australia
ASX	Australian Stock Exchange
ATO	Australian Taxation Office
AUSQS	Australian Unlisted Securities Quotation System
BAD	Bank Account Debits
BCA	Business Council of Australia
BIE	Bureau of Industry Economics
BIS	Bank for International Settlement
BLEC	BLE Capital Ltd
CAC	Corporate Affairs Commission
CAMTROM	Council of Australian Machine Tool and Robotic Manufacturers
CAPM	Capital Asset Pricing Model
CAR	Capital Adequacy Ratio
CBA	Commonwealth Bank of Australia
CDB	Commonwealth Development Bank
COSBOA	Council of Small Business Organisations Australia
CSO	Community Service Obligation
DITAC	Department of Industry Technology and Commerce
DSD	Department of State Development (Western Australian Government)
EC	European Community
EIT	Enterprise Investments Trust
EFIC	Export Finance Insurance Corporation
EPAC	Economic Planning and Advisory Council
ERISA	Employed Retirement Income Security Act
ETR	Effective Tax Rate
FID	Financial Institutions Duty
FIRB	Foreign Investment Review Board
FRDR	Fixed Reserve Deposit Ratio
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GFI	Government Financial Institution
GIRD	Grants for Industrial Research and Development
GNP	Gross National Product
HIA	Housing Industry Association
IAPM	International Asset Pricing Model
IRC	Industrial Relations Commission
ISC	Insurance and Superannuation Commission

LGS	Liquid Government Securities
LIFA	Life Insurance Federation of Australia
MICs	Management Investment Companies
MTIA	Metal Trade Industry Association
NAB	National Australia Bank
NASDAQ	National Association of Securities Dealers Automated Quotation system
NBFI	Non-Bank Financial Institution
NCD	Non-Callable Deposits
NCSC	National Companies and Securities Commission
NFF	National Farmers' Federation
NIES	National Industry Extension Service
OECD	Organisation for Economic Co-operation and Development
OTC	Over-the-counter
PAR	Prime Asset Ratio
PPP	Purchasing Power Parity
QIDC	Queensland Industry Development Corporation
QSBC	Queensland Small Business Council
R&D	Research and Development
RAFCWA	Rural Adjustment and Finance Corporation of Western Australia
RBA	Reserve Bank of Australia
RFC	Rural Finance Corporation of Victoria
RIBWA	Rural and Industries Bank of Western Australia
ROBIN	Register of Business Opportunities in NSW
sa	seasonally adjusted
SBNSW	State Bank of NSW
SBSA	State Bank of South Australia
SBV	State Bank of Victoria
SEATS	Stock Exchange Automated Trading System
SRD	Statutory Reserve Deposit
TDA	Tasmanian Development Authority
VDMID	Victorian Department of Manufacturing and Industry Development
VEDC	Victorian Economic Development Corporation

TERMS OF REFERENCE

I, PAUL JOHN KEATING, in pursuance of my powers under Section 7 of the Industry Commission Act 1989, hereby:

1. refer the availability of capital for business for inquiry and report within twelve months of the date of receipt of this reference;

2. specify that the Commission identify impediments faced by business enterprise in obtaining equity and loan capital that lead to inefficient resource use, and advise on courses of action to reduce or remove such impediments;

3. without limiting the scope of the inquiry, specify that the Commission give regard to:

   (a) the impediments to the raising of equity capital for medium sized Australian companies

      (i) the changed character of the stockbroking industry including the decline in the practice of underwriting particularly for medium business and its implications;

      (ii) debt financing of Australian businesses both medium and small;

      (iii) the lending practices of the banking and finance sector;

   (b) recommendations of the inquiry by the House of Representatives Standing Committee on Industry, Science and Technology into Small Business (the Beddall Report) on:

      (i) small business access to start-up and working capital;

      (ii) the effects of deregulation on the availability of venture capital to small businesses;

   (c) the role of government financial institutions, except the Reserve Bank; and

4. specify that the Commission is to avoid duplication of any recent substantive studies undertaken elsewhere.

P.J. KEATING
6 December 1990

OVERVIEW

This report is about the availability of finance to Australian business. It responds to a reference from the Treasurer asking the Commission to:

> identify impediments faced by business enterprise in obtaining equity and loan capital that lead to inefficient resource use and advise on courses of action to remove such impediments.

Within this broad mandate, the Commission was asked to give regard to the position of small and medium-sized enterprises, including the availability of 'venture capital'. The inquiry appears to have been largely motivated by concern that such businesses are disadvantaged in their access to finance, which was a conclusion of the Beddall Inquiry into small business.

Participants presented the Commission with polar views about the availability of capital. While some claimed that good business propositions were being deprived of funds, others argued that there was a shortage of sound projects in which to invest. In attempting to come to terms with these competing claims, the Commission has been conscious that the backdrop to its inquiry was a decade which saw:

- major deregulation of financial markets;
- historically high nominal and real interest rates;
- an asset boom culminating in a market crash (October 1987) and subsequent fall-out in property values;
- persistent high rates of inflation (until very recently); and
- strong economic growth followed by recession.

Financial institutions, particularly banks, have experienced transitional problems in adjusting to financial deregulation, but the benefits of deregulation are already apparent and should increase with time.

Against this background, it is not surprising that businesses may have found it more difficult and costly to obtain finance in recent years -- especially compared with the boom period of the mid-1980s.

The Commission's approach in assessing claims about lack of capital for Australian business has been to look for evidence that some areas of potentially profitable investment are failing to attract capital and for possible reasons why markets might consistently fail to allocate capital to the most productive uses. Impediments to efficiency within the capital market, as in other markets, can be of two kinds:

- inherent `imperfections' in the way the market functions; and
- rules and regulations applied to financial markets by government.

The Commission has considered these issues first in relation to the availability of capital in aggregate, and then its allocation among businesses.

Availability of capital in aggregate

Investment depends on the availability of saving to finance it. While the main source of finance is domestic saving, Australia's relatively high investment has traditionally also required access to other countries' saving through capital inflow. A substantial shortfall in domestic saving through the 1980s meant an increasing reliance on foreign capital and rapid build up in foreign debt and the servicing obligations that go with it. This has been a major factor in the tight monetary policy and high real interest rates of recent years.

Concern at the possible consequences of Australia's debt burden would be ameliorated by an increase in the level of domestic saving. In the short-term, while private saving is low, this has implications for fiscal policy. More fundamentally, the main focus of policy should be the removal of impediments both to saving and capital inflow (especially equity capital) and, of course, to their most productive employment.

While real interest rates in Australia over the 1980s have been very high by historical standards, and are still high, available evidence suggests that the cost of capital to industry, after allowing for the effects of taxation, is not significantly greater than in many other OECD countries.

Domestic saving

Household saving is discouraged by publicly funded pensions, social security, health and education services. For example, the provision of publicly funded pensions may reduce the incentive for individuals to build a retirement 'nest egg'. The Government's superannuation policy is intended in part to offset the effect of this particular disincentive. While the extent to which this will raise aggregate saving is unclear, it is having an impact on the disposition of saving and this will increase in the future.

Australia's relatively high inflation in the 1980s has also acted as a major disincentive to save, especially in conjunction with taxation of nominal income from interest. Lower inflation in recent years should have helped reduce this problem. The benefit will persist, however, only if economic policy delivers sustained low inflation.

Policy proposals to encourage saving by providing selective taxation concessions on certain bank deposits (not superannuation) would be costly in relation to the net additional savings (if any) they would generate and the Commission does not favour them.

Investment in home ownership, stimulated by incentives in the taxation and social security systems, reduces the availability of domestic capital for business and distorts resource allocation towards the housing industry. There would be economic benefits to the Australian economy in removing the tax disparity in favour of housing. However, the Commission has concluded that taxing capital gains alone -- as canvassed in the draft report -- would not have a significant net effect, taking into account both economic and administrative considerations.

Investments by Government in assets earning low rates of return also reduce the funds available for investment by industry.

The Commission found no impediments to the general availability of foreign capital requiring government action.

Availability of bank finance

Banks are the most important domestic source of debt finance for Australian business. Participants raised a number of concerns about the lending practices of banks, including an alleged excessive risk aversion, reliance on collateral and unwillingness to lend long-term.

It is relevant, in this regard, that banks play a central role in maintaining confidence in the entire financial system and have duties to depositors that are reinforced by regulation. They are *meant* to be conservative institutions ('as safe as a bank') and relatively low-risk lenders.

Banks also have large bureaucracies and complex administrative structures, with a number of staffing layers involved in taking lending decisions. This made it difficult for them to adapt readily to the changes to their environment resulting from financial deregulation. As they themselves have acknowledged, it was manifested in many poor lending decisions in the wake of deregulation and subsequently in some over-reaction. Banks are now providing a much wider range of financial products and are able to lend to more small business clients than was possible in the era of financial regulation.

While the banks contend that, in evaluating lending proposals, they place most importance on the capacity of borrowers to service their loans (that is, on cash flows), it is clear that they make extensive use of collateral security as a condition for much of their lending. This is a part of mainstream banking and can be an efficient way of reducing the information requirements and associated costs of lending decisions.

Small business lending

Banks have been accused of charging excessive interest rates to small businesses. The Commission found that small businesses typically pay higher interest rates than many large corporations, but that the administrative costs and risks of lending to many small businesses are disproportionately greater.

A second complaint was about the plethora of charges, in addition to interest, which make assessment of borrowing costs and comparisons between banks difficult for small business -- and also made it expensive for borrowers to transfer their business from one bank to another. The Commission considers that the banks should be more transparent in this area and considers that the disclosure standards recently devised by the Australian Bankers Association represent a significant move in the right direction.

Competition

Ultimately the capacity of the banks to set excessive prices and/or too onerous conditions for their loans must depend on the competitive pressures they face. Despite the importance of the four major banks, available evidence suggests that the sector is reasonably competitive and has become more so since deregulation. The remaining regulatory impediments to competition apply largely to the entry and operation of foreign banks and the Commission can see benefits in removing them.

Availability of equity finance

Many participants contended that there was a shortage of equity finance, including venture capital, for promising businesses.

Prospectuses

There were a number of complaints about the cost and complexity of the new prospectus requirements under the Corporations Law. In seeking to improve the previous procedures and the quality of information in prospectuses, the new rules have raised the costs of seeking equity finance. The Commission has heard that this in part reflects over-cautious interpretations of the law and that costs have been decreasing (and the incidence of smaller raisings increasing) with experience. Nevertheless costs could be reduced further and there would be scope to remove prospectus requirements for rights issues under a continuous disclosure regime.

Underwriting

The Commission's terms of reference refer to a decline in the practice of underwriting, particularly for medium-sized companies. Some companies have had difficulty recently in getting share issues underwritten, but this may be a temporary phenomenon, reflecting the down-turn in the market for new issues. The Commission does not consider that there is institutional or market failure in this area.

Taxation

The capital gains tax and treatment of tax losses were seen by some participants as impeding equity investments in certain businesses (including long-term and higher-risk ventures). While the capital gains tax has clearly reduced the attractiveness of those investments which yield returns predominantly in the form of capital gains, it has helped remedy the previous situation in which such activities had been favoured. On the other hand, the Commission sees merit in arguments that tax losses are given more severe treatment under the current income tax laws than under a neutral taxation system, but notes possible administrative and tax avoidance difficulties involved in effecting changes.

Banks and equity

A number of parties, including the Martin Committee, have recently proposed that current Reserve Bank guidelines be relaxed to enable banks to take equity positions in non-financial enterprises. While the nature of banking in Australia makes it unlikely that banks would seek to become significant providers of equity, the Commission considers that some limited flexibility could enable them to cater better for certain clients and that this would not affect the stability of the banking system.

Equity for smaller enterprises

Representatives of small and medium-sized businesses claimed that there was a lack of equity finance, especially for those which do not have access to the ASX. Representatives of financial intermediaries, particularly those specialising in investing in small and medium-sized businesses, were equally adamant that plenty of funds were available but good investment opportunities have been lacking.

The Commission notes that cyclical developments and the aftermath of the crashes in the share market and in property values have played an important role, by encouraging a flight by investors to quality and liquidity. This has affected smaller listed companies as well as unlisted businesses.
It is also relevant that the owners of many small businesses do not want to dilute their control, or may be unattractive to outside equity because they lack growth potential. Even among those that have potential, there is generally a higher risk of failure than for larger, established enterprises. It is also usually much harder and more costly for investors to obtain the information they need to monitor such businesses and to assess their risk.

A large and growing proportion of investible funds are under the control of large institutions, including life offices, superannuation funds and unit trusts. Considerable concern was expressed that the investment policies of these institutions are biased against smaller and riskier ventures and that policy-induced growth in superannuation funds will diminish capital availability for such businesses.

Superannuation funds

The large institutions, especially the superannuation funds, are inherently conservative. Their scale of operations nevertheless gives them scope over time to diversify their portfolios, by investing in higher risk ventures where the rewards are appropriate. But high transaction costs generally reduce their willingness to invest directly in individual small businesses; they prefer to operate through specialist intermediaries.

The adverse economic conditions of recent years has accentuated the conservative investment behaviour of superannuation funds. This has been compounded by some features of the institutional and regulatory framework. Superannuation fund trustees are required by law to be 'prudent'. Narrow legal interpretations of what is 'prudent' may encourage trustees to be more risk averse than is in the best interests of fund members and smaller enterprises alike. The inexperience of industry fund members and trustees, and the lack of reserves in new occupational superannuation funds, would appear to be contributing to this situation. A further problem is the lack of choice available to contributors under present industry fund arrangements, which presents trustees with the problem of accommodating a potentially wide range of risk preferences.

Excessive conservatism will be reduced as industry funds grow and their trustees gain experience, and as the new disclosure rules help promote contributor understanding. It would also be directly alleviated by legislation explicitly to broaden 'prudent man' requirements to a portfolio basis and by allowing members of schemes more choice as to how their funds are allocated among categories of investments.

Competition and choice would be further facilitated by regulatory changes to allow banks to offer superannuation savings accounts. This would also go some way towards stemming the diversion of saving from banks and any adverse impact on the cost of finance to bank clients. There is already considerable scope, however, for financial flows among intermediaries to mitigate the effect on smaller and riskier ventures of policy-induced diversion of saving into superannuation.

Venture capitalists

There has been rapid growth in specialist providers of equity to smaller ventures through the 1980s -- initially responding to the MIC scheme. This industry continues to grow and has the potential to play an increasingly important role in the development of small and medium-sized businesses in Australia. The performance of venture capitalists since the late 1980s has generally been poor, however, and this has affected their ability to attract capital. A general view among representatives of these intermediaries was that there are few potential 'winners' among small companies at present and that there is a shortage of skills both to select and to manage them.

The Commission does not consider that direct government intervention to expand the institutional funds available to smaller companies would improve the efficiency of the capital market or the economy generally.

The informal market

In the absence of a formal market outside the stock exchange, seekers and providers of capital are obliged to find and deal directly with each other. This is a time-consuming and costly process. Informal information sources and networks have developed. Governments also provide a range of facilities. The Venture Capital Directory has been useful in the past and should be updated, but the Commission sees little benefit in a government data bank of investment opportunities.

The lack of a secondary market for unlisted equities reduces their liquidity and attractiveness to investors. Overseas countries have developed alternative 'exchanges' and 'over the counter' mechanisms for smaller companies, but the second board experience in Australia has not been encouraging. Nevertheless, private initiatives in this area are to be welcomed.

Government-owned financial intermediaries

At various times in Australia's history, Commonwealth and State Governments have established their own financial intermediaries, usually to address perceived inadequacies in financial markets. They range from banks to specialist providers of capital.

In comparison with earlier years, especially prior to deregulation, Australia's financial markets are now extensive and sophisticated, containing many competing intermediaries providing a diverse range of services. The Commission accordingly considers that there is no longer a need for government ownership of financial institutions.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

- The Commission considers that perceived problems about the availability of capital in recent years are attributable in large part to the general economic conditions (chapter 2/3).

- Deregulation of capital markets through the 1980s has improved their competitiveness and the general availability of capital, although there have been significant adjustment problems, most obviously in banking (chapter 2/4).

- The Commission does not favour taxation concessions for certain non-superannuation deposits in bank accounts to encourage savings (section 3.1).

- The Commission considers that it would be desirable on economic grounds to bring the taxation of housing into alignment with that of other assets, but has concluded that taxing capital gains alone would not yield significant net benefits (section 3.4).

- While real interest rates in Australia have been relatively high, available evidence suggests that the cost of capital to industry, after allowing for the effects of taxation, is not significantly greater than in many other OECD countries (section 3.6).

- While there appears to have been a rise in the ratio of debt to equity held by Australian business in the 1980s, no long term trend is evident (section 5.2) and recent reforms to the tax system have largely eliminated previous biases in favour of debt finance over equity (section 5.3).

- The Commission considers that it is unlikely that capital adequacy rules are distorting the availability of bank finance to Australian business (section 6.8).

- The Commission sees some merit in banks being permitted to provide limited amounts of equity. It recommends that the Treasurer ask the Reserve Bank to consider whether the current prudential requirements could be eased to allow banks additional freedom to provide equity finance (section 6.8).

- Banks typically charge higher rates of interest on loans to small business than on loans to large corporations, but it is not evident that these differences are excessive when the higher costs of such lending are taken into account. Public understanding of this would be helped by banks providing information on the costs of lending to different categories of borrowers (section 7.3).

- A plethora of fees and charges has made assessment of borrowing costs and mobility between banks difficult for small business. The Commission supports adoption of the Australian Bankers' Association's disclosure standards to improve transparency and considers that initiatives to compute `effective' interest rates should facilitate comparisons of different banks' lending costs by small business (section 7.4).

- The Commission considers that the banking sector is reasonably competitive and that the degree of competition has risen since deregulation (sections 8.1-8.4).

- Remaining regulatory impediments to competition apply mainly to foreign banks:

    - The Commission sees no reason for retaining a limit on the number of foreign bank licences and recommends that such restrictions be lifted, subject to maintenance of suitable prudential requirements for new entrants.

    - The Commission recommends that holders of banking licences not be formally required to offer the full range of banking services.

    - The Commission recommends that branch banking be allowed for banks from countries judged by the Reserve Bank to be observing internationally accepted prudential requirements (section 8.5).

- The Commission accepts that the increased costs associated with the new prospectus requirements of the Corporations Law will be alleviated in time (and have already declined) but believes that standards such as `due diligence' should not be more onerous than is reasonable to facilitate informed decisions by investors. In the case of rights issues, implementation of a statutory continuous disclosure regime would appear to obviate the need for a prospectus (section 9.5).

- The Commission considers that while some smaller companies have had difficulty attracting the services of an underwriter, this reflects the risk preferences of investors, rather than institutional or market failure, and has been exacerbated by the economic climate (section 9.6).

- The Commission is sympathetic to arguments for providing tax treatment of losses which is more neutral across firms. It recognises, however, that there may be revenue and avoidance considerations which require careful attention in the design of such provisions by the authorities and so makes no specific recommendation about their form (section 9.7).

- The Commission is of the view that alleged `short-termism' in equity markets is attributable primarily to macroeconomic factors. Lowering and stabilising inflation, inflationary expectations and interest rates would address the main underlying causes of any short-term emphasis in investment decisions in Australia (section 9.8).

- The Commission considers that the costs of providing a simple rollover exemption for capital gains taxation would exceed the benefits in terms of increased mobility of capital, noting in particular the greater possibility of tax avoidance (section 10.6).

- The Commission considers that the highly conservative investment policies of superannuation funds in recent years has reflected a number of temporary or transitional phenomena, but that risk aversion may also be exacerbated by more permanent features of the regulatory framework and would be eased by:

- legislation to redress any adverse impact of the 'prudent man' rule on trustees' freedom to include risky individual investments in a properly diversified portfolio;

- employee representatives on boards of trustees being elected by members of schemes; and

- allowing greater choice for members of schemes as to the allocation of their funds among categories of investments (section 10.3).

- The Commission considers that banks should be allowed to provide superannuation savings accounts as part of their normal business, subject to compliance with ISC and Reserve Bank requirements. This would both enhance competition in the superannuation industry and reduce the potential for policy-induced superannuation growth to divert savings from banks and raise borrowing costs for bank clients (section 4.5).

- The Commission does not believe that Government regulations constraining portfolio choice of superannuation funds, or direct intervention to expand the institutional funds available to smaller companies, would improve the efficiency of the capital market or the economy generally (sections 10.3, 10.4).

- The Commission notes the lack of information about investment opportunities and sources of capital outside the ambit of the Australian Stock Exchange. It supports updating and upgrading DITAC's Venture Capital Directory but sees little benefit in a Government data bank of business opportunities (section 10.5).

- The Commission considers that uniform legislation relating to limited liability partnerships should be introduced in all States and Territories (section 10.6).

- The Commission supports the arrangements made by State Governments which give the Reserve Bank more formal powers of supervision over State banks, and believes the Commonwealth Government should invite the relevant State governments to make their banks subject to Commonwealth banking legislation (section 11.2).

- The Commission recommends that government guarantees over the obligations of government-owned intermediaries be removed, or a guarantee fee charged (section 11.2).

- Finally, the Commission supports continuation of moves to privatise government financial institutions and considers that the development of Australia's financial markets is now such that there is no general need for government provision of financial services.

CHAPTERS

1 INTRODUCTION

2 THE ECONOMIC ENVIRONMENT

3 AVAILABILITY OF CAPITAL IN AGGREGATE

4 CAPITAL FLOWS AND INTERMEDIATION

5 DEBT VERSUS EQUITY

6 ALLOCATION OF DEBT FINANCE

7 SMALL BUSINESS ACCESS TO DEBT FINANCE

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1 INTRODUCTION

This inquiry examines the availability of finance to fund business investments in Australia. It discusses the availability of domestic savings and foreign capital in aggregate and reviews the operations of financial markets in the allocation of debt and equity capital.

The Commission has been specifically asked to have regard to any impediments to the efficient allocation of capital to small and medium-sized enterprises (see Terms of Reference on page xiv). One aspect of this to which the Commission has been directed is the recommendations contained in the Beddall Report[1] on small business and especially venture capital. Others include the lending practices of the banking and finance sector and developments in the stockbroking industry.

In addition, the Commission has been asked to look at the role of government financial institutions other than the Reserve Bank.

In preparing this report the Commission sought the views of participants through formal submissions, public hearings and informal consultations (see Appendix A). In the initial stages of the inquiry the Commission received 61 submissions, made more than 30 visits to participants and held public hearings in Sydney, Melbourne and Canberra. This encompassed a wide range of financial institutions (the major banks, venture capital providers, life assurance companies), representatives of both small and large business, financial advisers and various Commonwealth and State government agencies. In September 1991, the Commission released a draft report for public comment. A further 39 submissions were received in response and draft report hearings were held in Sydney, Melbourne and Canberra. This information assisted the Commission greatly in preparing its final report and the Commission is grateful to all participants in the inquiry.

1.1 Some key concepts

Small and medium business

The definition of what constitutes a small or medium business will depend on the purpose for which the definition is required. As a guidepost, however, the Commission found helpful the Beddall Report's definition of a small business. This is a business which is: independently owned and managed; closely controlled by owner/managers who also contribute most, if not all, of the

[1] House of Representatives Standing Committee on Industry, Science and Technology (1990).

operating capital; and having the principal decision making functions resting with the owner/managers. These management-related criteria in the Beddall Report were supplemented by a 'size' definition of small business as one employing less than 100 people in the manufacturing sector and less than 20 in other sectors.

In broad terms, small firms as defined are not listed on the stock exchange. Many 'medium sized' firms are also unlisted, but the term can be taken to include smaller listed companies as well.

Venture capital

As noted, the terms of reference refer to the availability of 'venture capital'. Accepted OECD usage defines venture capital as primarily equity investments in unlisted businesses, not covered by collateral or other security (that is, they are justified solely on the earning potential of the project). Management support is usually given by the supplier of venture capital. Time horizons of the investment are typically longer than 5 years.

In Australia, the term 'venture capital' has connotations of high technology industrial investment. While the Commission has been specifically directed to look at venture capital, it would not wish its investigation of that topic to exclude smaller enterprises outside this field. For this reason, the term 'development capital' is used where a more general coverage is implied.

Debt and equity capital

The terms of reference speak of both debt and equity.

Debt is more secure than equity. The returns on investments of equity capital are directly dependent on the fortunes of the particular ventures concerned. With investment in equity capital comes a degree of control over the economic activities concerned. This can be an object in itself to suppliers of capital, especially in connection with small enterprises.

Debt and equity are taxed differently. For some investors, investments in equity capital are also regarded as a means of obtaining a hedge against inflation.

1.2 The role of capital markets

Looked at most broadly, the capital market can be seen as encompassing financial flows which begin with the savings of Australians (and foreigners). These are usually transmitted through financial intermediaries (including banks), the stock exchange or an informal market for equity investment. They are then distributed among enterprises and other investment opportunities. At

each stage of this process, the behaviour of the actors concerned is influenced by their own perceptions of risk and return, and also by taxes and regulations. These factors influence how much is saved in the first place as well as whether it is invested in dwellings or factories, small or large business, low or high risk ventures, manufacturing or mining.

Capital markets vary in their degree of sophistication and formality. At one extreme there is the stock exchange, the foreign exchange markets and the specialised areas of the money market in which the major financial institutions play large roles. At the other extreme, there are informal arrangements such as those among family members or acquaintances to launch a small business. All arrangements by which capital is made available to business are within the scope of this inquiry.

1.3 How are capital markets assessed in this report?

The central requirement of the terms of reference is an examination of 'impediments' to flows of capital which lead to 'inefficient resource use'.

Capital is employed inefficiently when it would be possible for it to generate a higher return to society in another application. Defined in this way, some inefficiency is to be expected in any situation in which information about investment opportunities is not perfect. But the important question for policy is whether such inefficiency could be removed at less cost. Acquiring information can be expensive. As a distinguished American economist has said, in an article on 'imperfections in the capital market':

> We cannot possibly afford perfect markets, but we regulate real markets in many ways and it would be desirable to know what these regulations are achieving (Stigler 1967).

The critical focus for this inquiry is on impediments to efficiency which can be altered or removed.

In responding to the terms of reference, and its statutory guidelines, the Commission's investigations follow three main stages:

- the first is the task of identifying apparent shortcomings in the functioning of capital markets, having particular regard to the views put to the Commission in its submissions and at hearings;
- the second is the identification and evaluation of the possible causes of these problems; and
- the third, following from the preceding stage, is an assessment of what government (or private institutions) might do to improve matters.

The fact that a particular business cannot obtain capital in particular circumstances does not necessarily indicate a lack of availability in a sense relevant to this inquiry. The perceived problems of some seekers of capital in obtaining finance may simply be evidence of the market working well

to screen out poor projects. The concern is with situations in which capital is not available at the 'right' price or on the 'right' conditions. The term 'availability' is used in this report to cover both the cost and the quantity of financial capital for Australian business.

Impediments to the efficient supply and allocation of capital, as in other markets, can be of two kinds:

- inherent `imperfections' in the way the market functions; and
- rules and regulations imposed on financial markets by government.

These two potential sources of inefficiency can be inter-related. Governments often devise regulations to address perceived deficiencies in market outcomes and these may have unintended consequences of their own.

1.4 Central issues

On many occasions during the inquiry, the Commission was presented with polar views about the availability and cost of capital. Some representatives of business and government argued that good investment opportunities were going begging for lack of funds. At the same time, institutions with the role of supplying funds suggested that adequate funds were available and that there was a shortage of business propositions which satisfied reasonable investment criteria.

The availability of capital for particular ventures is dependent on:

- the overall supply of domestic savings;
- the supply of funds from abroad; and
- the allocation of these savings among investment opportunities.

In some cases the way in which this issue has been raised is through concerns about the cost of capital in Australia. A number of participants referred to the Global Challenge Report prepared for the Australian Manufacturing Council (AMC 1990).

In aggregate, finance for Australian business originates both in the savings of residents (personal savings of households, corporate saving and government saving) and from foreigners (in the form of capital inflow). Government policy can have a significant influence on the amount of capital available from these sources.

Of particular importance is the extent to which the Australian economy is open to capital inflow. The greater the access to foreign capital, the less the impact of any deficiencies or distortions in the supply of domestic capital on the overall availability of capital to domestic industry - though there are risks associated with excessive dependence on foreign capital.

The allocation of capital within the economy is influenced by taxation and regulation. Two issues raised by participants are apparent biases towards owner-occupied housing and the favouring of superannuation. The former is thought to influence the total amount of funds available for other investments, and the latter their direction.

Also important is the role of the banking system. Small business participants in particular have argued that the banks are able to exercise an excessive degree of market power in supplying loans. They saw their interest rates and lending conditions as being adversely affected.

The focus of the inquiry on small and medium enterprises raises the question of whether there are underlying failures or deficiencies in the mechanisms for allocating capital to them. The claimed existence of a gap in financing at the smaller end of the market has been the rationale for some past government policies. Similar questions arise in considering whether there are factors which cause investors to be too 'short-termist' or risk-averse in allocating their capital among competing opportunities.

1.5 The inquiry in context

Many of the problems raised in this inquiry are perennial, and this is not the first inquiry to address them. Indeed several related inquiries were conducted concurrently with the present one. The Commission has been conscious of this background and of its terms of reference which require it to avoid duplication.

Other relevant inquiries include:

- House of Representatives Standing Committee on Finance and Public Administration (Martin Committee) - Inquiry into the Australian Banking Industry, reported in November 1991.

- Australian Law Reform Commission and the Companies and Securities Advisory Committee - Review of Prescribed Interests and Other Collective Investment Schemes, due to report by November 1992.

- Special Premiers' Conference Working Group on Non-Bank Financial Institutions - agreed in November 1991 to national legislation for supervising non-bank financial institutions.

- Senate Select Committee on Superannuation - examining a range of superannuation issues including the investment of superannuation funds and taxation arrangements. It is due to report by May 1992.

- Standing Committee of State Consumer Affairs Ministers - released a Draft Uniform Credit Bill in September 1991 for the development of uniform state credit legislation.

- The Task Force for Commercialisation of Research on mechanisms to improve Australia's commercialisation of research - report released November 1991 by the Minister for Science and Technology.

- The Joint Committee on Foreign Affairs, Defence and Trade released their report, *Australia's Current Account Deficit and Overseas Debt,* in October 1991. The report's recommendations included methods to increase domestic savings.

In addition, separate Royal Commissions are currently underway into the operations of Tricontinental Holdings Limited/State Bank of Victoria and the State Bank of South Australia.

In light of the focus of many of these inquiries, the need for prudential regulation, and the question of its consistency across financial institutions, is not addressed in this report. However, the effects of particular elements of prudential regulation on the allocation of capital do arise in some contexts.

The Commission's draft report preceded release of the other reports noted above, but the Commission was fortunate in having access to a number of these reports in completing its own final report.

The past inquiry with greatest relevance to this one, however, is that conducted a decade ago by Campbell (1981). The adoption of many of the recommendations of the Campbell Inquiry had far reaching effects on the operation of capital markets, largely by reducing government regulation. While many issues considered then have been raised again in this inquiry, the focus in this report is on developments in the ten years since the Campbell Committee reported.

In doing this it is important to distinguish between the process of adjustment to deregulation and the likely situation when things have settled down. The implementation of major reforms, such as financial deregulation, stretch the resources of those involved and frequently have short-term costs. An element of this review is an assessment of the extent to which the financial system is still overcoming an inertia acquired during years of regulation.

It should also be noted that the availability and cost of capital in Australia have been affected profoundly by the recent macroeconomic environment. This has included a protracted period of high real interest rates, a lengthy period of tight monetary policy (reflected in inverted interest rate yield curves) and an unusually long period of economic growth followed by a deep recession, as well as major changes to the Australian financial system associated with deregulation. As always, the swings in the economic cycle have been magnified by the impacts of `boom and bust' psychology on the attitudes of investors and businesses. These factors make it difficult to identify unambiguously structural impediments in the financial system which may have affected the availability of capital.

Section 1.6 The report structure

Chapter 2 provides a brief description of economic conditions and regulatory changes in the 1980s which would be expected to have influenced the performance of the capital market in responding to the financial demands of the business sector.

The next two chapters consider broad features of the Australian capital market. Chapter 3 examines the availability of capital in aggregate and considers such issues as the adequacy of domestic savings and access to foreign capital, while chapter 4 considers recent trends in the performance of Australia's major financial institutions and in particular the role that regulation has played in these developments.

After examining the underlying determinants of the choice between debt and equity finance (chapter 5), the next five chapters examine the access of firms, especially smaller businesses, to both debt finance and equity capital. These chapters identify the major providers of both debt and equity to business and assesses recent concerns about their performance in servicing the financial needs of Australian business.

Finally, chapter 11 considers some aspects of the role and performance of government-owned financial institutions.

2 THE ECONOMIC ENVIRONMENT

This inquiry was commissioned at a time when the economy, and particularly financial markets, had been adapting to the dismantling of a long-standing regulatory environment and to associated financial innovation. These changes were superimposed on other major developments in the macroeconomy which greatly complicated their digestion by the financial sector and other sectors of the economy.

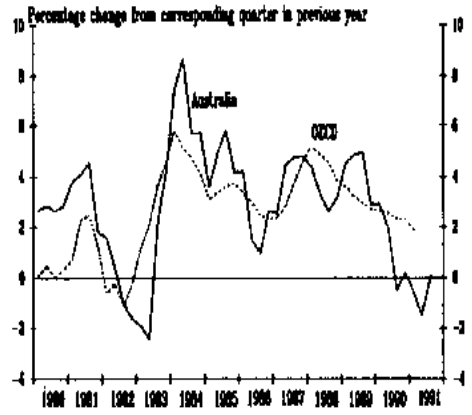
The 1980s saw unprecedented changes to the financial system, with significant deregulation accompanied by rapid financial innovation. It is clear now that the financial sector, and other sectors as well, had difficulty in digesting and adjusting to these changes. This is particularly evident for the major players in the banking system, which was staffed with large bureaucracies which had been trained to operate in a highly regulated environment. It is, of course, to be expected that the implementation of structural change should take time and involve once and-for-all costs as the system and the people who operate it adapt to the new rules (or absence of rules). However, the costs should be temporary ones incurred in the transitional phase and the benefits permanent ones.

2.1 Macroeconomic developments

The transitional problems experienced in adapting to financial deregulation were exacerbated by the economic circumstances of the 1980s, and are at times confused with the effects of other economic developments and policies. Features of this backdrop to the present inquiry were:

- two major recessions, between which Australia (and the rest of the developed world) enjoyed one of the longest periods of economic expansion of recent times (figure 2.1);
- inflation between 5 per cent and 12.5 per cent, though typically around 7-8 per cent (figure 2.2);
- an asset `boom' followed by busts in share prices in 1987 and in real property values in 1990, which posed a particular problem for institutions which lent against the security of real assets (figure 2.3);

Figure 2.1: **Growth in GDP**



Data sources: Australia - ABS, Cat. No. 5204.0.
OECD - Main Economic Indicators.

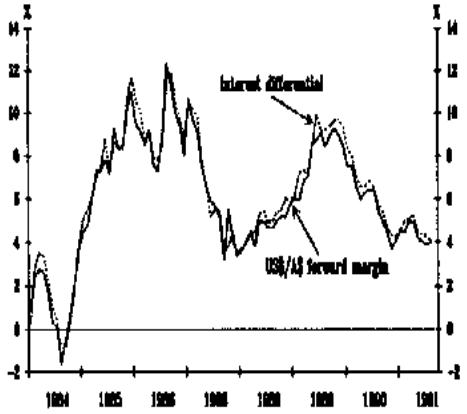
Figure 2.2: **Inflation**

Data sources: Australia - CPI, ABS, Cat. No. 5204.0.
OECD - CPI, Main Economic Indicators.

Figure 2.3: **Real asset prices**

Data sources: share prices - All Ordinaries Index.
dwelling prices - CBA, HIA and ABS.
office prices - James Lang Wootton.

Figure 2.4: **$US/$A forward margin and uncovered interest differential**



Data source: ABS, Cat. No. 5310.0.

- high dependence on foreign capital to fund investment, and consequent large current account deficits (which reached 6 per cent of GDP or close to it in a number of years in the 1980s before falling to 4.1 per cent in 1990-91);

- high real and nominal interest rates for much of the decade, reflecting the extensive use of monetary policy and the effects of consumer price inflation, however interest rates have fallen from their 1989 peak;

- associated with the high interest rates (and at times high commodity prices), the exchange rate was steady at between 75 and 80 cents US for the last half of the decade (despite the persistent balance of payments deficits), and the cost of forward cover for borrowing in foreign currencies remained high.

The first two years of the 1990s has seen further major changes to the Australian economy. The deep recession has been characterised by high unemployment, a high level of business failures, and low demand for credit. Inflation has fallen substantially below the OECD average for the first time for almost two decades. In spite of the recession, however, domestic savings continue to be insufficient to fund a relatively low level of investment so that Australia continues to have a substantial deficit on the current account of the balance of payments.

It is important to recognise the impact of these and other macroeconomic circumstances, as well as the effects of deregulation, on financial markets in making an assessment of how well these markets are functioning and whether impediments to their effective operation exist and might be eliminated.

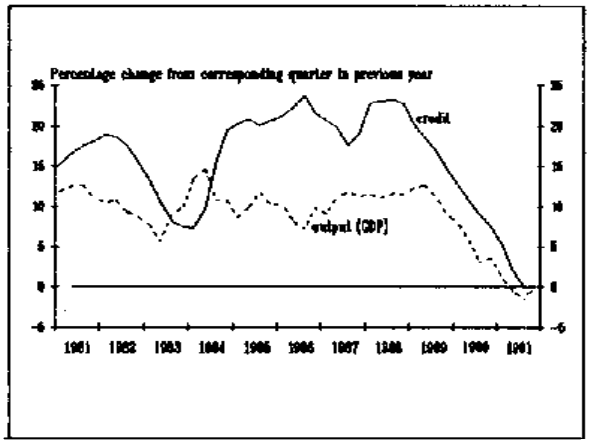
Cost of forward cover on borrowing in foreign currencies

In considering the cost of borrowing in foreign currencies, it is important to have regard to the cost of purchasing forward cover - which is approximately equivalent to the difference between interest rates in Australia and those in the relevant foreign country (the uncovered interest differential) and to the forward margin between the two currencies. The cost of obtaining forward cover for borrowings denominated in US dollars was usually above 4 per cent in the 1980s and at times has been as high as 10 per cent. Declining interest rates in Australia have brought back the cost of forward cover to around 4 per cent in 1991 (figure 2.4).

Interest rates and availability of credit

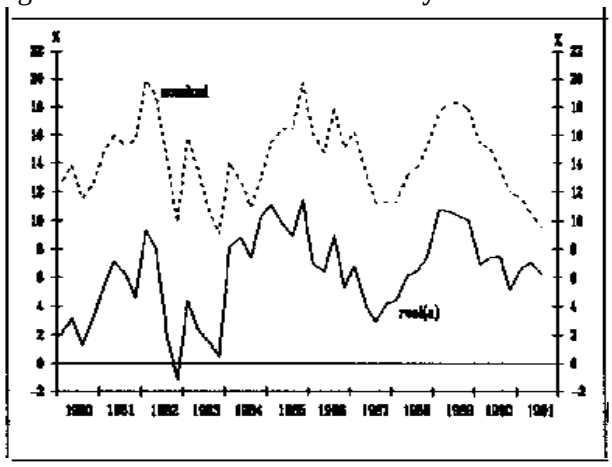
For much of the period 1985 to 1989, business credit grew at a very rapid rate near or above 20 per cent per annum. This was far in excess of the rate of growth of output in this period (figure 2.5). There has since been a sharp decline in the rate of growth of business credit, but it is still continuing to grow more rapidly than output.

Figure 2.5: **Business credit and nominal output**



Data sources: Credit - Reserve Bank Bulletin of Australia (various issues).
Output (GDP) - ABS, Cat. No. 5402.0.

Figure 2.6: **Nominal and real 90 day bill rates**

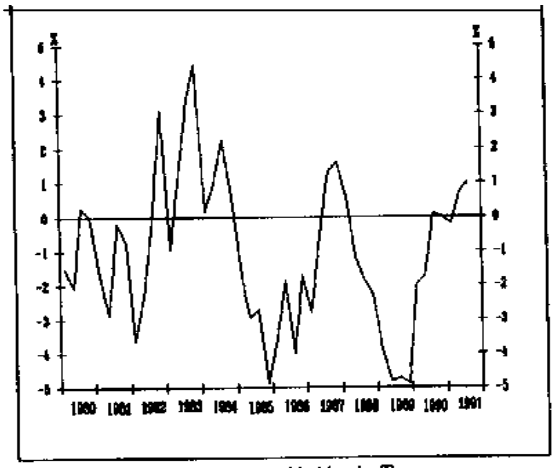


Note: (a) The CPI has been used to deflate the nominal interest rate to derive the 'real' interest rates as a proxy for inflationary expectations; as a result the figures for real interest rates in the chart are probably higher than recent actual real interest rates.
Data source: Quarterly data provided by the Treasury.

Real interest rates (proxied by nominal interest rates less the inflation rate) were generally higher over the 1980s than in earlier decades. This was due to a variety of factors, including the lower levels of saving in a period of sustained economic growth. Other OECD countries have experienced similar broad trends of higher real interest rates over the 1980s, coinciding with strong and sustained growth.

The 1980s saw large swings in short-term interest rates (figure 2.6). The exchange rate collapse and terms of trade fall in 1985 and 1986, and the associated tightening of monetary policy, saw short term rates rise substantially. In 1987, interest rates were progressively eased as the process of fiscal consolidation took hold and as the exchange rate remained strong. This easing (which essentially occurred prior to the stock market crash in October 1987), and the somewhat unexpected recovery of the terms of trade, contributed to the subsequent rapid growth in demand that occurred in 1988 and 1989. The October 1987 sharemarket crash effectively postponed consideration of a rise in short term interest rates until April 1988; by when it had become clearly established that the crash had little ongoing impact on the level of activity. Monetary policy was tightened from this point, so that short-term interest rates rose from below 11 per cent early in 1988 until they peaked at over 18 per cent in late 1989, but have been progressively reduced over 1990 and 1991.

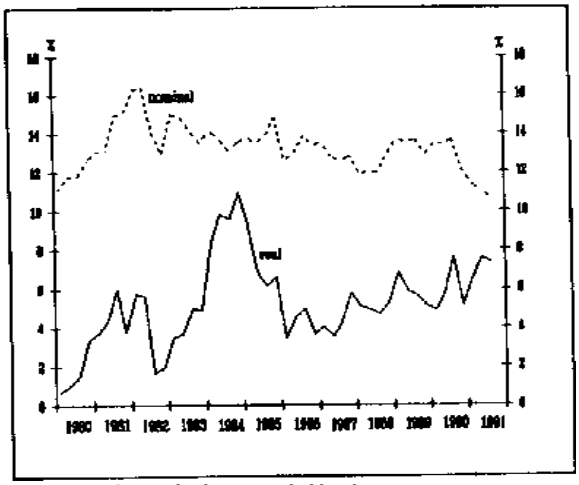
Figure 2.7: **Yield curve (10 year bonds less 90 day bank bills)**



Data source: Quarterly data provided by the Treasury.

Short term interest rates exceeded long-term rates (the yield curve was negative) for much of the period from early 1985 until late 1990 - providing one indication of the tightness of monetary policy in this period (figure 2.7). The easing of monetary policy following the October 1987 stock exchange crash is identified by the movement to a positive yield curve at this time. Recently the yield curve has again become positive.

Figure 2.8: **Nominal and real 10 year bond rates**



Data source: Quarterly data provided by the Treasury.

The stance of monetary policy has little direct influence on long bond yields. For most of the 1980s long bond yields generally traded in the range 12-14 per cent (figure 2.8). More recently, long bond yields peaked at around 13.5 per cent in late 1990; since then they have fallen roughly in line with the reduction in inflationary expectations.

2.2 Deregulation of the financial system

Until the early 1980s, Australia's financial system was heavily regulated, with emphasis on quantity controls over bank lending, and control of the exchange rate and exchange controls regulating movements between the Australian and foreign currencies. Some interest rates were controlled with the intention of limiting the cost of finance to housing, small business and the rural sector.

Pressures for change

The ability of government to enforce this system declined during the 1970s. The regulatory changes, predominantly implemented in the first half of the 1980s, were in response to forces that were undermining the regulated system. Some of the major pressures were:

- International financial markets were becoming more open and international capital flows less restricted. Combined with more sophisticated technology, this meant that international capital markets were becoming more integrated. With a fixed and subsequently `managed' Australian dollar exchange rate, monetary policy became less effective and vulnerability to speculation against the Reserve Bank, which stood behind the managed rate, increased. Variability in external economic conditions was borne by short term interest rates and foreign reserves.

- Control by the authorities over the financial system became less effective as the controlled banking sector shrank relative to the uncontrolled non-bank financial sector. (See chapter 4) Although many of the non-bank financial institutions were owned by banks, the banks were constrained from directly participating in these markets. The authorities had only indirect and weak control over the non-bank financial sector through the controls on banks.

- Rather than helping to achieve social and economic objectives, many direct controls on the financial system were found to be counter-productive. For example, interest rate controls on housing and small business finance limited the availability of bank finance for these purposes, forcing borrowers to use funds from higher cost alternative sources.

The Australian financial system was reviewed comprehensively by the Committee of Inquiry into the Australian Financial System (Campbell Committee), which reported in 1981, and the follow-up Martin Review Committee in 1983. The Campbell Inquiry had a wide ranging brief to look at the overall effectiveness and efficiency of the financial system, and the appropriateness of the regulatory framework. The Martin Review Committee reviewed the findings of the Campbell Inquiry and made recommendations in the light of the new Government's social and economic objectives. These inquiries were significant catalysts for change. Both recommended a substantial program of deregulation.

A wide range of restrictions on banks were removed in the early 1980s. (A chronology of changes appears in Appendix E). The changes included the removal of controls on interest rates for deposits, the relaxation of some controls on the maturity of deposits that could be accepted by banks, the cessation of guidelines on the size of bank lending, and the relaxation of asset controls on savings banks.

The single most significant deregulatory measure was the floating of the Australian dollar and the associated removal of exchange controls in December 1983. Prior to 1983, the ability of residents to buy and sell foreign exchange was restricted and the exchange rate set by the authorities, within operating guidelines established by the Government and market limits. However, this system was increasingly unable to control capital flows. These flows aggravated the volatility of domestic financial markets and weakened the effectiveness of monetary policy. The floating of the currency enabled the authorities to achieve more control of domestic liquidity resulting in short-term interest rates being less volatile. Floating the currency facilitated Australia's integration into the international financial system.

By 1985 all interest rate controls were removed, except on loans for owner-occupied housing (which were removed for new loans from 1986). These changes allowed greater competition among banks and between banks and non-banks, and contributed to the rapid growth of the banking sector. By the end of the decade, many of the non-bank financial intermediaries, which had been established by the banks to circumvent earlier controls, had been or were being reabsorbed back into their parent banks.

In January 1983, the then Treasurer announced the intention to admit new foreign banks to the banking sector. This policy was reaffirmed by the new Government upon the recommendation of the Martin Review Committee. In February 1985, 16 new foreign banks were authorised to establish banking operations in Australia. At the same time a large number of other foreign banks established or upgraded their existing presence in Australia in the form of non-bank subsidiaries. This step increased the scope for competition in the Australian financial system and also opened the way for Australian banks to expand internationally (under reciprocal access requirements).

Regulatory reform of Australia's stockbroking industry was also progressively implemented from April 1984. This was directed at removing the restrictive practices that had characterised the industry, including the fixing of brokerage fees and limitations on entry.

The Australian Stock Exchange Limited, which was formed in 1987 with the merger of the State stock exchanges, was 'stimulated by technological advances in communications, [and] increasing sophistication of investors'. (Bowen 1986, p 3984).

Changes to taxation arrangements, such as dividend imputation and the arrangements affecting superannuation funds, have also altered the financial environment.

Prudential supervision

The changed regulatory environment for financial institutions provided the catalyst for a review of prudential supervision of banks, to ensure stability of the banking system and protection of bank depositors. In accordance with the Martin Review Committee recommendations, the Government announced in 1987 that the Banking Act would be amended to give the Reserve Bank of Australia an explicit supervisory role as a necessary complement to other changes in financial regulation.

Capital backing of the banks formed the cornerstone of prudential regulation. In 1988 the Reserve Bank issued guidelines to banks setting out an appropriate ratio of capital reserves the banks should hold against risk weighted assets. These guidelines were consistent with international practice and were designed to achieve a much stronger capitalisation of banks, to increase protection for depositors and to enhance the security of the financial system.

The move to risk weighted capital adequacy guidelines complemented modifications underway to the Reserve Bank's other prudential controls over the banking system. The requirement that banks hold a certain minimum ratio of near-cash assets and government securities to total deposits (LGS ratio) was abolished and replaced with a Prime Assets Ratio. This ratio was a more comprehensive measure designed to enhance the stability of the financial system.

In 1988 the Reserve Bank announced a winding down of the Statutory Reserve Deposits requirement, and replaced it with a non-callable deposits ratio. The new ratio was based on a broader range of total bank liabilities, and provided a reduction in costs to banks, fewer distortions in the system and therefore greater efficiency.

The consequences of financial deregulation

The reduction in regulation and related changes to the financial sector in the 1980s saw it transformed from a heavily regulated and segmented financial structure into a system which is lightly regulated by world standards. Access to international financial services increased greatly.

The changes included the lifting of restrictions on the allocation of credit so that it could be allocated more competitively through prices. This has been of benefit to many borrowers operating in sectors that previously had credit rationed to them. The National Bank of Australia stated that:

> deregulation has provided a significantly more competitive banking environment and has enabled banks to finance a wider cross-section of the community. This has been of particular benefit to small and medium-sized business (Transcript p. 158).

The limited number of privileged borrowers who benefited under the previous regime would of course have been made worse off initially.

The innovation process is still continuing - some aspects include the growing importance of superannuation products and integration between banking and insurance services. Chase-AMP noted that:

> deregulation has already produced significant net benefits to banking customers through a much greater range of products, price competition, innovation, flexibility, improved access and higher service standards (Sub. 30, Attachment A, p. 2).

Absorbing these changes has not been easy. Adjusting to the changes themselves and the response of policy makers resulted in some costly learning experiences. The transitional process, in the course of which financial institutions and their employees learnt to operate in a deregulated environment, has been a difficult one in many respects for the institutions and the economy as a whole.

One of the consequences of changes in the financial system during the 1980s was the shift from the use of quantity constraints (rationing of credit) as a tool of policy to influence the financial system, to the use of market forces reflected in interest rates as the main monetary policy instrument. Open market operations of the Reserve Bank influence the availability, and thus the cost, of short-term funds (so called 'cash interest rates'). Changes to the cost of funds, if sustained, strongly influence the yields on bills and other short term traded securities and, less directly, short-term interest rates. These changes then affect the demand for credit, interest rate-sensitive activities being affected first. Interest rate changes can also have important implications for activity and prices through the effect on the exchange rate, and on expectations.

The adjustment problems of the private sector in the new financial environment also became apparent in the latter part of the 1980s when the economy had experienced a period of rapid growth. With new financing techniques and financial intermediaries competing to establish or gain market share, there was a record rate of expansion in credit until late 1989.

Adjustment by the participants in the financial system to the new financial environment took longer than many expected. Many businesses have found their high gearing added to difficulties in a period of subdued demand and falling asset prices. At the same time, bank profits are under pressure from unexpected levels of bad and doubtful debt and non-performing loans.

It is relevant to note in this regard that Australia's banks have not been alone in their recent problems. Similar problems have been experienced by banks in many other OECD countries - related no doubt to growing sophistication, competitition and internationalisation in financial systems. As in other sectors of the economy, there is pressure on the banks and other institutions in our financial sector to compete effectively in the international arena.

3 THE AVAILABILITY OF CAPITAL IN AGGREGATE

The divergence between domestic saving and investment is a major factor underlying persistent high real interest rates. This has occurred, in part, because concern over the current account deficit (equal to the gap between saving and investment) and rising debt has seen authorities tighten monetary policy and raise interest rates. Further, to the extent that capital markets are segmented and there is a lack of ready access to the international capital market, the divergence between investment and saving would have acted directly to keep rates high. Interest rates would also have been kept high by any premium charged by foreign lenders because of the effects of accumulated current account deficits on the perceived risk of lending to Australian borrowers.

Within the market for capital there are significant distortions which affect the availability of capital for industry. The incentives provided through the tax and welfare systems to invest in owner-occupied housing are encouraging the use of a sizeable part of our savings to fund investment in dwellings. Further, the failure of many government bodies to justify investment proposals on commercial grounds, even allowing for associated benefits, has seen capital diverted to poor investment proposals.

While real interest rates have been very high in Australia by historical standards, and are still high, it is not clear that the cost of capital to industry, after allowing for the effects of taxation, is significantly greater than in many other OECD countries.

3.1 The gap between investment and saving

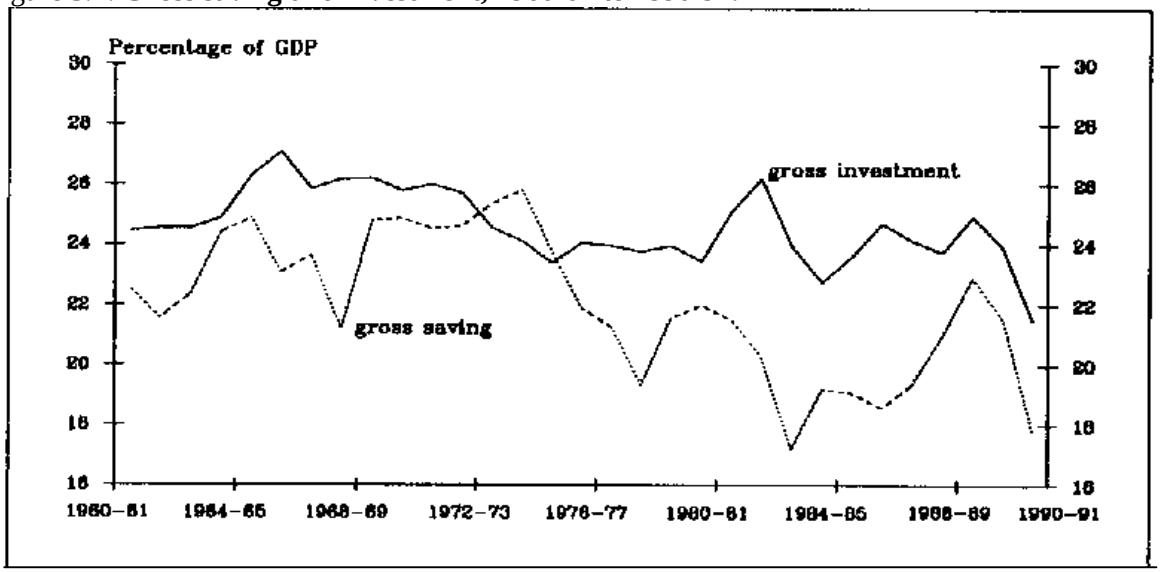
Trends in domestic saving

The main source of capital for Australian business is domestic saving -- which originates in households, businesses and government. There has been a decline in the gross savings rate (as a percentage of GDP) since the early 1970s (figure 3.1).

The decline in aggregate saving appears to be due largely to the decline in saving by general government (figure 3.2). Business and household saving tended to rise slightly as a percentage of GDP, prior to the current recession. There was a marked decline in the savings rate of governments in the early 1980s, followed by an increase and then a renewed decline in the current recession.

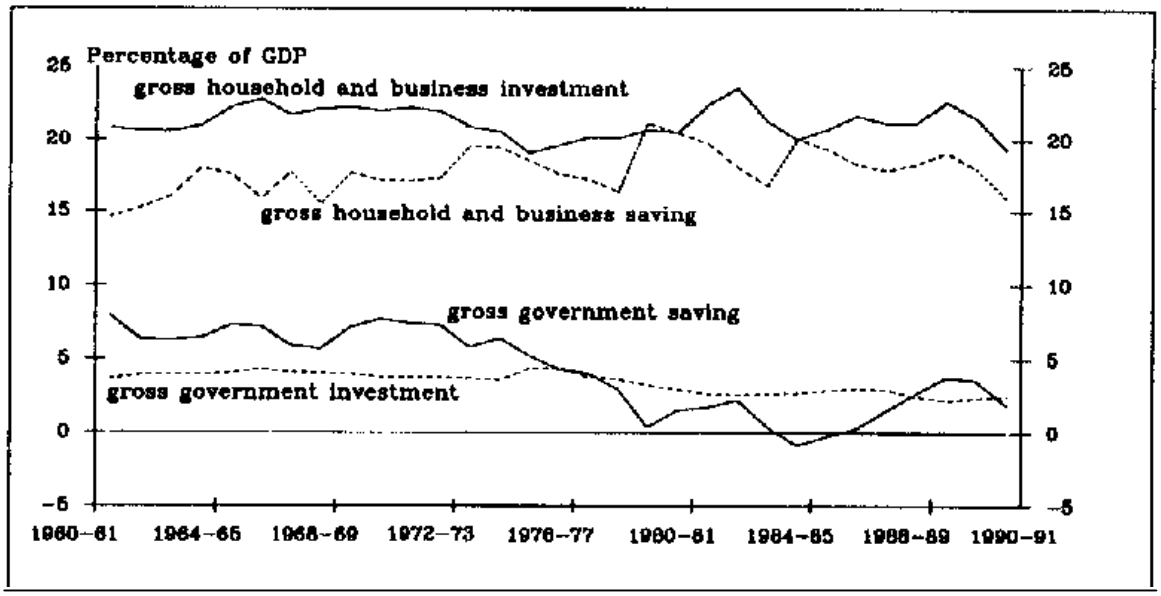
A similar decline in savings rates has occurred in many other OECD countries. Australia has remained close to the OECD average (table 3.1).

Figure 3.1: **Gross saving and investment, 1960-61 to 1990-91.**



Data source: ABS Cat., no. 5204.0.

Figure 3.2: **Saving and investment by sector, 1960-61 to 1990-91**



Note: The term 'government' refers to general government (ie excludes the operations of government business enterprises).
Data source: ABS Cat. no. 5204.0 and RBA Occasional Paper No 8A: Australian Economic Statistics, 1949-50 to 1980-81.

Table 3.1: **Average gross saving as a percentage of GDP, OECD countries**

	1960s	*1970s*	*1980s*
United States	20	19	17
Japan	35	34	32
Germany	27	24	23
France	26	24	20
United Kingdom	19	19	17
Italy	21	22	22
Canada	22	22	20
Australia	25	24	20
OECD Average	23	24	21

Data source: OECD, Economic Outlook Historical Statistics, various issues, OECD, Paris, 1991,

The household saving ratio (the ratio of saving to household disposable income) declined from double digit figures for most of the 1970s (about 15 percent for some years) to 6.3 percent in 1990-91 (it had been lower than 6 percent for three of the preceding four years). A range of factors may account for the long-term decline in household saving.

Government provision of income and other support for the aged, the unemployed, and others, may have reduced the incentives for individuals to save:

- publicly funded pensions may reduce the incentive of individuals to build nest eggs for their retirement;
- the precautionary motive for saving may be weakened by the provision of unemployment and sickness benefits to compensate for loss of income; and
- public provision and subsidisation of education and health care may reduce incentives to save to meet these expenses.

Government moves in recent years to encourage self provision for retirement via contributions to superannuation funds, as a substitute in part for unfunded pensions, are partly intended to offset the effects of these disincentives on aggregate saving. (Some implications are considered in section 3.3.)

The increased availability of consumer credit with financial deregulation seems likely to have produced what is probably a once-and-for-all increase in consumption, at the expense of saving. Households may also have sought to maintain or improve their living standards ahead of real income growth, at the expense of saving.

Inflation and inflationary expectations have provided a fairly general disincentive to save, because of the perceived difficulty of finding ways of holding savings which would preserve their real values when prices were rising. This disincentive was likely to have been particularly important because of the persistence of inflation at high rates during much of the 1970s and 1980s.

The operation of this factor is exacerbated by the taxation of nominal income. This creates a disincentive to provide for the future, especially when inflation is high. It does this because the decision to spend next year rather than now involves payment of additional taxation on the interest generated by those savings. Thus, with a nominal interest rate of 10 per cent, an inflation rate of 5 per cent and a marginal tax rate of 40 cents per dollar on additional income, the annual after-tax real rate of return to the potential saver is 1 per cent, compared to a pre-tax real rate of return of 5 per cent. This means that an individual who saves $100 for one year is only able to buy goods to the value of $101 rather than $105 in terms of present prices at the end of that year.

Tax concession proposals

Various adjustments to the taxation system have been suggested to counter this problem. They range from full indexation of all income and expenses to limited tax concessions on particular forms of saving. Both the NAB and ANZ, in submissions to this inquiry, suggested that longer-term saving should receive some taxation relief.

The proposals for tax concessions on long-term savings are based, in part, on models from overseas. The Individual Retirement Account (IRA) scheme in the US, the Tax Exempt Special Savings Account (TESSA) scheme in the UK, and the Registered Retirement Savings Plans (RRSPs) in Canada all provide tax incentives for long-term saving, through various financial institutions (see appendix I for further details).

The forms and objectives of these concessions vary. One important distinction is between taxation measures aimed at encouraging explicit provision for retirement (this issue is considered in chapter 4) and concessions aimed at ameliorating the impact of inflation on the taxation of saving generally. Problems with concessions on particular forms of saving are that they tend to introduce biases into the system, and that the main costs would be associated with savings which would have occurred in any event and are merely rearranged to attract the concession. **The Commission considers that they would be a relatively high cost way of promoting savings and does not favour them.**

Trends in domestic investment

Gross *investment* has declined relative to GDP over the last 30 years. While it increased in the latter half of the 1980s, it was still lower than in the latter half of the 1960s. There has been a sharp fall since the late 1980s (figure 3.1). Government investment has remained relatively stable over the three decades, while investment by households and business (including government business enterprises) has been more volatile, and has declined in recent years (figure 3.2).

Australia's aggregate investment as a proportion of GDP continues to be high compared to most other OECD countries, with the notable exception of Japan (table 3.2).

Table 3.2: **Investment (gross fixed capital formation), OECD countries as a percentage of GDP**

	1960s	*1970s*	*1980s*
United States	19	18	18
Japan	35	33	30
Germany	27	22	20
France	25	23	20
United Kingdom	19	19	18
Italy	20	20	19
Canada	24	22	21
Australia	27	22	24
OECD Average	21	23	22

Data source: OECD, Economic Outlook Historical Statistics, various issues, OECD, Paris, 1991.

This reflects, inter alia, our relatively rapid rate of population increase, and the structure of Australian industry, including the heavy weighting of capital intensive resource industries.

Despite this level of investment, the ratio of capital to labour - a principal determinant of labour productivity - has been growing at only 1.7 per cent per annum in Australia during the 1980s, compared with an average of 2.4 per cent per annum for the OECD (EPAC, 1990b, p. 6).

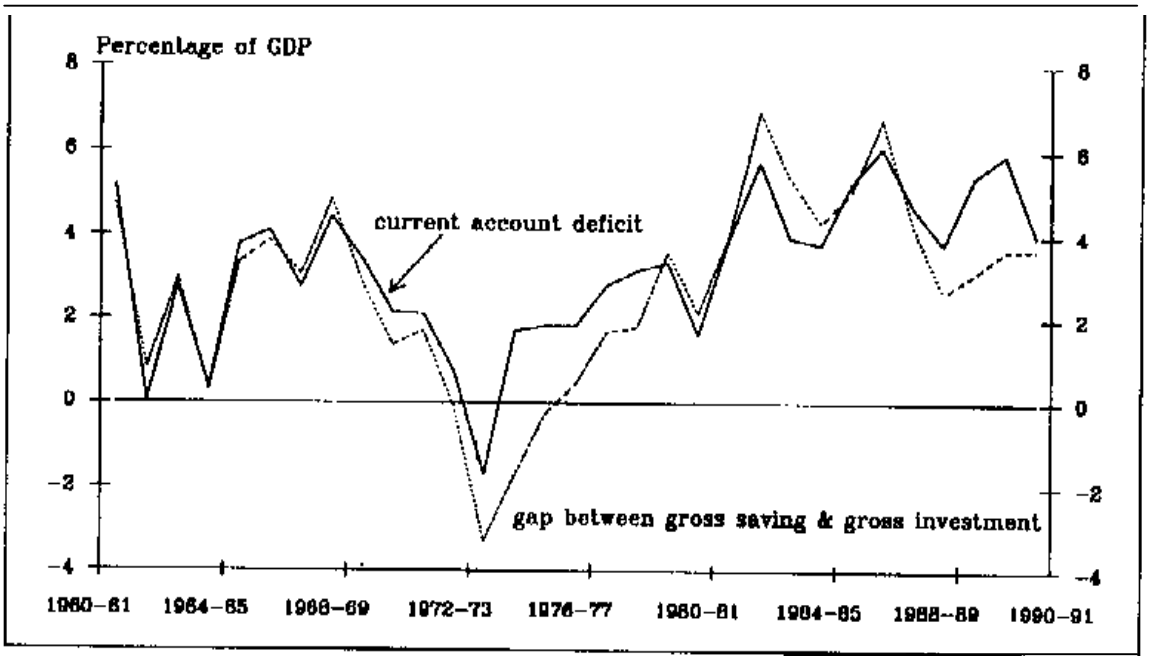
A relatively high level of investment in dwellings continues to diminish the amount of domestic saving which might otherwise be available to finance investment in industry. Throughout the 1980s, investment in dwellings accounted for 25 to 30 percent of gross fixed private capital expenditure. In addition, expenditure on dwellings represents one of the major forms of saving for households. It has accounted for slightly less than one half of total household saving throughout the 1980s (RBA Financial Flow Estimates). The incentives to invest in owner occupied housing are discussed in section 3.4.

The economy is also carrying a large legacy of past government investments in assets earning low rates of return (such as electricity generation).

Financing the gap between domestic saving and investment

The gap between domestic investment and saving over the last decade has meant that Australia has relied more heavily on *foreign sources* of capital to finance investment than during the 1970s and most of the 1960s. This has been reflected in higher current account deficits as a percentage of GDP.

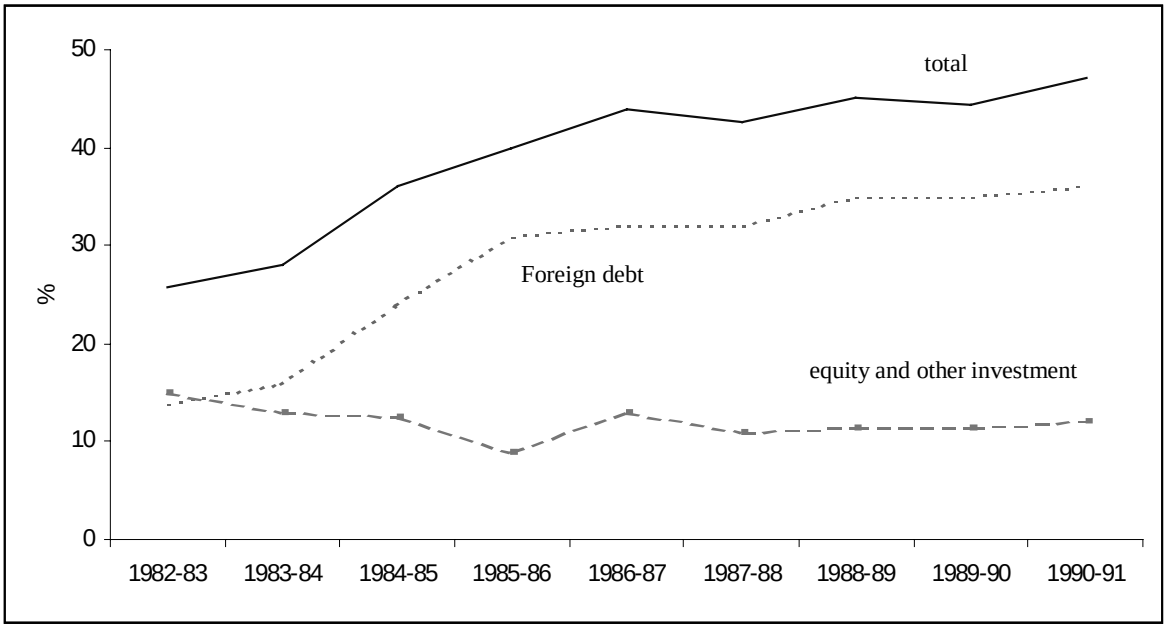
Figure 3.3: **The current account deficit and the gap between saving and investment**



Note: Gross investment is gross fixed capital expenditure plus increase in stocks. Gross saving is the funds available from domestic sources to finance investment (it is equal to GDP minus consumption expenditure). The conceptual difference between the two series presented in figure 3.3 is relatively minor. During the 1980s the difference is almost entirely attributable to the statistical discrepancy in the National Accounts - that is, to the difference between income and expenditure based estimates of GDP.
Data source: ABS Cat no 5204.0.

Foreign capital can be obtained either in the form of borrowing, typically channelled through financial intermediaries, or in the form of equity. The mix of debt and equity has varied throughout the 1980s. Following financial deregulation, there was a dramatic increase in inflows of debt. The floating of the Australian dollar, abolition of exchange controls and the subsequent development of markets for hedging the risks associated with borrowing in foreign currencies, improved access to foreign debt. This is reflected in the strong growth in net debt, as a proportion of GDP, particularly between 1983-84 and 1985-86 (figure 3.4).

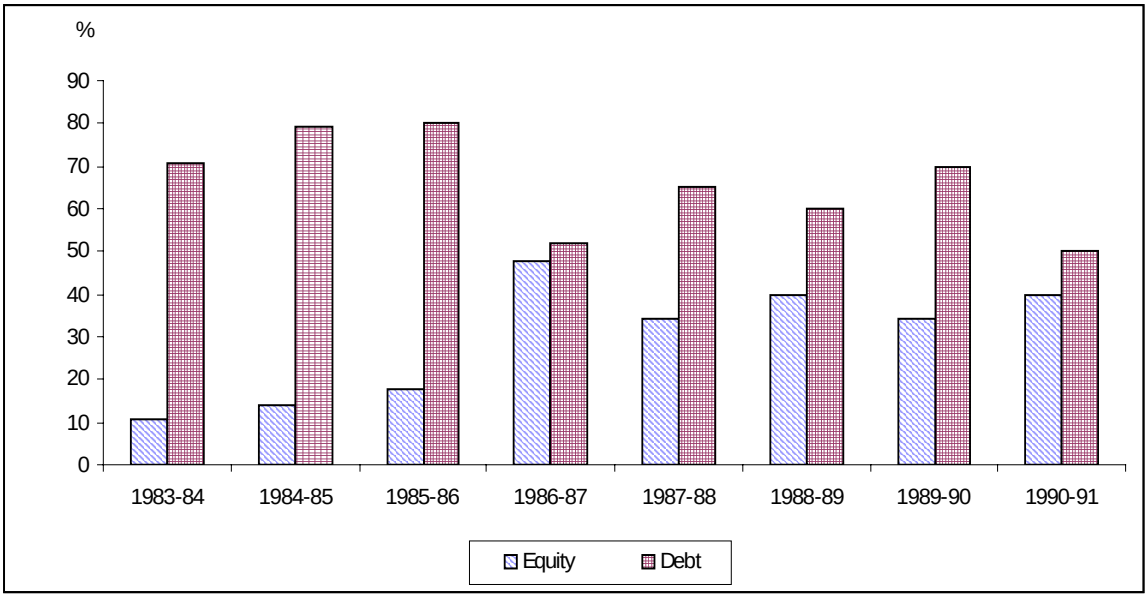
Figure 3.4: **Foreign debt and equity, as percentages of GDP**



Data source: ABS Cat no 5305.0.

The proportion of equity in foreign investment has increased in the most recent years, in part reflecting the swapping of debt for equity (figure 3.5).

Figure 3.5: **Composition of non-official net foreign investment**



Notes: Debt and equity do not necessarily account for 100 percent of the net foreign investment. The annual flows also include accounts payable/prepayments received, and 'other'.
Data source: ABS Cat. no 5305.0 and 5306.0.

3.2 Effects of reliance on foreign capital

Concern has been expressed that Australia's recent borrowing experience could cause a reduction in future living standards. If the investment undertaken with foreign borrowing fails to generate a sufficient return then the borrowers face the prospect of meeting contractual payments through a reduction in their own incomes. In the extreme case of default, the borrower also loses some or all of the equity contributed to the investment. In the case of non or under performing government investment the taxpayer must ultimately pay the cost.

In terms of this inquiry the questions at issue are what effects our recent calls on foreign saving will have on the funds available for investment in Australia, and their cost. This includes the question of the availability and cost of foreign capital for future investment projects.

Continuing access to foreign capital, at least in the foreseeable future, will be an important determinant of the growth in living standards. Current projections of investment levels required to generate growth in the capital stock consistent with rising living standards, combined with projections of the availability of domestic saving, assuming no marked change in the propensity of Australians to save, show that there will be continuing shortfalls in domestic saving relative to investment and hence a continuing reliance on foreign saving (including, of course, to service past debt).

For example, EPAC (1990b) provides a range of projections. In order to achieve growth in GDP of 2.5 to 3 percent into the mid 1990s, investment would need to be at around 24 percent of GDP, and at current domestic savings rates this would imply increases in foreign debt, to around 40 percent of GDP. The actual call on foreign saving will depend in part on the state of the economy and the stance of fiscal and monetary policy. However the underlying structural reliance on foreign saving is clear.

In examining the implications of this structural reliance it is important to recognise that for some countries, and at some stages of development, it is reasonable to sustain long periods during which growth in the capital stock is financed in part from foreign saving. The following comments by EPAC are highly relevant:

> In a longer term sense, capital markets should be comfortable with the idea that countries with faster population growth (and/or younger populations) will tend to borrow from countries with slowly growing (and/or older) populations (EPAC 1990b, p. 43).

In reaching an assessment of the implications of our recent borrowing experience, a distinction needs to be drawn between an increase in indebtedness and a build-up in equity investment. Though little concern has been expressed at the burden on the economy of servicing foreign ownership (equity), action to restrict this has been and is an element of government policy, for example, via the Foreign Investment Review Board and policy in relation to media ownership. With financial deregulation, access to foreign borrowings is unrestricted but the level of indebtedness is a matter of concern and debate in the community.

One view is that rising levels of foreign debt will make it more difficult, or more expensive, for investors to attract foreign saving. The size of Australia's debt is seen as an important determinant of the overall risk of investing in Australia, either because of some inherent risk in Australian investment projects or, more likely, that outstanding debt raises the risk of a fall in the value of the Australian dollar. (This question is considered further in section 3.7). For example, in a study of interest rates, exchange rates and foreign debt, Juttner and Leudecke (1991) argue that:

> Our foreign debt imposes an increasingly burdensome weight on the economy, a fact that is certainly not lost on foreign holders of our debt. Default considerations may enter into investment decisions (p. 139).

An alternate view is that a continued build up of private foreign debt need not be of concern for borrowers generally or the whole economy. Given Australia's integration with the international capital market, the cost of capital for individual enterprises depends on the characteristics of those enterprises rather than the total foreign debt of Australians. If a project promises a sufficient rate of return, foreign savers will be willing to finance it.

There is evidence to support both views. For example those concerned at existing debt levels note that Australia's credit rating has been reduced, signalling to foreign lenders and investors a higher risk inherent in lending to Australia. They also point to the expressed views of foreign financial institutions that they do not favour investment in Australia at any reasonable interest rate risk premium. On the other hand, formal analyses of the determinants of Australia's relatively high interest rates have not conclusively established that there is a risk premium responsible for the difference, or more particularly, that any risk premium is directly related to the level of foreign indebtedness.

Reconciling the two views is difficult, as it requires disentangling the effects of current debt levels from the interest rate and capital flow consequences of current monetary policy settings. It seems reasonable to conclude that at some point, rising levels of foreign debt to GDP will reduce Australia's access to capital markets, in the sense that the risk premium to be met before foreign savers will supply investment finance will become so high as to restrict the economic use of foreign saving to fund domestic investments. It is not clear, however, how close Australia is to that point - and that, in essence, is the source of the difference between the two views.

Continued reliance on debt (as opposed to equity) financing of investment needs, with its contractual obligations to make interest payments, largely in foreign currency, makes domestic living standards more vulnerable to external shocks. For example a fall in the value of the

Australian dollar precipitated by a fall in commodity prices would raise the burden of contractual interest payments, which would have to be met from lower living standards. For a country like Australia with a large exposure to volatile commodity markets, raising this exposure poses a significant risk.

If rising debt levels restrict the availability of foreign saving to finance investment, and increase the country's exposure to external shocks, then the need to remove government induced distortions which lower saving, stimulate investment or give preference to debt rather than equity, assumes added importance. As discussed in the previous section, some of these changes appear to be happening already. Reductions in inflation (and inflationary expectations) and the encouragement of self-provision for retirement are likely to strengthen incentives to save. Similarly, removal of distortions which led to poor investment decisions, particularly by government and its enterprises, may reduce the gap between domestic investment and saving.

However these actions will take time to become effective. For example it will take time for the removal of saving distortions to raise household savings rates. One option would be for the government to compensate for the saving distortions it induces in the economy by raising public sector saving -- although it would be important to ensure that this does not merely replace private sector sources of saving. This would see a substantial movement to a public sector surplus as the economy moves into recovery.

The main focus of policy should be to address the reasons for the persistence of an unwarranted structural dependence on foreign saving, particularly in the form of debt. Setting medium term objectives to remove underlying distortions will pay greater long-term dividends than addressing the symptoms through a sequence of ad hoc policy adjustments.

The following two sections examine areas in which action by government may affect the aggregate availability of domestic capital for business.

3.3 Superannuation

The government is supporting saving via superannuation funds to encourage self provision for retirement and to reduce the reliance of the aged on social welfare payments. This is affecting the level and composition of household saving. Evidence on the composition of household saving indicates that superannuation and life assurance saving has grown from about 2 to 6 percent of GDP during the 1980s. While the change in composition of saving, towards superannuation and away from other options, is projected to continue, the likely impact on aggregate domestic saving in the future is less clear. The net effects will depend on the form of the measures taken by the government, and household and other (private sector) responses to them.

The main measures to generate superannuation saving take the form of award based (and prospectively legislation based) employer contributions, roll over funds to preserve retirement benefits, and concessional rates of taxation on both contributions and superannuation fund income.

The tax treatment of superannuation saving has changed considerably in recent years. The focus of change has been to:

- maintain tax concessions for superannuation, subject to compliance with minimum occupational superannuation standards;

- increase the incentive to take superannuation benefits in the form of pensions and annuities rather than lump sums; and

- ensure that lump sum payments are invested so as to provide genuine retirement income.

While the changes reduced some of the concessions, the Treasury has noted that:

> in general, superannuation savings will continue to be taxed at only about half the rate that applies to other forms of saving and investment (Treasury 1988, p. 1).

Employee contributions are made from after-tax income, and are subject to no further taxation in the hands of funds, or on withdrawal. Contributions made by employers on behalf of employees, are taxed at lower rates than wage income received by the employee. The earnings on contributions are taxed in the fund as they accrue, at the low rate of 15 percent. Taxation of benefits on retirement depends on whether the benefits are taken as a lump sum or pension. In both cases, the tax is payable on withdrawal of the benefit. Lump sum benefits are generally taxed concessionally, but there are limits on the amount that may be withdrawn in this form. Pensions are taxed in the hands of the superannuant.

The government has made clear its intention to expand the coverage of occupational superannuation, as well as the contribution rate. The National Wage Case `productivity award' decision of 1986 granted employees an employers' contribution of 3 percent of salary, to be paid into a superannuation fund. This has led to the growth of industry award-based funds, and an increase in the coverage of occupational superannuation, such that in 1989-90 employer contributions to superannuation funds were being made in respect of about 67 percent of all full-time employees (57 percent of private sector employees, 92 percent of public sector). In the 1991-92 Budget, the Government announced that it will legislate for a prescribed level of superannuation support by employers. This level will be 9 percent by the year 2000. Consideration will also be given to supplementing this level of support with employee contributions and tax cuts equivalent to 3 percent of earnings (Budget Speech 1991, p. 11).

Impact on saving levels

The net impact of these superannuation provisions on Australia's aggregate saving (private plus public) is not clear, as there are likely to be a number of offsetting effects. Factors likely to increase *private* saving include:

- the long term, illiquid nature of superannuation, which makes it a poor substitute for savings for more immediate needs; and

- the widening coverage of award-based and other employee superannuation which represents significant forced saving for many lower income earners who would otherwise have saved very little.

Possible offsetting influences on private saving include:

- any reduction in real disposable income growth resulting from compulsory superannuation (ie. in lieu of money wage increases) which may lead households to reduce other forms of saving; and

- the relatively favourable tax treatment of superannuation savings which will encourage households to substitute it for other forms of saving.

Despite such offsets, NAB considered it `unlikely that growth in superannuation savings will fully displace other forms of private savings' (Sub. 19, p. 53).

Policies to encourage superannuation may also affect the level of *public* saving. Other things being equal, public saving will change by the difference between the net revenue cost of the tax concessions used to encourage superannuation and the reduced pension and related outlays. FitzGerald and Harper (1991) have shown that for some time to come the increased budget costs will far outweigh the pension saving. On the basis of simulations and analysis of induced changes in the elements of public and private saving, they conclude that the net effect could be an increase in aggregate national saving. But in their view this would depend on `the extent to which increases in saving through superannuation are forced and are forced mainly from low to middle income earner groups' (p. 29), rather than induced by the tax incentives:

> Tax-induced superannuation is unlikely to raise national saving significantly: either because at the incentive driven margin it merely diverts private retirement saving from one form to another; or because any increase in private saving is substantially offset (probably more than offset) by increased public dissaving incurred through the provision of tax concessions (p. 55).

In summary, while it is likely that policy-induced superannuation saving will increase net private saving, the extent of its impact on aggregate saving remains unclear (depending in part on the budgetary response to lower tax revenue). What seems clear is that superannuation growth is having a substantial effect on the *composition* of saving. Some implications of this are discussed in later chapters.

3.4 Incentives to invest in owner occupied housing

Owner-occupied housing receives significant tax advantages relative to most other forms of saving in Australia. The main sources are the non-taxation of imputed income from housing (in the form of housing services), and the exemption from capital gains tax on the sale of the principal residence, without any upper limit on the benefit (see Appendix C). In addition, home ownership does not affect eligibility for aged pensions.

The disparity in taxation treatment between owner-occupied housing and other savings and investment outlets has long been the subject of criticism from some quarters. A long-standing criticism is based on fairness or equity grounds: tax payers who own and derive a proportion of their income from their principal residence pay proportionately less tax than those who rent their homes. To these equity considerations, are added concerns about the impact of tax concessions for housing on economic efficiency and growth, in-so-far as they divert expenditure into owner occupied housing from investment in industry.

That there are also social (and political) considerations attaching to the question of home ownership were underlined by responses to the Commission's draft report. The Catholic Archbishop of Hobart argued that home ownership is central to the pursuit of 'worthwhile human values', including:

> ...stability in marriage; the freedom, independence and privacy of the family unit; the space and 'backyard' where children may grow and play in security (Sub 81, p. 1).

In its submission, AMP also observed that:

> ... home ownership is the aspiration of most Australians; any changes to the incentives which reduce its attractiveness or availability would need to be carefully considered in the light of community attitudes and the ownership culture (Sub 23, p 3).

While aware of the importance of equity and socio-political considerations, the Commission has necessarily given particular consideration in this inquiry to the *economic* consequences of concessional tax treatment of housing. The prospect that these concessions are reducing or distorting the availability of capital in Australia was raised by a number of participants, including the ANZ and NFF.

Economic effects

Tax incentives favouring owner-occupied housing influence household behaviour in several ways. They encourage households to buy housing rather than rent; to invest in housing rather than in financial assets such as bank deposits, superannuation, or shares, or directly in their own business; and to maintain a higher standard of housing than they otherwise would, while consuming less non-housing goods and services.

Because the current tax concessions create distortions both in financial markets and in real resource allocations, analysing their overall effects on the economy is a complex task. To assist in this task, the Commission developed a special purpose model (ORANI-TYCOON). Like the ORANI model on which it is based, this model incorporates linkages between households, government, industries and foreigners, but extends these links to cover financial assets as well as physical goods and services (see Appendix C for details). The model nevertheless contains a number of limitations and assumptions which mean that it can only evaluate small changes in taxation and should be interpreted as providing only a broad indication of the magnitude of economic effects.

The model was used to simulate the effects of a small reduction in the current tax disparity between housing and other equity investments. This was done by raising taxes on housing and lowering taxes on non-housing equity in a revenue-neutral manner. The simulation indicated that for every dollar of tax revenue transferred from other investment to housing, there was a net gain in national income of 30 cents.

The increase in income was due in part to an improvement in the allocation of real resources, with household choices between housing and other services being less distorted by housing tax concessions. In part it also resulted from a change in the composition of foreign liabilities, with equity being substituted for debt. (This change, which was driven by the reduction in rates of tax on non-housing equity, was beneficial because it tended to offset some distortionary effects of inflation -- see section 3.6).

The tax changes meant that less capital went to housing and more to business. This reflected not only greater capital availability, but also an increase in demand for business output. Overall, there was a small reduction in total foreign liabilities in line with lower capital requirements for the economy as a whole.

Policy options

The complete elimination of the taxation disparity between housing and other assets would require radical taxation reform. Such a step would require either the elimination of the taxation of income from capital (and greater weight placed on non-income tax bases) or the taxation of all forms of income from capital at the same rate. The latter policy, in the case of owner-occupied housing, would require owners to be treated like landlords of the dwellings in which they reside -- with taxation of (imputed) rent, deductibility of interest, allowances for depreciation and taxation of capital gains.

Such radical changes would have implications far broader than the scope of this inquiry and the Commission is not proposing either of these options. However, the apparent gains to be had from altering the balance of taxation towards greater uniformity have led the Commission to consider the possible benefits from more limited reforms. A number of participants and others have suggested that the exemption from capital gains tax is a particular source of inefficiency which should be addressed. In the mid-1970s, Treasury argued that:

> To exempt owner-occupied housing altogether from a realised capital gains tax would also have adverse consequences because investment in this form vis-a-vis other assets would be favoured (Treasury 1974).

In evidence to this inquiry, CAMTRON recommended:

> ... introduction of capital gains tax on private houses, principally as a signal to the community to focus on investments in income producing, wealth creating and employment creating activities (Sub 21, p. 7).

It is difficult to determine with any precision what proportion of the total effective tax disparity in favour of owner-occupied dwellings is attributable to the capital gains tax exemption. Available information presented in Appendix C suggests that it could be of the order of 20 per cent. On the basis of the Commission's modelling, this would mean that the gain from completely removing the exemption would be between 0.05 and 0.1 per cent of GDP. This does not take into account administrative and other costs associated with introducing the tax.

One concern relates to the effects of capital gains taxation on labour mobility. As discussed in chapter 10, the impact of capital gains tax is usually diminished if realisation of the gains is deferred. The desire to reduce capital gains liability may, in the case of home owners, make them less flexible in their response to economic incentives to relocate. This effect was of concern to the Australian Catholic Social Welfare Commission, which argued that:

> if the capital gains tax were imposed on family homes it would become a major disincentive for labour to move across the country in search of work. It would lock workers into locations where there were declining employment prospects and ultimately contribute to greater social, economic and fiscal problems (Sub 83, pp. 2-3).

Some countries have introduced additional deferral elements into capital gains taxation of owner-occupied housing, partly as a response to likely effects of the tax on labour mobility. In the United States, for example, homeowners are not taxed at the time of sale of principal residence if the proceeds are put towards the purchase of a higher valued house. Such concessions achieve the objective of relieving disincentives to move. At the same time, such concessions also weaken the impact of the tax in achieving a reallocation of resources from housing towards business and other investment opportunities. The likelihood of the effectiveness of the tax being eroded in this way would need to be considered in any decision to introduce such a tax for the purpose of achieving a reallocation of savings.

The costs of compliance with a capital gains tax are also potentially high. Extensive records may need to be kept over long periods. In the case of housing this would include the need to record such details as modifications and improvements to dwellings over the period of ownership. Australia's existing capital gains tax has not generally imposed such costs on the majority of households who

tend not to own assets subject to capital gains tax. The inclusion of owner-occupied dwellings in the base would greatly extend compliance costs. This would need to be weighed against the likely beneficial impact of the tax on investment behaviour.

The question of whether deductions were to be allowed against a capital gains tax introduces further problems, arising from the fact that other elements of housing income (imputed rent) are not taxed. If all income is taxed, all legitimate deductions can be allowed. When only part of income is taxed, it is much more difficult to rule particular deductions in or out. In some other countries, the argument for capital gains taxation has been made stronger (or, more accurately, this argument against it made less strong) by the fact that a degree of allowance is already made for interest deductibility for owner-occupied housing, even though all housing income is not taxed.

Given these problems, the question of the likely extent of real capital gains in practice assumes some importance. The Commission's analysis, on the basis of the limited available studies, has assumed that significant gains would be achieved. But the extent of realised gains has depended on the timing of purchase and sale. Some other evidence suggests that, over a long period, real gains are on average relatively low (see for example figure 2.3). A relevant issue may be the distribution of capital gains -- whether they accrue more to higher value houses, for example. However, selective approaches to applying a capital gains tax to housing would again raise equity issues and would further reduce the potential for net economic gain.

In conclusion, the disparity between tax treatment of owner-occupied housing and other assets distorts investment and imposes costs on the Australian economy. **The Commission considers that while it would be desirable on economic grounds to remove the tax disparity in favour of housing, taxing capital gains alone would not yield significant net benefits.**

3.5 The availability of foreign capital

With financial deregulation, particularly the dismantling of exchange controls, foreign capital has become readily available to finance investment in Australia. At the same time, of course, there are significant transactions costs in obtaining foreign capital; it is traded in specialised and sophisticated markets, and intermediaries such as banks and merchant banks play an important role. In practice, therefore, direct access to foreign capital is mainly restricted to large enterprises seeking significant sums.

For small enterprises there is in practice little direct access to foreign capital. There are, however, benefits in the extent to which access to foreign capital of Australian financial intermediaries and larger enterprises, and foreign investment in money markets and shares, increases the funds available in Australia for investment in smaller enterprises.

Funds are of course made available for investment in Australia indirectly, as a result of the purchase by foreigners of securities denominated in Australian dollars, such as bonds and bank bills. These funds are essentially short-term; they are potentially volatile and the foreign investors bear the foreign exchange risks.

Some companies with foreign affiliations are able to arrange their borrowings from or through their affiliates in ways which at least reduce the costs and other difficulties involved in these transactions. Large Australian companies with good credit ratings are able to raise loans in foreign markets in underwritten public or private floats. Other borrowings in foreign currencies are arranged through intermediaries operating in Australia - including banks and merchant banks (many of which are owned by foreign financial institutions). The overhead costs effectively price small raisings out of this market.

Borrowers who stand to receive income denominated in the currencies in which they borrow have natural cover against the risk of exchange rate changes which will affect the cost of interest rate payments and repayments of foreign currency loans. Other borrowers who do not wish to bear the risk of exchange rate changes have to purchase forward cover (which approximates the difference between the relevant interest rates in Australia and those of the country in whose currency the loan is denominated).

Small borrowers have the option of raising foreign currency loans through the banking system, but the cost of such raisings should include the cost of purchasing forward cover.

The attitudes of foreign investors to investments in Australia, and the interest rate premiums they charge on loans, are conditioned by:

- their perceptions of risk, both for the country and for particular borrowers, which are guided by the credit ratings accorded by international and Australian credit rating agencies; and

- in the case of many institutions, the desire to maintain a world-wide balance in their books (which of course varies from time to time) which implies some implicit rationing of funds.

Foreign investors also buy and sell shares in Australian companies through foreign and Australian sharemarkets. This is particularly so for major foreign superannuation funds and investment funds. They would be influenced by considerations of the kind outlined above, but also by the need to demonstrate their performances to their clients and the ease with which they would be able to liquidate their investments.

The availability of overseas equity capital has increased in recent years. In contrast to the mid 1980s, when there was a net equity outflow, there has recently been a net inflow of equity capital. In 1990-91, for instance, equity accounted for about 90 per cent of net capital inflow. This reflected increased asset sales by residents to foreigners, as well as some liquidation of Australian investment abroad and restructuring of corporate balance sheets through debt-for-equity swaps.

The inflow of foreign direct investment in Australian enterprises, in the form of debt and equity, has been facilitated by changes to foreign investment policy since 1986. As foreign investment approval is not required for takeovers and partial takeovers involving sums of less than $5 million, the volume of such investments are not known. There may, however, have been significant investments in small businesses by intending migrants, and it is known that there has been a number of foreign investments in businesses associated with tourism. However, the availability to foreign investors of information about smaller Australian enterprises and the market conditions in which they operate would continue to impose a constraint on such investment. By and large, direct equity investment by foreign enterprises in Australian enterprises tends to be in industries about which they are well informed. This often involves substantial foreign ownership of the Australian enterprise concerned, so that the investment is inherently not a very liquid one. This also means that foreign direct investment tends to be predominantly in large Australian companies.

3.6 Possible regulatory and taxation impediments to capital inflow

Australia has a number of policy instruments in place which affect the availability of foreign capital. Some, such as withholding tax on interest and dividends, and the Foreign Investment Review Board, affect capital flows directly. Others, such as the tax system applying to all capital investment, have a more indirect impact.

International capital mobility is facilitated by an absence of such controls. Their elimination would be expected to produce an increase in available capital and greater opportunities for worthwhile projects to go ahead. However, the encouragement of capital availability is not the only objective of governments. This section examines the extent to which it is desirable to control capital inflow by the use of these instruments.

Interest withholding tax

Withholding tax is levied on interest paid to foreign lenders. When the lender is a resident of a country with which Australia has a double tax treaty, the tax is levied at a rate of ten per cent. Australia has a double tax treaty with each of the countries which is a major source of its foreign capital inflow. (There is an exemption from taxation for some widely held securities.)

It is difficult to determine the proportion of interest paid on foreign debt which actually bears withholding tax, and the proportion which is exempt. In 1989-90, revenue from interest withholding tax was $797 million or about 6 per cent of total interest payments on foreign investment. Given the prevailing tax rate of ten percent, it appears from this that a considerable proportion of interest paid abroad did bear taxation.

The effect of interest withholding tax depends crucially on the role of double taxation treaties. Each country with which Australia has a treaty offers a credit for Australian withholding tax against its own taxation of the interest receipts. (Australia does the same for interest receipts from its lending abroad).

However, in some circumstances credits given in the home country of the lender may not be fully effective. These include situations in which:

- the lending country has a system of company taxation under which credits given to a lending company are recovered, or partly recovered, through income taxation of the shareholders of the company (foreign tax credits are `washed out' through an imputation or similar system); and

- foreign lenders do not have sufficient tax liability at home to offset all of the tax credited (this may be true particularly of financial intermediaries for which taxable income is only a small portion of the total interest received.)

The possibility that credits in lending countries were not fully effective in offsetting the effect of withholding taxes was referred to in evidence from the Australian Merchant Bankers' Association (AMBA). It said:

> The Commission's issues paper draws attention to the scope for the effect of these taxes on foreign lenders being partly offset by credits offered to reduce tax liabilities in their own countries. However, the universal market practice is for the issuer to be obliged to 'gross up' its payments to cover any withholding tax which is payable on its securities. Accordingly, the reality is that the provisions for offsets are illusory and do not overcome cost differences borne by issuers to foreign investors relative to those borne by issues into local markets (Sub. 25, p. 5).

A difference between observed forward exchange rate cover and measured interest rate differentials could indicate some impact of withholding taxes. Because the difference is small (see figure 2.7), this evidence would appear to suggest that withholding taxes have, at most, a relatively minor effect on interest rates.

Australia, as a net borrower, would of course have little interest in having the situation altered to the extent that withholding tax revenue is effectively obtained in Australia at the expense of, but with the agreement of, foreign revenue collecting authorities. However if, as AMBA claims, withholding tax adds to the cost of foreign debt to many Australian borrowers, more complex questions are raised. In principle it would not seem desirable to raise borrowing costs in this way.

It can nevertheless be argued that withholding tax can play a role in offsetting other taxation distortions. In particular it has been suggested that the combination of full deductibility of interest together with some concessional treatment of income financed by debt (e.g. on assets subject to capital gains tax), leads to excessive encouragement of foreign borrowing. If this is so, then interest

withholding tax could be an important offsetting factor. Calculations performed by the BIE (1990) suggest that if withholding tax does add a penalty to foreign borrowing, the rate at which it is imposed would go some way towards redressing this taxation-induced distortion.

Interest withholding tax may therefore serve a useful function. Either it is a revenue raising device with little allocative effect, or it assists in producing a more neutral taxation outcome.

A recommendation of the Martin Committee in its report on international profit shifting, 'Follow the Yellow Brick Road', was that the Commission should, as part of this inquiry, 'conduct a comprehensive review of Australia's withholding tax system to determine the extent to which the system in its existing form serves the interests of the Australian economy'. The Martin Committee was particularly concerned with the use of interest withholding tax as an avenue to reduce evasion. The Commission did not feel that it was within the scope of the current reference to conduct a full-scale investigation into interest withholding tax, particularly in light of the emphasis given by the Committee to tax evasion. The Commission notes, however, the potential importance of the tax to the availability of capital and has considered the issue in that light.

Taxes on foreign equity

Foreigners making direct equity investment in Australia are subject to full Australian company taxation. Unfranked dividends bear withholding tax, but this is not applicable if dividends are paid franked.

As with taxes on interest payments, Australian taxes on dividends are generally credited when received by foreigners in the major investing countries. Taxes credited can include both the underlying company tax and any dividend withholding tax.

Australian taxes on foreign equity investment, like those on interest, influence foreign investor behaviour only to the extent that the crediting process is not effective. Imputation systems in the investing country can again be a cause of this by negating credits given at the company level. An additional problem in the case of equity is the possibility that Australian taxes may exceed the level of taxation on the underlying income in the foreign country. The BIE (1988) found some evidence that this may have been happening under the tax system applying before 1988, but changes in the tax system since then could have ameliorated the situation.

If Australia's tax regime does impact to some extent on foreign equity investors, it does not automatically follow that this is undesirable. In some circumstances Australia's interest might be best served by some degree of taxation of foreign equity returns. This would be so if some positive taxation could be applied without undue discouragement of foreign equity. Foreign equity is less mobile than debt and in some circumstances foreign equity investors earn rents on investments in Australia. It may be possible for taxes to appropriate some of these rents without the availability of capital being significantly affected.

The Foreign Investment Review Board

The Foreign Investment Review Board (FIRB) was established in 1976 as an independent advisory board, assisting the Treasurer in administration of the Government's foreign investment policy. The FIRB examines certain proposals by foreign interests to undertake direct investment in Australia, and makes recommendations to the Government on whether the proposals conform with the foreign investment policy. Policy is 'framed and administered with a view to encouraging foreign investment in Australia and ensuring that such investment is consistent with the needs of the community' (FIRB 1991 p. 35).

The following types of proposals by foreign interests to invest in Australia are subject to examination:

- acquisitions of substantial interests (a holding of 15 per cent or more by a foreign person or corporation) in existing Australian businesses that have total assets of more than $5 million (more than $3 million for rural properties);

- proposals for establishment of new businesses involving total investment of $10 million or more; and

- proposals to acquire non-residential commercial real estate valued at $5 million or more.

Proposals involving residential real estate, media investment and direct investment by foreign governments or their agencies are generally scrutinised regardless of the size of the proposal.

The guidelines for approval were subject to considerable liberalisation in 1986. Prior to 1986, the onus was on the investor to prove that the investment would generate economic benefits for Australia. This guideline was replaced by the current system, where the Government must show that a rejected proposal is contrary to the national interest.

Stricter guidelines apply to investment in banking, civil aviation, mining (other than oil and gas), real estate, radio and TV, newspapers and uranium. In some cases they are supplemented by legislation which does not involve the review of proposals by the FIRB. For example, in radio and TV, a `foreign person' may not hold or control, directly or indirectly, more than 15 per cent of issued capital or voting rights in the licensee company. Proposals for foreign investment in newspapers are considered on a `case-by-case' basis (FIRB 1991, p. 37). The current policy with regard to foreign banks is that no further licenses are being issued. Proposals for investment in both new mining (other than oil and gas and uranium) and civil aviation must satisfy requirements for Australian equity participation. For mining, the guideline of 50 per cent Australian equity is applied `flexibly' (FIRB 1991, p. 36). Similar conditions apply to acquisitions of developed non-residential real estate.

The rules for investment in residential real estate were relaxed in July this year. Prior to the changes, foreigners were permitted to buy up to 50 percent of new residential developments, including those in tourist resorts. Resale to foreigners was limited, to prevent foreign acquisition of the existing housing stock. Proposals for acquisitions of developed residential real estate were not

normally approved, except in the case of foreign companies buying for their senior executives resident in Australia for more than 12 months, and also for foreigners entitled to permanent residence in Australia (FIRB 1991, p. 36). However, under the revised guidelines, foreign investors may acquire residential real estate, developed or undeveloped, within designated Integrated Tourist Resorts, without the need to seek FIRB approval.

The FIRB rejects only a small proportion of proposals (table 3.3). However, approval with conditions is common (more than half of approvals in 1989-90) and some proposals are withdrawn by their sponsors. In addition, some proposals may never be put forward for fear of contravening the guidelines.

Table 3.3: **FIRB proposals- approvals, rejections and withdrawals**

Year	*Approvals*	*Rejections*	*Withdrawals*
1986-87	1347	5 (.4%)	54
1987-88	3091	100 (3.1%)	139
1988-89	4398	77 (1.7%)	338
1989-90	2620	61 (2.3%)	232

Note: Figures in brackets are rejections as a percentage of proposals.
Data source: FIRB (1991).

The Commission received very little comment about the activities of FIRB and most of the comments that were received suggested that it had not been a significant deterrent to foreign investment. Indeed, the BCA representative said that he was not aware of any strong views about FIRB among its members (DR Transcript p. 310). An exception was Shell Australia Limited which argued that the FIRB:

> ...may have reduced the flexibility of economic policy .... induced an over reliance on debt at the expense of equity of individual projects ... may impede economic development by leading to the postponement of investment projects or jeopardising their viability .. (and) could clash with government policy to promote an international/export outlook for industry (Sub. 84, p. 2).

This concern may in part reflect the more restrictive foreign investment regulations that apply to mining compared with most other Australian industries. This issue was addressed in the Industry Commission's recent report on mining and mineral processing in Australia. The Commission sees no reason to depart from the view in that report that:

> ...there is a strong case for bringing foreign investment regulations as they apply to mining into line with those applying more generally (IC, 1991).

Shell Australia Limited went beyond this, however, in arguing that the FIRB should be disbanded altogether:

> ...the remaining restrictions on foreign investment in Australia should be removed because they serve no useful purpose and retard the generation of additional wealth within Australia (Sub. 84, p. 1).

However, the existence of community concern over aspects of foreign ownership and control in some areas is a reality. The FIRB provides one method of addressing these concerns. If alternative mechanisms were to be introduced it is possible that they would be less consistent and less transparent than those of the FIRB.

3.7 The cost of capital

Comparisons of the cost of capital in Australia and elsewhere are used to shed some light on the extent to which Australian firms are able to attract capital, and also the extent to which, on average, Australian projects have to generate a higher rate of return, or cover a higher 'hurdle rate' in order to secure funds for investment.

While there is no unique concept corresponding to the cost of capital, it is commonly used in two broad senses:

- the interest rate companies must pay on their debt and/or the rate of return they generate for their shareholders (also known as the cost of funds);
- the return, inclusive of company tax, which is required to make an investment by the company viable.

The cost of funds

The extent to which the cost of funds in Australia differs to that abroad has recently been the subject of some dispute. The AMC (1990) has argued that the cost of capital has been high both for debt and for equity. In the case of debt finance, a comparison of interest rates in 1988 revealed:

> Australia's average real cost of corporate debt, adjusted for inflation, appears high at 6.5% (in 1988) versus 5.0% in the UK, 4.5% in the USA and 3.5% in Japan and Germany (AMC 1990, p. 88).

To compare the returns to equity the AMC employed the Capital Asset Pricing Model and an approach based on the relationship between share prices and earnings (E/P). It found that:

> In real terms, unadjusted for company specific risk, Australian equity funds had an average pre-tax cost in 1988 ranging from approximately 11.0% (using the Capital Asset Pricing model) to 13.4 % (using the E/P method). By comparison, the Federal Reserve Bank of New York estimated the cost in four major countries (using an adjusted E/P method) at the same time to be 11.0% in the USA, 8.0% in the UK, 5.0% in West Germany and 3.0% in Japan (AMC 1990 p. 89).

The argument that Australia has a high cost of capital seems to be widely accepted. The Tasmanian Government argued that:

> the cost of finance remains the single greatest impediment to business development in Australia. This in turn constrains the availability of capital (Sub. 33, p. 2).

However, Irvine (1991) has questioned the existence of a cost of capital disadvantage in Australia. He argues that when account is taken of the value of the deductibility of interest for taxation, real interest rate differences between Australia and other countries disappear. For equity, he compares the returns in various countries as a premium over the (risk free) government bond rate. He finds that Australia compares well with a premium of 1.6 per cent compared to 3.8 per cent in Japan, 2.0 percent in the US and 1.5 per cent in Germany.

Moreover, in a report prepared for the Commission, Bowden et al (1991) consider evidence on the returns to equity and debt, and conclude:

> It is clear that Australia does not stand out internationally or by comparison with similar developed countries as a country of exceptionally high equity or bond returns, whether on a real or nominal basis.

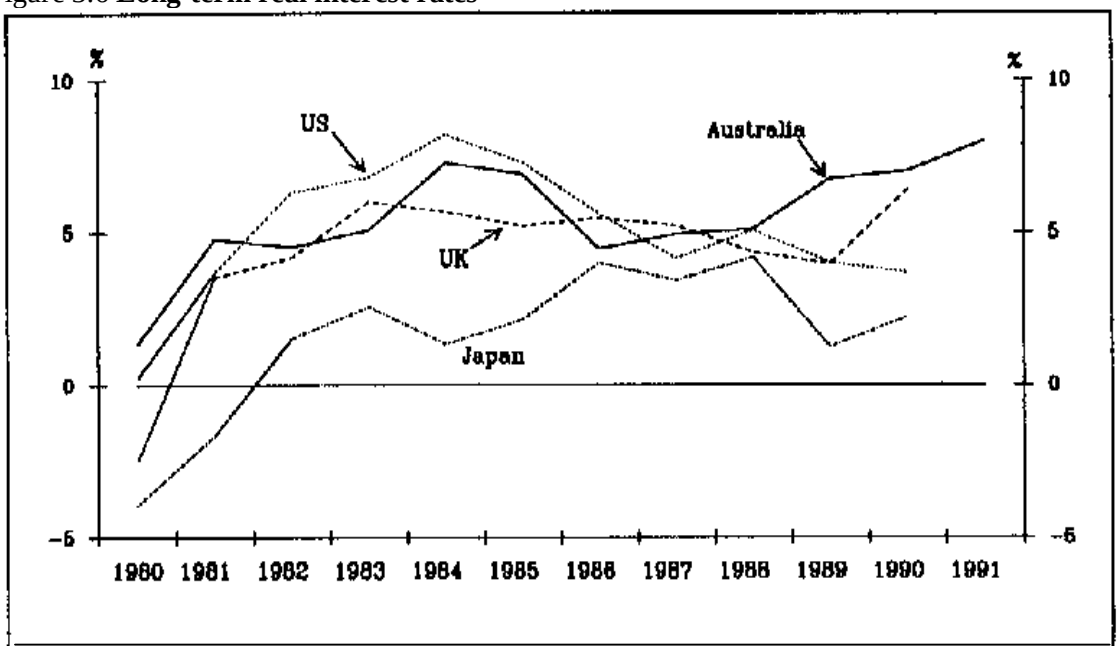
In principal the real cost of capital should be computed by deflating nominal rates by *expected* inflation, rather than by current inflation levels as in figure 3.6. In particular, when the CPI falls faster than inflationary expectations, the conventional use of current changes to the CPI will tend to overstate the level of real interest rates.

Shann (1991) attempts to infer the level of expected real interest rates in a way that is not dependent on instantaneous measures. Instead, he makes use of some data on predictions of inflation made by forecasters in a number of different countries to calculate the expected real yield on ten year bonds. By this measure Australia's real interest rate has not been high by international standards (table 3.4).

Taxation and the cost of capital

A company making an investment has to earn from that investment a higher pre-tax rate of return than the cost to it of the funding provided by shareholders or creditors (so long as taxation is positive). Comparison of this pre-tax required rate of return across countries has also been used as an indication of the extent to which capital is available to take up investment projects.

Figure 3.6 **Long-term real interest rates** [a]



Note: a nominal interest rates less current CPI.
Data source: OECD Historical Statistics, various issues.

Table 3.4 **Real long-term interest rates**

	10-year bond yield	*10-year inflation*	*Real yield*
US	8.1	3.9	4.1
Japan	6.6	2.7	3.9
Germany	8.3	2.8	5.3
France	9.0	3.0	5.8
Britain	10.4	4.3	5.8
Italy	13.1	5.3	7.4
Canada	9.7	4.1	5.4
Australia	10.7	4.9	5.5

Data source: Shann (Aug. 1991).

The process of making allowance for taxation has a number of elements, of which Irvine's adjustment of the interest cost of debt capital for the value of deductibility is one. In addition, however, calculation of the required pre-tax return involves consideration of the taxation of inflows to the company. The taxation of these inflows includes allowance for depreciation and any tax concessions, and applies whether the assets are financed by debt or equity.

A useful tool for comparing total taxes on corporate income, financed by debt or equity, in different countries is the 'effective tax rate'. Some results from recent studies (column 1, table 3.5) indicate that, in terms of corporate tax burden, Australia's taxation, while at the upper end of the scale, is not out of line with effective tax rates in many other countries. (Although there are some countries in which special factors such as tax concessions or the value of deductibility of interest against high corporate tax rates make effective tax rates at the corporate level extremely low).

Table 3.5: **Corporate effective tax rates, 1990 (per cent)**

	Corporate	*Corporate and personal tax*
Australia	27.2	36.0
United States	22.4	42.1
United Kingdom	28.0	41.8
Japan	-	33.7
Germany	4.6*	34.1*
Canada	29.0*	47.7
France	21.8*	54.0
Sweden	1.7*	22.8*

Note: Asterisk indicates the measurement is at zero inflation. Inflation affects the level of income subject to tax after deducting nominal interest on debt.
Data source: Jorgenson (1991).

These results should be interpreted with caution, particularly since the comparisons are made at one point in time. The estimates are thus sensitive to changes in inflation rates, interest rates and statutory tax rates. At the time of these calculations, Australia had relatively high inflation and nominal interest rates. This increases the value of the deductibility of nominal interest, one of the components of the overall taxation. At lower inflation rates, the benefit of this would be lower, and the net effect may be a higher tax rate.

In a recent study of the cost of capital in Australia relative to the US, the UK, Germany and Japan, the BIE found that:

> There does not appear to be compelling evidence of a sustained significant gap in the after tax cost of funds among these countries during the 1980s, although Australia does tend toward the higher rather than the lower end (BIE 1991, p. 5).

The study calculates the cost of capital, defined (as in this report) as the pre-tax rate of return required before an investment will go ahead. This explicitly takes account of the effects of taxation and depreciation provisions, and any special investment allowances. The cost is estimated for several types of investments -- machinery and equipment with a productive life of 20 years, a factory with a productive life of 40 years, an item of capital with a productive life of 3 years but which can be deducted for tax purposes, and a research and development project with a 10-year delay before any returns begin to accrue.

This evidence suggests that for some types of investment, Australia's cost of capital may be above that of the other countries, especially the UK and Germany. The BIE argues that the relatively low cost of capital for longer lived assets in the UK and Germany reflects the special depreciation provisions for long lived assets, as well as lower corporate tax rates. However, as noted by the BIE, it does not necessarily follow that the introduction of similar tax concessions in Australia would effectively reduce the cost of capital.

In considering the impact of taxation on investment incentives, attention should also be given to:

- the fact that foreign investors may be able to obtain credits in their own country for taxation imposed in Australia;

- domestic suppliers of capital will be subject to both corporate and personal taxes (the impact of which is shown in column 2, table 3.5); and

- domestic tax design principles (equity, efficiency and simplicity) may be seen as being as important as international comparisons of taxation in decisions about desirable levels of taxation.

Calculations of the cost of capital for particular types of investment in different countries show wide disparities which reflect the complexity of tax law. Most countries will have some investment which appears to be relatively penalised. **In aggregate, however, when evidence on the cost of funds in Australia is combined with evidence on effective tax rates, there is no strong support for the proposition that the cost of capital is relatively high.**

4 CAPITAL FLOWS AND INTERMEDIATION

The strong growth in and changes to financial intermediation in Australia over the past decade were closely related to regulatory reforms which have occurred. The growing importance of banks and superannuation funds is likely to affect the availability of capital to business. These intermediaries are seen as following conservative investment policies because they are inherently risk-averse and because of the way in which they are regulated. There are concerns that the encouragement of superannuation may disadvantage the banks and their clients because of adverse consequences for bank deposits and the cost of funds to the banks. However, transfers of funds between intermediaries should mitigate the effects on banks of the growth in superannuation. Initial diversion of savings would be reduced if the banks were permitted to offer superannuation saving accounts (within broad rules similar to those applying to super funds). This would also offer increased choice to contributors.

4.1 Introduction

Over time, a highly sophisticated capital market involving an array of financial intermediaries has evolved. Through the provision of a wide range of services, these intermediaries facilitate transactions among Australians and between Australians and the rest of the world.

Financial intermediaries emerged because of their relative efficiency in reducing costs and diversifying the risks associated with these transactions. Their efficiency in allocating funds is affected by a range of factors including the structure of the finance industry, technological developments and regulation. Changes in these factors have produced changes in the total amount of financial intermediation and in its form.

A particular concern for this inquiry is the effect of regulation on the efficiency with which capital is made available to business. Government regulation (broadly defined) affects intermediation in a number of direct and indirect ways:

- prudential regulation can affect the types of investment that different intermediaries make, and the number of competitors in particular areas of the market;
- implicit and explicit government guarantees of Commonwealth and State owned financial intermediaries can enhance their capacity to raise low cost funds;
- taxation of intermediaries can affect their relative attractiveness as places to deposit funds (eg. concessional taxation of superannuation fund earnings);

- taxation of individuals and corporations can affect their willingness to deposit funds with particular intermediaries (eg. tax deductibility of certain superannuation fund contributions);

- restrictions on entry to financial markets can affect competition in financial markets (eg. limits on the number of foreign bank licenses);

- restrictions on flows of funds can inhibit the efficiency of the final allocation of capital (eg. stamp duty on loan securities); and

- other policies such as the provision of social security benefits and the inclusion of mandatory superannuation contributions as part of wage settlements can affect the type of intermediation chosen.

The concerns about intermediation raised in this inquiry have focused on the growth of superannuation funds, the adequacy of equity sources for smaller companies and the behaviour of banks.

This chapter examines the changes in regulation and patterns of investment that have occurred over the recent past. It considers, at a general level, the impact of government policies affecting financial intermediaries on the availability of capital to business. Questions about the need for changes to particular policies are considered in subsequent chapters about debt finance (Chapters 6, 7 and 8) and equity funding (Chapters 9 and 10).

4.2 What do intermediaries do?

The acquisition of information to achieve a match between individual investors and businesses seeking capital usually involves substantial costs. Financial intermediaries reduce these costs and diversify risks by:

- specialising in the acquisition and provision of the information required to accomplish a financial transaction;

- providing economies in the management of financial assets;

- pooling the funds of many savers, thereby increasing the possibility of funding larger projects;

- allocating funds to a range of projects, thereby diversifying the risks associated with the financial failure of an individual venture, or a downturn in a particular industry or region; and

- managing maturity risks (by `borrowing short' and `lending long'), credit risks (by offering savers a financial claim on the intermediary rather than on the end-user of funds), and foreign currency risks (by raising and investing funds denominated in different currencies).

The activities of financial intermediaries increase the likelihood of the requirements of savers and spenders being satisfied.

Types of intermediaries

The principal types of financial intermediaries which provide debt or equity capital to businesses in Australia are:

- banks - comprising the major four banks, three state banks, and a number of smaller banks licensed in the last decade;
- non-bank financial institutions (NBFIs) - particularly merchant banks and finance companies (other NBFIs such as building societies and credit unions are primarily concerned with consumer lending);
- insurance and superannuation institutions - including life offices, superannuation funds, and general insurers;
- public unit trusts - such as property and equity trusts; and
- development capital companies including Management Investment Companies (MICs) - which invest in higher risk unlisted enterprises.

In addition, the Australian Stock Exchange (ASX) provides an organised market for the issue and trading of securities. The ASX sets out extensive rules of a prudential character, and relating to the disclosure of information to investors. The success of the ASX in promoting investor confidence in an efficient and informed market is influenced by the implementation and enforcement of these rules. Consequently, the activities of the ASX affect the capacity of Australian business to raise capital (The role of the ASX is considered in later chapters).

4.3 Developments in financial intermediation

Assets controlled by financial intermediaries in Australia totalled $729 billion, or nearly twice gross domestic product (GDP), as at June 1990.[1] This represents an increase of 50 per cent relative to GDP over the decade.

The Australian financial system was opened to world competition by a range of deregulatory measures from the early 1980s (see Appendix E). These included the removal of restrictions on Australian investment overseas (1981), the floating of the Australian dollar and dismantling of most exchange controls (1983), the issue of licences to deal in foreign exchange to forty NBFIs

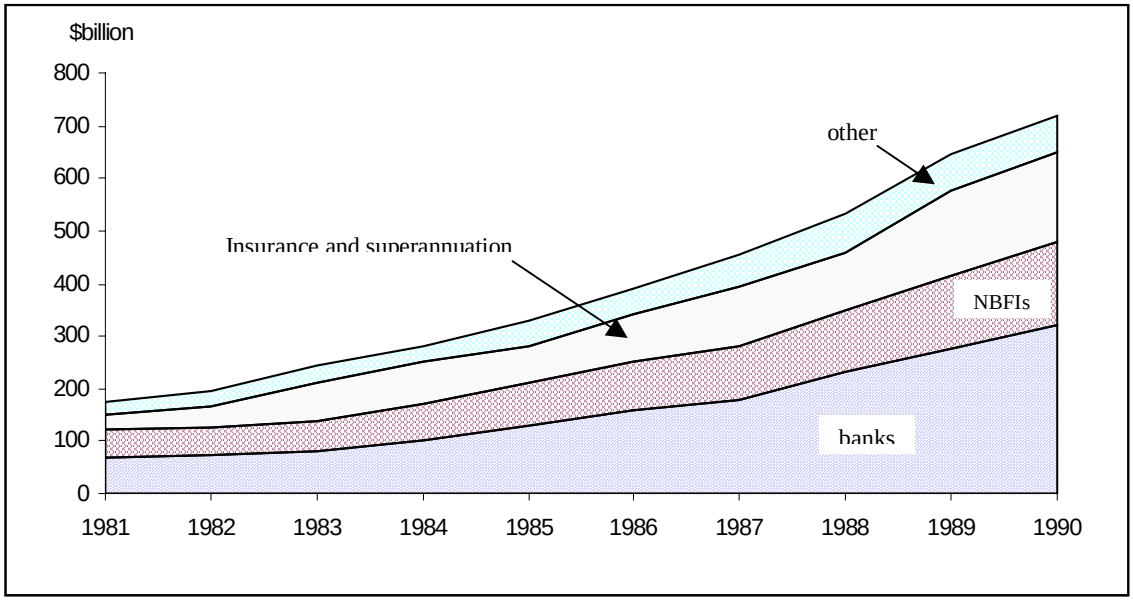
[1] Total assets provide an indication of the size of the financial sector. However, this is not an all encompassing measure because it ignores the off-balance sheet and non-lending fee based business of financial intermediaries.

(1984), the issue of fifteen new banking licences to foreign interests (1985), and the relaxation of foreign investment rules which saw the establishment of over thirty new merchant banks (1985 and 1986). The Australian dollar became a heavily traded currency, ranking sixth in the world by the late 1980s. This led to the development of a number of instruments to manage foreign exchange risk. Australian banks and major corporates were able to access overseas capital markets for funds, and there was a rapid build up of Australian investment abroad. Australian financial intermediaries expanded their international involvement through the trading of foreign exchange and related instruments, expansion of overseas offices, and the acquisition of foreign financial intermediaries. By 1989, the four major Australian banks held between 13.9 per cent and 38.0 per cent of their assets in overseas branch and subsidiary operations (KPMG Peat Marwick, 1990). Australian superannuation funds invest around 10.8 per cent of their assets abroad, and the Australian investments of foreign insurance institutions have also grown (Sub. 26, p. 22).

Broad trends

Figure 4.1 shows the extent of intermediation by main intermediary groups over the decade.

Figure 4.1: **Total financial sector assets**



Data source: Reserve Bank of Australia, 1991a, Table 3.4a.

The main trends have been:

- an increase in the share of assets held by the banking sector.

- a decrease in the share of NBFIs; and

- an increase in the share of assets held by the insurance and superannuation sector.

Banks

Banks dominate financial intermediation in Australia. They have increased their share of financial sector assets from 38.7 per cent in 1981 to 44.7 per cent in 1990, excluding funds under management. This increase in market share has been primarily at the expense of NBFIs. Banks are the major providers of debt capital to business, and business loans represent around 25 per cent of their total assets.

Participation in the banking sector in the 1980s was transformed by the transfer of substantial NBFI assets. Six domestic banks were formed through the conversion of building societies, and the new foreign banks transferred their existing investments in Australian merchant banks and finance companies to the banking sector. More recently, bank assets have been boosted by the transfer of the assets of a number of poorly performing bank-owned NBFIs to their parent banks. Bank assets have also been augmented as a result of the `flight to quality' of depositors in 1990 and 1991, due to reduced public confidence in alternative investments. This increase in bank assets has been offset by a decline in the importance of bank-owned NBFIs. Between 1984 and 1990, the market share of banking groups (including NBFI subsidiaries) remained steady at around 80 per cent of total bank and NBFI assets (RBA 1990, p.12).

NBFIs

The main NBFIs providing capital to business are merchant banks and finance companies.

The activities of merchant banks include wholesale borrowing and lending, trading in the money market, foreign exchange and securities markets and provision of advisory services. Larger merchant banks are generally owned by Australian and foreign banks. Merchant banks enjoyed strong growth in the era of bank regulation, and this accelerated in the boom conditions following deregulation. Over thirty new entrants in 1985 and 1986 saw the merchant bank's share of financial sector assets peaking at 8.9 per cent in 1987. Since then, significant rationalisation has occurred, with some merchant banks being absorbed into their parent operations, and others being wound down or closed. There has been a trend away from lending and borrowing, to concentrate on trading in financial markets and non-lending fee income. By June 1990, merchant banks had a 7.5 per cent share of financial sector assets, with around 75 per cent of this amount directed to business lending.

Finance companies steadily declined in importance through the 1980s. Their share of financial sector assets dropped from 12.6 per cent in 1981 to 5.7 per cent in 1990. These intermediaries traditionally raised money through debenture and unsecured note issues, and specialised in

providing consumer credit, financing of motor vehicles, leasing and factoring. Following deregulation, banks expanded their activities in these areas, and came into direct competition with finance companies. The four largest finance companies are owned by the major banks and many of their activities have been absorbed into their parent banks over this period. Finance companies have not performed well in the deregulated era, particularly those which branched into the financing of property development. They are currently withdrawing from unprofitable areas and refocussing on their traditional activities. Business lending and leasing represented around 75 per cent of finance company assets at June 1990.

Insurance and superannuation

Life insurance offices collect premiums and invest them to meet their obligations to policy holders. Superannuation funds invest funds to provide retirement benefits to their members and dependents. Life offices control over 40 per cent of total superannuation savings assets, and the two largest companies, Australian Mutual Provident Society and National Mutual Life Association of Australia, account for about half of life office business (Sub. 26, p. 1). The assets of these intermediaries have risen from 17.3 per cent to 20.1 per cent of financial sector assets in the nine years to 1990. Since 1984, household savings accounted for by superannuation and life insurance contributions plus interest have grown rapidly in real terms (figure 4.2). It appears, however, that this growth has been largely attributable to increases in fund earning rates over this period (Edey et al 1991). Government policies to promote superannuation both via inducement (through income tax concessions) and compulsion (through the award system) has played a relatively minor role.

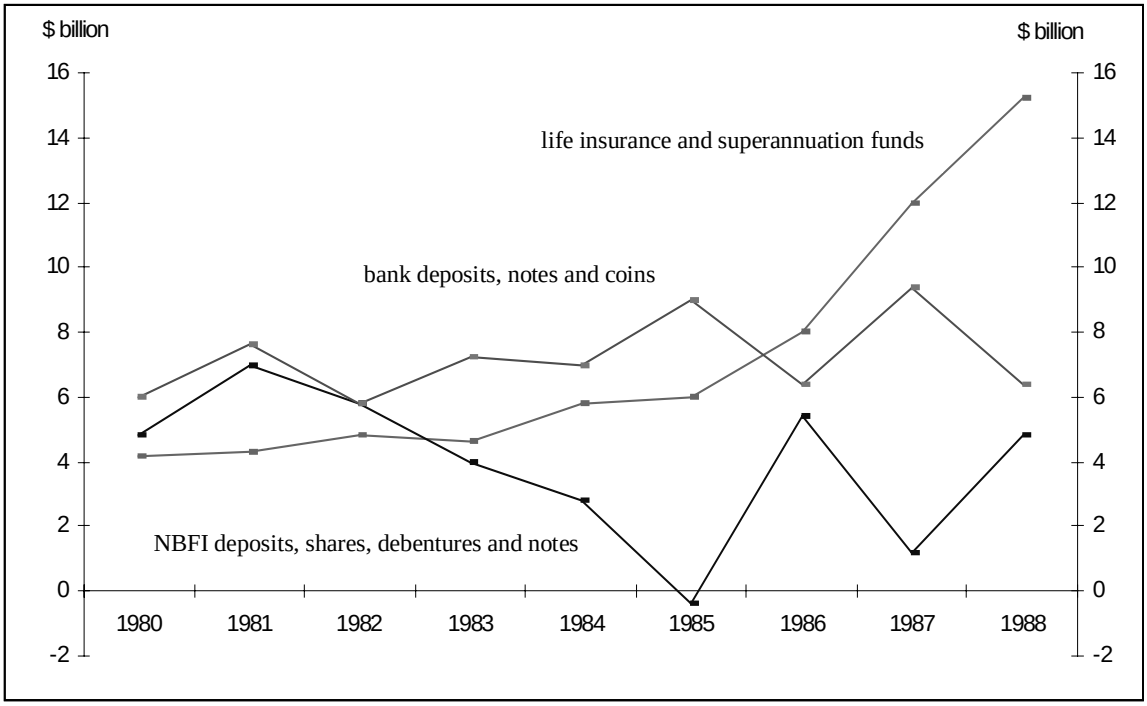
Forecasts of the level of superannuation savings by the year 2000 vary widely. However, inquiry participants generally agree with the view of the Life Insurance Federation of Australia Incorporated:

> The rise in superannuation since the mid 1980s is bringing about an ongoing major shift in the channels for the savings of Australian households from the traditional banking or deposit taking institutions to the long-term savings vehicles of life insurance and superannuation (Sub. 26, p. 38).

Life offices and superannuation funds are an important source of business finance, particularly equity. They are the largest single source of savings invested on the ASX, accounting for over 20 per cent of total market capitalisation, or around 30 per cent if the largest overseas companies listed in Australia are excluded (Sub. 26, p. vii). Life insurance companies and superannuation funds allocate around half of their assets to businesses and other financial intermediaries.

General insurers (including state government insurance bodies) provide cover for items such as motor vehicles, buildings and contents, and legal liability. As at June 1990, they represented 4.5 per cent of total financial sector assets, and had placed half of this in investments in shares, debentures, deposits and loans.

Figure 4.2: **Acquisition of financial assets by households**



Notes: Figures include unincorporated enterprises and are expressed in 1985 dollars.
Data source: Reserve Bank of Australia Bulletin, Financial Flow Estimates, November 1989.

Unit Trusts

Listed and unlisted public unit trusts manage the investment of funds on behalf of savers, generally specialising in equities, property or mortgages. The units in listed trusts are traded by investors on the ASX. Units in unlisted trusts are purchased and redeemed through the fund manager, directly affecting the cash resources of the trust. Since their introduction in the late 1970s, unit trusts have grown to 3.8 per cent of financial sector assets. Property and mortgage trusts represent over 70 per cent of the sector. The growth of public unit trusts has declined in the past three years. Funds under management by equity trusts has been static since the 1987 share market crash. Property trusts grew steadily until 1990 when concerns regarding commercial property values caused a crisis in the sector (Securities Institute of Australia, 1991, pp. 169-70). Unlisted property trusts experienced a high rate of redemptions, and fund managers were forced to extend redemption periods. In the case of a number of unlisted trusts managed by banks and insurance companies, a twelve month freeze was imposed by the Commonwealth government in July 1991. A number of unlisted trusts have transferred to listing on the ASX or are conducting a distribution of assets to unit holders. Proposals aimed at restoring confidence in unit trusts are currently under consideration by government, the ASX and the trusts.

4.4 The impact of regulation

The regulatory framework for intermediaries

The regulatory framework for Australian financial intermediaries involves a range of supervisory authorities covering various classes of intermediaries. These supervisors differ in their powers and methods of operation. As mentioned in chapter 3, there was significant liberalisation of the regulatory framework for financial intermediaries during the 1980s.

The differences in the regulation of different classes of financial intermediaries are due to their different roles, and are partly of historical and constitutional origin. For example, banks in Australia have traditionally provided a safe haven for the savings of depositors, as well as occupying a central role in the payments system, and in the functioning of the economy as a whole. Governments have long justified close supervision of banks on the basis of their importance, and the disruption which would result from bank failure. In comparison, other financial intermediaries, including State banks, have been less strictly supervised. The objectives of regulation of other intermediaries such as NBFIs, insurance and superannuation institutions are generally stated in terms of the protection of individual depositors, investors and policy-holders.

Regulation of financial intermediaries is not without costs. To the extent that regulation inhibits competition, this will have detrimental effects on the efficiency of the financial system, and hence the economy. Moreover, regulation motivated by prudential considerations may limit opportunities for investors to seek higher risk opportunities.

Regulation can be expected to evolve over time in response to changing circumstances. Pressures to amend (or retain) the existing regulatory framework arise because regulation has the effect of redistributing income between different sectors and groups in the economy. These pressures are also cyclical, responding to changes in economic conditions. For example, in 1981 the Campbell Committee argued for liberalisation of the financial sector on the basis that this would promote ‘a financial system which is efficient, competitive and stable’ (Final Report of the Committee of Inquiry into the Australian Financial System, 1981, p. xxvii). The recommendations of the Campbell Committee attracted support partly because the regulatory framework then operating had become less effective. This was due to the increasing globalisation of capital markets, and the capacity of heavily regulated market participants to circumvent regulation through less regulated subsidiaries. More recently, the economic downturn and the associated property market crash has seen increased lobbying for tighter regulation of financial intermediaries and markets. As mentioned in Chapter 1, a number of inquiries have recently been completed or are currently being conducted into the financial sector, and it is likely that proposals for changes in the regulatory framework will be forthcoming.

Reforms of the 1980s

Regulation has undergone significant changes in the last decade. In particular, the basis of bank supervision changed between 1980 and 1988 as the Reserve Bank moved from direct controls over bank deposits and loans, to prudential supervision based on capital adequacy and liquidity. The differences between savings and trading banks became blurred, and was effectively removed in 1989. The scope of prudential supervision has been extended with more emphasis on monitoring consolidated banking groups, rather than simply the bank holding company.[2] In the mid 1980s, State banks were permitted by their State government owners to expand beyond their home states, and into wholesale lending.

The removal of controls on bank deposits has brought NBFIs into direct competition with banks for deposits. This has adversely affected the capacity of NBFIs to attract deposits, and consequently to lend at competitive interest rates. In addition, competition for funds has prompted the development of an array of products for savers. In consequence, the percentage of non-interest and low interest bearing deposits held by banks has declined significantly. This trend has been reinforced by a general increase in the financial sophistication of Australian savers and the introduction of pensioner deeming in 1990.

Superannuation has long enjoyed significant taxation advantages over other forms of savings. Growth in superannuation savings is being encouraged by employer contributions as part of wage settlements, rollover funds to preserve retirement benefits, and concessional rates of taxation on contributions and fund incomes.

Regulation of superannuation fund investments has also changed. The 30/20 rule which directed superannuation investment into government securities was abolished in 1984. This has resulted in more superannuation fund investment being channelled into property and equity investments. The shift towards equity investment was further promoted by the availability of dividend imputation credits following the introduction of taxation of superannuation fund income in 1988. Superannuation fund trustees now have full control over their asset portfolios, subject to a number of prudential requirements introduced in 1989.[3]

[2] An important exception to this is that the Reserve Bank does not supervise the insurance, superannuation and funds management activities of banks.

[3] The fund must be maintained for the sole purpose of providing superannuation and like benefits. In addition, investments in the sponsoring employer of a fund must be on an arms-length basis and generally may not exceed 10 per cent of total assets. Loans may no longer be made to members. Superannuation Funds may not borrow except to secure temporary finance.

Table 4.1: **Regulatory framework of financial intermediaries**

Type of Institution	*Regulatory Authority*	*Type of Supervision*	*Number of Institutions*	*Total Assets $ Billion* [a]
Banks	Reserve Bank of Australia (RBA)	Entry, ownership, capital, liquidity, large exposures, market risk, associations with non-banks, management systems.	43	320.2
State Banks	Relevant State Government and RBA	As above[b].	3	37.6
Authorised Dealers	RBA	Equity, ownership, capital, asset composition	8	4.6
Merchant Banks (Money Market Corporations)	Australian Securities Commission (ASC)	For security dealing: capital, liquidity, dealing practices. for borrowing: prospectus requirements.	96	46.2
	RBA	For foreign exchange dealing: capital, entry, overnight exposure limits, management/dealer expertise.		
Finance Companies	ASC	For security dealing and borrowing: as for merchant banks.	120[c]	46.2
Building Societies	State Government Registrars/ Corporate Affairs and Statutory Reserve Boards [d]	Capital, liquidity, asset composition, interest rates, inspections.	37[c]	21.2
Credit Unions	As for Building Societies [d]	Reserves, liquidity, asset composition bonds of association, inspections.	367	9.3
Life Offices	Insurance and Superannuation Commission (ISC) [d e]	Entry, solvency of statutory funds, investments in related companies, trusts, types of policies written, management structure, transfers and amalgamation, information disclosure.	61	89.9 [f]
Superannuation and Approved Deposit Funds	ISC [d]	Limits on leading, borrowing restrictions, investments to be at 'arms length' from fund with limited 'in-house assets, information disclosure.	117 000+	76.1[g]
General Insurers	ISC [d e]	Entry, capital, solvency, ownership, reinsurance arrangements, accounting and managerial systems.	172	34.0 [h]

Table 4.1 (continued)

Type of Institution	*Regulatory Authority*	*Type of Supervision*	*Number of Institutions*	*Total Assets $ Billion* [a]
Unit Trusts	ASC [d]	Prospectus and trust deed, role of funds manager and trustee, redemption procedures, liquidity, borrowings and capital/reserves.	50(est) [i]	31.3 [j]
Trustee Companies (common funds)	ASC and State Government [d]	Prospectus, role of funds manager/trustee, valuation and redemption procedures, asset holdings, borrowings and capital/reserves.	13 [k]	6.6 [l]
Friendly Societies	State Government [d]	Liquidity, composition of loans, borrowings, inspections, information disclosure.	220(est)	8.6 [m]
Venture Capital Companies	ASC, Management and Investment Companies (MIC) Licensing Board [n o]	Corporations Law including prospectus requirements, financial reporting and disclosure of information. MICs were required to report data to the MIC Licensing Board.	35	1.1

Notes: a All figures as at December 1990, except for General Insurers and Trustee Companies which are as at June 1991.
b RBA has informal oversight, based on arrangements with the relevant state government.
c Number of reporting groups. Finance companies includes general and pastoral finance companies.
d Supervisory arrangements currently under review.
e State owned companies are supervised by the relevant state government.
f ISC 'Quarterly Statistical Bulletin'. Statutory fund assets in Australia only. Includes State Government insurers which are supervised by the relevant State Government.
g ABS 'Assets of Superannuation Funds and Approved Deposit Funds'. Cat. No. 5656.0. Excludes life office superannuation. Number of funds from ISC 1989-90 Annual Report.
h Assets from ISC 'Selected Statistics on the General Insurance Industry', June 1991, number of insurers as at December 1990. Includes State Government figures insurers which are supervised by the relevant State Government.
i Unit trust managers.
j ABS 'Public Unit Trusts, Australia. Cat. No. 5645.0 and 'Cash Management Trusts, Australia', Cat. No. 5635.0. Number of managers estimated from industry sources.
k Trustee companies offering common funds.
l Trustee Companies Association, June 1991.
m ABS 'Assets and Liabilities of Friendly Societies: Australia'. Cat. No. 5660.0. The ABS surveys the 15 largest societies (assets of $7.0 billion) which accounted for 84.7 per cent of total assets held by friendly societies as at June 1991. Number of societies estimated from State Registrars.
n Scheme abolished 30 June 1991.
o MIC Licensing Board, Annual Report.

General: Regulation and supervision of NBFIs differs from state to state. Also, fixed rate lending by institutions for non-business purposes is subject to consumer credit legislation in most States and territories. Finance companies are currently the major group affected by this legislation, relating to licensing, disclosure of information and interest rates.

Data source: Reserve Bank of Australia

The pooling of savings for investment in managed portfolios has been favoured by the capital gains tax rules introduced in 1985. Under these rules, capital losses on sale of investments are only deductible against capital gains. The pooling of funds reduces the risk that capital gains will not be available to absorb any capital losses realised by a taxpaying investor.

4.5 Implications of regulation

Regulation and risk-taking

The various classes of intermediaries tend to specialise in investments with distinctive risk/return profiles, partly reflecting the form and stringency of the regulations to which they are subject. Prudential requirements applying to some intermediaries limit the range of their possible investment strategies by restricting the risks that they may take. In so doing, costs are imposed on some investors. Those seeking funds for higher risk projects may be obliged to look to less regulated intermediaries.

Banks and Regulation

Participants in the inquiry raised two main concerns in relation to the impact of bank regulation and supervision on the availability of capital to business. The areas of concern were the capital adequacy rules and restrictions on the provision of equity by banks.

Capital adequacy requirements applying to banks explicitly provide incentives for those intermediaries to avoid risky activities. Under these rules, banking groups must hold a minimum level of capital set at eight per cent of risk-weighted assets. Risk-weighted assets are calculated by multiplying the amount of each class of asset (loans, investments, and off-balance sheet commitments) by a weighting of between 0 per cent (low risk) and 100 per cent (high risk). Two aspects of the capital adequacy rules drew particular attention.

Concern was expressed regarding the way in which capital adequacy requirements were said to favour housing. The Australian Industry Development Corporation said:

> .... the RBA capital adequacy weightings (50% for home lending versus 100% for corporate lending) encourage allocation of saving into home ownership and away from productive investment. This may not significantly affect larger companies which, in any event would be able to make greater use of the domestic bond market. However, smaller companies will not be able to access this market, making it more difficult for such firms to raise finance, particularly long-term finance (Sub. 46, p. 5).

Participants also raised the effect of capital adequacy requirements on the allocation of capital among businesses of different risk. Under capital adequacy rules, all loans to business are treated as equally risky and weighted at 100 per cent, thereby requiring the same amount of capital backing. The NSW Farmers' Federation said:

> The arbitrarily determined risk levels obviously do not bear any relationship to risk. Yet the Reserve Bank is imposing a cost on the banking system unrelated to the legitimate requirement for adequate risk cover. This is a distortion to price signals which has economic efficiency costs (Sub. 34, p. 15).

In addition, the Reserve Bank specifically discourages banks from providing equity finance or undertaking equity investments outside of the field of financial intermediation. Banks are obliged to seek Reserve Bank approval before undertaking a significant equity investment.

The influence of capital adequacy rules and the restrictions on the provision of equity by banks are considered in Chapter 6.

Superannuation and Regulation

The other main issue raised by participants was the effect of government policies which encourage savings through superannuation on the availability of capital to business. In particular, the prospective growth of superannuation was seen as being likely to have an adverse effect on the availability of funding for small and medium sized businesses.

The intermediaries which invest superannuation savings were considered by many participants to be inherently risk-averse. Superannuation institutions were also criticised for a tendency to focus on short-term, liquid investments. Consequently, the expected growth of superannuation funds was seen as being likely to generate an investment climate which is increasingly risk-averse and short-termist. Nevertheless, the Business Council of Australia suggested that the growth of superannuation may improve the availability of equity funding to business (DR Transcript p. 302). The investment policies of superannuation funds are considered in later chapters.

A number of participants expressed concern regarding the potential impact of the growth of superannuation on banks. It was suggested that savings would be diverted from the banking sector towards superannuation funds, with adverse consequences for bank borrowers.

Capital flows can reduce the impact of regulation on risk-taking

Regulation and the inherent risk preferences of particular intermediaries, can limit their portfolios to less risky propositions. However, examination of the first round allocation of funds by more 'conservative' institutions may tend to overstate the overall impact on the allocation of funds to risky projects.

One adjustment mechanism results from changes in expected relative returns on particular investments. The more some large intermediaries concentrate on allocating funds to low risk projects, the more that the return on such projects will diminish. This will tend to stem the flow of

funds to those activities. At the same time, the risk-adjusted returns on higher risk projects will become relatively more attractive, thereby enhancing their capacity to attract capital. Through the adjustment of returns, it might be expected that the capital market will find ways of taking advantage of risky opportunities, even if particular intermediaries tend to avoid them.

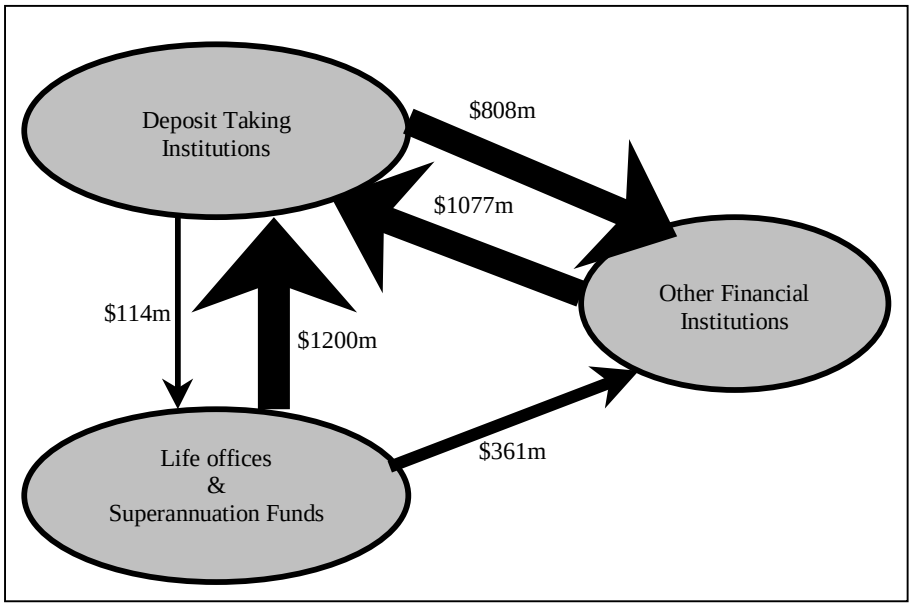
This adjustment process is evident in the investment patterns of Australian superannuation funds. Many participants noted that superannuation funds tend to concentrate their equity investment in 'blue chip' companies listed on the ASX. This tendency is accentuated in a downturn, because investments in smaller companies are regarded as being insufficiently liquid, and therefore too risky to meet the risk preferences of the funds. However, there are reasonable prospects that superannuation funds will tend to reassess the risks attaching to investments in smaller listed companies as the economic cycle recovers. They may therefore broaden their equity portfolios, without necessarily altering their risk preferences.

Regulatory reform over the course of the 1980s has meant that some foreign capital is available to major Australian corporates through debt raisings in foreign markets. In addition, foreign equity capital can be accessed through listing on overseas stock exchanges, or where foreign corporates take an ownership share in an Australian company. The fact that such foreign capital is available to large enterprises can then mean that more domestic capital is freed for use by smaller firms.

The ability of the Australian financial system to redirect funds is substantial. The Flow of Funds estimates prepared by the Australian Bureau of Statistics indicate that transfers of financial assets and liabilities between Australian financial intermediaries exceeded $7.5 billion in both March and June quarters of 1989. The general trend, depicted in figure 4.3, was for funds to flow to deposit taking institutions from life offices and superannuation funds, and other financial intermediaries. A significant component of these flows were transfers from superannuation funds to the banking sector.

The transfers of funds between intermediaries with different specialisations can provide an important offset to the initial allocation of savings to particular intermediaries. However, these transfers are not without cost. For example, stamp duty may be incurred on the transfer of receivables involved in a securitisation transaction. As a consequence, the transfer of funds between intermediaries is likely to add to the costs of finance for the end-users of capital.

Figure 4.3: **Flows of funds between financial intermediaries for the quarter ending June 1989**



Notes: a Deposit taking institutions are the banks, broad money Financial Corporations Act corporations (NBFIs) and cash management trusts.
b Life Offices and Superannuation Funds include all business of life offices, superannuation funds, approved deposit funds and friendly societies.
c Other financial institutions cover a range of heterogeneous institutions including general insurance, mortgage and equity trusts, state economic development corporations etc.
d Estimates include claims by way of bills of exchange; the estimates were constructed by pro-rating sub-sector bill assets by sub-sector of drawer of the bills.
e Estimates exclude price fluctuations in equity holdings, such as share price movements.

Data source: Australian Bureau of Statistics, Australian National Accounts, Flow of Funds, Developmental Estimates, (Catalogue No. 5232.0).

Banks and the growth of superannuation

Of particular concern to some participants was the prospect that government promotion of superannuation savings could have a detrimental effect on the availability of funds to the banking sector. However, there are a number of important factors which, at least in part, will offset this process. These factors are:

- the special characteristics of banks which will assist them in retaining a stable deposit base and a core of borrowers;

- flows of funds from superannuation funds to banks;

- bank ownership of superannuation funds;
- the possible introduction of superannuation savings deposit accounts by banks.

Special characteristics of banks

Bank deposits and superannuation savings are not perfect substitutes and it is by no means clear to what extent the volume of savings in bank accounts will be reduced because of increases in savings in the form of superannuation resulting from government policies. The special characteristics of banks reflect partly their central role in the payments system, and the distinctive attributes of the demand deposits that they provide. Banks are likely to be able to attract a stable deposit base to the extent that transaction balances are held in bank accounts for settlement of payments.

Moreover, the role of banks as possessors of information about the credit-worthiness of borrowers should assure that they retain a role as lenders. This will continue to be the case regardless of whether the banks obtain funds from retail or wholesale sources.

The special characteristics of banks are considered in Chapter 6.

Flows of funds from superannuation funds to the banks

Savings may be channelled through flows of funds from superannuation funds to banks. These flows may be achieved through transfers of financial securities, such as superannuation funds acquiring bank bills, or bank receivables through securitisation transactions. The National Australia Bank noted that superannuation funds would provide funding to banks and suggested that this would affect the cost rather than the availability of capital to Australian business:

> [Superannuation savings] ... will provide a source of funds to banks, albeit at wholesale rates as the [superannuation] funds invest in liquid assets. In addition, banks will be able to direct a higher proportion of their lending to small and medium business because the corporate sector will gain access to superannuation funds via equity and debt finance. Such funding of small and medium business may, however, be more expensive because of greater reliance on wholesale funds (Sub. 19, p. 5).

A number of participants expressed concern that the channelling of savings through superannuation funds would have a detrimental affect on the banking sector because of a heavier reliance on more costly wholesale funding. The Australian Bankers Association said:

> In our view, there is a danger that there will be an adverse impact on the ability of banks to secure a stable and low cost supply of funds to meet the lending needs of business, Governments and consumers (Sub. 74, p. 3).

The banks say that retail deposits, even after higher administrative costs, have generally been cheaper than wholesale funding in the past. However, recent trends towards higher yielding retail deposits has narrowed the price differential between retail and wholesale funding. This is consistent with greater competition for savings following the deregulation of the financial sector.

Wholesale funding is generally considered to be more volatile than a retail deposit base due to greater interest rate sensitivity exhibited by professional investors with many alternatives for short-term investment. According to Professor Harper, banks will respond to the shift towards wholesale funding by making:

> .... greater provision for sudden withdrawals of funds by increasing their reserves of liquid assets and establishing stand-by lines of credit. These are forms of insurance which it is costly to provide (Harper, 1991, p. 5).

In summary, there are substantial capital flows which have the effect of mitigating the initial effect of the growth of superannuation savings arising through regulation. It is likely that superannuation funds will make more capital, particularly equity, available to Australian business. The overall impact on banks and their clients of the growth in superannuation resulting from government policies is not yet clear. There appears to be some potential for the cost of bank funding to rise, resulting in an increase in the price of bank loans. However, this outcome may be more attributable to the rise in banks' cost of funds resulting from the trend towards higher yielding deposit accounts which has been evident for some time.

Bank ownership of superannuation funds

Banks already participate in the growth of superannuation through their ownership of funds management and trustee companies. National Mutual said:

> The banks are in there. They have not been denied access. They are involved in superannuation business under master trust deeds. They run corporate and industry funds, and they invest the assets of superannuation funds (Sub. 91, p. 1).

Under current arrangements, banks are able to offer superannuation products through their branch networks, provided that they use qualifying superannuation funds as vehicles. These entities are supervised by the Insurance & Superannuation Commission in the same way as other superannuation funds.

These savings directed to these superannuation products are not liabilities of the banks. They are simply funds which are being managed by the bank-owned superannuation funds on behalf of contributors. In order for the bank to access such funds, a transfer from the superannuation fund must take place in the same way that it would for an independent superannuation fund. Such transfers would be expected to be conducted on a commercial basis since the fund trustees have a fiduciary duty to act in the interest of the fund beneficiaries rather than those of the bank.

Bank provision of superannuation deposit accounts

The banks are currently seeking changes to the regulatory framework to allow them to offer directly superannuation savings deposit accounts. These differ from the bank-owned superannuation fund products in that a superannuation savings deposit would constitute an on-balance sheet liability of the bank and form part of its funding base. The Australian Bankers Association (ABA) proposed that banks be permitted to offer deposit accounts which qualify for similar tax concessions as savings directed to superannuation funds. The ANZ Banking Group and the National Australia Bank made similar proposals. Should these accounts be introduced, this would further diminish any adverse effect on banks of the growth in superannuation savings.

The ABA suggested that such deposit accounts be subject to the same conditions relating to eligibility for superannuation taxation concessions. Broadly, these are that the accounts are used for long-term saving for retirement, and that savings are available for withdrawal only under certain limited circumstances. The Insurance & Superannuation Commission would supervise compliance with these requirements.

The proposal made by the banks would probably add to competition in the superannuation market while continuing to satisfy the Government's retirement savings objectives.

It is envisaged that the deposits in superannuation savings accounts would be available for use in the banks' lending operations. The specialisation of the banks in provision of debt finance appears to place them in a strong position to compete in the capital stable segment of the superannuation market. In addition, the ABA claimed that the direct provision of superannuation accounts would enhance the availability of long-term capital:

> We believe that the direct provision of superannuation products by banks would provide benefits for the term structure of banks' liabilities which will, over time, help banks take a greater role in lending for longer-term purposes (Sub. 74, p. 2).

The ABA proposed that superannuation savings accounts would also qualify as bank 'deposits' under the Banking Act. The Reserve Bank has a legislative obligation to protect depositors and such accounts would fall under the supervision of the Reserve Bank.

Tax concessions provided for superannuation saving should be carefully distinguished from more general proposals for concessions to be provided for other bank savings products. The Commission noted in Chapter 3 that it did not favour ad hoc or partial adjustments to the tax system applying to particular types of bank deposits. It does, however, see benefit in allowing as many institutions as possible, including banks, to offer competing superannuation savings products to Australians wishing to take advantage of existing tax arrangements applying to superannuation. Such arrangements should allow the objectives of the Government's retirement incomes policies to be achieved more efficiently.

The Commission sees merit in allowing banks to provide superannuation savings accounts subject to compliance with the requirements for eligibility for superannuation taxation concessions. The nature and extent of the responsibility of the Reserve Bank and the Insurance & Superannuation Commission and arrangements for the co-ordination of their roles will need to be clarified.

5 DEBT VERSUS EQUITY

The choice between debt and equity financing of business is influenced by: the desires of enterprise owners and managers to keep control; the concern, particularly on the part of lenders, to set limits on gearing because of its effects on risk; the difficulties and costs to suppliers of capital in obtaining information about the prospects and progress of investments (which lead lenders to require collateral security); and the operations of markets for supplying debt and equity. Concerns about control on the part of existing owners and concerns about information on the part of investors are especially important in the case of smaller firms. There has been a large increase in the level of company debt in recent times which may to some extent have been translated into increases in debt-equity ratios. While the change to imputation of company taxation has virtually eliminated the previous bias in favour of debt finance, the impact of taxation continues to be affected by inflation.

5.1 The choice between debt and equity

Owners of an enterprise seeking additional funds, and those seeking funds to develop new enterprises, face a decision about the extent to which they raise debt and equity or hybrid forms of finance. This choice is affected by the characteristics of the various forms of finance.

Equity involves residual claims on income, with the returns taking the form of dividends or capital gains. There is no fixed commitment associated with either the timing or size of returns. If the business fails, equity investors can potentially lose all of the capital they have invested. Equity is usually associated with some degree of control over the activities of the enterprise. For shareholders in large corporations, control may be exercised over management via the exercise of voting rights and the trading of shares on the market, and in particular the threat of takeover. In small firms, control often involves direct participation in management.

Debt involves contractual repayment obligations, and creditors' claims on the income and capital of an enterprise rank ahead of the claims of equity investors. In the case of business failure, lenders generally have first claim on assets. Lenders may also exert some control over the business, although usually less directly than in the case of equity investors. Control is most likely to be exercised when the business is not performing well. The need to meet interest payments, and the threat of seizure of assets by the lender in the event of failure to meet commitments, represent a strong discipline on managers.

In between 'pure' debt and equity is a range of forms of capital which have characteristics of both. These include redeemable preference shares, subordinated debt, debt with equity conversion rights and perpetual debt.

The characteristics of debt and equity are summarised in table 5.1.

Table 5.1: **Characteristics of debt and equity**

	Debt	*Equity*
Returns	Specified in contract	Residual, in form of dividends or capital gains. Dependent on performance of the enterprise.
Claims in event of business failure	Ahead of equity Generally have right to seize assets.	Only residual, after debt and other creditors.
Implications for control	Usually no direct involvement in management. Direct control in case of receivership.	Direct control in management, and/or threat of takeover.

'Gearing' and risk

The mix of debt and equity used to finance an investment does not determine the overall riskiness of the investment. The risk associated with the investment arises because the underlying activity generates income which is inherently uncertain. The mix of debt and equity determines the allocation of the risk among the various holders of claims on the uncertain income - the lenders and equity investors.

Returns to equity adjust to reflect the different allocation of risk. If gearing is increased, an equity investor can gain a higher rate of return per dollar of equity invested if the investment turns out well. The return (or loss) per dollar of equity will be commensurately less (or greater) if it turns out badly.

Very high gearing increases the risk taken by lenders without commensurate adjustments in returns. The uncertainty of the income generated by the investment does not change with the gearing, and although the claims of lenders are usually fixed, they may be forced to bear some of any loss that equity investors would otherwise absorb. By the same token, they do not have the right to participate in the high returns that may result from business success. They therefore tend to set limits on the gearing of those to whom they lend.

The National Australia Bank noted that:

> without adequate equity participation, the bank is exposing itself to undue risk which cannot be fully compensated for by interest rates (Sub. 19, p. 18).

The bank observed that the level of equity was an important consideration in evaluating a business loan application. This point was also emphasized by the Commonwealth Bank of Australia:

> Insufficient equity is often a cause of business failure as an inordinate proportion of revenue must be allocated to servicing loan requirements (Sub. 49, p. 8).

The CBA also observed:

> As a general rule, lending to the small business sector involves a higher risk to the lending institution than lending to the personal or corporate sectors. A major factor underlying this is the high gearing ratio of most small businesses (Sub. 49, p. 5).

Information and risk

The willingness of equity investors and lenders to provide capital depends on the returns they expect to receive and the risk that they perceive to be associated with the investment. These risks may be reduced by acquiring information about the project and its managers. However, acquiring information is costly and these costs are an important determinant of the amount and type of capital supplied.

Regular monitoring consumes resources of both the supplier of capital and of the business in which the suppliers have an interest. Without such information, however, suppliers of capital are vulnerable to loss. For example, they may be unaware of changes in market conditions, or of changes in the way in which managers are disposing of the capital with which they have been entrusted.

Suppliers of equity capital are often particularly concerned about the behaviour of managers. Many feel that entrepreneurs are not careful enough with equity capital contributed by 'outsiders'. Indeed, in relation to general attitudes in venture capital investments and the corporate sector, AMP alleged that:

> managers often have no respect for investors' equity (Sub. 23, p. 21).

Advent Management said:

> For growth companies, equity is regarded as 'free' and the main concerns about it relate to ownership and control (Sub. 18, p. 3).

The Australian Investment Managers' Group also discussed the importance of information and risk, in relation to equity investment in small firms:

> Efficient decisions as to the allocation of funds depend to a large extent on adequate quantity and quality of information. Small firms tend to have a lesser availability of objective information relating to future earnings prospects, which makes it difficult for prospective investors to adequately assess the company, thereby creating a higher degree of uncertainty and the perception of higher risk. They are also less able, due to limited resources, to meet the market's demands for information (Sub. 61, p. 10).

Lenders have their own methods of attempting to reduce risks, without the need for costly monitoring. The requirement of collateral security is the most important of these. Collateral reduces the need to obtain regular information because there is greater security for the capital lent.

The National Australia Bank explained:

> Security is used as an insurance policy in the credit assessment process.

Further,

> Any deficiency in equity or inaccuracy in the financial data increases the riskiness of a project thus demanding a higher level of insurance and a greater security cover (Sub. 19, p. 19).

The assessment of risk of financial failure will have different implications for different types of firms. For example, the requirement for sufficient equity is likely to be a particularly strong imposition on those seeking access to start-up capital. Similarly, information about the reputation of a potential borrower is important. This is likely to be difficult to establish in the case of a new enterprise.

The industry in which a firm is engaged will also determine the type of equity and/or security that may be offered. For example, the National Australia Bank noted:

> The ability to turn stocks quickly into cash is an important consideration in loan serviceability (Sub. 19, p. 23).

Securing a loan may be more difficult in an industry where this type of liquid asset backing is not available.

Matching finance and projects

Financing will be affected by the initial costs which providers and seekers of capital face in obtaining information about the opportunities provided by the other. These costs differ significantly for debt and for equity.

In the case of debt, financial intermediaries are easily identified and approached. They have developed methods of assessment of propositions put to them which are economical in their demands on information. Competitive pressures and technological change has led to the development of lending products which are tailored to individual characteristics and demands of borrowers.

Matching demands for equity and its supply is more expensive. For large firms, the stock exchange (ASX) provides a central market. Its standardised requirements for the provision of information reduce the costs of assessing propositions (and so the uncertainty). Small firms must rely on the ability of venture capital firms and other investors to assess their attractiveness. Businesses seeking equity differ substantially in their characteristics and acquiring information about them and their prospects can be difficult and expensive. For firms which are not listed on the stock exchange, particularly very small ones, markets for equity capital are informal and fragmented, with the matching of suppliers and seekers often depending on family relationships and acquaintances.

The markets for debt and equity are considered in more detail later in this report.

Control of the firm

The introduction of external equity has implications for the claims of existing equity holders, and their control of the enterprise. It involves the transfer of some measure of formal control. This may be unattractive, especially to small businesses.
The Small Business Development Corporation noted the requirement of outside suppliers of equity:

> for involvement in management, which small businesses often seek to avoid due to fear that control will be lost (Sub. 14, p. 11).

A representative of the National Australia Bank explained at the hearings how entrepreneurs react when small firms reach a stage where they run out of their own capital resources:

> all sorts of difficulties begin to arise because most sole proprietors are not very keen on diluting their control over the company. Other investors are not particularly interested in investing unless they have some degree of control, so there is a conflict there immediately (Transcript, p. 168).

The prospect of loss of control with the introduction of outside equity may lead entrepreneurs to prefer debt. The Managing Director of Advent Management said:

> from an entrepreneur's point of view or someone who is seeking capital, debt is far more attractive because you do not have to give up any ownership or control to take on more debt (Transcript, p. 126).

Some businesses, however, welcome outside equity participation. The outside equity may bring management expertise and commercial know-how that can add value. In this case a loss of control is seen in a more positive light. Possible situations in which this is relevant include those in which small firms have grown to the stage that they are taken over by larger firms with better access to markets, or more managerial expertise, or when firms with complementary activities form joint ventures.

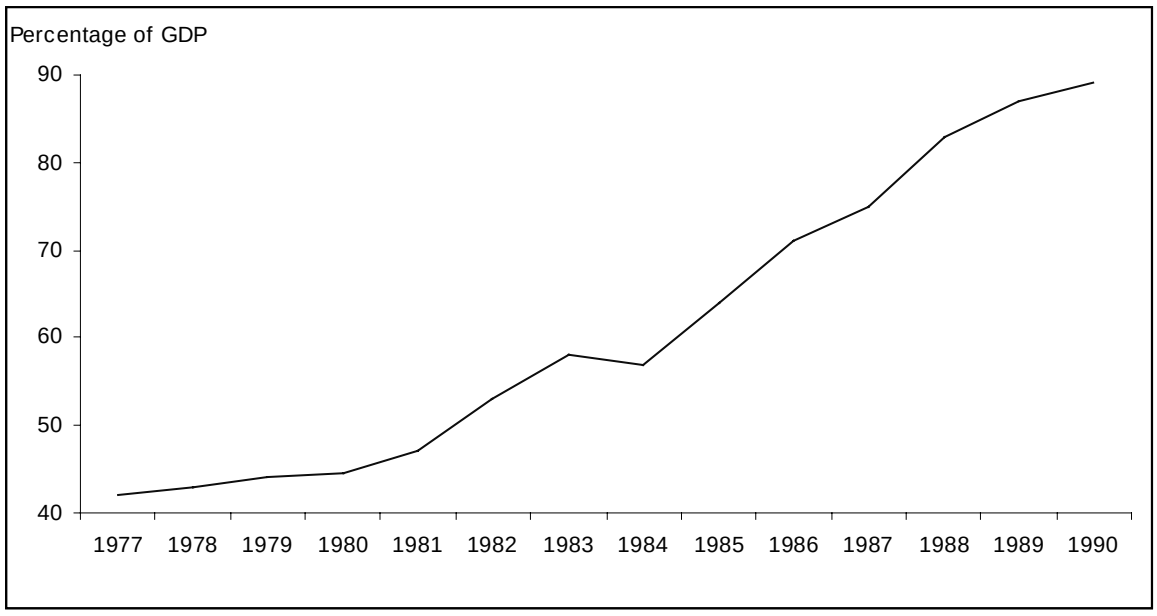
Subject to the effects of regulation, the mix of debt and equity used should reflect some balancing of each of these considerations - the risk and returns, implications for control, information requirements, and the sophistication of markets for matching providers and seekers of capital. The next section looks at some evidence on the debt-equity ratios that have eventuated. This is followed by consideration of the impact of taxation on the choice between debt and equity.

5.2 Debt-equity ratios in Australian firms

Overall debt-equity ratios in Australia

Business debt grew considerably over the 1980s. There were two periods of particularly rapid growth: during the resources boom in 1981-82 and following deregulation in 1984-85 up to 1987-88 (see figure 5.1).

Figure 5.1: **Gross business debt, as a percentage of GDP**



Data source: EPAC

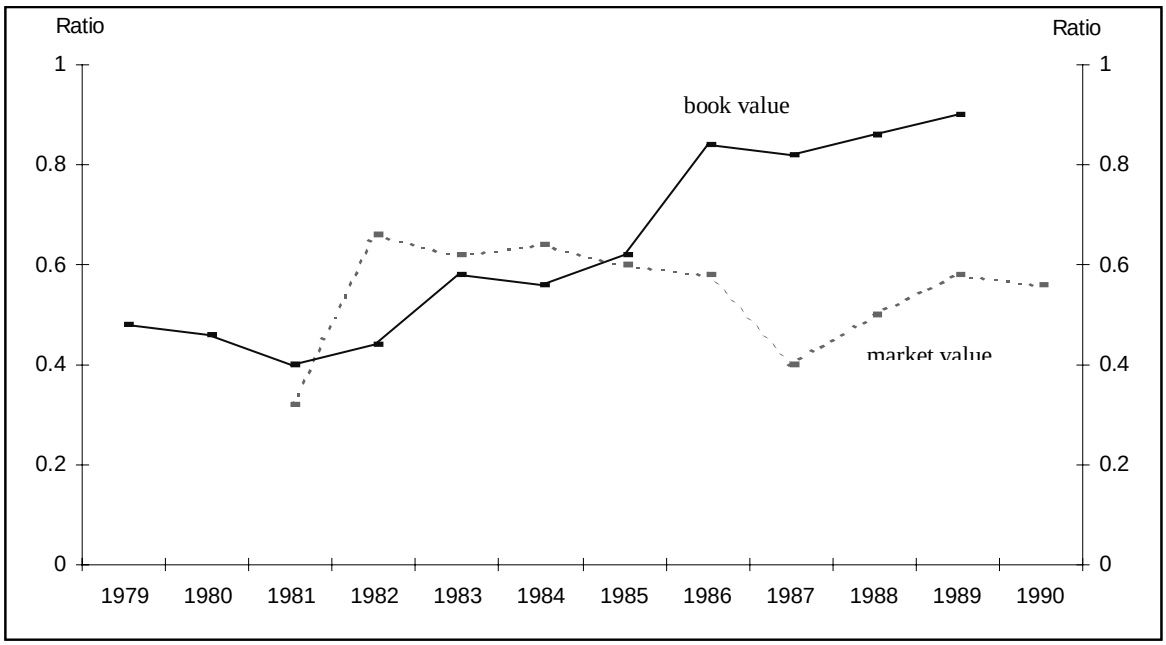
A rise in debt need not, of course, imply a rise in gearing, the ratio of debt to equity. Unfortunately, the value of equity is much more difficult to measure. There are at least three approaches to measurement which have been taken, each of which gives somewhat different results.

The most common approach is to measure book values of equity. This was used by the ANZ Bank in its submission to this inquiry and has also been used by McFarlane (1989), EPAC (1990a), and Stevens (1991). Such studies show a strong tendency for the debt-equity ratio to rise in recent times. Book values of equity can be misleading, however, because they tend to undervalue the true value of equity under inflation, and the extent of undervaluation can vary with the inflation rate.

Another approach is to measure equity by market valuation. EPAC has recently undertaken some analysis of this type, which shows that after a strong rise in 1981, average debt-equity ratios have not increased greatly during the 1980s. There was, however, a tendency for falling ratios with rising share prices up to 1987, and a significant rise in subsequent years (figure 5.2).

EPAC has disaggregated the market value data to exclude the impact on aggregate debt to equity ratios of the top 25 companies (by market capitalisation). The results indicate that the debt to equity ratios were biased upward by these companies. Exclusion of these companies from the sample does not, however, affect the broad trends in debt equity ratios.

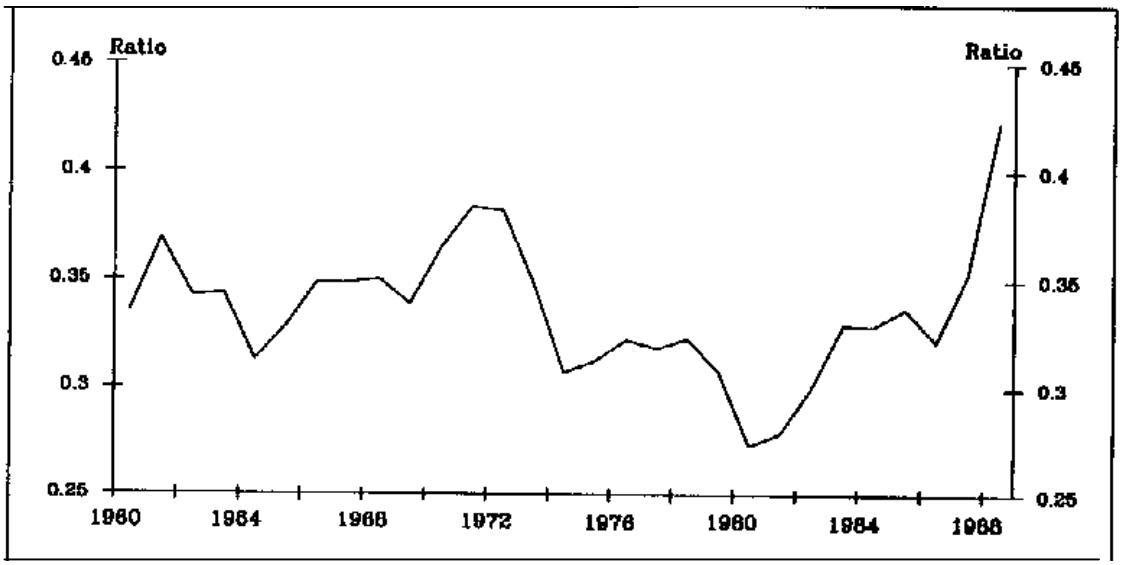
Figure 5.2: **Debt to equity ratios, at book value and market value**



Note: The book value data relates to the 1989 Statex sample. The market value data relates to the 'all companies' group.
Data sources: EPAC and Stevens (1991).

Yet another approach is to examine the value of companies' capital stock and to obtain equity as a residual, after deducting known values of debt. Using this approach, EPAC (1990a) found very little variation in debt-equity ratios over the longer-term, although there was a pronounced rise in the 1980s (figure 5.3).

Figure 5.3: **Ratios of net debt to capital stock**



Data source: EPAC

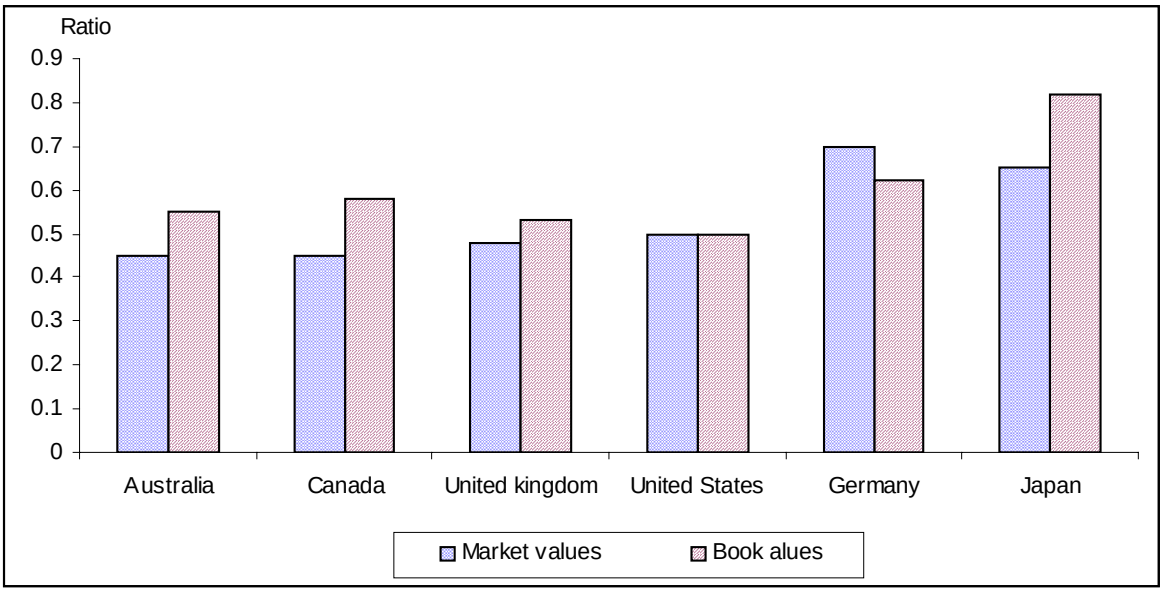
Overall, there appears to have been an increase in business debt over the 1980s. This has translated into a rise in debt to equity ratios in the 1980s, with the extent of the rise depending on the measure used. There is, however, a lack of conclusive evidence of a significant long-term trend in the mix of debt and equity.

The more rapid growth in debt through the 1980s was due to a number of factors. On the supply side, changes in the regulatory environment enabled the banks to lend to a broader range of clients, with charges matching credit risks. The demand side was influenced by the taxation system which, particularly before the introduction of imputation, favoured debt, and the popularity of gearing strategies by investors expecting asset price appreciation.

Comparison with other countries

Australia appears to have average gearing ratios which are comparable with Canada, US and UK, but low relative to Germany and Japan (figure 5.4).

Figure 5.4: **Gross debt to total assets ratios, various countries, 1986**



Notes: The values relate to the all industrials group of trading companies for Australia. For Canada, Germany and Japan, the figures relate to private non-financial enterprises, while for UK and US they relate to non-financial enterprises, consolidated or partly consolidated.
Data source: EPAC (1990a).

The relatively low gearing in Australia has been argued to disadvantage investment relative to that in countries such as Germany and Japan which have high gearing. However, the financing structure in Germany and Japan arises out of specific institutional, historical and cultural backgrounds. The Executive Director of the Australian Bankers' Association noted that:

> in Germany and Japan those equity positions have arisen as a post-war reconstruction event and are largely related to large enterprises (Transcript, p. 291).

These countries also have strong records of low inflation and low interest rates, factors which are an important influence on the willingness of investors to borrow and invest.

One institutional factor that helps to explain the high gearing in Japan and Germany is, somewhat paradoxically, the fact that banks in those countries also take equity interests in firms to which they lend. This enables them to take risks in the form of debt, that in other countries would be taken by investors subscribing equity. In 1988 banks held 12 per cent of outstanding stock in German firms and 21 per cent of outstanding stock in Japanese firms (Frankel and Montgomery 1991). This contrasts with the situation in Australia, where banks need to ensure that the borrower has sufficient equity to limit their risk in the event of default.

The access to knowledge about a company that necessarily goes with equity investment may be used to monitor the progress of lending and will give the bank greater opportunity to consider higher debt equity ratios than other lenders. The South Australian Government said:

> There is little doubt that the interconnection of German banks with industry and the vertical keiretsu structure of much of Japanese industry contribute to a diminution of risk and thus favour longer time horizons, high physical capital investment and shared financial and management expertise (Sub 45, p.5).

Further, problems associated with financial distress may be lower for a business in this situation, as the linkage of debt to equity reduces the conflicts that arise among investors when a firm is near default, with banks often organising informal refinancing arrangements for troubled firms. The 'Keiretsu' structure of the Japanese economy (the practice of cross-shareholding between banks and non-financial firms) enhances economic stability, through constant patterns of investment, with banks less likely to cut back on investment when a firm was experiencing low cash flow. The risks for the banks with equity exposure as well as debt must, however, be greater.

The equity interests of banks in Germany and Japan are supported by a range of specific institutional arrangements. Banks are represented on supervisory boards, exchange staff with clients and engage in quasi-stockbroking activities (EPAC 1990a). However banks act in differing supervisory roles in the two countries, as Frankel and Montgomery (1991) state:

> In contrast to German banks involvement with industry through supervisory boards, senior officers of Japanese banks are not members of corporate boards. The Japanese practice of cross-shareholding between banks and non-financial firms appears to make the keiretsu model one of collective decision making (p. 286).

Evidence suggests that the position of Germany and Japan has to some extent been the result of regulation, including interest rate ceilings and restrictions on overseas borrowing, and events surrounding the post-war reconstruction of both countries. With recent relaxation of some controls, firms have started to loosen their links with the banks, raising foreign capital and directly issuing domestic bonds. It has been suggested (Frankel 1991b) that debt-equity ratios are now declining in an environment with less regulation and in which less emphasis is being placed on trust and long-term relationships and more on explicit contracts.

The capacity to participate in equity markets gives banks the ability to choose from constant returns to debt in periods of economic downturn and higher returns to equity in periods of increased economic activity and profitability. However, banks taking equity positions expose themselves to changes in asset prices. For example, Japanese banks have been particularly susceptible to the downturn in property markets.

Westpac also noted that the relationship between banks and non-financial companies in Germany and Japan may have an adverse affect on small businesses seeking funds:

> This interlocking relationship between banks and their industrial customers may have certain attractions; however, an absence of robust venture capital markets in these two countries . It is also difficult to obtain risk capital for equity investors as few small companies in Germany, for example, are publicly listed (Conroy, p. 15).

5.3 Taxation

The tax system has long been recognised as a major potential source of bias in the choice between debt and equity. Significant changes to the tax system have occurred in recent years, and a number of participants considered that the Commission should review its impact. MTIA recommended that:

> the Commission examine available options to eliminate the remaining bias in the tax system in favour of debt finance over equity finance (Sub. 28, p. 6).

BZW, which was particularly interested in the taxation of intermediate forms of finance, argued that:

> failure to review the Income Tax Assessment Act in recent years has led to the development of severe impediments to the efficient accumulation of financial capital for business (Sub. 7, p. 9).

In order to evaluate the existing tax system, some basis for comparison is necessary. An appropriate benchmark would be a tax which leaves relative incentives to choose among alternatives the same as in the absence of tax. This is known as a neutral tax. While there are no taxation systems which are completely neutral, it is possible to design taxes which are neutral among given choices. The emphasis placed on neutrality in particular areas will depend on the importance of the choices involved and the extent to which they are affected by the tax system.

A tax system which is neutral between debt and equity would leave suppliers of finance facing the same total effective tax rate whether they chose to provide debt or equity. Two examples of such neutral tax systems are a true income tax and an integrated company tax (see box 5.1).

Australia's company tax reforms

Until 1987, Australia had a 'classical' tax system for corporate income. Income was taxed in the company, at the company tax rate, and then taxed again, at the personal tax rate, when received as dividends. Interest was deductible in the company and taxed at personal tax rates when received by lenders. From 1985, a capital gains tax was imposed on the value of income retained in the company to the extent that this added to share values.

Box 5.1: **Two debt/equity neutral tax systems**

A true income tax

A true income tax is neutral between debt and equity. The base of a true income tax is consumption plus the change in net wealth, for each individual taxpayer. Under such a tax:

- an investor who chooses to supply equity is taxed on the net return from the investment;
- an investor who lends is taxed on interest;
- an equity investor who borrows to make an investment is taxed on the profits from the investment remaining after deducting interest (since interest does not constitute an increase in that investor's wealth).

The deductibility of interest is a central requirement of neutrality under this form of taxation. Strict neutrality also requires depreciation to equal the loss in market value of depreciable assets, and full taxation of capital gains, on an accrual basis. A true income tax is also neutral whether magnitudes are expressed in nominal or real terms (see Swan 1982).

Integration

When company taxation is interposed between the supplier of capital and the return from the investment, it becomes more difficult to achieve neutrality. One theoretical ideal is integration of personal and company taxation.

Under integration all of the profit generated by a company is attributed to shareholders and then taxed at the marginal personal rate. The attributable profit comprises both dividends and retained earnings. Tax collected at the company level is in essence withholding tax for the subsequent personal taxation. Interest is deductible in the company and taxed in the hands of lenders at marginal personal tax rates. Under integration, therefore, each supplier of capital is taxed on the proceeds of investment at marginal personal tax rates only.

Under most circumstances this system was quite distorting between debt and equity. Generally it was considered to be biased against equity[1], since new capital subscribed to a firm would be subject to both company taxation and taxation of dividends, while debt would be subject only to personal taxation of interest. It also provided an incentive for companies to retain (undistributed) earnings, particularly in the period prior to the introduction of capital gains taxation, thereby offering shareholders appreciation in the capital values of their shares in partial lieu of dividends. This particularly favoured established profitable companies, giving them privileged access to additional capital.

In 1987, Australia introduced imputation of company taxation. Broadly speaking this allows any tax paid in the company to be credited to shareholders as a partial payment (or even, for some, excess payment) of personal tax due on the underlying income. In many ways this system approaches the neutral ideal of integration, since company income can be attributed to shareholders

[1] For those in the highest tax bracket who invested in companies which retained earnings, the tax system actually *favoured* equity. See BIE (1990) Figure 3.3.2.

themselves and is taxed only once. If full taxation of economic income is paid in the company, the system results in the equity income of most shareholders being taxed at shareholders' marginal personal tax rates, as it does for debt.

Until 1988, superannuation funds were untaxed. The returns that they received from equity were therefore diminished by company tax, while those from lending and investing on their own account were received tax-free. This created significant disincentives to invest in equity.

They now pay tax on income at a rate of 15 per cent, but are able to offset imputation credits against tax payable on other income. The total taxation on dividend income received by superannuation funds is now identical to that on interest income. That is, tax paid at the company level is fully offset by being credited against superannuation fund tax liabilities. Provided superannuation funds can actually use imputation credits, they should be no more biased between debt and equity because of tax considerations than any other investor.

LIFA noted that the changed taxation arrangements altered incentives markedly:

> The imposition of taxation on superannuation fund earnings caused a re-evaluation of the expected returns from particular investment sectors. The ability to utilise imputation credits in respect of Australian dividends paid out of taxed earnings resulted in an increase in the holdings of Australian shares. It also coincided with (and would have contributed to) an increase in the price of Australian shares. At the same time other investment classes such as property, fixed interest and overseas securities became relatively less attractive (Sub. 26, p. 36).

However, some possible sources of bias between debt and equity remain in the tax system:

- Income may be paid to some shareholders who cannot use the tax credits. Such shareholders include those on zero statutory marginal rates, those who have reduced taxable income to zero through deductions and credits, and foreigners who receive limited benefits only from imputation credits in the form of remission of dividend withholding tax. The tax on equity for these shareholders will be higher than that on debt.

- It has been argued that superannuation funds could be in a situation where imputation credits exceed tax payable. This would lead to a bias in the choice between debt and equity. Total tax paid on dividend income would be the 39 per cent paid in the company. Freebairn (1990) suggests that if this occurs there will be a bias toward debt and real estate, as these may use up excess credits which would otherwise be lost. However, this bias needs to be considered in the

context of the overall investment strategy of the superannuation funds, and the constraints on how much they hold in the form of domestic equities. It is an empirical question as to whether the holdings of domestic equities paying franked dividends are high enough to generate excess credits. For 1988-89, franked dividends accounted for only 7 per cent of total taxable income for superannuation funds (Australian Tax Office 1990, Table 4.3).

- Income tax paid in the company may fall short of that due on true economic income. Reasons for this might include tax concessions such as special deductions for research and development, and allowances for depreciation which do not match economic depreciation. (This will generally be the case with historical cost depreciation under inflation.) Alternatively, if income exists which has not borne income tax it may be paid as a dividend, in which case full personal taxation will be paid (the dividend is paid `unfranked') and the system remains neutral. If such income is retained in the company and used in ways which increase the value of shares, taxation will be deferred until the gains are realised and then only the real gain will be taxable. The opportunity to finance further investment by retaining these earnings can lead to a bias in favour of equity over debt.

In principle these elements of the tax system have potential to create biases in the choice of types of finance. Many argue that biases continue to exist because of the deductibility of interest and concessional taxation of some income, especially capital gains. This ignores some important considerations. In particular, concessional treatment of some income, such as capital gains, applies to the equity investor whether debt or equity is used to finance the investment. Further, the advantages of deductibility are greatly reduced under imputation, which tends to claw back deductions which are allowed at the company level through personal taxation of dividends and capital gains.

Calculations by the BIE indicate that biases between debt and equity in the tax system at current levels of inflation appear to be small for domestic suppliers of capital (BIE 1990). As was noted in chapter 3, however, foreign suppliers of capital may be biased towards debt. Moreover, the inflation/taxation interaction would be potentially more damaging if inflation were to rise. Options to reduce these biases and potential biases include permanent reductions in inflation, inflation adjustment of the tax system and less reliance on the taxation of income from capital (see box 5.2).

Several submissions referred to the importance of reducing inflation. For example, the National Australia Bank said:

> Indeed, concerns about the limited supply of equity finance for small business and short investment horizons in Australia appear to have a lot to do with the lack of incentives to invest in productive (ie. non-property) areas caused by inflation, the tax system and the overall economic environment (Sub. 19, p. 32).

Box 5.2**: The inflation-sensitivity of the tax system**

The current tax system has elements of both a nominal and a real income tax. Under inflation this has potential to bias financing decisions (as well as cause other distortions). Some of the most important provisions are:

- inventory is taxed on full nominal increases in value;
- nominal interest is fully taxed and fully deductible;
- capital gains are taxed on a real basis;
- depreciation is based on the historical cost of the asset distributed over its life, rather than nominal or real loss of value of the asset.

For domestic taxpayers, an income tax system which is neutral between debt and equity could be based on either nominal or real income. However, the nominal base has potential to create a larger real tax burden on investment and saving by residents, unless real interest rates rise sufficiently to compensate fully for higher burdens under inflation. If the real interest rate in Australia is set in the world market, compensation for this effect of inflation on tax payments would not be possible. For this reason many have argued that Australia should be looking to move to a base closer to real income.

Moreover, as has been noted in an earlier chapter, the deductibility of nominal interest, combined with taxation of assets which is not fully nominal, can encourage excessive inflows of foreign capital.

Apart from the introduction of a full nominal tax system, there are three broad methods by which the potential for bias in the current tax system might be reduced

- a reduction in inflation would reduce the disparity between the real and nominal elements;
- less reliance on income taxation would allow income tax rates to be reduced and ameliorate the effect of distortions in the definition of the tax base;
- indexation of the tax system for inflation would leave taxpayers taxed as they would in the absence of inflation.

The Commission notes that inflation in Australia has recently fallen from previously high levels.

6 ALLOCATION OF DEBT FINANCE

Banks are the most important domestic source of debt finance to Australian business. The banks have large bureaucracies with tiers of officers involved in lending decisions -- which leads them to adopt very structured decision making processes. Consistent with their special roles in the financial system and the economy, banks have traditionally operated at the lower risk end of financial markets. The banks do price for risk, but because of the high cost of obtaining the information necessary to make individual risk assessments, they tend to group borrowers in setting interest rates, which benefits some borrowers and penalises others. Collateral security is sought by banks as a means of reducing risks and information costs in providing loans.

In spite of claims to the contrary, the evidence is that capital adequacy rules do not affect adversely bank lending to businesses.

The Commission sees merit in the banks being permitted to provide limited amounts of equity.

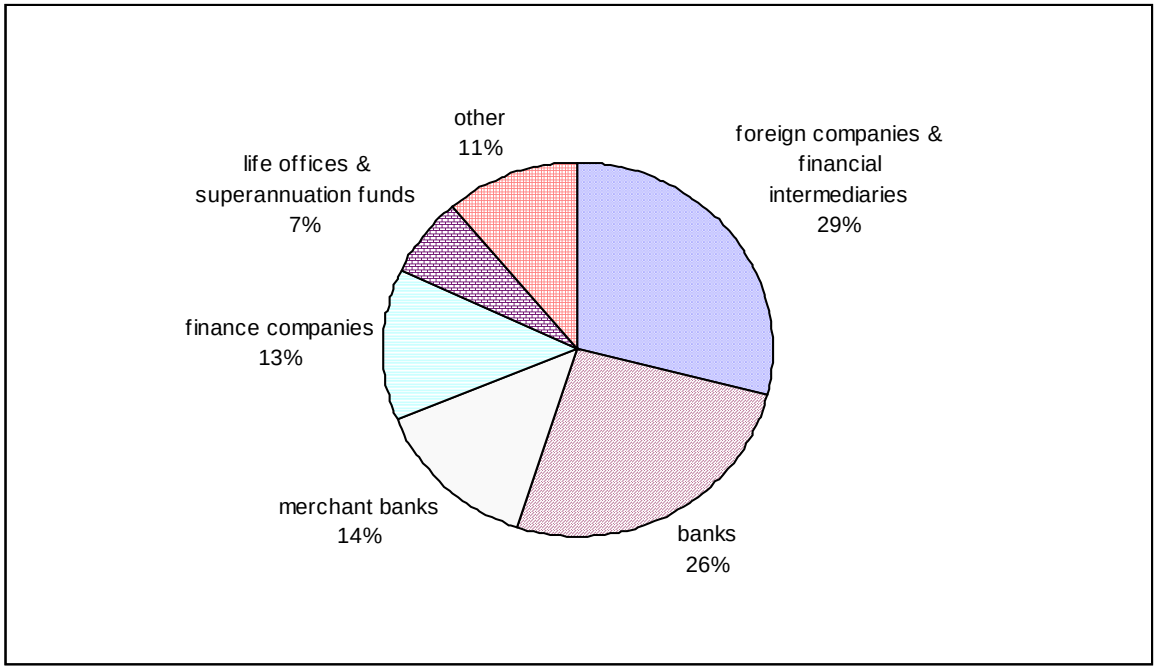
6.1 Debt finance and the banking sector

The total outstanding amount of debt finance provided to Australian business exceeded $220 billion as at June 1989. Banks are the principal domestic service of business loans. Lending by banks represents around 24 per cent of total lending and they are responsible for facilitating a further 14 per cent of loans from other sources by means of bills of exchange. The other major sources are finance companies, merchant banks and foreign companies and financial intermediaries (see figure 6.1). Life offices and superannuation funds represent a relatively minor source of business finance, with around seven per cent of total lending to business.

Banks have a central role in the provision of debt finance. The main types of business lending facilitated through banks are bills of exchange, fixed loans and overdrafts (see figure 6.2). Over the last decade, bank overdrafts have fallen and fixed term loans have risen as a percentage of total bank lending (RBA 1991a, table 3.7).

For the purposes of this report, short-term debt is defined as debt for periods up to two years. Short-term business debt typically includes overdrafts, trade credit, bridging finance and commercial bills. Medium to long-term finance facilities include financial leases, term loans, mortgage loans, and debentures. In practice, the distinction between short, medium and long-term debt is often blurred. For example, it is common for lenders to renew a short-term facility almost as a matter of course so that it effectively becomes part of the long-term core debt of a business. The availability of long-term debt to business is considered later in this chapter.

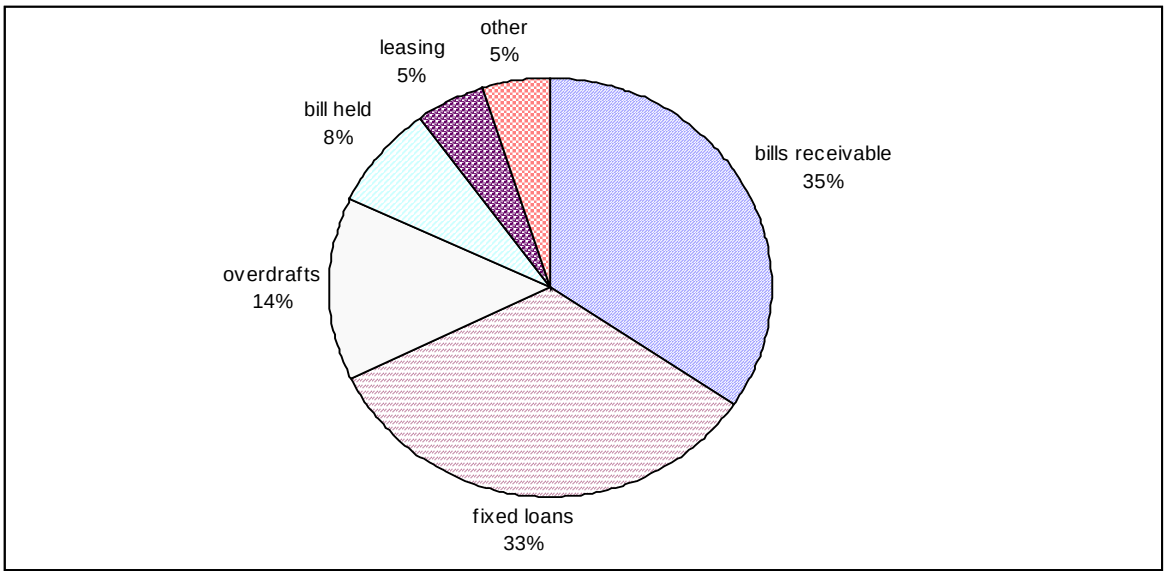
Figure 6.1**: Total lending to Australian business, June 1991**



Notes: a Excludes lending by Australian households and businesses. Excludes lending to unincorporated businesses. Excludes miscellaneous categories of debt such as accounts receivable.
b It has been assumed that it is the holders of bills of exchange who provide debt finance. Much of this lending is facilitated through endorsement or acceptance of bills of exchange by banks.
c Foreign companies and financial intermediaries includes lending by foreign businesses to their Australian subsidiaries, and lending by non-resident banks.
d Finance companies include pastoral finance companies and general financiers.
Data source: Australian Bureau of Statistics, unpublished data underlying the Australian National Accounts: Flow of Funds(Catalogue No. 5232.0).

The importance of banks in the provision of debt finance to Australian business has increased significantly in the last decade, and they now account for around 45 per cent of total finance sector assets (RBA 1991a, table 3.4b). The four major banks dominate the sector with 72 per cent of the total of Australian banking sector assets as at September 1991. The other participants in the banking sector are the three remaining state banks, the foreign banks and the new Australian banks, which account for 10, 9 and 7 per cent of Australian banking assets, respectively (RBA 1991c, table B.10). The importance of banks is further indicated by the fact that the five largest finance companies and the second largest merchant bank are bank owned.

Figure 6.2: **Types of bank lending to Australian business, June 1989**



Notes: a Bill receivable have been accepted by a bank and then discounted (sold) to another investor.
b Bills held have been purchased or funded by a bank (ie funds provided by the bank to a customer) and held by the bank.
Data source: Reserve Bank of Australia, 1991c, Table B.5.

6.2 Issues for this inquiry

Banks exercise extensive power over the terms and conditions under which debt capital is made available to business. This is particularly the case when they deal with smaller borrowers. Participants in the inquiry expressed a wide range of concerns regarding the lending practices of banks, including:

- lack of finance for riskier ventures;
- over-reliance by lenders on collateral rather than cash flow;
- lack of long-term finance;
- the extent of non-interest charges, which disguise the true costs of borrowing, and raise the cost of switching banks;
- discrimination against small and medium-sized business borrowers, involving excessive borrowing costs and rigid terms and conditions, with little variation between the products offered by different lenders.

In order to place these issues in context, this chapter looks next at the nature and role of banks. It then considers the process of lending. This involves examining the extent to which lending

decisions are constrained by the bureaucratic decision making processes of banks, and the effects of the costs of information on the way that lending is done. The balance of the chapter then addresses the first three of the above concerns expressed by participants. Questions relating to non-interest loan charges and the provision of debt finance to smaller firms are considered in the following chapter.

6.3 The role of banks

Banks differ from other businesses in that their operations are central to the confidence in the payments system and the stability of the entire financial system. The sheer size and importance of banks as financial intermediaries means that their activities can affect every sector of the Australian economy. Banks are also seen by the public as a safe haven for the deposits of small investors since the Reserve Bank has a legislative obligation to protect the interests of bank depositors.

Banks have a legal monopoly in the provision of non-currency payments services in Australia. Unlike other financial intermediaries, banks are able to participate directly in the payments system through the operation of Exchange Settlement Accounts held with the Reserve Bank. All payments by cheque in the economy (excluding barter transactions) are ultimately settled through transfers of the obligations of the Reserve Bank or by entries in the banks' Exchange Settlement Accounts. Direct participation in the payments system for the clearance of cheques and electronic transfer of funds is limited to the eighteen member banks of the Australian clearing house. The remaining banks and a small number of NBFIs issue cheques under agency arrangements with the clearing house banks.

The intermediaries which participate in the payments system are in the unique position of being able to offer demand deposits to their customers. These are deposits which are redeemable immediately into claims on the Reserve Bank. They are able to offer demand deposits because they assume liquidity, maturity and credit risks. By assuming such risks, a bank is able to fund illiquid, long-term assets (such as business loans) with liquid, short-term liabilities. According to Professor Harper, banks will have an ongoing role for the foreseeable future:

> So long as payments services are demanded by the general public, including non-bank financial intermediaries, there will be reason to hold demand deposits with banks (Harper, 1991, p. 8).

The basic function of a bank is to accept deposits, provide payments services and undertake lending. However, the range of products offered by banks has expanded considerably over the years. Banks also became owners of NBFIs, which have been able to offer a wider range of financial services because they were less heavily regulated. During the 1950s and 1960s, Australian banks became owners of finance companies and merchant banks. Following deregulation, some banks sought to provide 'one stop shopping' by offering stockbroking, funds management, insurance and superannuation services. The latter activities are becoming increasingly important. A significant development is the establishment of arrangements whereby banks market the products of insurance institutions.[1] Nevertheless, the fundamental business of most banks is to raise funds (bank capital, deposits and borrowings) and onlend these funds at a profit.

[1] Currently, there are such marketing arrangements between the two largest life offices, and two of the four major banks, Australian Mutual Provident Society/Westpac Banking Corporation and National Mutual/ANZ Banking Group.

Regulation of banks is intended to protect the interests of depositors and to ensure the stability of the payments and financial systems. It does not remove the responsibility of bank directors, management and shareholders for the operations of a bank. Regulation is not intended to prevent bad loans, but to limit the damage that lending losses could inflict on the financial system and the economy generally. Nevertheless, to foster bank stability, the Reserve Bank has imposed prudential rules which constrain the activities of each bank, including constraints on bank lending. Rules which affect the amount and type of lending undertaken by banks are: the capital adequacy rules (whereby a certain amount of capital must be held against risk assets including loans) and Reserve Bank supervision of concentration of risks (banks must report large exposures, and consult with the Reserve Bank prior to undertaking exposures to non-bank private sector entities which exceed 30 per cent of their capital). Reserve Bank requirements which oblige banks to hold minimum levels of high quality assets also affect their capacity to lend. These are the prime asset requirement (six per cent of total assets must be held in high quality assets such as cash and government securities) and the non-callable deposit requirement (an amount equal to one per cent of Australian liabilities must be deposited with the Reserve Bank).

Banks have traditionally operated in the lower risk end of financial markets. Compared to other financial intermediaries, banks prefer to undertake low risk lending. (This remains true despite the fact that many banks misjudged the risks associated with lending decisions in the period following deregulation. Many loans made in this period have since proven to have been very high-risk propositions). The factors influencing the conservative approach of banks are their high gearing, relatively low cost of funds and strict supervision. Many of the criticisms of banks' lending criteria outlined in later sections are implicit criticisms of the banks' risk preferences. For example, the Council of Small Business Organisations of Australia Limited described Australian banks as:

> bureaucratically oriented banks vying to lend without risk, against clear tangible and obviously redeemable assets' (Sub. 29, p. 4).

Banks are highly geared businesses, and a relatively small change in revenues or costs has a leveraged effect on profitability. Hence, losses on lending can have a significant impact on bank profits, encouraging cautious behaviour. Banks are able to raise deposits and borrowings at lower cost than other financial intermediaries, giving them greater capacity to operate in the low risk, low margin end of the debt market. The traditionally conservative mentality of banks is reinforced by their prudential supervision.

Banks essentially are large bureaucracies. The number of staff employed by Australian owned banks ranges from over 50 000 for the Commonwealth Bank of Australia (as at June 1991) to less than 1 000 for the Bank of Queensland Limited. While foreign banks are generally smaller, with staff numbers averaging around 1 000, they are all subsidiaries of very large international banking groups (KPMG Peat Marwick, 1991). Banks have displayed a certain heavy-handedness in setting standardised lending rules, and inertia when it comes to amending these rules in response to the changing economic and regulatory environment. Banks may also be slow to adjust lending policies because of the time lag between making a lending decision and receiving feedback on the success or failure of a loan. These characteristics contributed to the mistakes made by the banks in the process of adjusting to deregulation.

6.4 Bank lending processes

The lending processes of the banks reflect their bureaucratic nature and relative conservatism. Their formal lending policies are extensively documented in manuals on lending products and approval procedures. Staff are trained in highly standardised products and credit assessment techniques. Less obvious (but very powerful) influences on the behaviour of lending officers relate to the culture of the bank. This includes such factors as whether lending rules can be waived, the types of loans which are most readily approved, and the extent to which lending officers are held responsible for loan losses. Banks, as large conservative organisations, tend to have inflexible rules and encourage staff to pursue conservative lending practices. This has the benefit of simplifying the lending process. However, this simplification may also result in the refusal of loans which fall outside the fairly restricted lending criteria, but are nevertheless worthwhile propositions.

The banks say that the codification of the lending process is an inevitable consequence of their size, and necessary to provide their board and senior management with control over the risks which are being assumed.

While loan approval procedures vary from bank to bank, it is usual for the boards of banks to delegate responsibility for the approval of loans in a very structured manner. Typically, lending officers and bank managers have specific limits which are set in accordance with their level of seniority, experience and past performance. Where the bank officer does not have authority to approve a loan, the officer forwards it (with a recommendation for approval or rejection) to a more senior officer. A loan may be reviewed at a number of levels before final approval is granted. For example, the NAB said that it had seven levels of approving authorities. It explained its approval processes at hearings following the issue of the draft report:

> ...over half of all loans are approved or declined at the branch level. The bulk of the remainder are referred directly to the relevant level of authority and would be considered by a total of two layers of authority in the organisation. Only the largest proposals which require consideration by executive management of the bank or by the board would be considered by three levels of authority (DR Transcript pp. 266-277).

Larger and more complex lending proposals will be reviewed by specialist credit departments, before being submitted for approval. The banks say that their approval processes have become more responsive following deregulation. However, it is clear that the hierarchical method of loan approvals can impose significant time delays and costs on a prospective borrower.

Banks set limits on the maximum exposure which they are prepared to accept in lending to particular countries and regions, industries and companies in order to restrict the concentration of credit risks. The Reserve Bank's prudential guidelines affect these policies since the Reserve Bank has the power to require a bank to hold additional capital against large credit exposures. Banks also identify industries which they wish to target or avoid for strategic business reasons. A loan which falls outside the normal exposure limits of a bank will either be rejected or will require a higher level of approval than would normally be the case.

The flow of information between borrower and lender has a vital effect on the availability of debt capital to business.

6.5 Credit assessment, risk and the role of information

Banks seek to earn profits on their lending activities by selecting lending opportunities which offer attractive yields relative to their risk. They undertake this selection process by acquiring and analysing information regarding loans and borrowers to evaluate whether the loan risk is acceptable to the bank. This is the purpose of the credit assessment process prior to loan approval, and of subsequent loan monitoring. Banks also use their assessment of risk in the pricing of loans.

Because banks are generally more risk-averse than other lenders, they seek to ensure that the risk of loss on a loan is very low. The determination of the appropriate level and quality of information required to assess a loan proposal is an important part of the lending process. Banks must balance the time and cost of acquiring and analysing information, with their desire to build up a reliable picture of the credit-worthiness of a loan.

A business borrower will always have more information than a prospective lender about the prospects and risks associated with the assets and undertakings of the business. Information provided by the borrower to a bank will usually be filtered to place the loan proposal in the best possible light. A lender may seek to overcome this information bias by investing more resources in reviewing a loan. In addition these information problems can be lessened by requiring collateral. The use of collateral is discussed further in section 6.6.

A sample of the credit guidelines for the retail business customers of one major bank are set out in box 6.1. According to these guidelines, the credit assessment process of the bank takes into consideration the financial and managerial strengths of a business; its capacity to repay the loan from cash flow; and the amount of security available to the bank. A bank may also consider its capacity to 'selldown' loan risk (through credit insurance, securitisation or syndication of the loan).

Banks update their client information by reviewing loans on a regular basis. This generally involves reassessment of cash flows, collateral value, financial statements, loan repayment record, and business prospects. Monitoring reduces the risk of loss since it increases the likelihood that emerging problems will be detected and addressed at an early stage.

The process of information gathering does not eliminate the possibility of loss on a loan. The bank may make an incorrect judgement on the amount of information required, or misinterpret the data provided. The information may be inaccurate due to incompetence or fraud. Finally, the eventual risk over the life of a loan depends partly on future events which can never be fully anticipated at the time of assessing a loan. Like other financial intermediaries banks are vulnerable to major economic swings, which by their nature cannot be predicted accurately, and to related changes in perceptions of economic prospects. For example, banks developed collateral requirements over a long period of rising property values. They did not fully anticipate the decline in property values which has occurred during the past two years. Nevertheless, banks, like other financial intermediaries, exist partly because of their relative efficiency in assessing and managing credit risk. In effect, they receive a reward for assuming lending risks.

Pricing for risk

Lending involves the risk that borrowers will default on their obligations. Banks say that they seek to price loans so that they provide a profit after covering all costs including the average percentage loss on that risk class of loan. Consequently, banks vary interest rates and fees to reflect the risks that they assume. Where the risk of loss on a loan is considered to be relatively high, the banks will require a higher return.

There is an upper limit on the return a bank may earn on a loan. Unlike an equity investment, the return comprises interest and fees received less the cost of funds to the bank and the costs of administration which are attributed to the loan. (For the purpose of this chapter the discount on a loan instrument such as a bill of exchange is considered to be loan interest).

Box 6.1: **Key elements of the National Australia Bank's credit assessment of business loans**

Credit Assessment

Amount sought:	Is it adequate for the purpose? What is the borrower's equity in the proposal?
Loan purpose:	Does it comply with the banks lending policies?
Personal factor:	What is the character and integrity of the borrowers and principal(s)? What is their level of management expertise?
Ability to repay:	Will there be sufficient cash flow to meet loan obligations taking into consideration:
-	Industry: Industry cost structure, maturity, economic and seasonal cycles, profitability and possible changes to existing regulation.
-	Business: Business management experience, depth of management, integrity, track record, dependency on customers and suppliers, and level of competition.
-	Finance: Capital structure, asset structure, profitability, accounts receivable and payable, working capital and inventory turnover.
Financial position:	What do balance sheet and profit and loss statements for the last three financial periods reveal? Are cash flow projections realistic?
Security:	Are business assets available to support the borrowing where there is uncertainty regarding cash flow? Are personal assets available as security where the realisable value of business assets is insufficient to cover the borrowing.

Loan monitoring

Are adequate systems in place to monitor the progress of the loan?

Pricing for risk

Does loan pricing adequately reflect loan risk, taking into account ability to repay?

Data source: Adapted from National Australia Bank, Sub. 19, pp. 18-23.

In the event of a borrower defaulting on all obligations the bank stands to lose interest and fees forgone, the loss of loan principal, administrative costs associated with the loan, plus any costs of attempting to recover the amounts due from the borrower. This may be offset by any subsequent recoveries through the calling up of collateral. Some of the risk assessment practices of the banks in the 1980s have proved unsatisfactory, and this has flowed through to loan pricing. Mr Don Argus, Managing Director of the National Australia Bank said:

> It is fair to say that in the late 1980s banks paid inadequate attention to pricing for risk. This was partly because we were on a fairly steep learning curve after the shackles of regulation were removed. ... The 1990s are likely to see a much more rigourous attempt to price for risk (Argus, 1991, p. 6).

The banks say that pricing for risk cannot compensate them for risks beyond a certain level. As loan margins are increased, the level of fixed interest commitments rise, reducing the viability of the business. Ultimately, a point is reached where the banks consider that the additional margin is insufficient to compensate for the risk of loss. Thus, the banks are unwilling to provide finance beyond a certain risk level, regardless of reward. This is evidenced by the fact that the pricing of most business loans is based upon an indicator rate (generally set with reference to the costs of the bank) plus a margin to reflect loan risk. Bank margins for risk are generally low in relation to those of other lenders. A number of banks indicated to the Commission that they would, at a maximum, price for risk to the extent of 3 to 4 per cent annum above their base or prime rates. In effect, for reasons already discussed, banks specialise in the provision of lower risk capital. Businesses seeking funds for high risk ventures are likely to have to obtain them from other sources such as NBFIs or equity investors.

Banks were criticised by some participants for showing little discrimination in the interest rates they charge for individual borrowers. Small business groups in particular have said that they are treated by banks as all being relatively high risk, thus penalising those that are not. For example, the Council of Small Business Organisations of Australia Limited said the banks 'assume a risk component to the small business community that may not, we think, be there' (Transcript p. 414). Clients of the NSW Department of Business and Consumer Affairs argued that 'the scrutiny applied and security demanded for a small business loan is disproportionate to the real risk attached' (Sub. 32, p. 3).

The grouping of borrowers in pricing for risk can be explained in terms of the cost of obtaining sufficient information to differentiate among customers, especially where relatively small loans are involved. This can nevertheless have perverse effects. In practice lenders have an incentive to find cost effective ways of overcoming such information problems. As noted previously, standard lending procedures do allow scope for some individual risk assessment. Moreover the effect of any inequality in access to information is likely to be alleviated by the use of collateral.

6.6 Collateral vs cash flow

Many participants expressed the view that banks focus too heavily on collateral (or loan security) rather than cash flow. Typical of these concerns were those expressed by Pacvest Securities Limited:

> There is an extraordinary lack of understanding of what can constitute reasonable security amongst the banks. For the most part, they will not look beyond real estate and have ignored assignment of receivables, cash flow revenue streams, etc (Sub. 3, p. 2).

The Small Business Corporation of South Australia said that banks were prepared to lend to borrowers with poor prospects provided they could offer sufficient collateral:

> In many cases financial institutions do not do business owners any favours in granting finance where there is adequate business or personal security, but the existing business venture appears not to be viable or the owners are not competent to manage (Sub. 2, p. 1).

These complaints should be considered in the light of the risk preferences of the banks and the costs of information to assess those risks.

The banks claim that they analyse the cash flow of a borrower in order to assess the borrower's capacity to meet loan obligations. However, they also point out that this can be a difficult and costly exercise. A vast range of factors can affect the cash flow of a business, such as competition, technological change, management skills, employee relations, financial structure, economic conditions and government policies. The complexity of the interaction of these factors causes the information costs of evaluating cash flow projections to be high. This is particularly the case where specialist business knowledge is required, or where reliable data is not available (as is the case for many small businesses). At a minimum, a bank will generally interview the principal(s) of the borrowing firm and examine their financial statements.

The evaluation of cash flows is particularly difficult where a business is in start-up phase. For this reason, the banks generally lend to businesses which have been operating for a minimum period of time. The Commonwealth Bank indicated that it reviews the history of the applicant and, for new customers, it seeks financial statements for the past three years (Transcript p. 348). The National Australia Bank seeks financial statements for at least the last three financial periods (Sub. 19, p. 19).

Banks appear to have had limited experience and expertise in assessing cash flow risk in the past. The major banks readily admit that one major result of the regulation of interest rates for loans below $100 000 prior to April 1985 was that it was not necessary for loan officers to develop extensive cash flow assessment skills for small businesses. Several participants expressed the view that this was also reflected in lending to larger businesses.

The ANZ submission to the Martin Inquiry said that:

> ... many bank managers found lending under a regulated system as a straightforward matter of rationing funds between loan applicants who, from the bank's point of view were virtually risk-free.... the lender today needs skills of a different order from 10 years ago and progress towards staffing the bank with those skills has been painful for some traditional bankers (ANZ Banking Group, 1991, p. 17).

The assessment of cash flow projections has become more complicated following the transition to a less regulated regime. Deregulation has increased competition for market share, and eliminated widespread credit rationing. This has placed more emphasis on the need to evaluate cash flows. At the same time, analysis of cash flow projections has been made more difficult by an increase in the volatility of interest rates and exchange rates.

Banks seek to reduce the risks associated with relying on cash flows by discounting projections provided by the potential borrower (thereby allowing greater margin for error), and by seeking collateral.

Collateral serves three purposes for banks. First, it reduces the risk of loss in the event of the financial failure of the borrower. Second, it reduces the information costs related to assessing loan risk. Third, it increases the commitment of the borrower to meet its obligations. The financial failure of a borrower has costs to the banks such as the time and effort involved in additional monitoring and exercising of security, even where the full amount owed is recovered. The Commonwealth Bank of Australia said:

> ... it must be stressed that no amount of security is a substitute for lack of demonstrated capacity to repay or inability to satisfy other loan assessment criteria (Sub. 49, p. 10).

The complaint that banks tend to disregard the value of business assets (other than property) can be understood in this context. The value of specialised business assets frequently depends upon that business remaining a going concern. Similarly, cash and other liquid assets tend to have been realised in a distress situation, and are generally not available to the bank in the event of financial failure. In consequence, banks tend to place greater weight on the collateral value of assets such as property and motor vehicles which can be insured against destruction, and which are difficult to sell without bank permission. They are also relatively easy to value because they are traded in established markets. In addition, banks accept security in the form of loan guarantees and credit insurance.

Business borrowers benefit from the provision of collateral and other forms of security through lower borrowing costs and greater availability of credit. This is because security reduces the lender's risk, and the information costs associated with assessing the value of security are relatively low. Conversely, the provision of security does increase the borrower's risks, since the security can be forfeited in the event of default. It also poses problems for businesses which do not acquire tangible assets because of the nature of their operations. For example, the main input in some service industries is labour and investment in real estate assets may be inappropriate.

The deregulation learning curve

The removal of lending controls has eliminated large scale credit rationing which discouraged banks from funding small and risky businesses. Deregulation required the banks to acquire more sophisticated credit assessment skills as they were able to lend for more risky propositions. The banks' capacity to adapt was retarded by lack of lending staff with strong financial skills. Lending officers were generally trained internally by the banks and tended not to have formal qualifications in finance. It is clear from the record levels of bad debts currently being reported that the development of these skills has been a painful learning process for both the banks and their customers.

It is now clear that banks undertook excessively risky lending as they sought market share in the more complex and competitive deregulated environment. One financial journalist has described this as the 'boom-bust cycle' of the 1980s:

> ... For decades the banks had been criticised for their unwillingness to take risks - largely as a result of the constraints under which they operated. By the end of the 1980s, they were under attack for having been too cavalier in their lending.... The 1980s ended on a note of relative corporate sobriety and in the new decade the caution continued (Carew, 1991, p. 81).

The problems of the Australian banks are not unique. Banks in the United States, Japan and United Kingdom are all re-evaluating their strategies and overhauling procedures as a result of poor performances. The problems of these banks are attributed to a variety of factors, including the downturn in world economic growth, poor lending practices (particularly lending to less developed countries), highly geared property and entrepreneurial companies involved in leveraged takeovers. As in Australia, these banks are undergoing an ongoing process of adjustment to a less regulated environment.

According to the banks, they are addressing the deficiencies in lending practices which have emerged. Mr Will Bailey, speaking as Chairman of the Australian Bankers' Association said:

> ... in the first heady years of deregulation, we clearly did not always meet our own standards as prudent lenders. We have learnt our lessons. We have reviewed lending procedures, credit assessment, problem loan management, management organisation and personnel (Bailey, 1991, pp. 3-4).

The banks are developing more sophisticated credit assessment procedures and investing in more staff training. For example, the National Australia Bank has implemented a computer based risk assessment system for its businesses customers of its retail network. The bank says this system contributes towards a greater degree of uniformity in assessment and pricing of loans, but notes that these systems cannot be used in isolation and are no replacement for sound lending skills.

It appears that the process of adjustment to deregulation in Australia is an ongoing one for both lenders and borrowers. The Western Australian Department of State Development acknowledged that since deregulation the banks had made some progress towards taking cash flow of a prospective borrower into account, but said this was a long-term process requiring changes in bank culture and staffing:

> The banks need to acquire the expertise and the will to assess a commercial client's potential trading performance. Bank lending officers will need to have an extensive understanding and knowledge of the workings of a business and of business management generally. This expertise needs to be cultivated within the banks' staff structure (Sub. 50, p. 90).

Many participants expressed concerns that during the current recession many participants have retreated to over cautious lending criteria. The banks have certainly applied more stringent lending criteria over the past two years. In some cases they have withdrawn or reduced credit facilities with questionable haste. This matter is discussed further in the following section.

6.7 Availability of long-term finance

Some participants expressed the view that there was a shortage of long-term finance available to business. SBP State Council Inc. said:

> There has been very little long-term debt finance available to Small Business apart from heavily secured bank loans and limited mortgage finance (Sub. 12, p. 2).

The term of finance provided to business reflects both demand and supply conditions.

Supply of long-term debt

Banks have not traditionally been lenders for terms exceeding five years, with the notable exception of residential mortgages. The risks associated with mortgage lending are significantly lower than for most other forms of lending.

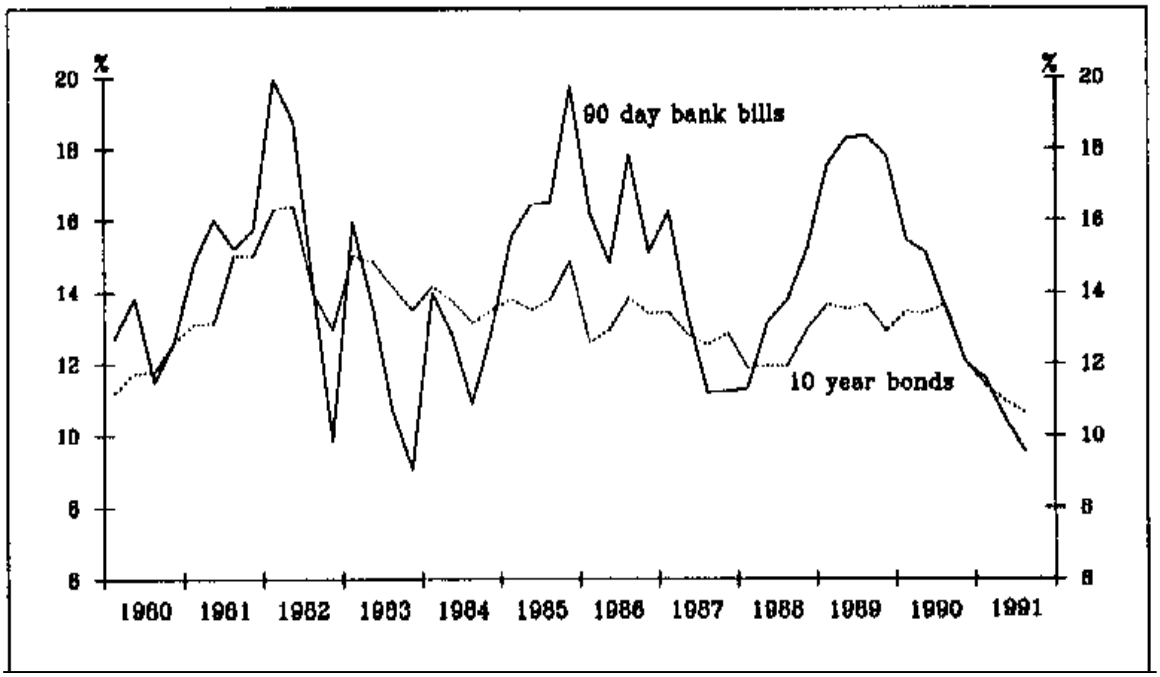
The lack of long-term lending by banks can be attributed partly to their risk-averse stance. The credit risks associated with short-term facilities are relatively low because of the comparatively limited scope for deterioration in the borrower's financial position. With the greater uncertainties associated with long-term loans, the costs of information required to assess credit-worthiness are higher. Consequently, bank policies to limit the availability of long-term loans may be attributed partly to the higher costs and uncertainties associated with long-term lending.

In addition, a bank may prefer to make short and medium term loans because this assists it in managing the liquidity risks associated with 'borrowing short' and 'lending long'. The liabilities of banks (particularly their deposits) are generally short-term in nature. In fact, until 1984, the Reserve Bank prohibited banks from borrowing for terms exceeding four years.

A frequent phenomenon in the 1980s has been an 'inverted yield curve' with short-term interest rates higher than long-term rates. The relationship between short-term and long-term interest rates mainly reflects monetary policy settings. Long-term interest rates could be expected 'normally' to exceed short-term rates, reflecting the greater uncertainties of events further into the future. An inverted yield curve is associated with a tight monetary policy stance by the monetary authorities. The extent of variation between short and long-term interest rates is shown in figure 6.3.

It is not clear whether the emphasis on short-term lending by banks has increased in recent years. The Australian Bankers Association (ABA) said that several banks had indicated that there had been no shortening in average loan terms over the 1980s for the small and medium business sector. However, some banks had suggested that a shortening had occurred more recently. The ABA pointed out that deregulation has enabled banks to cater for a much greater range of terms (Sub. 52, p. 1).

Figure 6.3: **Short and long-term interest rates**



Data source: Commonwealth Treasury.

Demand for long-term debt

The term preferred by a borrower relates primarily to borrowing costs, the need for flexibility and the need to manage refinancing risk. Borrowers will take into account current interest rates levels and their expectations of future interest rates when determining their preferred loan maturity. Borrowers might prefer the simplicity and flexibility of short-term debt where they expect that interest rates will fall. However, long-term facilities offer borrowers with a range of alternatives which allow more sophisticated management of interest rate risk.

Many banks provide longer term facilities with fixed long-term interest rates, or with variable interest rates set by reference to short-term rates. Banks are increasingly offering borrowers the option of switching between fixed and variable rates. More sophisticated borrowers also have the opportunity to manage interest rate risk through 'synthetic securities' such as fixed interest rate swaps and forward rate agreements.

Other borrowing costs which will be taken into consideration are the interest margins and fees sought by the bank (on top of the base interest rates) plus legal and government charges. Since a long-term facility represents more risk to a lender, they would be expected to seek a greater reward by way of interest margin and/or fees. In contrast, the legal and government charges on short-term facilities such as overdrafts can be cheaper than those on other forms of debt. They are frequently based on informal arrangements where the lender does not make an ongoing legal commitment to provide a loan, and are less likely to incur costs relating to legal documentation and stamp duty on formal loan securities.

Short-term debt provides more flexibility to both the borrower and the lender. However, where short-term facilities are being used to fund longer term requirements, borrowers face a higher level of refinancing risk.

Refinancing risk

Refinancing risk is the risk that replacement finance will not be available at acceptable terms upon the maturity of an existing debt facility. Refinancing risk increases in an economic downturn or in a credit squeeze when credit becomes less freely available. A number of participants cited the cases of individual borrowers to show that rollover risk had increased in the current economic downturn. To some extent, this may be seen as banks reacting to the increased risk of business failure in an economic downturn. It may also reflect the fact that banks have raised credit standards following evidence that the practices of the late 1980s, were inadequate. In many instances, borrowers have become less credit-worthy because they became highly geared in the late 1980s, or because of a decline in the value of the collateral that they can provide.

Nevertheless, a number of participants expressed concerns that banks were overreacting to their bad debt problems by withdrawing support for credit-worthy customers. The Australian Industry Development Corporation said:

> We know of a number of public and private companies that have had so-called evergreen facilities cancelled or reduced at short notice by bank that have reacted nervously to market views of potential pressures on specific industry sectors, rather than hard information of problems in individual companies. While this type of action may ensure protection against even a remote loss, it places the companies in an impossible position, as in a difficult market they have problems in replacing these facilities (Sub. 46, p. 3).

Anecdotal evidence suggests that refinancing risk has also been increased at present due to the operation of capital adequacy rules. Bad debts reduce the capital of a bank, and place pressure on its capacity to meet capital adequacy requirements. One way of dealing with this is to run down the banks lending assets by refusing to refinance, or by offering unfavourable terms to borrowers.

The extent of competition between alternative sources of finance such as competitor banks and other financial intermediaries is an important determinant of whether businesses can obtain finance. However, it is important to note that the products offered by different banks to small and medium sized businesses tend to be similar, reducing the incentive to change banks. In addition, there are significant costs associated with refinancing with another lender. These issues are discussed in chapter 7.

6.8 Impact of prudential regulation on bank lending

Banks are subject to capital adequacy rules imposed by the Reserve Bank. Several participants considered that these rules influenced the allocation and level of bank lending in a way which unfairly disadvantaged particular groups. By contrast, prudential controls that discourage banks from providing equity funding, may have indirectly resulted in greater availability of debt finance to business.

Capital adequacy

The capital adequacy rules primarily seek to ensure that the level of bank capital is sufficient to protect depositors. Capital provides a buffer which is available to absorb any losses which are incurred on the assets of a bank. Hence, the level of a bank's capital vis-a-vis its assets is an important determinant of its financial strength and stability. Under the capital adequacy rules, the minimum level of a bank's capital is set by reference to the level of its assets and credit exposures adjusted by five broad categories of risk-weightings. These rules were devised by the twelve member countries of the Basle Committee on Banking Supervision, under the auspices of the Bank for International Settlements. The capital adequacy rules are currently being implemented around the world. Banks are scheduled to have capital in excess of eight per cent of risk-weighted assets by December 1992.[2] Australia is not a signatory to the Basle accord, but has chosen to implement the rules along with a number of other non-signatory countries.

[2] The United Kingdom and a number of European countries have fully implemented the capital adequacy rules in advance of the 1992 deadline. Progress is slower in the United States. Japanese banks generally have weaker capital bases, and have received a three month extension for meeting the minimum capital requirements. The Basle accord only relates to internationally operating banks, but most central banking authorities have chosen to adopt the accord for all banks under their supervision.

The capital adequacy rules contribute towards stability of banks in participating nations. This was seen by regulators as being desirable given the growing interdependence of international banks.

While capital adequacy rules contribute towards international convergence of banking regulation, they do not eliminate all variations between the regulation of banks in different countries. There are technical variations in the implementation of the rules by various central banks. In addition, banks in different countries operate under different taxation and accounting arrangements, and institutional structures.

The Basle Committee is currently working on extending the guidelines to take account of other risks faced by banks such as foreign exchange and interest rate risks. Nevertheless, these rules are not intended to address all the risks to the capital of a bank. This was acknowledged by the Reserve Bank when it introduced the capital adequacy rules:

> There are, however, other risks that may need to be taken into account as a separate matter in the overall assessment of capital adequacy. The Bank will continue to have close regard to quality of assets, profitability, liquidity, loan exposures and provisions, and the effectiveness of management systems for controlling risks (Reserve Bank of Australia, 1988).

The Reserve Bank introduced the risk-based capital adequacy rules in 1988, and all Australian banks have achieved the target level. However, the imposition of capital adequacy requirements on banks is not a recent phenomenon. Prior to 1988, the Reserve Bank had monitored the capital adequacy of Australian banks since the early 1980s and had introduced a minimum capital requirement using a simple on-balance sheet model in 1986.

The Commission sought the views of inquiry participants on the impact of the capital adequacy rules on the availability of finance to Australian business. The rules appear to have broad acceptance in Australia. No participants suggested that the rules be abandoned. However, some specific changes to the rules were suggested.

A number of participants were critical of the arbitrary nature of the credit risk-weightings adopted in the capital adequacy rules (table 6.1). The risk-weightings are based on the category of borrower, and do not take into account loan security or term. They also treat all types of business loans as being equally risky and requiring the same amount of capital.

Table 6.1: **Capital adequacy risk-weighting of selected types of loans and assets**

Loan/Asset Class	*Risk-weighting (Per cent)*	*Capital required to back a $100 loan/asset ($)*
Reserve Bank	0	0.00
Commonwealth Government (greater than one year)	10	0.80
Inter-Bank Deposits	20	1.60
Local Government	20	1.60
Housing Loans (fully secured)	50	4.00
Business Loans	100	8.00
Fixed Assets	100	8.00

Data source: Reserve Bank of Australia, 1988

Some participants questioned the lower risk-weighting of housing finance compared with business loans. This favouring of housing is unique to Australia. However, it was introduced by the Reserve Bank on the basis of evidence that loan losses on residential housing mortgages are significantly lower than those on other personal and business loans. The National Australia Bank supported the risk-weightings saying:

> It would seem fully appropriate when establishing capital requirements to take into account systematic differences in risk between assets. ... The average bad debt experience on residential property is less than one-quarter the average for commercial loans. This would give support to a lower weighting given to housing (Sub. 77, p. 3).

The Commonwealth Bank acknowledged that banks had targetted the housing market in the period leading up to and shortly after the introduction of the capital adequacy rules. It said that during this phase-in period, the capital adequacy risk-weightings had been a factor in the creation of two new housing products. However, since then growth in housing lending relative to business lending had reflected factors other than the capital adequacy rules. These included strong underlying demand for housing finance, the 'flight to quality' of deposits from NBFIs which would otherwise have provided housing finance, and the poor outlook for many businesses relative to housing loan applicants in depressed economic conditions (Sub. 92, p. 2).

Under the capital adequacy rules, a small business loan which is secured by a home is not regarded as a different version of a residential mortgage. Such loans would generally fall into a higher risk category than residential mortgages, and are weighted at 100 per cent. Regardless of the form of security held by the bank, business loans rely upon the success of the business for loan servicing. In many instances the principal balance of a business loan is not amortised over the course of the loan (i.e. interest-only loans, overdrafts and revolving credit facilities). This involves a greater risk than a residential mortgage where borrowers frequently have secure sources of salary income and loan balances reduce over time.

The NSW Farmers Association considered that its constituents were disadvantaged by the capital adequacy rules which classify farm loans as business loans. It argued that farming is a low risk business activity over the long-term and should receive a lower risk-weighting. The NSW Farmers Association said that the farming sector had low gearing, diversification of income streams from different activities, and leadership in technological development capable of adapting to new markets and new competition. However, this assessment was not supported by the banks which participated in the inquiry. They acknowledged that farmers, like home owners, would go to extraordinary lengths to avoid losing ownership of their properties. However, they pointed out that farm incomes were volatile and dependent upon variable agricultural prices and weather conditions. The Commonwealth Development Bank said:

> Farming is not a low risk business these days, not in a deregulated environment (DR Transcript, p. 329).

The Australian Bankers Association noted that there was no evidence to suggest that the capital adequacy rules had resulted in a displacement of funds from the farming sector to other borrowers. It supported the current risk-weightings saying that the rate of bad debts on housing was far lower than that of farm loans. As an indicator the ABA advised:

> The information obtained [from ABA member banks] indicates that lending to the rural sector classified as non-accrual is currently around three times higher than that for the housing sector Sub. 74, p. 2).

In the absence of the rules, banks would be expected to maintain adequate capital levels based on the risk of loss on their loans and investments. Banks are risk-averse institutions and would be expected to set limits on the level of gearing which they consider prudent. The providers of funds to the banks also influence the amount of capital that a bank holds. Bank depositors and other lenders will penalise a bank which is considered to have insufficient capital by demanding a higher risk premium for their funds or withdrawing them altogether.

The capital adequacy rules will directly affect the amount, availability and allocation of bank finance only where the requirements under the rules are more stringent than those imposed by the market. This is not currently the case according to the National Australia Bank:

> .... currently capital markets are demanding that banks hold capital significantly in excess of that set by the BIS guidelines and I think the margin that capital markets expect banks to hold in excess of those (minimum) requirements .... has increased over recent years as the volatility facing banks has increased (DR Transcript, p. 277).

This is borne out by table 6.2 which shows that all Australian banks have risk-adjusted capital ratios well above the eight per cent required under the capital adequacy rules. Banks therefore have considerable scope to change the allocation of their new lending while still complying with the rules. This suggests that, at present, banks have regard to market perceptions rather than the capital adequacy rules when making lending decisions.

Table 6.2: **Capital adequacy of Australian banks**[a]

Bank	*Risk adjusted capital ratio (Per cent)*
ANZ Banking Group	9.9
Commonwealth Banking Group	8.7
National Australia Bank	11.4
Westpac Banking Corporation	10.5
State Bank of New South Wales	10.8
State Bank of South Australia	9.7
Advance Bank Australia Limited	9.1
Bank of Melbourne Limited	11.2
Bank of Queensland Limited	13.6
Challenge Bank Limited	10.2
Macquarie Bank Limited	14.1
Metway Bank Limited	9.3
Rural & Industries Bank of Western Australia	9.0
Bank of America Australia Limited	15.0
Bank of Singapore (Australia) Limited	11.0
Bank of Tokyo Australia Limited	10.8
Bankers Trust Australia Limited	17.7
Barclays Bank Australia Limited	9.3
Chase AMP Bank Limited	9.2
Citibank Limited	12.3
Deutsche Bank Australia Limited	8.4
Hongkong Bank of Australia Limited	10.4
IBJ Australia Bank Limited	10.9
Lloyds Bank NZA Limited	9.2
Mitsubishi Bank of Australia Limited	8.9
NatWest Australia Bank Limited	8.4
Standard Chartered Bank Australia Limited	11.0

Notes: a As at reporting dates. The first 12 ratios relate to 1991; the rest are based on data for 1990.
Data source: KPMG Peat Marwick, 1991; bank reports.

In the situation where the amount of capital backing allocated under the capital adequacy rules exceeds that sought by the market, the arbitrary nature of the risk-weightings has the potential to distort the pricing and allocation of loans. The question is essentially to what extent the rules change existing bank lending practices. This distortion will occur only to the extent that the risk-

weighting for a particular class of loans does not reflect the actual average credit risk of those loans. That is, risk-weightings do not have to be accurate for individual loans, but for groups of loans. Bank lending practices will not be affected by the rules provided that the risk-weightings reflect the risk on average of the different classes of loans. In consequence, it may well be appropriate to alter the risk-weightings over time in order to reflect changes in risk profiles of different types of loans.

The NSW Farmers Association proposed that market determined risk-weights be adopted for the capital adequacy rules. However, given that overall capital levels are already market determined, it appears that in effect this is what occurs.

Any proposal for the Reserve Bank to disaggregate the existing categories of risk-weightings would pose some practical difficulties. It would be a resource intensive task to devise detailed risk-weightings in order to accurately reflect the many specific credit risks assumed by a particular bank. There is nothing to suggest that parties external to the banks are well placed to undertake this task. At the extreme, it would duplicate the credit assessment and management processes of the banks themselves.

Some participants stated their belief that the higher risk-weighting applying to business loans under the capital adequacy rules had contributed to an increase in the borrowing costs of this group. The risk-weightings are not intended to replace the banks' judgement of risk in the pricing of credit by bankers. In an address to the 1991 Banking Industry Conference, Mr G. Thompson, Assistant Governor of the Reserve Bank said:

> Another instance of relying too much on the capital framework is the mistaken belief that the risk weights are a precise guide to pricing of particular loans. They were never intended for any such purpose and a banker using a set of broad-brush weights - devised in a lengthy process of give and take by regulators from many countries - to price individual credits would be derelict in his or her duty (Reserve Bank of Australia, 1988).

In pricing loans, banks take into account their cost of funds including the cost of the capital which they hold against the loan. However, the amount of capital required to back a loan appears to be market determined rather than based on the risk-weightings. Banks would normally be expected to set different prices for commercial loans of different risk. The Commonwealth Bank of Australia noted that its pricing of loans was not directly related to the capital adequacy rules:

> The interest rate charged by a bank is an amalgam of a number of factors, the most important of which are: the cost of funds ....; competition and strategic factors ....; and the assessment of credit risk (Sub. 92, p. 3).

The Commission was told that in pricing loans some banks calculated the return on the minimum capital backing required under the capital adequacy rules (DR Transcript p. 245). In doing so, these banks are making a business decision by assuming that the capital adequacy rules are a satisfactory proxy for measuring actual credit risk. Such practice is independent of the requirements of the rules. Further, it is unlikely that these calculations will be used to price loans in isolation without consideration of other factors such as competitor's pricing and the bank's business strategy.

In conclusion, the Commission considers that **it is unlikely that the capital adequacy rules are distorting the overall cost or availability of bank finance to Australian business at present.** The banks are subject to market requirements that they hold capital well above the levels determined by the rules. The higher risk-weighting accorded to business loans, although simplistic, does reflect the generally higher risk profile of business finance. The current capital adequacy system sets a relatively arbitrary minimum level for capital, and leaves the detailed assessment of credit risks to the banks. The advantage of this system is that it is transparent, simple, and difficult to manipulate.

Banks and equity

In Australia, the Reserve Bank specifically discourages banks from directly providing equity funding or undertaking equity investments outside the field of financial intermediation (box 6.2).

Prudential concerns relating to equity investment by banks arise because of the higher risk nature of equity. The risk of financial loss on an equity investment is higher than on a loan, since equity investors' claims on the assets and income of a business rank behind its debt commitments. Where banks take equity (or quasi equity) positions in large businesses, bank supervisors may also be concerned about "contagion" risks[3]; conflicts of interest between the banks' dual roles as a lender and an equity investor; and the concentration of financial power. However, prudential concerns would be less significant where a bank undertakes a number of small equity investments in a wide range of industries.

The prudential rules regarding bank investment in equity differ in other countries. However, they are not directly comparable because of differing historical backgrounds and institutional structures. For example, it is common for banks in Germany and Japan to have investments in large industrial companies as a result of arrangements arising out of the post-war reconstruction of those countries (see chapter 3).

Australian banks are not significant direct sources of equity funding to business. The Commonwealth Development Bank (CDB) is the only bank which is a direct provider of equity, and its equity portfolio amounts to less than $5 million.

[3] Contagion risk arises where a bank chooses to support an associated business which is in financial difficulties. This support can impair market confidence in the bank and have adverse implications for the capital and solvency of the bank itself.

Box 6.2: **Reserve Bank guidelines on equity investment by banks**

The Reserve Bank considers that a bank's soundness and public perceptions of its soundness, should not depend to any significant extent on the fortunes of associated non-financial enterprises. The risks to a bank from being a shareholder are greater than those involved in lending, since any losses first fall on shareholders' funds. The Reserve Bank seeks to satisfy itself that the equity investments undertaken by a bank are not a danger to the good health of the parent bank. This applies to both the bank's subsidiaries and the companies with which it has an equity association.

To this end, each bank generally must ensure that:

- its equity investments are generally confined to institutions in the field of financial intermediation;
- it does not hold an interest in excess of 12« per cent of an institution or business without Reserve Bank approval;
- it does not give guarantees regarding the repayment of liabilities of its subsidiaries and associates;
- its subsidiaries and associates are prudently managed and adequately capitalised to handle the range and size of operations intended.
- the size of its subsidiaries does not become unduly large relative to the bank itself;

This does not preclude banks from making investments as part of financing facilities which are quasi-equity in nature. For example, investment in preference shares or acting as an equity participant in a leverage lease. Such arrangements would be expected to be for a fixed term, provide a pre-arranged return to the bank with no bank involvement in the management decisions of the ultimate borrower.

Some banks are also permitted to take short-term trading positions in listed company shares.

In addition, the Reserve Bank will permit a bank to undertake a relatively short-term equity investment where this is judged an appropriate component of a "work-out" of a particular loan. Equity held as a result of a debt for equity swap generally should not be held for five years and progress should continue to be made towards the disposal of the equity investment during this period.

Data source: Reserve Bank of Australia.

To the extent that direct equity investment by banks does occur, it is treated relatively favourably under current Australian bank capital adequacy rules. Equity investments in businesses receive the same 100 per cent weighting as loans to businesses. Consequently, a bank is required to hold $8 capital for every $100 of debt or equity provided to an Australian business. (However, the Reserve Bank retains the option of requiring a higher level of capital where it has particular concerns regarding the debt or equity exposures of a bank).

Equity investment is treated less favourably under capital adequacy rules in many OECD countries. For example, equity investments held by New Zealand banks must be fully funded by capital (that is, $100 capital must be held against every $100 of equity funding provided to a business).

The prudential rules do not distinguish between different types of equity investment. Thus, a shareholding in a major listed company would be treated the same way as an equity investment in a small business customer.

A number of parties have recently proposed that the current Reserve Bank guidelines be relaxed to enable banks to place a limited proportion of their assets in equity investments. This would provide banks with some scope to provide equity funds in the ordinary course of their business. The Martin Committee (1991) found that Reserve Bank guidelines may have unduly discouraged Australian banks from taking equity positions. It recommended that banks be permitted to take equity positions subject to limits on individual and aggregate equity exposures.

A similar proposal had been made to the Commission by the National Australia Bank (Sub. 77, p. 4-5). It said that the proposed relaxation of the rules could make 'non-trivial' amounts of equity available to business without raising significant concerns regarding the stability of the banking system. A limit on equity investments of, say, 5 per cent of total shareholders funds would potentially allow the National Australia Bank to make equity investments totalling $200 million.

Banks frequently have access to detailed information regarding the financial position and prospects of their customers. Consequently, they may be well placed to assess the risks and returns on an equity investment in a business customer. To the extent that banks are constrained by the current restrictions on equity investment, the relaxation of these rules may allow them to provide more capital to Australian business.

However, there are a number of reasons why banks are unlikely to become significant providers of equity, at least in the short-term. Banks are specialised providers of low risk capital. They would need to develop new skills and a different culture in order to provide equity funding. The Australian Bankers Association noted:

> Australian banks have not sought to develop the necessary skills to become involved in the provision of equity finance given the close monitoring of companies which would be required, in some instances involving the banks concerned becoming part of the management of the company (Sub. 52, p. 2).

In addition, the high gearing of banks limits their capacity to take equity risks. Banks are mainly funded by liabilities (deposits and other borrowings) on which they are committed to make fixed payments of interest. The greater uncertainty regarding the timing and amount of returns on equity investments may be incompatible with the bank's obligation to pay interest on its deposits and other liabilities. Where a bank becomes over-exposed to equity, this will be detrimental to its capacity to raise deposits and other funds at competitive rates. At the extreme, this would threaten the ongoing viability of the bank.

In an address to the Australian Academy of Technological Sciences and Engineering 1991 Symposium, Mr Frank Conroy, Managing Director of Westpac, commenting on the role of banks in the provision of capital for high-tech industries said:

> Our specialisation is to run the business of channelling funds from lenders to borrowers. The capital structure of banks is generally not geared to taking equity positions in client companies. Such activities would necessarily increase the cost of funds because of the higher risk it entails (Conroy, 1991, p. 13).

In Australia, the Reserve Bank has a legislative obligation to protect the interests of depositors. It has been argued that it is too risky for bank depositors (who receive a fixed return on their deposits) to be exposed to the risks associated with equity investment.

To sum up, the current prudential requirements applying to banks restrict their capacity to provide equity directly to Australian business. However, it does not seem likely that a relaxation of these prudential rules would result in a significant increase in the equity funding provided by the banks. The banks' capital structures would tend to restrict their capacities to take up equity capital, and the existing skills and experience of their staff would be of limited relevance. Nevertheless, the banks' access to information on their customers' businesses could place them in a favourable position to assess prospective equity investments. Some flexibility in this regard might also enable the banks to cater better for the requirements of clients with (perhaps temporary) gearing problems. There is some appeal, therefore, in the suggestion that banks be given some additional freedom to invest a small proportion of their total assets in equity.

The Commission sees some merit in banks being permitted to provide limited amounts of equity. It recommends that the Treasurer ask the Reserve Bank to consider whether the current prudential requirements could be eased to allow banks additional freedom to provide equity finance.

7 SMALL BUSINESS ACCESS TO DEBT FINANCE

The banks are the major source of debt finance for small businesses. Other major sources are finance companies and trade credit.

Small businesses pay more for debt finance than large business - the opposite of what happened in the early 1980s when there was an interest rate ceiling on bank loans of less than $100 000. However, interest rate controls on small loans caused banks to ration these loans to a limited number of low-risk customers whose loans were relatively cheap to administer. While they provided benefits to those that could meet the banks' lending criteria, they discriminated against those that required higher risk finance.

It is clear that small businesses have had problems in understanding the plethora of non-interest charges that are levied on borrowers. These charges have also restricted the mobility of borrowers between lenders. The disclosure standards and 'effective rate' information that currently are being implemented should help in alleviating some of these difficulties.

Higher interest rates charged to small businesses for debt finance can be at least partly explained by relatively greater costs of providing loans to this group than to larger businesses. Insufficient information is available to assess directly these cost differentials. The degree of competition is important in this respect and is discussed in the next chapter.

7.1 Current concerns

The Commission received very few complaints about lending to large business, suggesting that they are generally able to obtain debt finance at a cost that they consider at least reasonable. Large businesses have a range of alternative sources of debt finance available to them. Indeed, some large businesses have better credit ratings and can borrow on world markets on more favourable terms than the major banks.

The focus of complaints was on lending to small businesses. Many participants said that the cost of debt finance was significantly higher for small businesses than for large businesses, and that the margin could not be justified. In addition, many were critical of the plethora of non-interest 'add-on' costs which made it difficult for small businesses to assess the overall costs of their borrowings and make comparisons between financial products of different lenders. 'Add-on' costs also made it expensive to cancel a loan with one lender and to take a new one with a preferred lender.

On the other hand, the Commission has been told about the higher costs of providing debt finance to small businesses, associated particularly with obtaining reliable information from them and the greater risks in lending to small businesses.

Role of small business

ASBA went beyond identifying alleged impediments to small business finance that should be removed, to argue that small firms should receive special treatment in their access to finance -- for example, in the form of subsidised interest rates or easier lending criteria than apply to other applicants for finance.

> Small business is the major employer, the major wealth generator in our economy. It is the nursery bed of business development .... [we] would argue for positive discrimination to ensure that small business has a fair go in the finance market (Sub. 73, p. 2).

It is commonly argued that small firms should be assisted because of the sector's substantial contribution to the output, employment, innovation and level of competition in the economy. Lowe (1990) noted that:

> At times small firms and entrepreneurship have been judged to be synonymous; at other times small firms have been seen as employment generators of the future, the 'effective trust busters' in the market place or the sector best able to complete specific tasks - innovation, service, understanding customer needs etc.

It is true that small firms in total make a significant contribution to the Australian economy. It is estimated that small firms account for 45 per cent of the total non-farm workforce, 30 per cent of GDP and about 25 per cent of R&D expenditure (see appendix F for further details). However, if the intention is to improve the performance of the economy as a whole rather than assisting small firms as an end in itself, then the Commission does not consider policies that discriminate between particular categories of firms would be helpful.

In most cases there are also less discriminatory means of achieving government objectives with regard to employment, innovation and competition. For example, improvements to the patent and copyright system could provide an improved environment for innovation for firms of all sizes; initiatives to remove restrictive trade practices and reduce import barriers can increase competition directly, while labour market reforms can be used to address employment issues .

To justify pursuing such objectives through special assistance to small business it would need to be shown that an additional job in small business, or an innovation by small business, provides extra economic benefits to an additional job or innovation provided by other sized businesses. The Campbell Committee argued that such government initiatives could not be justified in terms of improving economic efficiency - though it noted that government may consider it desirable to provide assistance to small business on social or other grounds. The Commission sees no reason to differ from this conclusion.

What is left to consider therefore is whether the capital market discriminates against small business. This question is addressed in this chapter and also in chapter 10 which examines the availability of equity finance to smaller enterprises.

7.2 Sources of debt finance for small business

The banks are by far the most important institutional source of debt finance for small business (see appendix F). The majority of small businesses utilise bank finance, usually in the form of overdrafts. However, a variety of other sources of debt finance are also used by small businesses - the main ones being finance companies and trade credit.

A lack of financial expertise among many small business operators means that traditional finance is often sought - that is, overdrafts, fully drawn loans, supplier credit and finance leases - regardless of whether they are the most appropriate forms of finance available. The Western Australian Small Business Development Corporation commented that:

> ... many small business operators choose, because of time pressure or poor management skills, not to fully examine their options (Sub. 14, p. 7).

The Queensland Small Business Corporation commented that often there was an excessive use of short-term debt, which caused problems in times of tight credit or when business activity slowed.

The growing importance of banks

In its submission to this inquiry, the Bureau of Industry Economics reported that banks were a more important source of finance for small business in 1991 than they had been in 1978 (table 7.1). From the results of two surveys of small business financing, it was found that in 1978 only 55 per cent of small firms received finance from banks, but by 1991 this figure had risen to in excess of 80 per cent[1].

Some of the increase in the use of bank finance over this period may have been due to the greater range of financial products now offered by banks. For example, banks have become more directly involved in leasing. More importantly, regulatory changes in the 1980s - particularly the removal of the interest rate ceiling on loans of less than $100 000 - provided banks with a much greater incentive to lend to small businesses.

While banks are clearly an important source of finance for small businesses, small businesses are also a major part of bank lending. The importance of small and medium sized business in the pattern of bank lending was stressed in submissions to this inquiry by two major banks.

[1] This figure cannot be identified directly from table 7.1 as it is based on the number that received any form of bank finance.

Table 7.1: **Sources of finance used by small business** [a]

Source of finance 1978	*Manuf. %*	*Non-manuf* [b] *%*	*Source of finance 1991*	*Manuf. %*
Trading banks	54.6	53.8	Bank overdraft	73.5
Finance (including hire-purchase) company	26.9	33.0	Bank term loan	28.5
Existing shareholders/partners	35.0	31.0	Bank bills, commercial bills etc.	19.5
New shareholders/partners	3.2	4.0	Bank Leasing finance	22.1
Commonwealth Development Bank	9.6	2.5	Finance Co. - leasing	21.6
Personal loan (from a person not associated with the firm)	6.5	10.5	Finance Co. - term loans	3.0
Trade customers or trade suppliers [c]	5.0	5.0	Merchant Bank	0.5
Solicitor or accountant	3.2	4.3	Commonwealth Development Bank	2.9
Assurance society or superannuation Fund	5.1	4.8	Other Government agency	0.5
Savings bank or building society	2.8	3.1	Other loans	0.5
Stockbroker or merchant bank	2.5	1.0		
Government agency or department	3.6	0.5		
Other	4.3	3.7		

Notes: (a) The percentages do not add to 100 as many small firms have access to more than one source of finance.
(b) Includes construction, wholesale and retail trade, road transport, real estate and travel agents, restaurants, hotels and clubs, technical, business and personal services. The survey did not cover firms known to be engaged in primary industry, property ownership, the provision of finance and the professions.
(c) This does not include trade creditors, which are used by virtually all firms, but only special loans given by trade customers or suppliers.

Data sources: BIE 1981; BIE, Sub. 57, p. 10, table 3.3.

The National Australia Bank provided data showing the growth in lending to retail and corporate business. Retail lending is considered to be a good proxy for lending to small and medium sized businesses and corporate lending for lending to large businesses. On this basis, these figures (reproduced in table 7.2) suggest that lending to small and medium sized businesses grew rapidly during the second half of the 1980s and more rapidly than corporate lending. The National Australia Bank's retail lending was 92 per cent of all their business lending over this period.

The Commonwealth Bank of Australia conducted a survey of their lending over the last half of 1980 for this inquiry. In this period, over half of new lending was directed to small and medium sized businesses. Finance facilities provided to small and medium sized businesses were about two-thirds of those provided to the commercial sector as a whole (Sub. 49, p. 7). The Commonwealth Bank also noted that 95 per cent of the client base of the Commonwealth Bank Finance Corporation was small and medium sized businesses.

Table 7.2: **Lending to business by NAB (years ended September, per cent)**

	Growth					*Proportion* [a]
	1987	*1988*	*1989*	*1990*	*4 Year Average*	
NAB Retail Business Lending.[b]	11.4	7.1	35.9	21.1	18.9	92
NAB Corporate Lending [b]	0.0	6.2	16.4	9.3	8.0	8
Total Financial System Business Credit [c]	25.8	28.2	16.6	10.2	20.2	100

Notes (a) Average proportion of total NAB business lending over four year period.
(b) Corporate lending includes all loans managed by Group Relationship Managers within the state head office. In general, these accounts include large corporate customers with complex financing requirements. This is distinct from retail customers which are handled at the branch and regional level. Retail business lending is all other non-corporate business lending.
(c) Reserve Bank Bulletin Table D4. In January 1989, a large break in the series due to a reclassification of loans by some lenders has caused the rate of growth in 1989 to be somewhat understated.

Data source: National Australia Bank, Sub. 19, p. 26, Table 1.

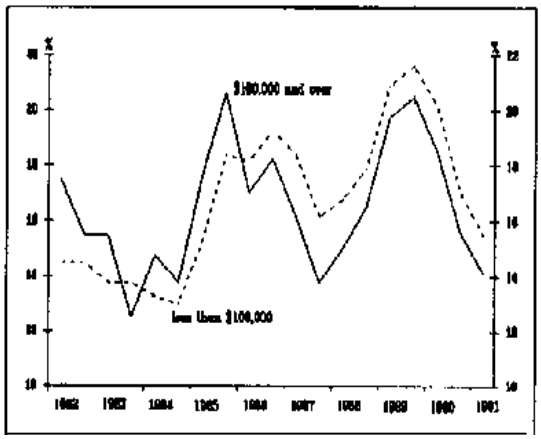
The financing patterns of small businesses are also influenced by the type of activity undertaken. Surveys conducted by the BIE suggest that small businesses in areas of newer technology rely less on debt for their financing than those firms in areas where technology is more developed (see Appendix F). The reliance on equity tends to decline (and the use of bank debt rises) as the age of the firm increases.

The distinction between types of small business is important. Small businesses range from corner shops with little growth prospects to those that could one day grow to dominate their markets. Businesses in traditional areas that have readily realisable assets and good track records are attractive to lenders. Others that are starting up and attempting to build up new markets or implement new ideas will not satisfy easily the criteria of lenders and may have to rely more heavily on personal borrowings and equity finance (discussed further in chapter 10).

7.3 Interest rates on smaller loans

Prior to April 1985, the interest rates charged on overdrafts of less than $100 000 were regulated and generally less than those charged on overdrafts of more than $100 000. The quantity of funds made available on these terms was rationed and the number of small businesses able to obtain finance under these conditions was correspondingly limited. Those who were not successful were obliged to seek funds from higher cost lenders outside the banking sector and thus were at a relative disadvantage.

Figure 7.1: **Interest rates charged on bank overdrafts**



Data source: Reserve Bank of Australia Bulletin, Table F3.

Interest rates on small loans have been consistently higher than those on large loans since the interest rate ceiling was lifted (figure 7.1). The Australian Bankers' Association suggested that interest rates on loans to small and medium sized business customers were a couple of percentage points above the prime rate. The NAB stated that its average margin on small loans was 1.2 per cent above its key lending reference rate, while its average margin on large loans was only 0.6 per cent above this rate.

Further evidence about the existence of such margins was obtained in a survey of small and large firms in the metal trades industry by Holmes and Kent (1990). They found an average difference in interest rates charged to small and large businesses of 1.5 per cent.

Higher costs of lending to small businesses

Allowance for risk

A frequent comment in relation to lending margins applied to small businesses was the greater risk involved. The Commonwealth Bank noted:

> As a general rule, lending to the small business sector involves higher risk to the lending institution than lending to the personal or corporate sectors. A major factor underlying this is the high gearing ratio of most small businesses. Small businesses also generally have a relatively minor share of the market in their particular product range, and through rapid technological change and/or entry of new competition, market share can quickly be lost. Reflecting their generally low capitalisation, small businesses have little buffer to absorb losses arising from swings in economic activity (Sub. 49, p. 5).

One indication of the riskiness of small firms is their high failure rate. This is especially true of firms in the start-up phase which, by their nature, are predominantly small. The high failure rate of small firms in the early years after formation is shown in the survey results presented in table 7.3.

Unlike larger businesses, small businesses are often engaged in a single activity. A temporary decline in the income stream associated with one activity cannot be offset by an increase in another. This lack of diversification adds to their risk.

Table 7.3: **Average business failure rate**

Year after formation	*Cumulative failure rate*
1	31.7
2	46.4
3	57.2
4	60.1
5	65.7

Data source: Williams (1986).

Other features of small firms also contribute to their probability of failure. The realisable value of business assets offered as collateral by some small firms may depend on the prospects of the firm. These prospects can be quite uncertain. Success often depends on the abilities of one or two individuals. But people can get sick, lose motivation or find more attractive employment. As one participant noted, there is always a danger with small firms that the (human) capital in which a firm has invested might one day 'go down in the lift'.

COSBOA disagreed with the premise that small loans should attract a higher interest margin on the basis that they were higher risk. It argued that most small loans are secured against business or personal assets and:

> ... a secured asset is no risk at all and therefore no justification for a higher margin (DR Transcript, p. 347).

As previously noted (section 6.6) the banks have indicated that they are not prepared to lend purely on the basis of security with no regard for business prospects. Realising the value of security to meet loan repayments can involve substantial additional administrative costs to lenders and also loss of goodwill. One participant, Msÿ C. Currie, described additional dangers of adopting this practice when lending to highly geared companies, noting that such companies:

> ... were allowed to set up and borrow on the grounds that banks held guarantees or personal mortgages over ... houses (and that) banks have had so much trouble enforcing these guarantees... (DR Transcript, p. 243).

The perceived higher risks of mortgage-based business loans than of residential lending is also reflected in the capital adequacy rules, as discussed in the previous chapter.

Assessment and administration costs

Lenders often claim that it is more difficult to obtain relevant information to assess a loan application from a small business than from a large business. Assessment costs vary according to such factors as information about similar projects, how well markets are established and known, the quality of financial information about the enterprise, its track record and how well the ability of management is known to the prospective lender.

In this regard, the Commonwealth Bank said:

> From a lenders' perspective, loan assessment and ongoing account administration in relation to small business clients often requires relatively more staff resources than for corporate clients, given the marked difference in the size of the facilities granted (Sub. 49, p. 5).

Westpac, in its submission to the Martin Inquiry, said that administrative costs cover specific ongoing costs related to the loan, plus a contribution to infrastructure costs and that these costs do not usually increase in proportion to the size of the loan (p. 34).

High administrative costs associated with small businesses may arise at all stages of loan establishment and monitoring. Initially, poor presentation can result in rejection of the loan application or higher costs to the lender. Financial statements are often dated and in an unaudited or draft form only. Insufficient and unreliable data about the operation of a small business increases the cost of loan finance as it makes it difficult for the lender to assess the capacity of the business to service a loan. The NAB cited inadequate business plans and inadequate or inaccurate financial information as common reasons for failing to approve a loan to a small or medium-sized business. The Commonwealth Bank said that one of the major problem areas from its experience was that, because of insufficient financial records, many small businesses fail to understand 'even their day-to-day cash position' (Transcript, p. 351).

Large businesses generally have scope to specialise and employ full-time financial managers, whereas this activity is often undertaken on a part-time basis within small firms. Given the greater range of in-house expertise of large businesses and the necessity to keep track of substantial inward and outward cash flows, poor records would be expected to be a less prevalent feature of larger businesses.

Monitoring costs

The less comprehensive financial information typically maintained by small businesses may require lenders to put additional efforts into monitoring the continuing capacity of small firms to service a loan compared with loans to large businesses. Furthermore, additional efforts may be required to ensure that the value of collateral offered by small businesses remains adequate.

The effort required by lenders to monitor collateral depends on the nature of the assets, their value compared with the value of the loan, and their 'saleability'. Small businesses tend to be concentrated in industries (such as service sector industries) which have a greater requirement for working capital than for the types of fixed assets that are more acceptable to lenders as collateral. As a result, small businesses have particular difficulty in providing the level and quality of collateral that lenders require.

Summing up

There appears to be general agreement that there are higher costs involved in establishing and managing loans to small business. At issue is the extent to which these costs explain the difference in interest rates charged on loans to small businesses compared with loans to large businesses. COSBOA was highly critical that banks had not provided adequate data to justify the higher cost of finance faced by small firms. They stated:

> If they cannot substantiate and justify those increased costs in a very quantitative fashion, then the question must be asked as to how they justify it at all (DR Transcript, p. 348).

The Commission is in a similar position to that explained by COSBOA in that it has insufficient data upon which to assess directly whether the increased interest margins and charges levied on small loans can be fully justified by the additional costs involved in providing such finance. The Commission accepts that commercial considerations may prevent individual banks from revealing certain details about their profit margins in specific areas of their business activities. However, it does appear that banks would improve their public image by providing additional quantitative evidence for the banking sector as a whole to justify the higher charges levied on small business.

(An indirect gauge of banks' ability to overprice their loans is the degree of competition they face -- discussed in chapter 8.)

7.4 Administrative practices for small loans

In addition to concerns about whether the prices charged by lenders constitute an unwarranted discrimination against small businesses, small business groups were also critical of the fees and charges levied by lenders. These are of course not confined to small business lending. The general criticisms about lending practices that were examined in the previous chapter, such as claims about banks cancelling or reducing evergreen overdraft facilities at short notice, were of particular concern to small businesses.

Fees and charges

Retailer Financial Services commented on an increased propensity by lenders to charge a variety of non-interest or 'add-on' costs:

> In the past, lenders were content to lend their money, and be paid back over the required terms at the agreed interest rate. These days, the interest rate forms only part of the income stream to the lenders, as a range of fees are added. These costs include: loan application fees, loan establishment fees, account keeping fees, service or line fees and loan facility fees to name but a few (Sub. 42, pp. 6-7).

Several participants drew attention to the perceived anti-competitive nature of certain bank administrative charges. Loan establishment charges, annual administrative charges and exit penalties for early termination of a loan were raised as impediments limiting the ability of borrowers to switch between lenders. COSBOA, for example, said that:

> ... the practice of applying a 1-3 months exit penalty for the early termination of loans is an obvious disincentive to the free movement between lenders. It also serves to complicate the client's appreciation of price (Sub. 29, p. 6).

This view was also supported by Retailer Financial Services:

> The most blatant finance cost facing business in Australia today, is the payment of pay-out penalties ie the fees payable to terminate a loan prior to the expiry date of the approved facility. ... this type of practice is exploitative. We are aware of lenders who charge up to 4 months interest ...(Sub. 42, pp. 6-7).

Exit costs would be expected to vary between different types of loans as different services, set-up costs and contracts are involved. In some cases, pay-out penalties would be expected to be high. Borrowers who enter a fixed interest loan agreement for a given period take a risk that they would not be better off under a variable rate agreement. Pay-out penalties are required to ensure that borrowers meet their commitments in the event of unanticipated falls in current interest rates. Otherwise borrowers would have the best of both worlds -- fixed interest rates if interest rates rise and variable rates if they fall.

The Commonwealth Bank agreed that certain bank fees provide a disincentive to refinancing loans, but pointed out that there are also many government charges:

Government charges levied on a loan transaction, through stamp duties and other transactions based fees and duties, not only add to the cost of borrowing for business but can also be a disincentive to a borrower's willingness to change institution (Sub. 49, p. 10).

The Bank presented an example indicating that total establishment costs for a typical business loan of $110 000 secured by a mortgage over freehold property amounted to $2300, of which government charges represented about 20 per cent. Should a borrower later wish to pay out the loan in order to take advantage of a lower interest rate offered by another lender, it would have to pay to establish the new loan. However, the specific pay-out charges would be about $220 of which two-thirds would be accounted for by government charges.

Disclosure

Several participants, including the Western Australian Small Business Development Corporation, COSBOA and the NSW Farmers' Association, said that the information provided by lenders was not adequate to enable the small business borrower to identify and compare easily the cost of alternative sources of funds and choose his financial sources. Retailer Financial Services, for example, argued that:

> ... often the borrowers do not understand, or were not told of the plethora of fees that are about to befall them, when they take out a loan. In some cases, the "charge" runs appear to be at random. Lenders should not be allowed to earn any additional fees ... not recorded explicitly on the loan documents (Sub. 42, p. 5).

Many participants in the inquiry were unaware of the powers of lenders to vary loan conditions with little prior consultation. COSBOA stated that it had received a continuous stream of reports from its members wherein long standing finance arrangements were being adjusted arbitrarily without any notification to the borrower by the lender. Instances of substantial reductions in overdraft limits at short notice were related also by the Australian Electrical and Electronic Manufacturers' Association and SBP State Council.

Several participants argued that the lenders should provide standardised information on the cost of funds to facilitate comparisons between different contracts and products. In the words of the NSW Farmers' Association:

> ... this would facilitate a more efficient market as small businesses without sophisticated financial management resources would be better able to make comparisons between financial products and institutions (Sub. 34, p. 8).

It would of course be easier for borrowers to compare the costs of alternative loans if lenders were to incorporate more of their administrative costs into the interest rates they charge. The Commission sought views on the scope to move in this direction in its draft report. The Australian Bankers Association (ABA) were adamant that combining other lending costs into the interest rate charge would not be an equitable way for lenders to structure the prices of their loans:

> ... there are important equity and efficiency issues in the structuring of prices and in our view it is appropriate in many cases for costs to be allocated to customers on a fixed-rate basis or a transactions basis and not simply an interest rate basis (DR Transcript, p. 134).

The ABA cited the cross subsidies that occur among credit card users, where interest is the sole charge, to illustrate its point:

> ... in the credit card area quite clearly 70 per cent of people (that is, all those who do not pay their credit card off each month) are paying for 100 per cent of the system. We think this is grossly inequitable and is a classic expression of what occurs if we adopt the principle that in order to (facilitate cost comparisons between alternative loans) we just make it implicit in the interest rate (DR Transcript, pp. 135-136).

NAB had a similar view:

> ... it is not appropriate to incorporate administrative costs in the interest rate charged because these costs contain a significant element of fixed costs. In addition, it is not possible to include establishment fees in the interest rate unless the term is known. Incorporating such costs in interest rates would, therefore, lead to cross-subsidies (Sub. 77, p. 5).

With the increased range of products available in the deregulated financial system, it is particularly important that lenders provide adequate information to their clients on the costs and other features of the financial products which they offer. This information should be in a form which enables borrowers readily to compare the products offered by different lenders, as well as to identify clearly the full costs of commitments into which they are entering.

The ABA believe that its initiatives to provide improved information on the costs of loans should effectively meet customer needs. The ABA commissioned a survey in 1987 which concluded that there was a need for improved disclosure of interest rates and charges in a readily comparable form, at both the initial stages of a loan application and through time. A 'disclosure standard' for both loan and deposit products was formulated by the ABA and is gradually being implemented by its members[2]. The standard requires that the types of information that should be readily available are:

- the nominal rate of interest per specified debiting period;
- the nominal annual percentage rate;
- all fees and charges individually itemised;
- government charges; and
- termination fees or late payment charges.

On 23 July 1991, the ABA released a draft code of practice relating to farm finance. The code, which was drafted in consultation with the NSW Farmers' Association, would require banks to publicise `effective' interest rates which illustrate the combined cost of interest and all other charges and allow for reopening of agreements considered to be unjust (ABA, Media Release, 23 July 1991). It appears that this initiative will largely meet the needs of farmers in this area. At the draft report hearing in Sydney in October, the NSW Farmers' Association reported:

> ... just today, we have reached agreement with the Bankers Association on a booklet which they are to produce and make available to customers on how to calculate the cost of money ...we only have one disagreement with them now, and that is...(the) effective interest rate should also be included on all statements that come from the bank to a customer (DR Transcript, p. 83).

The ABA indicated that it would be implementing similar initiatives to meet the needs of its other customer groups for better information about lending costs:

[2] Agencies involved are the Australian Bankers Association, The Australian Society of Certified Practising Accountants, the Institute of Chartered Accountants, the Law Council of Australia and Business in the Community.

> We are using the farmers as a pilot because the farmers were the most vociferous of our critics and they were a clearly identifiable interest group. We would be looking to extend the same principles to other customers (DR Transcript, p. 134).

In a submission to the Martin Inquiry, Westpac announced that it had nearly completed a code of practice written in 'plain English' which is clear and easy to understand.

Despite these developments, ASBA were not optimistic that such voluntary codes would be effective since experience had shown that customers:

> ... can't rely on the banks and other major institutions to redress voluntarily the recognised deficiencies and inadequacies (Sub. 73, p. 2).

They did, however, go on to say:

> It is encouraging that some effort is being made by the banks to consider giving their customers more adequate information about their products and costs (Sub. 73, p. 4).

Similarly, moves in this direction were supported by COSBOA:

> The concept of a code of ethical conduct for lending is something in which we see great merit (DR Transcript, p. 365).

The Commission considers that recent moves to increase disclosure from within the banking industry will alleviate some of the problems that have arisen through a lack of information about bank charging practices. Initiatives to calculate and make available to customers an 'effective interest rate' should make it simpler for borrowers to compare the costs of alternative loans.

Even with appropriate disclosure, however, there may still be too many separate charges and they may still be higher than they need to be. The ability of lenders to set higher prices than appropriate depends on the competitive pressures they face. Competition in the debt market is examined in the next chapter.

8 COMPETITION IN THE DEBT MARKET

The banks are the major domestic source of debt finance for business, particularly small businesses. The relatively high concentration of the (retail) banking sector and any uniformity in lending terms and conditions over time need not imply lack of competition. There is significant scope for entry and expansion of smaller banks.

Available indicators of competitiveness, such as bank lending margins, bank profitability and the range of financial products available, all have their deficiencies. However, these indicators suggest that the banking industry is reasonably competitive and that the extent of competition has increased over time. The range of financial products also appears to have increased significantly since financial deregulation.

To improve further the competitive environment, the Commission recommends easing the restrictions on foreign bank entry, and allowing foreign banks to operate through branches and to engage in 'niche' banking. Large businesses are likely to benefit most directly from these changes. However, small businesses may benefit indirectly.

8.1 The importance of banks

As noted in chapter 6, banks are the principal domestic providers of business loans, though finance companies, merchant banks, foreign companies and foreign financial intermediaries are also significant lenders to business. Life offices and superannuation funds represent a relatively minor source of business finance accounting for less than 3 per cent of total lending to business.

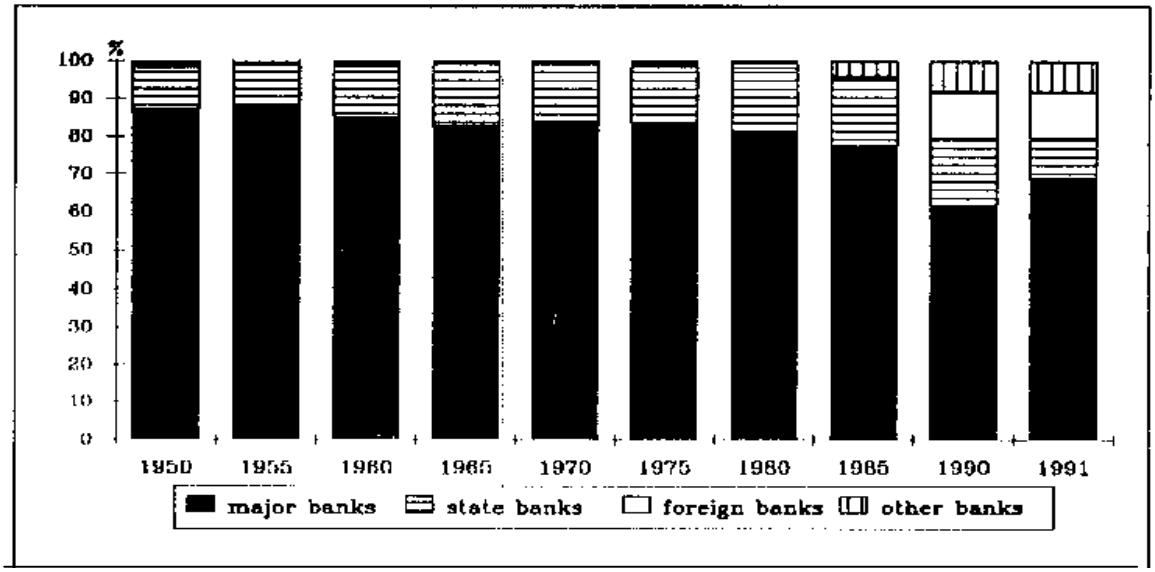
The importance of banks has increased significantly in the past decade as a result of the licensing of new banks and the transfer of some of the assets of Non-Bank Financial Institutions (NBFIs) to the banking sector. The banks have increased their share of total financial sector assets from 39 per cent in 1981 to 45 per cent in 1990 (RBA 1991a, Table 3.4b). This is reinforced by the fact that the five largest finance companies and the second largest merchant bank are bank owned.

The structure of the banking industry was transformed in the 1980s. A round of mergers in 1981 reduced the number of nationally operating banks to four, accounting for 80 per cent of total bank lending. A further 18 per cent of bank lending was undertaken by the four state banks which, at the time, provided limited services in regional markets. Deregulation of the financial system saw the entry of twenty-five new banks by the end of the decade. These included six banks formed from the conversion of building societies, and fifteen foreign banks.[1]

[1] Eight of these licences were issued to joint ventures between foreign banks and Australian companies and financial intermediaries. However, all the Australian investors have since sold their holdings to their foreign bank partners.

Following deregulation, the four major banks lost market share principally to the new banks. However, following the extensive lending losses which emerged in recent years, there has been some further rationalisation of the industry. The major banks remain the most important participants in the banking sector with around 68 per cent total bank lending as at June 1991 (see figure 8.1). The State banks grew rapidly in the late 1980s, but are now reporting extensive problem loans. Following the sale of the State Bank of Victoria to the Commonwealth Bank of Australia, their market share had declined to 12 per cent of total bank lending as at June 1991.

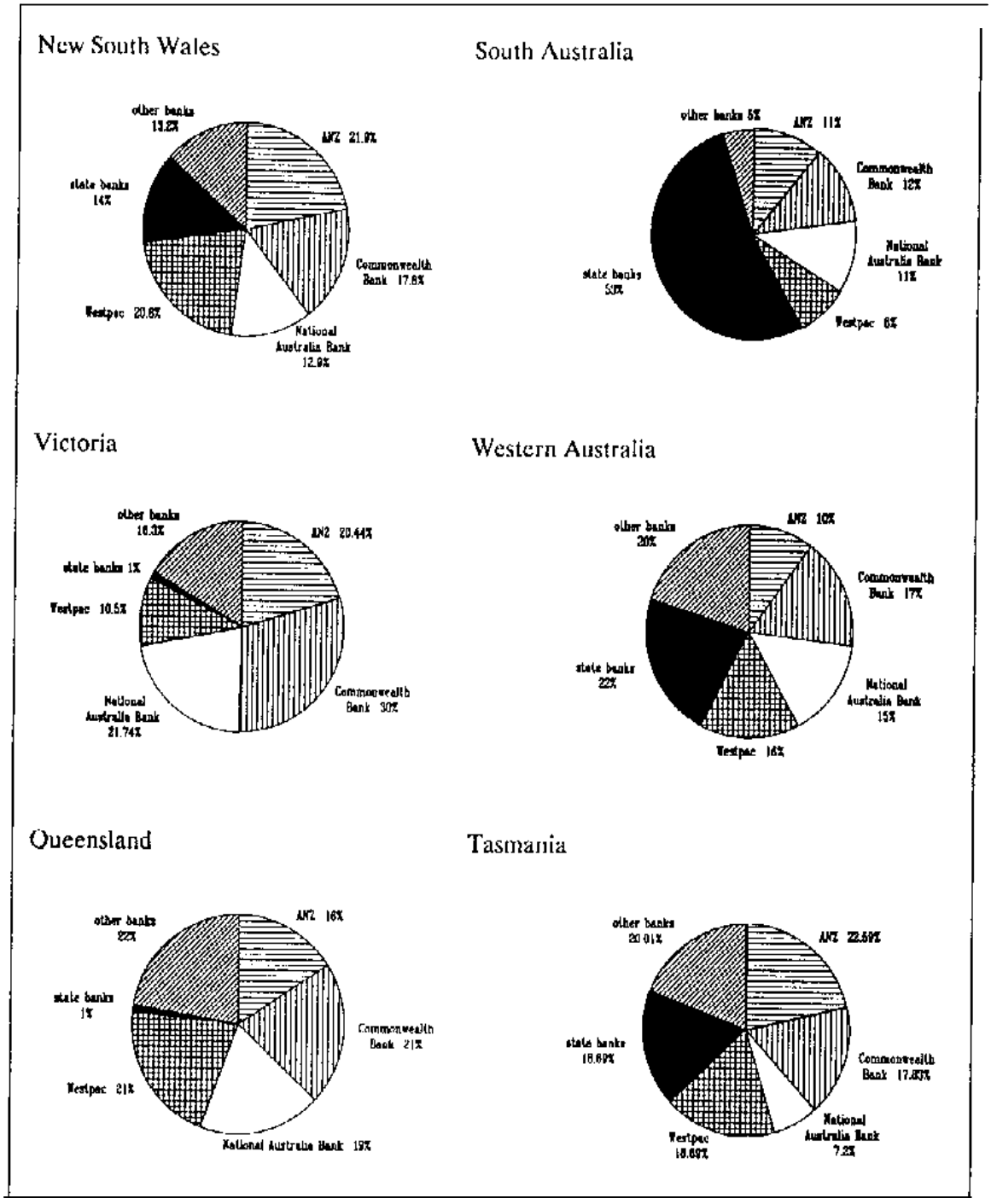
Figure 8.1: **Total bank lending - June 1991**



Data source: Commonwealth Gazette, Australian Banking Statistics.

The Australian banking industry is thus highly concentrated by conventional industry standards, being dominated by the major four banks. Concentration is significantly lower, however, in the 'debt market' as a whole. The banking market structure itself also varies significantly by region (figure 8.2). State banks provide a significant source of competition in a number of States. It is now evident that none of the new banks has developed a national deposit base or retail branch network to rival those of the major banks. Those formed from building societies have tended to remain focussed on their strengths in traditional regional retail markets. Most of the foreign banks have concentrated on the wholesale lending and financial markets.

Figure 8.2: **Total bank lending by State, August 1991**



Note: Other banks include new Australian banks and foreign banks.

Data source: Reserve Bank of Australia, Australian Banking Statistics, August 1991.

There are a number of government owned financial intermediaries which undertake business lending. These include the Commonwealth Bank of Australia (CBA) and its subsidiary, the Commonwealth Development Bank, the Australian Industry Development Corporation, the Queensland Industry Development Corporation, the Tasmanian Development Authority and the Rural Finance Corporation in Victoria. Some of these specialise in providing debt finance to small or risky businesses. Apart from the CBA, these intermediaries do not add substantially to total business lending, but in some cases they may play an important role in specific market segments. The role of these intermediaries is considered in chapter 10.

Contestability in retail banking

The relatively high degree of concentration in retail banking, is sometimes seen as being synonymous with a lack of competition. However market concentration in itself need not mean that the dominant firms -- in this case, the four major banks -- are able to set prices higher than their costs warrant. The key to an efficient market structure and performance in banking, as in other industries, is not the number of dominant banks, but whether the positions of the market leaders can be 'contested' by smaller banks, other financial intermediaries and new entrants. It thus ultimately depends on the nature and extent of barriers to entry (and exit) of new banks or barriers to the expansion of existing banks. Apart from regulatory measures, entry into new markets can be impeded if this requires substantial expenditure which can not be recovered upon exit (sunk costs). Barriers to entry do not appear to be significant in the wholesale market, where Australian and foreign banks, as well as merchant banks, compete for corporate lending, treasury and advisory business. However there are a number of features of retail banking that are generally regarded as potential barriers.

- Extensive *branch networks* with large client bases have been established over time by the major banks throughout the country. Replicating such networks would clearly impose very great costs on entrants and would not readily bring comparable access to clients. However, branch networks can be created in localised stages at more manageable cost, as some new banks have been successfully doing. Advances in technology may also be reducing somewhat the need for numerous retail premises.

- The *goodwill* (reputation and customer loyalty) of the major retail banks is a product of history and proximity. The advantage this gives to existing banks is difficult to overcome quickly. However, entrants to banking already need to be of high standing to obtain a licence and it is possible to build up `product recognition' by advertising.

- Membership of the *payments system* -- inter-bank fund transfer arrangements -- provides obvious advantages to the banks involved. But the fact that there are now 18 member banks indicates that entry has not been too restrictive. In addition, non-member banks and some NBFIs have indirect access through agency agreements with member banks.

- *Regulatory barriers* to entry, which were highly restrictive before 1985, now only exist in respect of foreign banks. However there are now some 30 banking groups operating in Australia, including 14 foreign banks. While most are not currently in retail banking, they represent a substantial pool of potential entrants to the retail market.

In sum, while the retail banking sector in Australia is relatively highly concentrated, it is also on the whole a reasonably contestable market, with scope for expansion of smaller banks and entry of new ones (notwithstanding the remaining barrier to additional foreign bank entry). While there may be limitations on the effectiveness of these pressures in the short-term, technological developments and regulatory changes have made the banking market more contestable today than in the past.

8.2 Performance of banks

The substantial deregulation of the banking sector during the 1980's, including the entry of foreign banks, was expected to lead to greater competition in the finance market. This could manifest itself in various ways, including economies in operating expenses, lowering of charges (including interest rates), increased product differentiation in line with the variety of loan requirements and lower bank profits.

Lending margins

Other things being equal, stronger competition should result in reduced margins between borrowing and lending rates. Milbourne and Cumberworth (1990) separated margins into those on retail and corporate lending. They deduced that the net interest margin on retail banking activity throughout the 1980s increased at 0.2 percentage points per year. In the first half of the decade, the rising retail margin was more than offset by substantial reductions in the net interest margin on wholesale activity. By the second half of the decade, especially following the entry of new banks, wholesale margins had been pared to the bone and the upward trend in retail margins began to affect aggregate net interest margins. This difference between margins on retail and corporate lending is also reflected in the data on interest rates on small and large overdrafts discussed in chapter 7, which showed a relative increase in the rates charged on smaller loans.

Milbourne and Cumberworth(1990) offered two explanations for the failure of financial deregulation to deliver smaller net interest margins in retail banking. First, the effective competition from new banks was confined for the most part to wholesale business. New foreign banks generally avoided retail business and concentrated on wholesale banking. Secondly, the removal of the interest rate ceiling on bank loans of less than $100ÿ000 changed the nature of the products that banks could provide. Deregulation enabled banks to consider higher risk projects for which higher interest rates were required.

It was to be expected that the removal of the artificial interest rate ceiling on loans of less than $100 000 would result in an increase in these interest rates and in the profitability of these loans, but also that it would lead to an increase in lending to small business with acceptance of greater risks and the likelihood of a greater incidence of bad debts.

Trends in bank profitability

The two main sources of debt to small businesses (banks and finance companies) do not disaggregate their financial data about operating profits, operating expenses and the cost of bad debts according to firm size. No doubt this reflects the difficulties of allocating overheads to various activities. Nevertheless, aggregate data can give some indication of overall change in competitive pressures.

The Reserve Bank, in its submission to the Martin Inquiry, analysed aggregate indicators which they argued suggested that substantial competitive forces were operating in the banking sector. In table 8.1, data on various components of profit for the five years before and five years after major regulatory changes affecting the banking sector are presented.

These data do not indicate dramatic changes. However, they do show that profits fell between the two periods and operating expenses were reduced, which is consistent with increased competition.

There was also an increase in bad debts. This may be the result of increased competition forcing banks to accept riskier loans at a given interest rate. However, it may also reflect the removal of the interest rate ceiling on loans less than $100 000. This change increased the freedom of banks to consider riskier investments by allowing them to offset the greater chance of bad debts against the potential to earn higher rates of interest. At the hearings, NAB observed:

> ... the profitability of Australian banks is not out of line with other industries and this was the case even prior to the recent list in bad debts (DR Transcript, p. 266).

Table 8.1: **Components of profit for major banks, (as a proportion of total assets)**

	1980-85 (per cent)	*1986-90 (per cent)*
Net interest income	3.7	3.3
Non-interest income	1.8	1.7
Operating expenses	3.9	3.2
Bad debt expense	0.2	0.5
Tax	0.6	0.6
Profit after tax	0.8	0.7

Data source: RBA submission to Martin Inquiry, January 1991.

Banking services are diverse, and these data are not necessarily indicative of increased competition in all segments of the market.

8.3 The range of financial products

Innovation

In a competitive market with diverse requirements by borrowers, there will be a reasonable degree of product choice. Consequently, if the changed regulatory environment since the mid 1980s and the entry of foreign banks did increase competition in the finance market, an increase in the range of financial products would be expected. Distinguishing between the effects of increased competition and the effects of technological change that would have occurred anyway is difficult. Nevertheless, a number of participants considered that there had been significant benefits of this type that were attributable to competition.

Chase AMP stated that deregulation has produced significant net benefits to banking customers through a much greater range of products. It considered that in addition to more competitive pricing, the new banks introduced new products. This was quickly met by the established banks, with the benefits passing to bank customers: corporate, retail and institutional (Sub. 30, Attachment A, p. 5). In its submission to the Martin Inquiry, the NAB presented evidence showing a considerable increase in types of products available. In particular, it argued that lending facilities were now more structured to suit client cash flow and financial maturity.

Not all of those putting views to the Commission were happy with the extent of product development. For example, the Medical Industry Association of Australia endorsed the ACM recommendation that the range of bank products be limited to ‘genuine banking’ lines of business (Sub. 22, p. 6). The New South Wales Government agreed that while deregulation has greatly

increased the range and sophistication of products offered on the Australian financial market, there has not been a great deal of evidence of special product development for the small business sector by financial institutions (Sub. 32, p. 4).

Uniformity

A number of participants commented on the degree of uniformity between banking products, despite the changes that have occurred, and suggested this was evidence of a lack of competition in the banking sector.

The Commission asked for responses on this matter in the draft report. The banks disputed the view that their products were uniform. The ABA commented that:

> ... everybody has been vociferously complaining about just the opposite. The array of products is so diverse that it is confusing and there is both a huge range of lending products, a huge range of treasury products, of capital markets products now available to any business which cares to go out there and have a look at it (DR Transcripts, p. 140).

The NAB observed that:

> ... it is easy to misjudge the extent of uniformity in pricing. Over recent weeks, for example, there has been quite substantial differences in interest rates which banks charge on loans and offer on deposits (DR Transcripts, p. 226).

To the extent that some uniformity in bank pricing and products does exist, at least over time, the market implications of such uniformity would be ambiguous. It could either represent tacit collusion to minimise competition, or be the result of competition itself. In a competitive market any cost-reducing or profit-enhancing move by one player would need to be quickly adopted by others to avoid loss of market share. In practice observed 'follow the leader' policies could well involve elements of both.

8.4 Markets for long-term and short-term loans

A qualitative assessment of competition in the supply of debt finance can be gained from a consideration of other sources for short-term and long-term loans. While this distinction is analytically convenient, there is, as discussed in chapter 6, considerable scope for substitution. Some instruments are essentially short-term, such as trade bills, and others by definition are long-term (term loans). However, many can be used for short or long-term purposes. These include commercial bills, equity loans and overdrafts. There is thus scope for some competition between various parts of the finance market.

Short-term loans

The predominant source of short-term loans is the major banks. The Commonwealth Bank indicated that about two-thirds of its lending activities to small and medium sized businesses was in the form of bills and overdrafts (although bills can, in practice, be rolled over by businesses for medium to long-term finance).

There are other sources of short-term finance that provide competition to the major banks, at least at the margin. Data published by the Australian Finance Conference show that around 40 per cent of funds advanced by finance companies is short-term. A further important source of short-term finance is trade credit. Data on the importance of trade credit in Australia are unavailable but, in its submission, the BIE quoted figures showing that creditors and accruals represented about 40 per cent of all liabilities of small and medium sized business in the UK. This had increased by nearly 10 percentage points over the previous seven years.

Debt factoring is a very important source of finance in the UK and some other countries, but has had a very limited development in Australia, where its use is interpreted (probably wrongly) as evidence of financial weakness. It involves usually a financial intermediary (typically a finance company) taking over a trade credit for a fee (or discount). A small trade bill market (an alternative method of discounting trade credit) has emerged recently. A limiting factor on both mechanisms is the shortage of credit insurers in Australia.

The larger life assurance and superannuation institutions also provide loans in the order of $50 000 to $500 000 against prime security, usually real estate. These loans are not directed towards any particular activity (buying a boat or building a factory) nor is it possible to determine whether such finance is used for short or longer-term financing. Again, even though it is not possible to estimate how much of this finance is used by small business, it is an alternative source of finance open to some small businesses and hence injects some additional competition in the supply of short-term finance to business.

Long-term loans

Banks again dominate the market for finance which is explicitly longer-term. The common debt instruments used for these finance requirements are term loans, mortgage loans, fully drawn advances, and lease finance. However, finance companies provide strong competition to banks in long-term lending. Roughly 50 per cent of funds advanced by finance companies are for periods of between 1 and 5 years. Finance companies are particularly significant in providing long-term finance for the acquisition of plant and equipment, including motor vehicles. According to a BIE survey conducted in 1990, banks and finance companies were similarly important sources of leasing finance to small firms (table 7.1).

Prior to the mid 1980s, the activity of finance companies was fostered by regulations which prevented banks from undertaking particular activities. Indeed, many finance companies were established by banks in order to undertake such activities indirectly. Following the substantial deregulation of the finance sector, some of this activity has flowed back to the banking sector.

Overseas financial sources provide substantial competition for loans to larger corporations and many larger corporations borrow off-shore. They are not a significant source of finance for small businesses.

8.5 Foreign banks

Sixteen foreign banks were issued licenses to operate in Australia in 1985 - though only 14 are currently operating here. However, the additional competition to the major domestic banks in providing finance to small business has, to date, been very limited.

Natural advantages enjoyed by domestic banks, such as their established relationship with clients and their large related deposit bases, the high cost of setting up a branch network, knowledge of the local and regional markets, and control over the clearing system, provide significant impediments to the entry of foreign banks into the retail market. Chase AMP said:

> So strong are these barriers that it is very unlikely that any new entrant would approach the market on anything other than a highly focussed line of business or niche market approach. Certainly, the prospect of any bank in the world attempting a frontal assault on the majors' entrenched retail franchise is remote (Sub. 30, Attachment A p. 9).

The 14 new foreign banks that currently operate in Australia have 95 branches between them compared with 5 650 branches of the 4 major domestic banks (RBA 1991b, Table B.18). Only two foreign banks have made any significant move into retail banking. However, some foreign banks have extended their network through links with other agencies. Chase AMP had banking facilities located in some of its AMP Insurance branches but the banking arm has now been merged with Westpac. Citibank accepts deposits through agencies such as Soul Pattinson pharmacies and NAB and ANZ branches and provides withdrawals through NAB and ANZ automatic teller machines.

In this respect, Australia's experience of deregulation has been similar to that of other countries, where similar disadvantages to new entrants have characterised the retail banking market (OECD 1989). In virtually all OECD countries retail customers tend to be serviced by domestically based institutions.

In contrast, there was a considerable increase in competition for lending to the larger corporate sector. Indeed, competition for this business has now been acknowledged by many as the cause of the less than prudent approach by many banks in offering these loans.

The restrictive conditions attached to new banking licenses included requirements that a bank be established as a subsidiary rather than a branch of the parent bank and that it establish a retail banking service, though this later condition has not been enforced. Potential foreign entrants face the more fundamental obstacle that additional licenses have simply not been available.

Number of bank licences

The Campbell Committee recommended that the embargo on non-resident participation in Australian banking should be removed. They considered that the increased competition this would inject into the financial system would improve efficiency. However, the Committee was not prepared to recommend unrestricted entry as it considered that this could result in undue disruption in the short-term and a possible unacceptable loss of ownership and control of the banking system.

Events since foreign banks were permitted access to the domestic finance market suggest that these fears were unfounded. Domestic banks have increased their market share while foreign banks have found it difficult to gain market share (see chapter 6).

It is indeed conceivable that lifting restrictions on entry may actually see the number of foreign banks operating in Australia fall, as it would no longer be necessary to retain a licence to maintain a 'toehold' in the Australian market. Equally, it would permit the entry of other banks which may have special expertise to finance specific segments of the market, though most new entrants would probably come from existing merchant banks. In broad terms, the gain from entry would probably be small and confined to 'niche' markets.

Freer access by foreign banks to the domestic market could also facilitate domestic banks wishing to establish facilities off-shore where other countries require reciprocity of access. It would also remove a discrimination often cited against Australia by the EC and others.

From the evidence to this inquiry, Australian banks appear to have little objection to additional foreign banks operating in Australia. For example, the CBA said that:

> The Commonwealth Bank would have no objection to additional foreign banks being allowed to conduct banking operations in Australia. Nor would it object to those activities being undertaken as a branch of the foreign parent bank in lieu of a separately incorporated subsidiary. We would nevertheless consider it appropriate that the Reserve Bank of Australia fully satisfy itself as to the suitability of the prudential supervisory arrangements applicable in the country of origin of the parent bank before such banks were allowed to operate in Australia. Equally all prudential standards applying to Australian owned banks would have to be satisfied by the Australian branch (Sub. 49, p. 23).

The Commission sees no reason for retaining a limit on the number of foreign bank licences and recommends that such restrictions be lifted, subject to the maintenance of suitable prudential requirements for new entrants.

Restrictions on services

The September 1984 guide-lines for foreign banks called for the provision of a wide range of services and a spread of offices in all states. The intention was that the new entrants should not be permitted to concentrate on the most profitable areas of the market while leaving the existing banks to service the less profitable areas.

It could be said that this requirement has been honoured more in the breach than the observance. The majority of the foreign banks were deterred from entering the retail sector by the entrenched positions of the major banks with their extensive retail branches. Instead, they moved into particular market niches such as corporate lending and personal banking for individuals with high net-worth. The story is sometimes told of one foreign bank, in principle offering retail services, which had a sign in its office 'no cash kept on the premises'.

The focus by the foreign banks on niche markets has provided certain types of clients with valuable financial services and contributed to the efficiency of the Australian financial system. These should not be denied Australian businesses without good reason.

The Commission recommends that holders of banking licences not be required to offer the full range of banking services.

Branch banking

Guidelines for a foreign bank to receive a licence also require it to set up operations in Australia as a locally incorporated subsidiary, rather than as a branch. Foreign banks operating in Australia as merchant banks are also requested to do so as locally incorporated subsidiaries. This was to ensure that the Reserve Bank and other Australian authorities had the legal capacity to supervise foreign banks and that domestic legislation would be binding on boards of directors of banks.

It was considered that a branch system could permit authorities in other countries to influence the behaviour of banks of their nationality operating in Australia - but it is not obvious that this has not been equally true for subsidiaries. With a branch system the Government would lose its present power under the Banks (Shareholding) Act to judge in advance whether changes in the ultimate ownership and control of an authorised bank are consistent with the national interest. The Australian system of depositor protection gives the Reserve Bank the power to assume control of a bank, where it is in danger of not meeting its obligations, for the purpose of ensuring that priority is given to meeting its Australian deposit liabilities. Under a branch system the Reserve Bank would find it more difficult to control an overseas based bank.

Setting up a subsidiary with its own management structure, its own separate board of directors, with segregated accounting and capital base and being required to meet local company law requirements, clearly increases the costs of entering the Australian market. Some foreign banks have pointed out that as branches they would be able to use the capital base of parent banks, giving more effective access to wholesale banking opportunities and increasing their credit ratings. The capital bases of parents are generally many times larger than those of their subsidiaries. Other major OECD countries, with the exception of Canada, allow branching by foreign banks and it is the preferred form of foreign operation for international banking groups.

The adoption of Capital Adequacy Ratio rules by 12 OECD nations since 1988 has increased the similarity of prudential regulation between these countries. This reduces perceived problems of branch banking by banks from countries which have adopted capital adequacy ratio rules.

All four major domestic banks support the idea of foreign banks having the freedom to operate as branches or subsidiaries. Both CBA and NAB in their submissions said they were in favour of this under certain conditions. NAB said it supports this idea provided the RBA is 'satisfied with the stability of the bank concerned and the prudential supervision arrangements in its country of origin under which it operates'. However, where a foreign bank wishes to establish a sizable operation, a subsidiary may be a more suitable form as it permits greater prudential control. As noted previously, the CBA similarly said it was appropriate the RBA fully satisfy itself as to the suitability of the prudential supervisory arrangements applicable in the country of origin of the parent bank before their branches were allowed to operate in Australia. This emphasis on the importance of satisfactory prudential arrangements seems particularly apt in the light of recent overseas experience with the failure of the BCCI Bank.

The Commission recommends that branch banking be allowed for banks from countries judged by the Reserve Bank to be observing, or having made sufficient progress towards observing, internationally accepted capital adequacy requirements.

9 THE ALLOCATION OF EQUITY FINANCE

The Australian Stock Exchange (ASX) provides a well defined market in which listed companies, particularly larger ones, can raise capital and in which their shares can be traded.

Current moves to close the second boards and revise the requirements for listing on the main board, will effectively reduce the number of companies that can make use of the ASX in future. However, these changes should improve investor confidence in the ASX and thereby improve the availability of equity finance to companies that are able to comply with the new standards.

The new prospectus requirements of the Corporations Law should ensure that the information provided to investors in the course of public raisings is of good quality. While they have added to the cost and complexity of new raisings, this partly reflects uncertainty about the meaning of some obligations and should be ameliorated in time.

The capital gains tax is seen by some investors as creating a disincentive to make some investments, but it is less onerous than other forms of income taxation. The Commission is sympathetic to arguments for providing tax treatment of losses which is more neutral between firms but recognises that there may be revenue and avoidance considerations.

There does not appear to be a lack of underwriting capacity, which is a core business activity of the stock broking industry. The current slowdown is attributable to general economic conditions.

The perceived short-termism of Australian investors can be largely explained by reference to the risks inherent in long-term projects -- including those associated with economic conditions and government policies -- and the discount rates necessary with high inflation and high real interest rates.

9.1 Introduction

In the course of this inquiry the Commission has heard opposite views from participants about the ability of businesses to obtain external equity finance. At one extreme, the Commission heard that there was a marked shortage of equity finance from external sources. This was considered to be particularly so for new and fast growing businesses. The NSW Government, for example, told the Commission that:

> ... a prime weakness in our industrial system is the lack of availability of equity and semi-equity (e.g. subordinated debt) for the expansion of firms. This particularly applies to non-publicly listed firms (Sub. 32, Attachment 1).

Against this, however, several participants claimed that there was no such shortage of equity finance but rather a shortage of worthwhile projects in which to invest. One intermediary noted that:

> BLE Capital and a number of other risk capital financiers have funds available but are finding less investable projects than they are seeking (Sub. 27, p. iii).

The Australian Stock Exchange (ASX) informed the Commission that the results of a recent survey of underwriters by the Exchange supported this view (Sub. 24, p. 5).

A number of participants also raised more general issues about the allocation of equity finance and highlighted difficulties in obtaining finance for particular types of projects, including:

- projects that are likely to take a long time to become profitable; and
- start-up projects, particularly those involving the development and application of new technology.

This chapter focuses on some general features of the capital market of relevance to both small and large businesses. The specific concerns about the availability of equity finance for smaller enterprises are considered in the next chapter.

9.2 How are claims about equity markets to be assessed?

Claims made to the Commission that there is a shortage of equity finance, and that valuable investment opportunities are being missed as a result, are not new. Similar claims have been made to previous inquiries over more than a decade. They are addressed in the Crawford Report (1979), the Campbell Report (1981) and the Martin Report (1983)(see appendix B). The difference today is that they are occurring in an environment characterised by substantial deregulation of financial markets largely resulting from the implementation of proposals in these earlier reports.

Claims about the lack of availability of equity finance were made by participants in general terms, and some specific examples were brought to the Commission's notice. It is, however, virtually impossible for the Commission to evaluate such claims on their merits with the data it has at its disposal. As is the case for debt finance, the existence of unsatisfied demand for capital does not necessarily indicate some failing in the market. This depends on the relative returns from the projects which can and cannot raise capital.

It is reasonable to assume that investors will generally take up relatively profitable opportunities, having appropriate regard for risk, provided that they know about them and are free to pursue them. They would be expected to allocate the funds at their disposal to maximise anticipated returns, taking the costs and risks of the various alternatives into account. The approach adopted by the

Commission in assessing claims about lack of equity capital, is to look for possible reasons why this competitive search for profitable opportunities might consistently fail to allocate capital to the most worthwhile projects. As just suggested, potential sources of difficulty include the adequacy of information about capital sources and opportunities, and the role of government regulation and taxation in influencing decisions (including superannuation).

The central role of information in capital allocation decisions was described in chapter 6 in relation to the lending practices of the banks. Information about the viability and potential of a project is even more critical for equity investors, however, given their residual claim on the income and assets of a business. The poorer the information about a proposal, the higher the risk and the higher the expected reward would need to be for investment to proceed. Where there is an 'information gap', there may also be a deficiency in capital availability. What the implications of this might be for policy depend on its causes and the costs of doing something about them.

Various institutions and mechanisms have developed within the capital market to reduce information disparities between seekers and providers of capital. The stock exchange itself plays an important role in this respect. Laws and regulations have also been developed for the same purpose. Before looking at these general features of equity markets, it is useful to review briefly the main sources of equity finance and their significance.

9.3 Sources of equity capital

The main sources of equity finance for Australian businesses have been described in chapter 4. They range from individual investors to large institutions, both nationally and internationally. However not all firms have equal access to these various sources. A distinction can be drawn in this respect between larger companies listed on the Stock Exchange and smaller (unlisted) businesses.

Large companies have potentially available to them a number of domestic and overseas sources of equity capital (table 9.1). Overseas investors have been a substantial source of equity finance for large Australian companies. Indeed, about 29 per cent of the value of companies listed on the ASX is foreign owned.

Financial institutions are the largest source of equity finance for larger listed companies, accounting for 36 per cent of the equity of Australian companies listed on the ASX, according to J.B. Were (1991). Among financial institutions, superannuation funds and life offices are the largest investors in Australian equities. Equities owned by these institutions account for about one-third of the total market capitalisation (excluding major foreign corporations) of the ASX.

Table 9.1: **Equity holders in small and larger businesses**

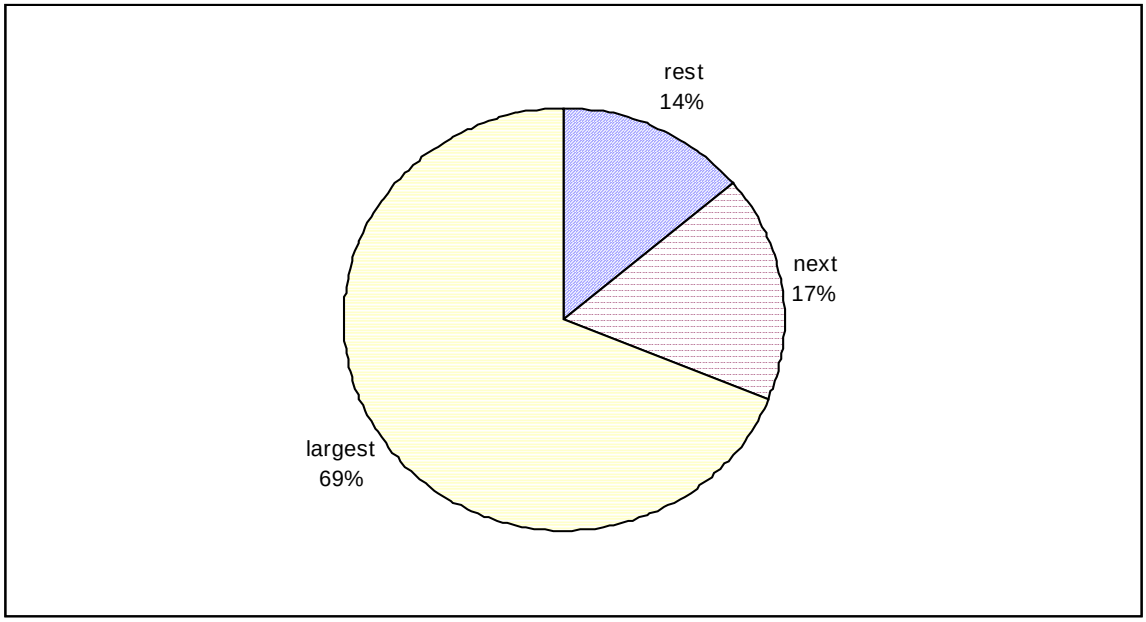
Small Businesses(a)		*Listed Companies(b)*	
Equity holder	*%*	*Equity holder*	*%*
Australian Financial Institutions		**Australian Financial Institutes**	
Investment Co. (incl. MICs)	0.3	Life Offices	10
Other	2.2	funds	22
		Inv. Co. & Equity Trusts	2
		Other	2
Total	2.5	Total	36
Other Australian Investors	**Other Australian Investors**		
Owner or family member	80.0	Individuals	28
Partners or other personal shareholders	17.2	Other Companies	7
Unrelated business	0.3		
Total	97.5	Total	35
Overseas Investors	-	**Overseas Investors**	**29**
Total	100.0		100

Notes: (a) Based on a survey of 204 small manufacturing firms BIE (1991)
(b) J B. Were & Son (1991). Excludes major overseas corporations listed on the ASX.

Equity investments managed by life offices are concentrated among the larger funds. The four largest life offices, for example, account for just over two-thirds of the equity investments made by life offices from statutory deposits (figure 9.1). However, there are over 50 life offices which invest on their own account or on behalf of other funds. In addition, as noted in chapter 4, there are many superannuation and approved deposit funds which manage their own investment portfolios.

Equity investments in large Australian companies are also attractive to private individuals, as demonstrated by the recent Commonwealth Bank share issue. Private individuals account for about 28 per cent of the equity of listed companies even though only about 9 per cent of Australian adults directly own shares. The proportion of equity investment accounted for by private individuals has been declining steadily for the last three decades, though recent taxation reforms and new share issues associated with the privatisation of government business enterprises may make investments in shares a more attractive proposition.

Figure 9.1: **Equity investments by life offices**



Note: Excludes ordinary business of life offices.
Data source: ISC Quarterly Statistical Bulletin, December 1990, table 14c.

By contrast, small businesses seeking equity finance face a much more restricted set of options (these are examined in more detail in chapter 10). A recent survey conducted by the BIE suggests that equity for small businesses mostly comes from their owners or related family (table 9.1). The survey found that overseas investors have not been a significant source of equity finance for small business. Financial institutions accounted for less than 3 per cent of the equity of small business in the sample, though some have indirectly provided capital to small businesses through their investments in venture capital companies.

A major development in the capital market during the 1980s has been the growth in intermediaries that specialise in providing equity and other forms of risk finance to small businesses. However, as shown in table 9.1, these companies appear only to account for a small proportion of the equity of the small manufacturing firms in the survey.

The other main 'external' sources of equity finance for small businesses are individuals and, to a small extent, other companies. It is likely that these investors have some expertise or knowledge of the businesses concerned.

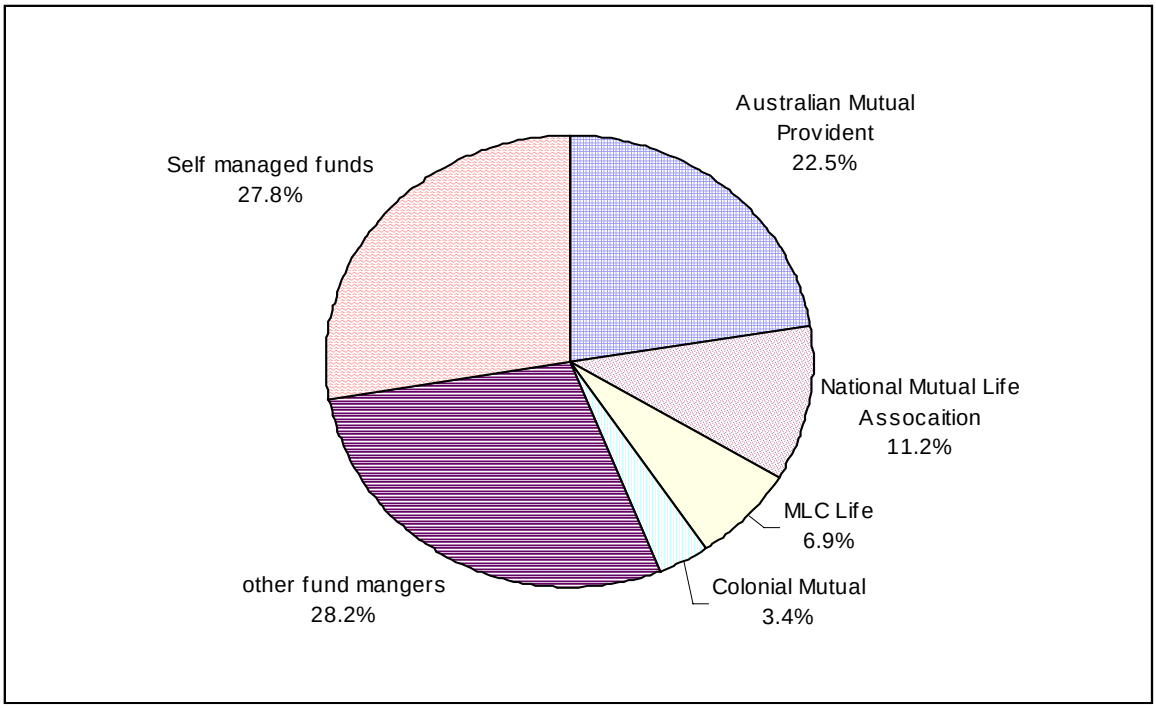
Superannuation funds

As a broad generalisation, the institutional structure of a large part of the superannuation industry can be viewed as comprising:

- the *fund managers*, who invest monies in line with requirements and risk preferences of fund trustees;
- the *trustees*, who have statutory responsibility for the prudent investment of contributors' funds, typically being appointed by employers (or employers and unions); and
- *contributors*, who generally have little effective choice as to the fund in which their contributions are lodged or the trustees who control them.

At present, four financial institutions manage about 44 per cent of superannuation fund assets. AMP -- the largest fund manager -- accounts for 22 per cent (figure 9.2). Despite the dominance of the biggest four, there are over 50 other fund managers and many more self-managed funds. The influence of the largest four may be larger than suggested by their absolute size, however, to the extent that they act as market leaders for the small fund managers.

Figure 9.2 **Total assets of superannuation funds classified by fund manager**



Note: Life office figures include both their own and managed funds.
Data sources: Assets of superannuation funds and approved deposit funds, ABS Cat. No. 5656 and Quarterly statistical bulletin, ISC.

A range of participants argued that the ease with which superannuation fund trustees can and do change fund managers, and the practice of consulting actuaries regularly publishing 'league tables' that include the quarterly and sometimes monthly investment performance of investment fund managers, has led to intense competition among fund managers. Advent Management Group, for example, said that:

> Most of the institutions are competing on a quarter to quarter basis in the published statistics that are put out for performance of their various funds and that has immediate implications because if they start falling behind their competitors, trustees of funds can switch the money from one manager to another and a couple of bad quarters of performance could lead to a significant reduction in the capital you were managing (Transcripts, p. 152).

Trustees are able to allocate their funds among a number of fund managers and commonly move their funds between them in search of the best returns.

In addition to competition among existing fund managers, there is significant 'contestability' in the superannuation market. Harper (1991) notes that new superannuation funds can readily be established. Recent experience of banks establishing their own superannuation funds and providing fund management services indicates that it is feasible for substantial new players to enter this market and compete for business.

Overall, it seems clear that there is vigorous competition among fund managers for the business of trustees and thus very strong incentives for them to maximise returns subject to the risk preferences of their clients. It is less clear, however, whether the limited choice available to contributors under the present institutional arrangements is leading to a pattern of investment that adequately reflects the risk preferences of contributors. That issue is explored in chapter 10.

9.4 The Australian Stock Exchange

The basic role of the Australian Stock Exchange (ASX) is to provide a market for the trading of securities. It facilitates raisings of equity capital by companies and provides a secondary market whereby capital providers can liquidate, increase or switch their investments (see Appendix H).

Listing on the ASX confers a number of benefits to investors and users of funds. For example:

- listed companies have a marketplace where they can issue shares, debentures and other instruments to finance their long-term development;
- the capacity of investors to sell shares on the ASX provides them with liquidity;
- investors can gain considerable information about investment opportunities from the disclosure requirements of the ASX;

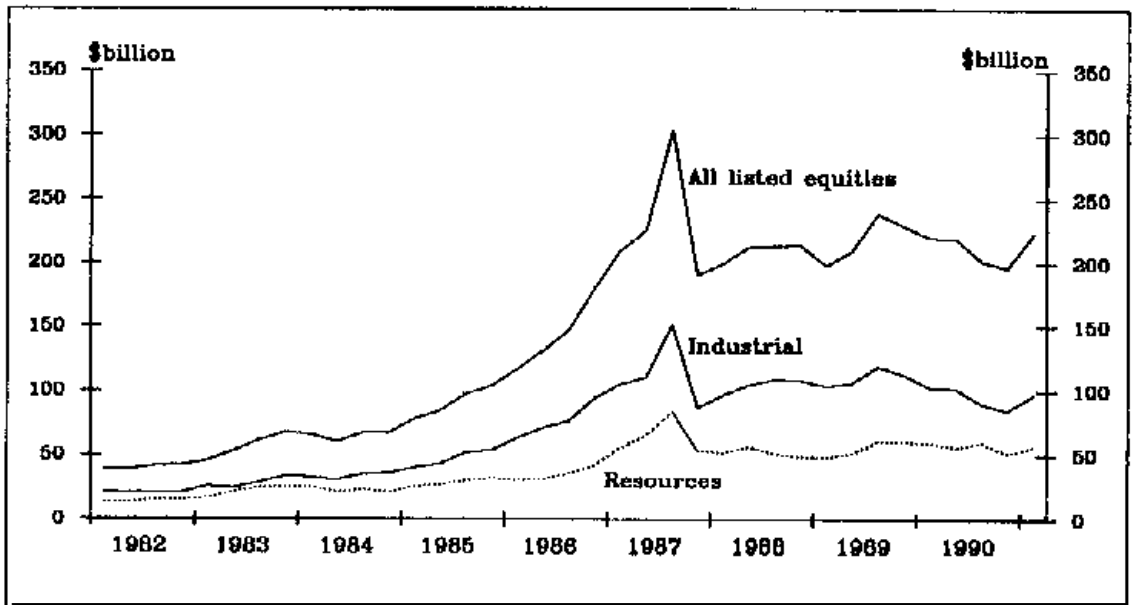
- investors have considerable capacity to vary the size of their commitment in any single investment and diversify their investment portfolios; and

- listed companies are able to access easily a wide pool of potential investors and are able to reduce the risk of failing to attract the required amount of capital through the use of underwriting services[1].

Stock Exchange activity

The market value (capitalisation) of companies listed on the ASX increased strongly in the mid 1980s. However, the stock market crash in October 1987 saw the value of listed companies fall by about 40 per cent (figure 9.3). In the remainder of the 1980s, the value of listed companies has remained roughly at its post crash level, though there has been significant volatility in share values over this period.

Figure 9.3 **Market value of companies listed on the ASX**

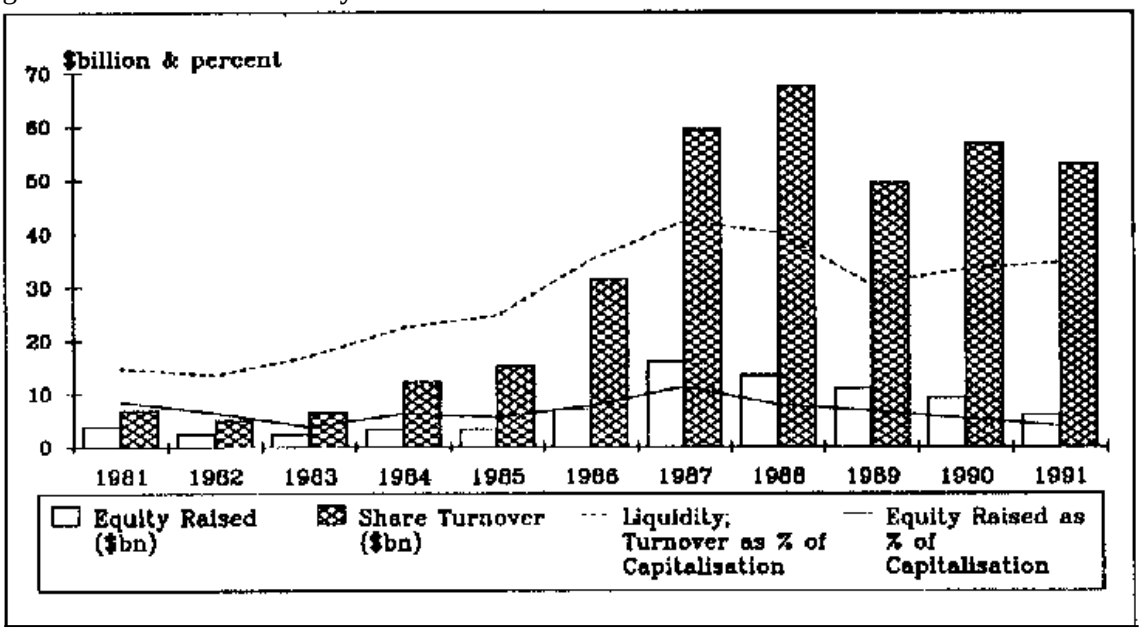


Data source: Australian Stock Exchange.

The Australian market for equities has provided a substantial source of capital for listed companies, with $65 billion being raised over the 1980s. In 1986-87, when the stock market was at its peak, listed companies obtained $16 billion from new share issues, or over 10 per cent of their market value (figure 9.4).

[1]Further details about the nature of the ASX and its listing requirements are presented in Appendix H.

Figure 9.4 **Main board activity**



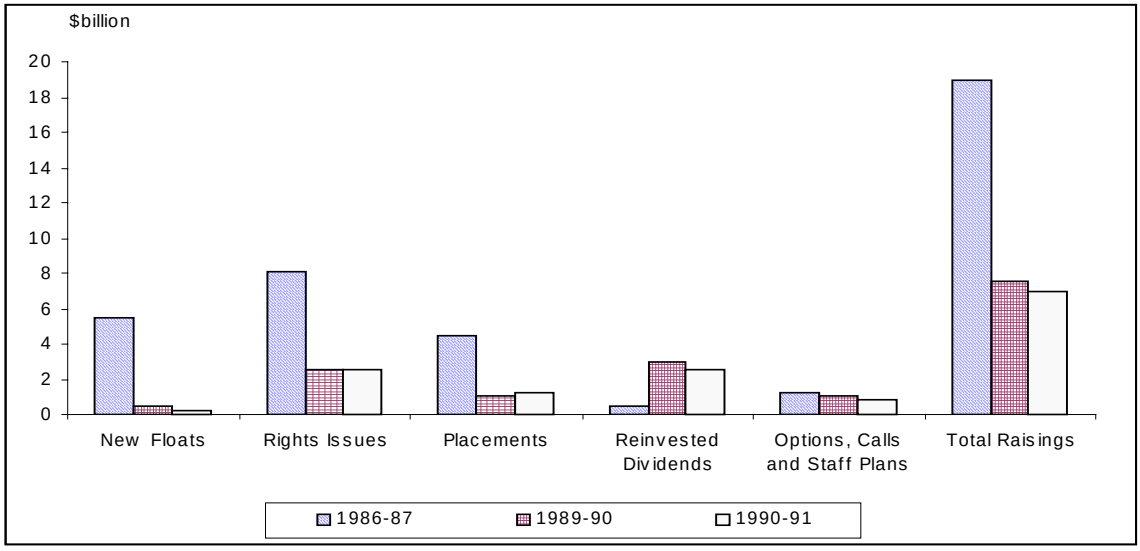
Data source: Australian Stock Exchange.

Peaks and troughs in the stock market cycle affect the raising of equity capital. New share issues are a more attractive method for raising finance when prices are high and rising than when prices are low and falling. However, even under the difficult market conditions since October 1987, new share issues have remained an important, though diminished, method for obtaining finance. In 1989-90, listed companies raised over $9 billion from new issues - equivalent to about 20 per cent of the total private fixed capital expenditure on non-dwelling construction and equipment in that year.

The proportion of equity capital raisings accounted for by new floats declined from 26 per cent in 1986-87, prior to the stock market crash, to less than 2 per cent in 1990-91. In contrast, the proportion accounted for by reinvested dividends increased from 2 per cent in 1986-87 to 33 per cent in 1990-91 (figure 9.5). The increase in dividend reinvestment can be attributed partly to taxation changes which have encouraged the payment of dividends, and perhaps also by higher prospectus costs in the early period of the new Corporation Law (see section 9.5). The ASX suggested that the increase in dividend reinvestment may also be due to the decline in the stock market:

> Companies that have decided to raise capital in the recent subdued market conditions have increasingly adopted relatively novel devices to do so, such as dividend reinvestment programs, employee share plans and equity hybrids (Sub. 24, p. 4).

Figure 9.5 **Equity raised by main board companies**

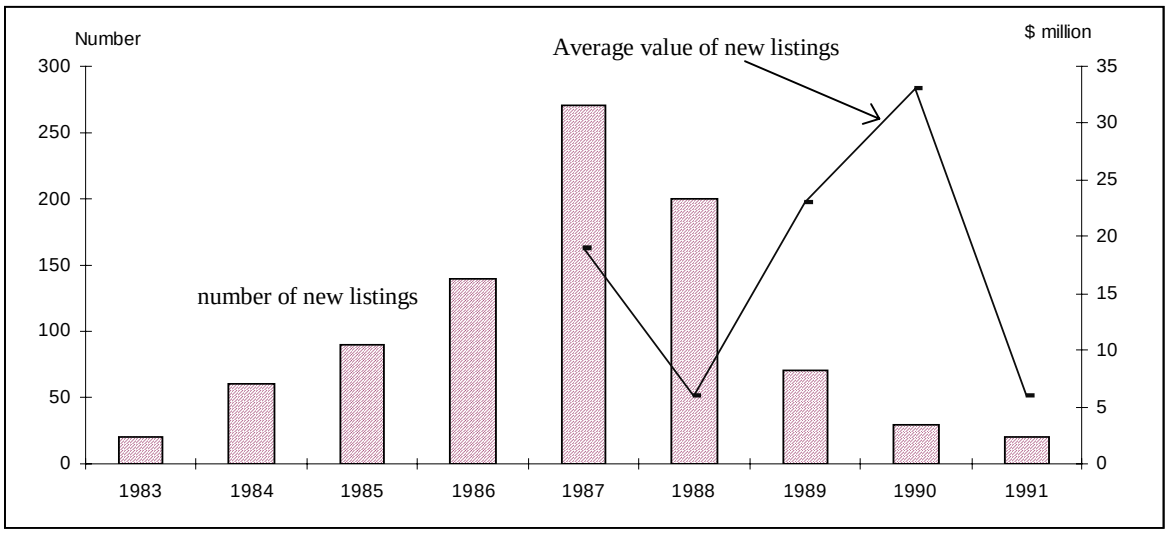


Data source: Australian Stock Exchange.

The downturn in the stock market appears to have had a relatively greater impact on smaller listed companies. This view was forcefully put by Mr A Burns who suggested that:

> very little of the $9 billion raised (in 1989-90) from new issues was available to companies outside the top 150 on the ASX causing severe financial problems for nearly all medium sized and small (listed) companies (Sub. 93, p. 2).

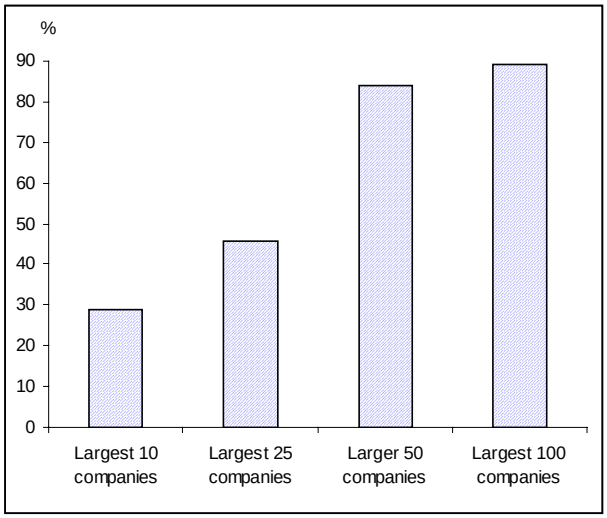
Figure 9.6 **New listings on the main board**



Data source: Australian Stock Exchange.

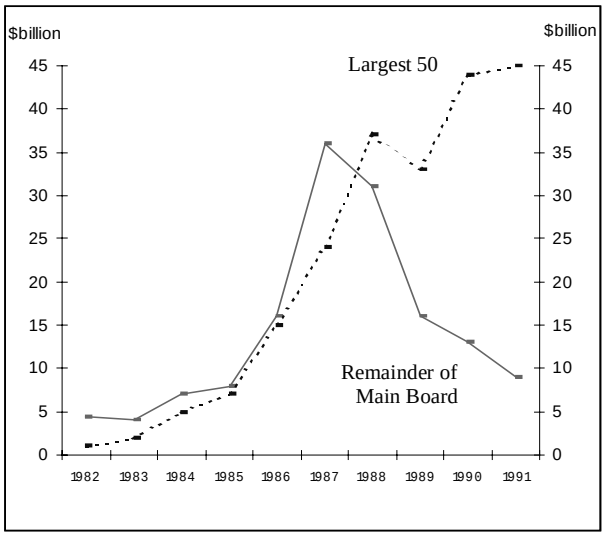
In 1986-87, when the stock market was buoyant, there were 271 new share listings with an average value of about $18m. In 1989-90, the number of new listings decreased to 35 but their average value rose to $34m. In 1990-91, there was a continued decrease in new listings, to 18, but the average value fell back to $6.7m, despite the impact of the CBA float (figure 9.6).

Figure 9.7 **Concentration of market capitalisation - 1991**



Data source: Australian Stock Exchange.

Figure 9.8 **Concentration of share turnover**



Data source: Australian Stock Exchange.

While there are approximately 1150 companies listed on the main board, capitalisation is highly concentrated in the largest companies, and since 1987 so too has turnover. In 1991, the top 50 companies account for 84 per cent of the value of Australian listed shares and the top 100 companies for nearly 95 per cent (figure 9.7). Similarly, the top 50 companies accounted for just over 80 per cent of the total stock market turnover in that year and the top 100 companies for just over 90 per cent.

The extent to which the largest companies dominate share trading on the ASX has increased substantially over the last 10 years. In 1982, the top 50 companies accounted for under 20 per cent of the total share turnover. By 1991, the share of total turnover accounted for by this group had increased to over 80 per cent (figure 9.8), with most of the change occurring post-1987.

This trend over the 1980s would partly reflect the substantial number of mergers that occurred in this period. In the latter part of the decade, however, it would also reflect the 'flight to quality' that typically occurs in periods of stock market downturn. Between 1987 and 1991, following the stock market crash, share turnover of the top 50 listed companies increased by about 90 per cent while the total share turnover of all other listed companies declined by 70 per cent.

New listing requirements

Companies that wish to be listed on the ASX must meet minimum standards set by the Exchange. Such standards are intended to ensure that:

> The securities, including the rights and obligation attaching to them, must be issued in circumstances which are fair to new and existing security holders and they should trade at a reasonable price (ASX 1991).

In addition to protecting investors in any particular shares, these requirements are important in maintaining the overall integrity of the ASX and thus in attracting local and overseas investment and listings by overseas companies.

The ASX intends to modify its listing rules from 1 January 1992. It maintains that the changes are necessary to increase the confidence of investors in equity markets in the wake of the 1987 stock market crash and the subsequent spate of failures by Australian companies. The ASX commented that:

> ... there is a strong perception that Australia's business reputation is somewhat in tatters and perhaps the exchange has played a role in allowing that to happen and certainly intends to play a role to improve the situation (Transcript, p. 272).

Apart from simplifying and clarifying the listing requirements, substantial increases are proposed in the minimum capitalisation and number of shareholders of companies that can be listed as well as the minimum issue price of their shares (table 9.2). While companies that list after 1 January 1992 will be required to meet the revised requirements about their size and shares, presently listed companies will not be required to comply with these new arrangements (see Appendix H for further details).

Table 9.2: **Listing requirements**

Requirement	*Present arrangement*	*Proposed arrangement*
Minimum capitalisation[a]	$300 000	$1 000 000
Minimum number of shareholders	300	500
Minimum issue price	20[c]	50[c]

Note: (a) Minimum capitalisation varies between types of industries and businesses. See appendix H.
Data source: Australian Stock Exchange.

While the Commission received many complaints that raising finance through the ASX was not a viable option for small firms, this was generally due to the small amounts of capital they sought relative to costs involved in a share issue, rather than to the minimum size required for listing. Indeed, the minimum capitalisation required is much lower than the amount of capital that is typically raised from new listings.

The proposal that the minimum capitalisation of listed companies be increased from $300 000 to $1m represents more than a threefold increase. However, the minimum capitalisation requirement has not been increased for 20 years and hence, in real terms, is still much less than it was 20 years ago. This requirement is also extremely modest compared with the minimum size requirement for listing on major overseas exchanges (see table 10.2 in the next chapter and Appendix H). For example, the New York Stock Exchange requires a minimum capitalisation of $A23m, the Tokyo Stock Exchange requires $A10m and the London Stock Exchange $A1.7m.

The second boards

Second boards were established by the stock exchanges in each State between 1984 and 1986, in line with similar developments in other countries. According to the ASX:

> [a belief that] main board quality requirements could be in conflict with the needs of smaller companies to raise equity capital, and ... that capital would be available for such companies from private investors, led to the formation in the mid-1980s of Second Boards in each state (Sub. 24, p. 7).

The second boards provided companies which did not meet the requirements for listing on the main board with an additional means to gain access to equity capital. Companies in the development stage, for example, are unlikely to have a sufficient number of shareholders, paid-up capital and a satisfactory three year profit record to be eligible for main board listing.

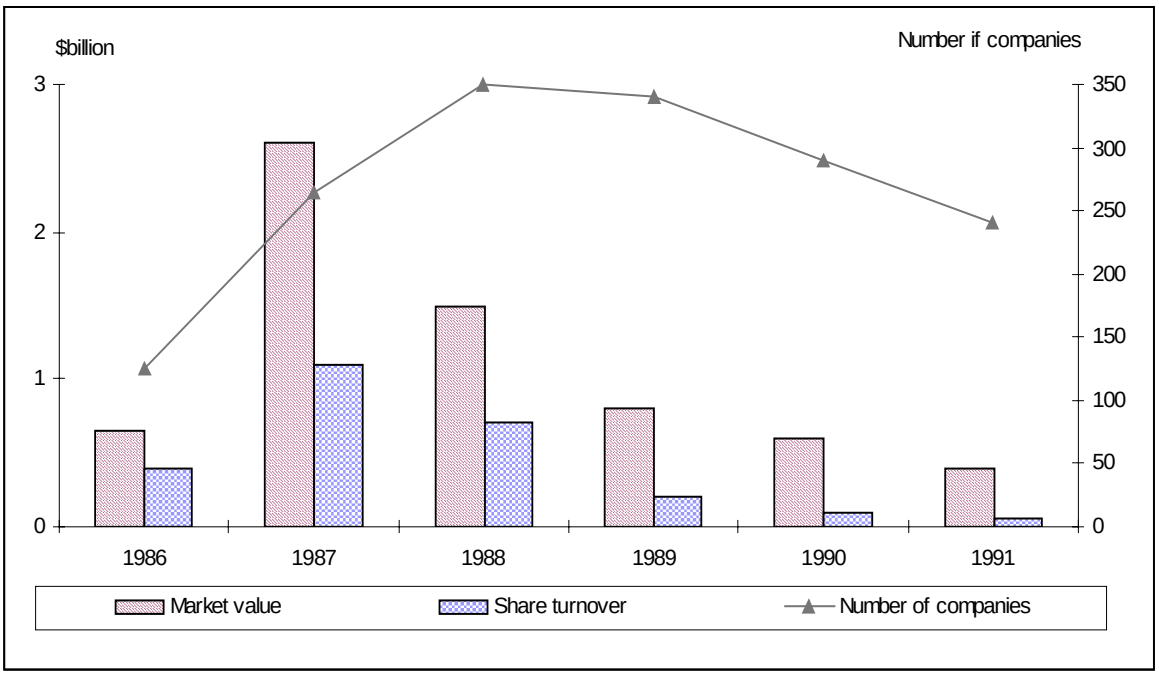
Listing requirements are not as stringent as those of the main board. The principal second board listing requirements for the Western Australian Stock Exchange are a minimum of 50 shareholders (later increased to 100) and a minimum issued capital of $100 = 000 compared with main board listing requirements of 300 shareholders and $300 000 issued capital. In addition, listing fees are approximately half those of the main board.

Second board companies can issue different classes of shares with different voting rights in order to permit their owners to maintain control. Main board companies have less flexibility in regard to the voting rights of their shares. As discussed in chapter 10, several previous reports have noted that owners of small businesses seldom seek equity from external sources due to their reluctance to relinquish control.

The operation and vision of the second boards were the responsibility of the various State stock exchange corporations. However, with the establishment of the ASX, the various State listing requirements became very similar and all companies listed on State second boards are now traded through the Exchange's SEATS computerised trading system.

The second boards initially attracted substantial capital for developing businesses, due partly to the boom in asset prices during the first part of the decade. Activity on the second board peaked in 1986-87, when annual share turnover was $1078m and second board companies had a market value of $2600m (figure 9.9). Following the crash, however, there was a virtual collapse of the second boards and the failure of a large number of the new second board companies. Share turnover in 1990 was $38 million - only 4 per cent of its peak level - and the market value of second board companies in 1990-91 fell by 85 per cent. The number of companies listed declined from 350 in June 1988 to 238 in December 1990, though 33 made the transition to the main board.

Figure 9.9 **Second board companies**



Data source: Australian Stock Exchange.

Investors are showing little confidence in many of the surviving second board companies. Share prices of second board companies are typically well below their par value. In a sample of 134 second board companies examined in June 1991, only 13 companies (10 per cent) had a share price higher than par value. The share prices of over 70 per cent of these companies were less than half of their par value, and in about 40 per cent of cases share prices were less than 20 per cent of their par value[2].

[2] These results were reported in the Australian Financial Review, 22 June 1991.

If anything, these share price comparisons present a conservative picture of the lack of investor confidence in second board companies. The performance of second board companies in maintaining the value of their stocks is probably even worse. The statistics reported include only stocks which have been traded in the fairly recent past. They do not include stocks in which investors have shown no interest or that have been suspended from trading.

Possible reasons for the sharp decline in turnover of the second boards were advanced in a number of submissions. The share market crash of October 1987 and the 'flight to quality' observed on the main board would no doubt have had a similar impact on second board trading. Indeed, the dramatic decline in share turnover on the second board since 1987 has been similar to that of main board companies outside the top 50 (figure 9.8).

If the decline in second board trading reflects a 'cyclical flight to quality', the second boards could be expected to recover with a recovery in the stock market. However, a number of submissions, suggested that the decline in second board trading was not solely a cyclical phenomenon.

The Western Australian Corporate Affairs Department considered that the less stringent rules adopted by the second board allowed companies involved in unscrupulous or unwise activities to be listed, which resulted in losses to investors and damage to confidence. Among the problems they identified were:

- `Cash Box' type companies. Some companies were floated with no information as to the eventual use of the funds raised. Investment was found to have been directed to companies which themselves did not satisfy prospectus requirements, including companies in which directors of the cash box company had interests.

- The quality of the information contained in prospectuses was of a low standard. In particular, the practice of employing consultants who were paid by the raisers of the funds, and who bore no responsibility for the eventual viability of the company was seen to be a flaw in the system.

- Inadequate vision, permitting companies to unrealistically revalue intangible assets, therefore leading to incorrect appreciations of their worth.

- The practice of allowing directors discretion over initial allocation of shares may have led to market rigging (WA Corporate Affairs Department 1990).

The ASX has decided to discontinue second boards from 30 June, 1992 (Sub. 79, p. 1). At the time the ASX announced its decision, there was concern about resultant adverse effects on existing second board companies that could not meet the listing requirements of the main boards.

A recent study by the accountancy firm Price Waterhouse, concluded that:

> Only a minority of second board companies would be able to satisfy the current official listing criteria for the main board, and it could be expected that this will be still the case in 2 to 3 years (Price Waterhouse 1991).

Of the 187 second board companies whose shares were able to be traded as at April 1991, the study found that only 10 qualified for listing on the main board. Presumably fewer companies could meet the more stringent requirements that are now proposed. At the same time of the study, the market value of companies that did not qualify for main board listing was estimated at between $300m and $350m.

It was argued that even though the market for shares of second board companies has been relatively illiquid since the October stockmarket crash, a relatively illiquid market for shares is better than no market at all. For minority shareholders in second board companies that did not qualify for main board listing, it was felt that the closure of the second board would virtually render their shareholdings valueless.

Price Waterhouse did not argue that the second board should be retained, but that shareholders in existing second board companies should be protected.

> 'Shareholders' rights would be protected by 'grandfathering' provisions to allow all existing second board companies onto the main board, but without relaxing initial listing requirements for new companies seeking ASX listing (p. 1).

The method proposed by Price Waterhouse for discontinuing the second boards has now largely been adopted by the ASX. All second board companies that are able to meet the current second board listing requirements on 31 December 1991 will be given the opportunity of listing on the main board on that date. These companies will not be required to comply with the admission criteria applicable to other companies that seek listing on the main board. They will only need to comply with the current second board rules. Those companies remaining on second boards after 31 December 1991 will be delisted on 30 June 1992.

Effect of ASX changes on capital availability

With the proposed abolition of the second board and changes to the listing requirements on the main board, some companies face the prospect of being delisted and suffering a resultant drop in the liquidity of their shares and fall in their share price. Others may be denied the opportunity to use the ASX to raise capital by the more stringent listing requirements. This will exacerbate the problems that these businesses already have in raising capital.

It does not necessarily follow, however, that the proposed changes will reduce the overall availability of capital. The attractiveness of the stock exchange depends not only on having a wide range and large number of companies from which investors may choose, but also on the credibility

and reputation of the exchange as a whole. The ASX is required to make fine judgements about the necessity for rules to filter out any prospective listing which might damage the integrity of the market. As pointed out by the ASX:

> The Listing Rules are not fixed. They can be and are amended to rectify anomalies or remedy problems, provided always that the change does not compromise the integrity of the market (Sub. 24, p. 6).

While the proposals just outlined will reduce the access of smaller companies to the formal market, the Commission can understand the ASX's reasons in the light of recent developments. If future developments provide scope for the ASX to expand its activities again into the smaller end of the market, it would presumably do so. If profitable opportunities for such services were not met by the ASX, there would be an incentive for other 'exchanges' to set up and this should not be inhibited by government. A proposal is currently being developed to establish a formal market that will specialise in small companies, many of which would not meet the listing requirements of the ASX (see chapter 10).

9.5 Prospectus requirements

A central feature of public capital raisings are the regulatory and legal requirements on companies to provide information to investors. Public companies, in raising capital from the general public, have always been required to issue a prospectus, setting out relevant information about the company's operations and performance (see appendix G).

The Corporations Law has brought substantial changes to prospectus requirements compared with those under the old Companies Code. A number of participants saw these changes as constituting a major impediment to the availability of equity finance, especially for smaller companies. As the representative of the Australian Stock Exchange put it at the hearings:

> The prospectus is perceived now by the Corporate sector as being an instrument to be dreaded, something that is going to change the whole way that capital is raised in Australia (Transcript, p. 286).

However, the new arrangements were intended to *facilitate* capital raising by simplifying and deregulating the approval process and enhancing investor confidence in the informational worth of the contents of a prospectus. In the second reading of the Bill, the Attorney General stated:

> ... to ensure that fund raising activities are not impeded by delays or the imposition of unnecessary costs by the regulatory authority, the Australian Securities Commission (ASC) will not pre-vet prospectuses. There will also be no pre-vetting of part A statements, profit forecasts and asset valuations during a takeover. As well, the complex and detailed rules as to the content of prospectuses will be replaced by much more basic disclosure rules designed *to provide investors with information they need to make informed investment decisions* (Corporations Bill, 2r, House of Representatives, 23 May 1988, pp. 2993-5 emphasis added).

The reforms were also designed to remove the previous 'offer to the public' test for when a prospectus was required. This concept was hard to define and easy to subvert. It was progressively broadened in the courts until it was interpreted to mean an offer to *any member* of the public. Under the new law, all invitations or offers of securities require a prospectus, with exemptions mainly for large issues to institutional investors or personal offers to not more than 20 people in a 12 month period (see appendix G). This removes, however, the previous open ended exemption for issues to professional investors. The need for a prospectus has also been extended to rights issues, and for secondary trading.

Unlike the arrangements under the Companies Code, there is no longer a specified list of facts to be included in the prospectus. The onus is now on the issuer to include:

> ... all such information as investors and their professional advisers would reasonably require and reasonably expect to find in a prospectus for the purpose of making an informed assessment of:
>
> a) the assets and liabilities, financial position, profits and losses, and prospects of the corporation; and
>
> b) the rights attaching to securities (Corporations Act 1989, Section 1022).

A representative of the AMP has observed:

> Under the old regime issuers complained of extensive delays and unnecessary costs. Issuers were subjected to exhausting compliance with checklists monitored by the Corporate Affairs Commissions. It was intended that under the new arrangements they could get away from all that and instead would provide the information that investors needed. Just to make sure that issuers did this, those responsible for the prospectus were made liable for its content (Hall 1991, p. 11).

The new law widens the range of people who could potentially be held liable for breaches. Any of those involved with the prospectus can be held liable if their contribution is thought to break the law. This includes the issuing corporation, promoters, stockbrokers, underwriters and persons who authorised or caused the issue of the prospectus.

This represents a substantial extension of the law. There are defences available, however, to those involved in preparing a prospectus that is found to have a false or misleading statement or material omission. These are based mainly on the notion that such persons cannot be liable if they undertook a reasonable effort ('due diligence') to ensure that their contribution did not contravene the law.

Increased costs

While there were different views about the worth of the new prospectus requirements, most participants agreed that they had thus far substantially increased the costs to business of seeking equity capital.

The Commission has seen cost estimates for prospectuses ranging from $40,000 for small company issues up to $30m for the recent Commonwealth Bank issue, and heard that the demands on management time have increased greatly. It would appear that costs are proportionately greater for small issues. For example, the CBA's costs amounted to some 2 per cent of the value of the capital being raised. According to some analysts this is not outside the range of costs previously observed (Mews, 1991). In contrast, Westhens indicated that for an intended capital raising of $250,000, costs were estimated to be as high as 16 per cent (Sub. 9, p. 3).

Higher costs of preparing a prospectus under the new law can be attributed to:

- the extension of liability;
- interpretation by some advisers of how much information investors may `reasonably require and expect'; and
- interpretations of what is needed for a `due diligence' defence.

While the extension of liability and of the circumstances in which a prospectus is needed will remain a source of higher cost, it is argued by some that the other factors will diminish as lawyers become accustomed to the new approaches and there is clarification of key terms in the Act.

The central concept of `due diligence', for example, is relatively new to Australian law. As interpreted in the United States, it has necessitated independent investigations on behalf of each party associated with a prospectus, covering financial, business and legal aspects of an issue. It appears that some advisers to companies in Australia have presumed that the same standard will apply here and have as a result left no stone unturned:

> The net result to date , has been that prospectuses have taken a long time and an enormous amount of money to produce (Hall 1991, p. 11).

An alternative interpretation, which has been gaining currency, is that `due diligence' is a transplant to the Corporations Law of the much less onerous standard to be found in Section 85 of the Trade Practices Act (see, for example, Executive Law, August 1991 and appendix G). The concept of `reasonable precautions and due diligence' in the Trade Practices Act has been interpreted as follows:

> It is not necessary that all conceivable steps to avoid a contravention should have been taken, so long as action has been taken which would be thought appropriate by a person genuinely desiring to avoid a prohibited activity. On the other hand, some positive steps must have been taken, except in the rare case where nothing could have practicably been done (Taperell, Vermeesch and Horland 1983, p. 765).

Ultimately these matters of interpretation will require either resolution by the Courts or amendment to the Act. In the meantime, it is understandable that some companies and their advisers have been taking a more cautious approach than others. While the CBA prospectus contained over 100 pages, for example, an ANZ convertible preferences issue contained less than four pages and a prospectus issued by the Advance Bank contained only one. The latter examples both made use of the scope that exists to incorporate by reference other documents, such as accounts and annual reports. Also, some recent issues have cut down considerably on duplication in due diligence investigations.

One underwriter has observed that while legal fees are currently higher than they were under the previous rules:

> In my opinion this is partly paying for the education of lawyers - and indeed other participants. Once a proper system has been evolved (and indeed it is evolving) then the legal costs will fall (Mews 1991).

Given the obvious incentive for companies seeking capital to minimise their costs and effort, any innovations which do this at what seems an acceptable risk will presumably be adopted more widely. Recent press reports indicate a significant rise in capital raisings -- including among smaller companies -- and at proportionately much lower cost than the early, well-publicised cases.

An impediment?

The Queensland Small Business Corporation argued that the increased costs required to meet the new prospectus law were prohibitive for using share issues to raise the small sums typically required as seed capital for start-up business, but may be more worthwhile for businesses in the expansion phase because of the larger amount of capital that is required.

Some participants argued for exemptions to the current prospectus requirements for smaller companies. Westhens Investments Pty Ltd, for example, suggested that

> ... the requirement to issue a prospectus in the form as presently required by the Act be abolished for small companies and partnerships (Sub. 9, p. 4).

Other participants, including the Queensland Small Business Corporation, argued in favour of more modest prospectus requirements for small equity raisings rather than complete exemption. Abbott Tout Russel and Kennedy suggested that:

> ... where a one product company requires seed capital ...the promoter should be able to put forward an all care and no responsibility prospectus (at a minimal cost) to enable the promoter to approach more than 20 potential investors (Sub. 13, p. 3).

Such proposals raise some fundamental issues about the role of prospectuses in equity markets. While some take the view, as in the preceding quotations, that prospectus requirements impede the access of companies to those investors who would be happy to invest without a prospectus; others see the absence of effective legal obligations as an impediment to the increased availability of equity finance generally. For example, a representative of Rothschild Australia Corporate Limited argued that:

> The higher standards required by the Corporations Law and now the Stock Exchange will mean that investors over time will be able to become more confident as to the companies, large or small, in which they invest. The pool of capital available to smaller companies will, as a result, increase in size (Sub. 51, p. 1).

As noted, prospectuses have generally only been required for offers to the public at large. Private companies can have up to 50 shareholders or partners, and public companies can make personal offers to up to 20 investors or issue individual parcels above $500 000 without needing a prospectus. The logic of this dichotomy has to do with the informational disadvantages of being a small investor with a small potential interest in the company concerned. Such investors have limited scope to inform themselves directly about the company's affairs and the reliability of its directors and management. And the legal, information and transaction costs of taking individual action where small amounts are involved are typically prohibitive. The scope for exploitation of the 'public', therefore, is greater than in a more interactive transaction involving a limited number of investors, especially if they are 'professionals'.

The informational disadvantages of investors generally in evaluating a company's position (known to economists as the problem of 'asymmetric information') would in the absence of prospectuses result in a higher risk premium and thus lower availability of equity capital than necessary.

This logic would seem to apply regardless of the size of the company or the amount of capital it is offering to the 'public'. It is true that the smaller the company or issue, the greater will be the costs of satisfying the prospectus requirements and other formalities of a public issue. But this is not a reason for allowing special dispensations. Rather it reflects the unsuitability of that source of finance for such companies. Indeed, as discussed in chapter 7 (and later in chapter 10) smaller companies tend to be riskier and often more difficult to evaluate than larger companies. This has led some to argue that higher disclosure standards are even more desirable in their case.

A question of balance

The real issue, therefore, is whether the new prospectus rules have struck the right balance between the inter-related elements of disclosure, liability and compliance cost.

While many participants were critical of aspects of the new rules, the Commission received no recommendation for a return to the previous regime. In principle the less prescriptive nature of the new laws should allow greater flexibility and provide scope to reduce compliance costs. For example, a small, single product company of the kind cited earlier could be expected to provide much less information than a more complex entity such as a bank. It would also seem that the new prospectus requirements more directly address the real informational needs of investors than the previous check list approach. This could be expected to involve some cost.

As noted, one source of higher cost under the Corporations Law is the extension of prospectus requirements to rights issues (equity raisings from existing shareholders). In evidence to the Commission, the ASX has argued that this provision should be removed, noting that dividend reinvestment plans do not require a prospectus and, more fundamentally, that any need for one will be obviated by the new continuous disclosure requirements of the ASX, which are 'designed to ensure that potential investors are fully informed' (Sub. 79, p. 3).

Continuous disclosure requirements have been recommended for broader application to all public (and large private) companies by the Companies and Securities Advisory Committee, and are presently under consideration by Government (CSAC, 1991). These would involve statutory obligations on company directors to make timely disclosures of any 'material matter' to the ASC and to lodge comprehensive half-yearly reports. Putting to one side the question of whether the significant additional costs implied by these requirements are justified, they would clearly serve to reduce further costs of preparing prospectuses, given the additional scope they would provide for incorporation by reference. (This may also help to overcome a potential problem, identified by the ASX, of 'bunching' of raisings soon after the end of the financial year.) **In the case of rights issues, a statutory continuous disclosure regime would indeed appear to make a prospectus largely superfluous and, if the regime is implemented, the Commission can see merit in removing the requirement for one.**

For a given prospectus, costs can be expected to be somewhat higher as a result of the extension of liability to underwriters and others outside the issuing company. The more important cause, however, has been conservative interpretation of what information is needed to comply with the law. This in turn reflects the looseness of language in the law and the scope for different interpretations. At present these aspects are having an inhibiting effect and may even be counterproductive in promoting quality of information. For example, despite all the time, expense and detail that went into the CBA prospectus, the ASX was reported to have found that the information contained in it did not meet the requirements of the Exchange.

The Commission accepts that these problems may be ameliorated in time. However it is desirable that clarification be obtained sooner rather than later on those aspects of the Act that are giving rise to most uncertainty.

The Commission considers that standards should not be more onerous than is reasonable to facilitate informed decisions by investors. In the case of 'due diligence', the Trade Practices usage would seem more appropriate than that applied in the United States.

The Commission notes that the ASC Advisory Committee is conducting a review of the new prospectus requirements and understands that it will be giving consideration to the question of 'due diligence', as well as to the matter of rights issues under continuous disclosure.

9.6 Underwriting

The Commission's terms of reference refer to a decline in the practice of underwriting, particularly for medium sized Australian companies.

The Commission received very few comments about the availability of underwriting services. However, one participant, Mr A Burns, urged the Commission to:

> recognise that there is a shortage of underwriting capacity for medium sized companies ... [and conclude that] ... Government initiatives were needed to remedy a damaging imbalance (Sub. 93, p. 3).

In support of his argument, Mr Burns quoted the results of a survey he conducted involving 180 smaller listed companies. About two-thirds of respondents considered that if they currently wished to raise capital it would be difficult or impossible to find an underwriter.

Underwriting is a core business activity for many larger stockbroking firms. An underwriter is an intermediary between the seekers and providers of capital, rather than the primary risk taker. An underwriter will accept a proposal to underwrite a new share issue if he considers that it will be attractive to investors at the agreed price. It would generally not be in the underwriter's interests to reject proposals that would be attractive to investors.

The ASX considered that the decline in underwriting activity does not indicate a change in the approach to underwriting, but merely reflects the normal market response to a downturn in the market for new issues. Between 1987 and 1991, the value of new share issues declined by 70 per cent while the value of new floats declined by 98 per cent (figure 9.5).

The ASX noted that in contrast to more buoyant times, such as 1986 to 1987, when it was possible to raise funds for almost any venture:

> In cyclical troughs, there is invariably a flight to quality and security, and capital raising for enterprises, other than those of high repute and unequivocal financial soundness, becomes more difficult. The 'high repute' qualification generally favours larger, successful companies, if only because they are more widely known, in contrast to equally sound but smaller companies (Sub. 24, p. 3).

The decline in underwriting activities for listed medium sized companies can thus be largely attributed to investor preferences rather than a problem with the capacity to supply these services.

The ASX considered that there was little evidence to suggest that there would be a shortage of underwriting capacity in the event of a recovery in the stock market.

> It is significant that several stockbroking firms with underwriting departments today are retaining these specialist staff, although they are grossly underemployed, because of the importance of the activity to them and the need to be equipped for a favourable change in market climate (Sub. 24, p. 5).

There has clearly been no lack of underwriting capacity for the recent spate of new share issues by large companies.

The ASX did not agree that bank ownership of some stockbrokers had constrained underwriting activities. It was pointed out that underwriting is a competitive activity open to any financial institution or individual of sufficient substance. As a result, any unwarranted bias against underwriting share issues of particular types of business by some underwriters should provide a commercial opportunity to others in the industry.

The view was put to the Commission that the only more durable factor inhibiting underwriting activity was the new prospectus laws, just discussed, which have raised the liability of underwriters and the costs to them of ensuring a due diligence defence.

The Commission concludes that while some smaller listed companies may be having difficulty attracting the services of an underwriter, this reflects the risk preferences of investors rather than an institutional or market failure and has been exacerbated by the adverse economic climate. It considers that there is no need for Government intervention to increase the supply of underwriting services.

9.7 The tax system and equity capital

The income tax system can have a significant effect on the willingness of investors to provide capital for particular projects. In this inquiry particular attention has been devoted to the impact of the capital gains tax and to the treatment of tax losses.

The capital gains tax was thought to be a major impediment to the availability of capital for some types of projects. Hambro-Grantham said that the introduction of a high marginal rate capital gains tax has had 'a disproportionately adverse effect on long-term risk investors who are almost totally reliant on capital gains' (Sub. 31, p. 4). Many other participants were concerned about its effect on capital mobility. (These concerns are addressed in chapter 10).

The treatment of tax losses is of concern to single activity enterprises, such as exploration companies, which cannot offset losses on a particular operation against income from other sources. Similar concerns were expressed about risky high-technology ventures and large infrastructure projects.

Capital gains tax

Australia's capital gains tax is applied to real gains derived from the sale of assets. Assets purchased before September 1985 are exempt, as is owner-occupied housing. There is also an exemption for 20 per cent of the capital gain on goodwill, for businesses valued at less than $1 million.

Because capital gains were previously tax-free, the introduction of capital gains tax is seen to have penalised some forms of activity (including long-term and risky ventures) which produce returns predominantly in the form of capital gains. It has materially altered the investment arithmetic for those projects, making investors less willing to provide funds.

The appropriate benchmark for assessing the individual tax measures such as the capital gains tax is a system in which all forms of economic income earned by an individual are taxed at the same rate (see chapter 5). Because some forms of income can be converted to capital gains, they should be included in the income tax base. The 'neutrality principle' also implies that capital gains should be taxed as they accrue. That is to say, if other income is taxed annually, capital gains should in principle also be assessed and taxed annually.

Under the current capital gains tax provisions in Australia, capital gains are taxed on realisation. Countries with capital gains taxes almost universally levy tax on realisation because of the difficulties associated with accruals taxation. These difficulties include the following:

- Valuation can be inaccurate and expensive. While the changes in value of shares and other financial assets are relatively easily established, property, artworks and similar assets often need to be actually sold to establish a true value.

- Investors would pay tax without having actually received the value of the gain. This could create cash flow problems for some investors .

Taxation on realisation can substantially diminish the impact of capital gains taxes if investors defer the sale of their assets. The gain from deferral is higher, the higher is inflation, the higher the real interest rate and the longer the period of deferral. The impact of the capital gains taxation is also ameliorated by the fact that it is indexed. Under the current income tax, most other forms of income are taxed on a nominal basis. It can also lead to sub-optimal behaviour in order to minimise the impact of capital gains tax.

In general terms, the capital gains tax is less onerous than other forms of income taxation. While it is true that activities subject to it have been penalised by its introduction, their previous tax-free status unjustifiably favoured investment in them. Current treatment goes some way towards redressing the previous imbalance between their treatment and that of other income earning activities.

The treatment of tax losses

The current tax law allows some companies to obtain an immediate tax benefit from losses incurred on particular projects. A company which incurs a loss on one project, as part of its overall operations, can offset that loss against other income. As well, a loss incurred by a company as a whole may be deducted against other income in the company group, provided there is 100 per cent common ownership of the company incurring the loss and the company claiming it.

If the loss cannot be written-off in the current tax period, it may be carried forward indefinitely. It may be deducted against future income from the same company, or within the company group, where possible. However, only the nominal value of the loss may be carried forward - there is no allowance for interest or inflation.

Under a neutral income tax system a taxpayer would be required to pay a proportion of profits as taxation at the statutory rate, but would receive a refund at the statutory rate for any losses. Unless this occurs the tax system will alter the relative attractiveness of projects which are expected to have the same total rate of return over their lifetimes, but different patterns of profits and losses over time. A project which does not obtain the full benefit of a deduction when its taxable income is negative is penalised by the tax system.

The current treatment of tax losses disadvantages enterprises with variable income streams. Such enterprises are directly penalised relative to the neutral ideal by the absence of immediate tax benefits from loss-making. They are also penalised relative to some companies which undertake such activities as part of a diversified range of operations and thus obtain a more dependable income stream against which to offset losses.

Companies with delayed income streams are also seen to be disadvantaged. One example is private ventures which incur large costs establishing infrastructure before obtaining income well into the future. Such companies may incur large tax losses early in their operation. However, because they are at the same time building up assets, it is generally not true that they have incurred losses in an *economic* sense. In other words the value of their assets at the end of a year of apparent losses is

likely to be higher than at the beginning. The value of assets should reflect the expectation that income will be generated in the future. A neutral tax system would give projects, irrespective of corporate structure, a deduction for their expenditure and also tax their implicit (but unrealised) capital gain on newly created assets. As has been noted, capital gains are not currently taxed in this way.

Whether such companies or projects should receive immediate benefits from tax losses is a complicated question. Many would clearly obtain too large a benefit from such a policy in the sense that their true economic income in the year in which they declared a loss would be undertaxed. While this undertaxation would give them a tax incentive to invest, it is also true that they are discriminated against relative to firms with similar projects but additional income streams against which to claim the deductions. The underlying problem is clearly that taxation of capital gains is imperfect.

The disincentives that are generated are particularly apparent in considering an investment project undertaken on behalf of a group of non-related companies through a jointly owned company. Losses made by the subsidiary will not generally be available to be deducted by the companies in the year in which the losses occur. Yet this penalty may be incurred simply because commercial considerations dictate the sharing of risk through a stand-alone company. A company investing in its own right would be able to offset the losses to the extent of its income from other sources.

A number of participants argued that immediate benefit should be given for tax losses. The Australian Petroleum Exploration Association (APEA) said:

> Although present tax law allows immediate write-off against corporate tax of eligible exploration expenditure, this is of little value to companies without sufficient income to offset such deductions until many years after the exploration outlay, if at all. This acts as a substantial deterrent to investors who may wish to subscribe funds to new or existing exploration companies and thereby reduces the pool of funds available for the Australian oil search (Sub. 43, Attachment 2).

The Council of Australian Machine Tool and Robotics Manufacturers (CAMTROM) argued for:

> the inclusion of imputed interest in carry forward tax losses, thereby lengthening the time horizon of investments in development of products and markets so that the time frames of these types of investments more closely match those of real estate with its normally inherent inflation protection (Sub. 21, p. 7).

BZW (Sub. 7) argued for *carry back* of tax losses, as a way of offsetting the 'cash flow consequences in early periods', particularly for new investment projects by small businesses. It suggested that carry back would be of particular benefit to small companies which are more vulnerable to cash flow failure than are larger corporate groups. The Australian Petroleum Exploration Association Limited (APEA) renewed a call, made initially in 1989, for a system which allows a company to elect to waive its right to a tax deduction by providing eligible and interested shareholders with a deduction certificate.

The Commission is sympathetic to arguments for providing tax treatment of losses which is more neutral across firms. It notes, however, the problem that some firms that would claim deductions in this situation are not in a position of economic loss. They would unduly benefit. It recognises that there may be revenue and avoidance considerations which may require careful attention in the design of such provisions by the authorities and so makes no specific recommendation about their form.

9.8 Short-termism

The Commission heard complaints from many participants about 'short-termism' or a lack of 'patient capital'. These participants argued that equity markets are biased against projects with longer term returns and little cash flow in early years. The view was raised in particular in relation to venture capital, but was also seen as a more general problem in Australia, and sometimes contrasted with an apparent longer term perspective of investors in countries such as Japan and Germany.

AIDC spoke of 'a failure of the market to understand the nature of returns from development capital, and the short-term perspective taken by institutional investors' (Sub. 46, p. 23). Others have argued that the stock market 'punishes' longer term projects. Investors allegedly sell out of companies with relatively low current earnings -- even if this reflects activities with substantial returns down the track. Share prices are said to be driven down.

Short-termism is also said to be associated with the dominance of managed funds as sources of equity capital and the way in which fund performance is measured. As AMP has described it:

> There is a tendency towards short-termism which is exacerbated by trustees of superannuation funds taking notice of the many surveys published by superannuation consultants regarding the performance of institutional investment managers. While the more responsible consultants will emphasise the longer term nature of the business, the fact that the performance charts are the subject of such intense interest naturally results in a focus upon the shorter term investment returns. There is consequently some diminution in the ability of institutional managers to consider investment opportunities which are not likely to produce results within a relatively short time-frame (Sub. 23, p. 6).

Advent's Nick Callinan, an experienced 'development capitalist', made similar points and concluded:

> I just think all the evidence I have is that institutions really are reluctant to consider investments with a pay off beyond 2 years' (Transcript, p. 152).

The ISC has taken these charges seriously and established a task force to look into 'investment performance indicators' and how they might be improved. A member of that task force, Michael Barker, has argued that:

> superannuation funds are, in theory, ideally placed to take a long-term view of their investments. With their major purpose being the funding of retirement benefits, they have little need for immediate liquidity, and are driven by long-term asset accumulation rather than immediate cash flow. This should mean that superannuation funds are potentially major providers of long-term equity capital. In practice it is generally perceived that these funds are adopting a much shorter term focus than [this] would imply (Sub. 48, p. 1).

Mr Barker thought the problem had largely resulted from inexperienced trustees and ill-informed fund members. Among other things, employee representation on boards of trustees was seen as exacerbating the problem, as employees 'seldom appreciated the benefits to be gained from investment diversification and taking a longer view' (Sub. 48, pp. 1-2).

The view that short-termism is a problem in Australia mirrors similar concerns in the United Kingdom and the United States. It was not shared, however, by all participants in the inquiry. For example, the Commission's attention was drawn to the fact that projects with long gestation periods such as development of the North-West Shelf gas fields have been successfully funded. In addition, the consistently higher price-earnings ratios of resources stocks on the ASX compared with industrials, suggests that Australians do not base their investment decisions just on a company's short-term performance.

The argument that there is a bias against projects with delayed earnings implies that the required 'hurdle' rate of return for these projects is too high or the required 'pay back' period is too short. Thus it is implied that the market discounts future earnings too heavily and places too low a value on projects and companies with delayed earnings, resulting in less long-term investment than is socially desirable.

The fact that fund managers have their performance measured against movements in asset prices over short periods (quarterly or even monthly) does not establish that they discount future earnings too heavily. Long-term developments in financial markets are reflected via capitalisation in short-term movements of financial prices and returns:

> To the fund manager, ... maximising short-term performance is equivalent to maximising long-term performance. Furthermore, because a company's share price anticipates the future, any information or insights the fund manager has about even the company's very long-term future gets incorporated into the share price almost instantaneously. The fund manager's short-term actions may thus reflect a very long-term view (Marsh 1990, p. 32).

In chapter 10, the Commission identifies some regulatory factors that heighten the conservatism of superannuation funds and also bear on the term of their investments. It makes a number of recommendations which should lead to increased competition and reduced conservatism.

Any undue emphasis by financial market participants on short-term results would mean that the shares of companies involved in longer term projects would be undervalued relative to their realisable returns. This should permit some more far-sighted investors to make above-normal profits, by purchasing such shares and holding them for a sufficient period to realise their true value. Interest in such profit opportunities would in turn tend to drive up the undervalued shares' prices. If Australians as a whole were discounting future returns too heavily, then it could be expected that, at least for companies listed on the Stock Exchange, a higher proportion of foreign capital inflow would tend to be attracted to longer term investments.

Apart from such questions of inherent time preference, longer term projects would normally be expected to involve greater risks and therefore to require higher potential rates of return than short-term projects. In general, prospective returns in the distant future are likely to be less certain because of unforeseeable changes in economic conditions and government policy. The risks are magnified where projects involve creation of assets which are industry-specific or location-specific, because such assets are likely to have low salvage value if the projects become uneconomic. To a large extent these greater risks of longer term investment are a fact of economic life, although they may be exacerbated by uncertainty about the future course of government policy.

Macroeconomic policy plays an important role in influencing investment decisions. High rates of inflation and high real interest rates, such as Australia has experienced, are reflected in relatively high discount rates on future earnings. This discriminates against long-lived investments with returns distributed over longer periods of time. Japan and Germany, which as noted are often contrasted with Australia, both have a post-war history of low inflation and low real interest rates.

The Commission is of the view that lowering and stabilising inflation, inflationary expectations and real interest rates would address the main underlying causes of any short-term emphasis in investment decisions in Australia.

10 AVAILABILITY OF EQUITY FINANCE FOR SMALLER ENTERPRISES

Most Australian businesses do not have access to the Australian Stock Exchange. Many of these businesses do not want or have the growth potential to attract external equity. Those that are suited to this form of finance retain some inherent handicaps in competing for investors' funds, some of which are shared by smaller listed companies. This has been compounded in recent years by adverse economic conditions.

Under existing regulatory arrangements, policy-induced growth in superannuation funds has the potential to distort the allocation of equity capital (while increasing its aggregate availability), but this would be ameliorated by initiatives identified by the Commission to reduce risk aversion and promote competition, and does not justify direct government intervention to affect the provision of funds to smaller enterprises.

Large institutions, including superannuation funds, allocate only a small proportion of their portfolios to investments in smaller enterprises, and find it more economic to do this through specialist intermediaries. These intermediaries have grown in number through the 1980s, and represent a valuable innovation in financial intermediation, but their performance in recent years has generally been poor and this has affected their ability to attract capital.

There may be scope for government and private initiatives to improve information and liquidity for investments in unlisted companies.

The previous chapter looked at some general features of the equity market, and in particular the operation of the stock market. But the issues raised by participants mainly focussed on companies smaller than those with access to the ASX. The Commission's reference also made specific mention of the availability of 'venture' capital to small businesses. This chapter therefore considers what problems there may be in this area and what could or should be done about them. As noted by Advent Management:

> There are about 800 000 incorporated enterprises in Australia. Of these about 1 200 (0.2 per cent) are listed on the ASX. Although the ASX may account for a large proportion of new capital actually raised, it certainly doesn't even address the 50 000-100 000 'middle market' companies which may have actual or latent needs for capital (Sub. 18, p. 2).

In focussing on unlisted companies in this chapter, the Commission is not suggesting that companies listed on the ASX have no difficulty in attracting equity capital. As noted in the previous chapter, smaller listed companies share some of the difficulties of small businesses generally in attracting capital, and to that extent, much of this chapter relates to them too.

10.1 Which enterprises?

It was noted in Chapter 7 that banks often reject small business claimants for finance because they have already reached the limit of what is regarded as prudent borrowings in relation to their capital bases. This might suggest that the owners of many such businesses would consequently be in the market for additional equity capital. Another interpretation is that many smaller enterprises prefer debt to equity, and seek equity only when they have little alternative.

The reasons for this were touched on in Chapter 5: they essentially boil down to an understandable reluctance of small business owners to accept diminished control and to share other aspects of ownership.

The Campbell Report (1981) had earlier noted that owners of small business seldom seek equity from external sources due to their reluctance to share control. This conclusion was supported by results of a survey of the financial activity of over 4000 small businesses conducted in the late 1970s by the BIE. The BIE found that very few of the firms that had sought finance had approached potential new shareholders or partners, including institutional sources (see appendix F).

These findings were mirrored by a recent survey of small businesses conducted by the BIE. For the 204 small businesses in the sample, external sources of equity (excluding the owner, the owners' family and active partners) accounted for only 4 per cent of the total. The BIE also found that, of the firms surveyed:

> Seventeen per cent had been made an offer of external equity in the past two years but very few ... accepted (Sub. 57, p. 35).

This was confirmed by a representative of the Council of Small Business Organisations of Australia (COSBOA), who explained:

> I think that a great number of small businesses make a fundamental decision not to work for somebody else, to run their own show, to be independent. When growth and perhaps future wealth for that entrepreneur start to threaten what his perception of his lifestyle should be ... that is where he starts to make decisions to curtail his growth (Transcript, p. 407).

Looked at from the other side, many smaller businesses are in any case not suited to obtaining external equity. As discussed previously, equity investors assume risks that are at least equivalent to those of the owner and will want the prospect of high returns to compensate for the higher risk. This can come from dividend income, but typically requires the potential for capital gain. But many small businesses cannot offer such financial incentives. Indeed the majority could be described as 'terminal' small business - for example, they may meet a local demand at an optimum size which remains 'small' and thus have no growth prospects to attract the outside investor.

Thus BLE Capital stated:

Institutional risk capital financing is not applicable to sole or proprietorial businesses which could be classified as traditional small businesses, such as milk bar, individual retail stores or individual take-away food establishments. These businesses, while providing good incomes for their owners, tend to show little potential for substantial sales and earnings growth, and after establishment or purchase are usually self-funding, possibly operating within the reasonable limits of a bank overdraft (Sub. 27, p. ii).

The proportion of small businesses that both want and are 'qualified' to seek external equity, therefore, could only be a fraction of the 400 000 or so small businesses in Australia.

The sorts of small businesses that are relevant to the broader equity market are those that are 'developing' -- providing the prospect of capital gain and high earnings. Such businesses could range from 'standard' or traditional activities, meeting some existing demand or market niche, to the 'new' and innovative. The technology could be high or low. Indeed their source of growth could be marketing skills or just business 'know-how'. High technology industry, with which the name 'venture' capital has been closely identified and to which the MIC scheme was largely devoted, is a subset.

In a separate survey of 119 'Innovative small firms in emerging industries' the BIE found that these firms did indeed make more significant use of equity finance from external sources than other small businesses (BIE 1988). Existing shareholders/partners and trading banks were found to be the most commonly used sources of finance, as they are for all small businesses. However, far greater use was made of external sources of equity finance outside the owner, the owner's family and active partners. About 23 per cent of firms had obtained finance from an MIC or venture capital company and 10 per cent from either the main board or second boards of the stock exchange over the previous two years (see appendix F).

10.2 The quest for capital

The point at which a small (potentially) growing business comes to seek external equity will vary, depending on the nature of the firm's activities and the resources and attitudes of its existing owners. The potential sources of outside equity for small and unlisted companies are:

- private investors (known colloquially as `angels');
- larger companies, particularly in related fields;
- professional `venture' or `development' capital institutions; and
- large diversified financial institutions, such as life offices.

Unlike the position of publicly listed companies, however, there are no centralised market mechanisms available to bring the small business's capital needs to the attention of these prospective sources. Instead, such companies must rely on direct approaches or informal networks of bankers, accountants, solicitors and other financial advisers (of which more later).

Having eventually 'got the ear' of a potential investor, there still remain some significant handicaps for small businesses in competing for the investor's limited funds against alternative opportunities.

Inherent handicaps of smaller enterprises in attracting equity

It has already been noted that equity investment involves greater risk than (secured) debt. A problem for equity investment in smaller enterprises is that perceived risk is greater in two senses: there is generally a higher risk of failure, for reasons discussed in chapter 7, but also it is generally much harder for investors to assess the degree of risk.

In a brief discussion of the impediments to equity investment in smaller enterprises, Ernst and Young observe:

> ... medium-sized businesses generally do not have strong monitoring and reporting systems and in many cases do not present creditable financial information. [They] are generally not audited, so there is no independent assessment of results (Sub. 37, p. 2).

This means that the prospective investor will need to devote more effort to evaluating the business. These costs are heightened where the business is based solely on an invention or technical innovation, as this requires specialised technical expertise, as well as judgement about commercial prospects. This is especially acute for hi-tech 'startups', and the commercialisation of R&D (BIE 1989). Evaluation costs are less of a problem for companies in related fields, or for individual investors experienced in the area concerned.

In the end, as several participants emphasised, the critical determinant of whether an 'outsider' will back a project often comes down to the perceived competence and reliability of the existing owner/manager. Judgements about this are difficult at any time for an outsider to make and, in the absence of other information, will tend to be based on the manager's track record. This explains why businesses that are just starting out have such difficulty attracting outside equity and are generally funded by family and acquaintances who know the person concerned.

As discussed later, there was agreement among many participants about the importance of sound management, but differing views about the extent to which deficient existing management could be overcome through outside involvement. In part the scope for this depends on the size of stake held by the outsider. Where outside investors have a minority shareholding, which existing owner/managers will generally prefer, there may be limited scope to change management's approach.

So an equity investment in a unlisted company is likely to involve more individual monitoring and outside involvement by the investor on an ongoing basis than for a large listed company, which again is costly.

A further drawback for investment in unlisted companies is the lack of marketability or liquidity of the equity stake. As noted, there is no centralised market equivalent to the stock exchange. (Even on the ASX the liquidity of smaller stocks is less than that of larger stock and drops off greatly in cyclical downturns as the recent experience has shown.) An outsider's stake, even if not a majority holding, is likely to be a substantial proportion of the total business and this reduces its liquidity. Ernst and Young conclude:

> The combined negatives of higher risk and lack of negotiability that distinguish investment in private companies ... are difficult to overcome (Sub. 37, p. 2).

What is at issue, therefore, is whether smaller enterprises are receiving less outside equity than they should, taking these factors into account.

Previous reviews and responses

This is not the first inquiry to deal with this issue in Australia, or overseas. As the AIDC noted:

> ... the possibility of an equity gap in the financial system ... has long been identified (probably first documented by the Macmillan Report of 1931 in the UK). This has been defined as the lack of provision for the supply of medium to long-term equity for the smaller and medium sized businesses. It has thus been seen as an imperfection in the market (Sub. 43, p. 17).

The Campbell Report (1981) recognised that small businesses find equity funds more difficult and costly to obtain, particularly for new and innovative ventures, but concluded that:

> ... these disabilities, for the most part, do not reflect in-built deficiencies in the allocative role of the financial system (p. 699).

The Committee saw no need, on efficiency grounds, to recommend further government initiatives to facilitate equity raisings for small business beyond the general recommendations for freeing up, and increasing competition in, the financial system (see appendix B for details of this and other reports).

The subsequent Espie Committee (1983) did not agree with this view.

> This Committee holds strongly to the view that the recommendations of the Committee of Inquiry into the Australian Financial System (Campbell) would not be adequate in leading to the development of an Australian venture capital market. That is initiatives which are additional to, or apart from, the freeing up of the financial system are essential if Australia is to develop such a market, and an environment favourable to innovation, in the foreseeable future (p. 40).

The Espie Committee's recommendations led to the introduction of the MIC program in 1984. Three years later, however, a BIE review of the venture capital market concluded that:

> ... the size of any venture capital gap which existed has probably declined substantially in the past few years as a result of financial deregulation, the emergence of MIC and non-MIC venture capital companies, and stronger competition among institutions supplying risk capital. A much wider choice of venture capital is now available to young and growing business (BIE 1987, p. xviii).

Concerns about a lack of venture capital for small firms have nevertheless persisted. The Beddall Report is the most recent advocate of reform of the capital market in this area (Beddall, 1990). The report considered that:

> A significant obstacle to growth and development of small business has been access to finance under appropriate terms and conditions (p. xlviii).

It concluded that there was a greater need for equity finance to support new ventures by small business, particularly in the relatively modest amounts of $50 000 - $100 000 of venture capital which appear to be most in demand and most difficult to obtain by small business.

This raises the question of why these claims are persisting despite the deregulated environment -- in which there are no significant barriers to entry to any segment of the capital market. As discussed previously, it might be expected that the competitive search for profit would tend to fill any gaps that reflected real, profitable opportunities.

Cyclical vs structural problems

In seeking to explain perceived problems, it should not be forgotten that the general economic climate in which these claims are being made has not been conducive to the funding of investment generally. As described in chapter 2, the features of the economic 'backdrop' to this inquiry have been: historically high and prolonged nominal and real rates of interest; coinciding in latter years with a recession; preceded by an asset boom culminating in the world-wide stock market crash of October 1987 and the subsequent fall-out in property values; and monetary policy settings aimed at slowing inflation and containing the current account deficit.

In such an environment, small businesses tend to be particularly hard hit, reflecting their greater vulnerability to downturns in economic activity and higher failure rates; they pay a premium for debt finance (chapter 7) and in equity markets suffer as a result of the flight to quality and liquidity.

The important question, however, is whether the access of smaller companies to equity capital is constrained by more durable, or 'structural' causes, that cyclical recovery and a lower interest rate structure can not be expected to remedy. A number of participants argued that this was so. For example, the Institute of Chartered Accountants of Australia said:

> Problems experienced presently in obtaining debt finance are largely cyclical in nature and ... experienced across the board by individuals, small business and larger enterprise. However there are few sources of equity capital available to small business. The Institute regards this as a structural problem in that it is unlikely to be remedied by a revival of economic activity ... (Sub. 41, p. 1).

Possible structural problems, including those raised by participants, can be considered under three broad headings.

- First, are there deficiencies in or constraints on financial intermediaries, which consistently bias investment flows away from smaller companies?

- Second, are there adequate market mechanisms to match potential investors with investees?

- Third, are there taxation or regulatory measures which otherwise constrain and distort decisions?

These possible problems are explored in the balance of this chapter. It begins with concerns expressed about the investment practices of the large intermediaries and then looks at the role of specialist intermediaries for smaller companies.

10.3 The large institutional investors

As already observed, a large proportion of investible funds are under the control of relatively large institutions, including life offices, superannuation funds and unit trusts. There has been some concern about the increasing role of these organisations in capital markets. The Commission heard many complaints that investment managers in these institutions are too conservative in approach, sticking to government bonds and `blue chip' stocks, when they could be investing to advantage in smaller companies, including smaller listed companies.

Again, these claims are not new. They were assessed as part of the Campbell Committee's brief in 1981, which observed in its report:

> The behaviour postulated by critics (conservative investment patterns, undue emphasis on large well established companies, narrow focus on existing shares, etc.) implies that institutions do not seek to maximise the returns on their investments. Given the high degree of competition among fund managers, it seems inconsistent both with theory and with their recent behaviour to suggest that institutions as a whole are unresponsive to relative returns (p. 560).

It may well be that the institutional investors' general attitudes to risk are more conservative than those of smaller investment companies or individuals. However, the very magnitude of the funds at their disposal should in principle allow them greater scope for offsetting risk through diversification than would be possible or desirable for small investors acting individually. For example, one of the attractions of unit trusts to small investors, and presumably a reason for their growth, is their ability to reduce costs and risk through pooling of small individual contributions.

An indication of the ability to take on more risk with larger scale is given by the proportion of equity investments in life office assets, which is around 20 per cent for the smaller institutions and 30 per cent for the largest four (ISC 1990).

In practice, as LIFA and some of the financial institutions acknowledged, there is strong evidence of what might be called a 'Top 50 Syndrome' in the equity portfolios of the large institutions. The Australian Investment Managers Group (AIMG) argued that this was 'entirely logical', noting that the top 50 companies account for around 80 per cent of the value of stocks quoted on the stock exchange and that this increases to around 90 per cent for the top 100 companies (Sub. 61, p. 9).

While it is generally acknowledged that on average smaller listed companies traditionally have had better performance over the long-term (Little and Wilson 1988) and thus might be expected to attract interest disproportionate to their share of the market, they are also disproportionately costly to assess and monitor, as discussed previously. This is even more the case for unlisted companies. As noted by LIFA:

> Covering unlisted stocks and stocks in small listed companies is typically, in proportion to the amounts invested in them, very much more demanding and costly than covering stock in large, actively traded companies. It is therefore difficult for many funds or managers to justify the high costs of devoting scarce resources to managing modest amounts of invested funds in small or unlisted companies, venture capital and the like (Sub. 26, p. 33).

For unlisted companies, liquidity is relatively low at all times and there is no 'market price' for an equity holding, which causes difficulties for valuation of units in pooled funds.

It was also emphasised by a number of participants that the emphasis on 'blue chips' and indeed a shift from equities generally into money market instruments, has been exacerbated by the 'flight to quality' following the 1987 stock market crash and the onset of recession (discussed in the previous chapter) and that a greater weighting of investment in smaller companies will occur with cyclical recovery. However, direct involvement in unlisted companies is likely to remain a very small component of overall investment by the larger institutions.

Given the special informational and monitoring requirements of investment in many smaller companies, a logical development is for specialist intermediaries to develop in this area, and for the larger institutions to invest in them. National Mutual, in its submission to this inquiry observed:

> National Mutual is not running away from providing venture capital. We are happy to invest in competent *intermediate, preferably listed,* companies, whose role is to invest in commercially viable projects (Sub. 56, p. 1, emphasis added).

Such intermediaries, which were quite scarce at the time of the Campbell inquiry, have since increased considerably in number and include institutions specialising in smaller listed companies (for example, 'Greenchip') as well as unlisted companies, including venture capital. Before looking at these intermediaries, it is worth examining more closely the role of the superannuation funds as a distinct component of institutional investment, given the policy-induced projected growth in this area.

The conservatism of superannuation funds

Superannuation funds are now the most rapidly growing component of funds for investment in Australia. In the case of life offices, superannuation funds account for more than 60 per cent of assets under management.

The growth in superannuation funds is underpinned by government policy, as noted in previous chapters. Prior to the measures announced in the 1991-1992 Budget, official estimates were that superannuation funds would reach some $600 billion by the end of the century. This estimate was disputed by LIFA in its submission to this inquiry, but more recent Government policy initiatives would tend to push all estimates up. What seems clear is that superannuation will continue to increase as a proportion of the economy's investible funds.

There is a strongly held view in some quarters that this growth is tending to divert investment away from smaller companies and development capital because of the particular conservatism or risk aversion of the funds. The Western Australian Government was of this view:

> It is recognised that one of the objectives of the recent changes made by the Commonwealth Government to the superannuation industry was, inter alia, to direct a greater proportion of Australians' individual savings into investment in the Australian private sector. However, by causing this to occur through the large financial institutions and life offices there is potential for the reverse effect to occur with respect to small to medium sized businesses and companies. This is one matter which appears not to have been addressed in the Beddall Report, but is nevertheless likely to be a serious problem (Sub. 50, p. 3).

A survey of 40 members of LIFA revealed investments of a development nature at the end of 1990 of $2.4 billion. This included $850 million in venture capital, including investments in MICs, unlisted companies and companies with less than $50 million market capitalisation. It was found that:

> The largest fund managers appear to have allocations of between 0.5 per cent and 2.0 per cent of their equity portfolios in venture capital with additional allocations of 5 per cent and more (ranging up to 10 per cent) in unlisted companies or companies outside the top 100 (Sub. 26, p. 33).

While international comparisons are made difficult by possible definitional differences, this would appear comparable to the experience of pension funds in the United States.

Nevertheless it is generally acknowledged that superannuation funds have more conservative risk preferences than other market participants and have been ultra-conservative in recent years. One indication of this is the relatively high weighting of capital guaranteed investments sought by trustees of superannuation funds and by individual policy holders. This has led to higher investments in gilt edged securities and blue chip stocks compared with the 'ordinary business' of life offices (see LIFA, Sub. 26).

This is again seen partly as a temporary phenomenon, reflecting the uncertainties associated with the recession and relatively high returns on fixed interest investments while interest rates were high. A number of participants observed that a return by superannuation funds to greater investment in equities was already occurring associated with the downward trend in rates of interest.

It is also the case that some of the funds, in particular the industry funds, are still in their infancy and are not yet large enough to develop diversified portfolios, or to build up reserves which would give them scope to spread their risks more. It could be expected, therefore, that this aspect of the problem will diminish as the projected expansion of the funds takes place. A recent report by ASFA (1991) includes a table on a typical industry fund's pattern of investment which shows that the capital guaranteed component has fallen from 96 per cent in 1985, after one years operations, to 73 per cent in 1986 and 63 per cent in March 1991 and is projected by the ACTU to decline eventually to between 25 and 35 per cent of assets.

The question remains, however, as to the extent to which there are more durable or structural influences which might be leading to excessive conservatism in superannuation investments.

Constraints on trustees

The investment attitudes and risk preferences of fund managers are ultimately determined by those of their clients -- in the first instance, the trustees of the funds. Fund trustees are legally obliged to invest the money at their disposal for the 'sole or exclusive purpose' of providing benefits for superannuation fund members. Trustees can manage their investment portfolios themselves or leave this to specialist institutional fund managers. The type of guidance that trustees give to managers varies from very broad mandates to quite specific requirements relating to types of investments and risk classes.

The legal requirements on fund trustees also oblige them to be more cautious with the funds in their charge than they would be if they were acting on their own behalves (the 'prudent man' rule):

> The duty of the trustee is not to take such care only as a prudent man would take if he had only himself to consider, the duty is rather to take such care as an ordinary prudent man would take if he were minded to make an investment for the benefit of other people for whom he felt morally bound to provide. (Lindley L. J., cited in Finn and Ziegler 1987).

This may lead trustees to allocate less to smaller or riskier firms than if they had no such constraints. Finn and Ziegler (1987) argue that:

> ... the prudent man principle as currently applied in Australia is deficient, and that a change of emphasis is dictated by modern portfolio theory.... Traditionally the courts have adopted a "line-by-line" approach and examined the risk and return for each investment in a fund in isolation, irrespective of other investments... (p. 333).
>
> ... non-traditional types of investments would probably be held to be imprudent on the conventional investment-by-investment approach, ... especially as they fall outside investments contained in statutory lists in the various Trusts Acts (p. 337).

If so, this would militate against the scope that scale and diversification provide for undertaking riskier investments. This point was raised by the Australian Small Business Association (Sub. 47) who referred to the experience in the United States, which recognised the need for trustees to adopt a portfolio approach in enacting the Employed Retirement Income Security (ERISA) Act 1974. This was seen as having had a significant impact on venture capital availability in that country (see also Bygrave, 1990, Attachment to Sub. 44).

In a recent 'policy issues paper', ASFA (1991) raised the question of 'whether trust law is appropriate for modern superannuation funds' and 'whether the courts enable the trustee to embrace accepted techniques of modern portfolio theory adequately.' They went on to argue:

> Specific aspects of prudential investment practice which are unique to superannuation funds may be better dealt with by federal regulation. This approach might also carry advantages of clarifying and improving trustees' understanding of their obligation (p. 10).

In a response to the Commission's draft report, however, ASFA observed:

> It does appear that Australian courts are yet to express approval of the application of the principles of modern portfolio theory (as distinct from a 'line-by-line' investment approach) by trustees. Again, though, the practice of modern portfolio theory is extremely widespread ... At this stage ASFA does not think the US approach of including investment principles in federal legislation is necessary (Sub 90, p. 1).

A related issue is the effect on portfolio choice of the 'sole purpose' test in the Occupational Superannuation Standards Act. LIFA informed the Commission that the Act has at times been interpreted by the Taxation Office to preclude: majority holdings in a business; speculative investments, and investments which are not easily realizable -- all of which would apply to many smaller ventures.

The ISC has argued that existing regulations are not a significant constraint on the ability of fund managers to select those investment opportunities that they consider most likely to provide the best return for their members.

> The insurance and superannuation supervisory legislation and associated requirements impose a limited range of investment controls on the insurance and superannuation industries while allowing them the freedom to participate in a wide range of investment opportunities, including venture capital projects, where they form part of a balanced portfolio (Sub. 58, p. 15).

This would again seem to be supported by the presence of such projects in fund portfolios. Nevertheless the scope for narrow interpretation of these rules may be an inhibiting factor at the margin and could prove a constraint if expected returns were to improve in this area, with greater potential for funds to be more active. In the draft report hearings, Australian Investment Advisers put the matter as follows:

> Certainly, if I was a director or a trustee in a large superannuation fund and I had an investment proposal put to me and it was in a venture capital area, I would have to ask the question: is there any provision under which the members of this fund could be successful in action against the ... trustees if 100 per cent of the capital invested in this venture was lost, even if that ... only represented 0.3 per cent of the funds? If the answer was, in any way, 'they may be successful,' I would vote against the proposal (DR Transcript, p. 214).

Notwithstanding the views of some industry representatives that legal requirements have not been 'unduly' restrictive, **the Commission considers that it is desirable to make it explicit in Federal legislation that risky individual investments by superannuation funds can be consistent with prudent behaviour when part of a properly diversified investment portfolio.**

The attitude of trustees will clearly also be influenced by their perception of the attitudes of the fund membership. One well placed industry participant makes the following observation:

> The average level of understanding by members of their industry fund superannuation benefits can only be said to be woeful.... The new generation of scheme members overwhelmingly view their benefits as pay which has been directed into a form of quasi-bank account. This has led to a "pass book" mentality in which an interest credit is expected each year, at least as great as would be earned in a bank deposit (Barker, Sub. 48, p. 2).

LIFA has argued that the solution lies in:

> ... more training of trustees; more efforts to educate superannuation fund members...; enhanced accountability to fund members, and better reporting... (Sub. 26, p. 32).

Trustees clearly have a pivotal role which requires skills and experience which not all may have acquired -- especially in the newer funds. **The Commission supports moves by the Association of Superannuation Funds of Australia to educate trustees in portfolio choice matters and to improve the information available on comparative fund management performance (see Sub. 58).**

A more fundamental issue, however, relates to the existing institutional arrangements, in which contributors to industry funds have very little choice or control over the management of their superannuation. Among other things, this is almost certainly a contributing factor in the passive attitude and ignorance of many fund members.

Whereas trustees in the past were mostly appointed by employers or fund managers, employee representation will play an increasing role in the future. So far, however, it is thought to have compounded the conservatism of the funds concerned. While education of trustees and additional experience -- and an improved economic climate -- will all help to reduce excessive risk aversion, there remains the reality that fund trustees are obliged to invest on behalf of large numbers of members with varying risk preferences. Fiduciary obligations and the threat of legal action are likely to create a greater incentive to cater to the more risk-averse members. If so, many fund members may find themselves with a portfolio containing a lower weighting of riskier (and potentially more profitable) investments than they would have preferred.

The extent to which employees can influence the decisions made on their behalf by fund trustees will, of course, depend on their influence over the selection of trustees. The move toward employee representation is therefore important. However, **it is also important that the processes by which those trustees are selected involve employees directly.**

This leads to the question of whether members of superannuation schemes should be given more individual choice over the way in which their equity in schemes is invested.

It is relevant in this regard that the information available to individual contributors will increase significantly once the new disclosure requirements come into operation on 1 July 1992. This will, among other things, enable contributors to make comparisons more readily between the performances of their own and other superannuation funds.

Apart from benefits which greater choice in itself would provide for employees, their ability to determine, even within broad categories, the type of investments in which their monies were placed would reduce the scope for excessive risk aversion by trustees.

National Mutual has drawn attention to the cost implications of this sort of approach:

> ... one of the reasons for limiting this choice under the award system was to minimise the cost of administration, both for employers and superannuation funds. Employers should and would be appalled at any proposal which forces them to make superannuation contributions to a superannuation fund chosen individually by each and every employee (Sub. 91, p. 3).

The extent of such additional costs would depend on the approach used. Costs would clearly be highest where individuals had something approaching complete flexibility in determining how their funds were invested. It is not obvious, however, that the cost of offering some limited choice would be great. For example, a mechanism which allowed employees to choose between a limited number of investment categories may not impose much higher costs than under present arrangements

(especially if they were offered by the same institution). For instance, members of a scheme might be given the choice of placing their money in a fixed interest fund, a capital guaranteed fund, a blue chip equity fund, a broadly based equity fund, or a balanced fund selected by the fund manager. It would also seem reasonable that employees bore any additional cost that such greater flexibility (and scope for higher returns) might imply.

The Commission considers that there is scope to provide greater choice to members of superannuation funds in determining how their equity in schemes is managed (at least in terms of choosing between broad investment categories) and that there would be potential benefits to smaller enterprises and in enhanced competition generally from doing so.

To sum up, the Commission considers that while the highly conservative investment policies of superannuation funds in recent years has reflected a number of temporary or transitional developments, it has also been exacerbated by more permanent features of the regulatory framework and would be eased by:

- legislation to redress any adverse impact of the `prudent man' rule on trustees' freedom to include risky individual investments in a properly diversified portfolio;
- employee representatives on boards of trustees being elected by members of schemes; and
- allowing greater choice for members of schemes as to the allocation of their funds among categories of investments.

These changes would serve to promote the efficient allocation of capital, while better meeting the interests of fund members themselves.

Should superannuation funds be required to invest more in smaller companies?

The Australian Small Business Association (ASBA) has recommended that superannuation funds be required to allocate 1 per cent of their portfolios to licensed intermediaries specialising in smaller companies (Sub. 47, p. 8). The extent to which the institutions have been investing funds through such intermediaries is unclear from LIFA's reported survey results for end-1990. In response to a request for further information, LIFA informed the Commission that of 50 life companies surveyed, 10 were involved in venture capital intermediaries, comprising some 25 such firms in all and amounting to $176.4 million (Sub. 100, p. 2). This is about one-quarter of the total capital base of venture capital firms, but only about 0.14 per cent of the assets of all superannuation funds. (It is also only a small proportion of the reported total investments of a venture/development nature by superannuation funds.)

The amount that is invested through such companies -- or in venture capital generally -- will tend to reflect what fund managers believe to be appropriate to maximise returns, given expected performance and the risk preferences of trustees. In its submission, LIFA noted:

> ... to distort superannuation investment away from the point which maximises returns ... will be very inequitable in diminishing and putting at risk the retirement savings of individuals concerned. What proposals to do this amount to is asking the individual member of a superannuation fund to pay a politically decided price to support projects which, even if they work, will benefit not those individuals alone but the population at large (Sub. 26, p. 42).

Government requirements that resulted in lower returns to fund members would also have economy-wide costs unless these investments yield benefits beyond those available to the investor. If there were additional ('external') benefits from such activities, the Commission considers that it would be preferable to assist them in ways which made them more attractive investments to all potential investors. This was of course what the MIC program attempted to do.

The Commission has identified a number of reasons why risk preferences may be more conservative than is desirable and these should be addressed directly. Requiring superannuation funds to allocate contributors' monies in particular ways would only be adding a further distortion.

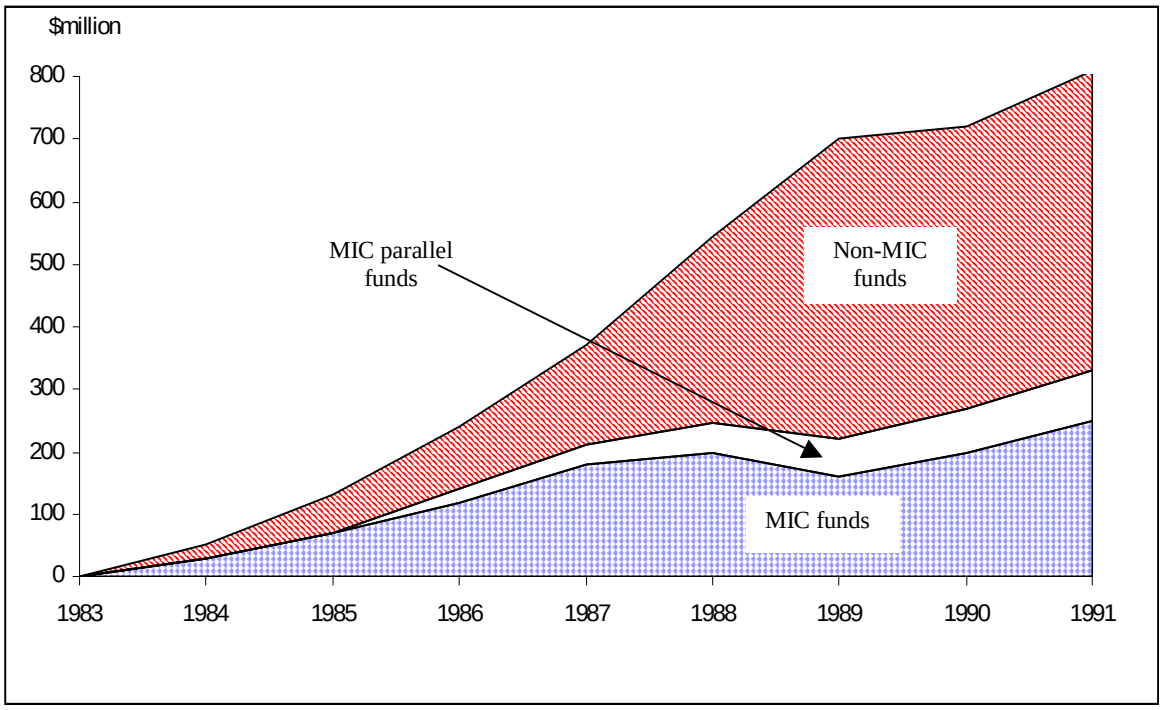
10.4 Specialist intermediaries

As noted, there are signs that the superannuation funds are responding to a relative decline in returns from the money market and reweighting their portfolios in favour of equities and that the newer funds are increasing their equity involvement as they grow. They could also be expected to invest more in specialist intermediaries if they saw potential. LIFA stressed that the presence of successful specialist venture capital investors was a virtual precondition to greater involvement by superannuation funds in venture capital:

> A key point of the overseas experience is that venture capital and small business investment are very distinct investment activities which utilise highly specialised professionals - each of whom will manage only a small 'stable' of investments. An investing institution can diversify among a number of such venture capitalists, or do so by investing in a pool, avenues readily open in the deeper markets of the northern hemisphere. Such pools, established on a competitive market basis, can be expected to develop here and/or to encompass both foreign and Australian investments, so as to attain essential diversity (Sub. 26, p. 41).

Before the early 1980s, financial institutions specialising in equity investments in unlisted companies, including venture capital, were apparently almost non-existent in Australia. Such outside equity as was obtainable by smaller companies at that time came predominantly from individuals and larger companies. It is generally presumed that this was disproportionately insignificant, but survey evidence from other countries suggests that the role of these sources tends to be undervalued, as a result of their low profile. Indeed in the United States it has been estimated that 'angels' have accounted for the largest pool of risk capital in the country (Wetzel 1983). The growth of venture capital funds can be observed in figure 10.1.

Figure 10.1: **Australian private venture capital base**



Data source: MIC Licensing Board.

As noted in the previous chapter, the professional venture capital market grew very rapidly through the 1980s. The MIC scheme played an important part in its early growth, but by the end of the decade venture capital associated with it was outweighed by other sources. Some details concerning the institutions active in this market, as at 1990, are contained in table 10.1.

Several of the institutions listed in the table are indicated as providing quite small amounts of capital. It would appear from evidence to this inquiry, however, that few would provide amounts smaller than $100 000 and typically invest $250 000 or more. Gordan Pender informed the Commission that to his knowledge 'only the Commonwealth Development Bank and BLE Capital at the moment will consider equity investment of less than $1 million'. (DR transcript, p40). This relates to the point raised by the Beddall Report about a lack of equity finance from institutional sources in the range $50 000 to $100 000. However, the Commission does not see this as a 'market failure'; rather, it reflects the relatively high costs of providing such small amounts of finance.

The combined investments of these institutions amounted to 0.1 per cent of total market capitalization in 1990. This has been compared unfavourably with the experience in some other countries. The OECD (1986, p. 4) observed:

> It can be stated unequivocally that even when a venture capital market exists, and is generally thought to be active, it accounts for a very small percentage of the overall financial market. A rule of thumb figure would be one per cent.

Table 10.1: **Venture capital companies' funds ($millions)**

Name of Company '	*Minimum*	*Maximum*	*Raised*	*Invested*
Arrow Capital Ltd	none	none	10.4	10.4
Austech Ventures Ltd	none	none	8.1	8.1
Corporate Enterprise Investments Ltd	none	none	0.2	0.0
Quest Investments Ltd	none	none	7.5	6.5
Stinoc Ltd	none	none	19.0	19.0
Tasmanian Development Authority	none	none	2.5	2.5
Westintech Ltd	none	none	11.1	5.1
Commonwealth Development Bank	none	1.0	3.0	3.0
Small Business Investment Company Ltd	none	0.5	2.4	2.4
First MIC Ltd	none	4.0	30.0	20.0
Shedden Technology Management Ltd	0.1	0.5	1.5	1.5
Australian Pacific Technology Ltd	0.2	none	22.0	16.0
Consort Pty Ltd	0.2	1.0	3.0	3.0
Continental Venture Capital Ltd	0.2	4.0	23.4	23.4
Enterprise Investments Ltd	0.2	4.0	9.2	7.2
Western Pacific Investment Company Ltd	0.2	none	20.0	15.0
Advent Tourism Development Fund	0.2	none	10.0	0.0
Advent Western Pacific ltd	0.2	none	27.0	23.0
Invetech Developments Ltd	0.3	1.0	5.5	4.5
Melbourne Australia Investments Ltd	0.3	2.0	1.7	0.9
Shared Investments Ltd	0.3	2.0	5.0	5.0
Technology Development Capital trust	0.3	2.5	15.7	11.7
Queensland Venture Capital Fund (QIDC)	0.3	3.0	16.0	5.6
BLE Capital Ltd	0.3	5.0	131.0	131.0
Brown and Dureau Ventures	0.5	none	14.0	14.0
H-G Ventures Ltd	0.5	none	17.0	10.0
Oilmet Investments Ltd	0.5	1.0	5.0	1.3
NSWIC Pty Ltd	0.5	2.0	19.0	19.0
BT Innovation Ltd	0.5	3.0	27.4	18.4
CP Ventures Ltd	0.5	5.0	41.8	41.8
ACS Bonds	1.0	none	31.0	11.0
Lend Lease Technology Pty Ltd	1.0	none	28.0	8.0
Citicorp Capital Investors Australia	2.0	none	36.0	29.0
Japan Australia Venture Capital Fund (MIC) Ltd	2.0	20.0	40.0	0.0
Development Capital of Australia Ltd	3.0	none	10.0	10.0
Australian Mezzanine Investments Trust	3.0	5.0	32.6	9.6
AIDC Limited	3.0	30.0	30.0	30.0

Note: Venture Capital is defined as: primarily equity investments in unlisted businesses; not covered by collateral or other security; intended for medium to long-term; given management support by venture capital company; excluding investments in mining and property.

Data source: Australian Venture Capital Directory, Department of Industry, Technology and Commerce, March 1990.

If this comparison is valid, it indicates a sizeable disparity and has led some to conclude that action should be taken in Australia to bring us up to the 1 per cent 'benchmark'.

Some of the disparity could be explained by the exclusion of investments in the primary sector, which in contrast to other OECD countries is Australia's main area of comparative advantage and occupies a more important position in our economy. In addition, the Australian manufacturing sector is far less concentrated in technology intensive industries than most OECD countries and most manufacturing industries in Australia are far less research intensive than their OECD counterparts. The high level of overseas ownership of Australian manufacturing, and a tendency for multinationals to introduce new innovations in their home market may also account for the lower availability of venture capital in Australia.

Finally, Australia's economy is not large by the standards of those OECD countries which have institutionalised venture capital markets. To the extent that the ability to specialise in venture capital is a concomitant of scale, a further reason for the relatively low level of venture capital in Australia may thus be the relatively small size of the Australian financial market in general.

Performance

It might be expected that if the venture and development capital market in Australia was indeed 'underserviced', as the above ratio implies, then those intermediaries operating in this field would be making above normal profits. In practice, this does not appear to have been the case. Indeed, LIFA argues that the main 'impediment' to superannuation funds investing more in venture capital is the poor track record of venture capital in Australia:

> Reluctance to invest in venture capital stems from the lack of demonstrated proof that venture capital fund managers can make a sustained above average rate of return. Professional investors will be prepared to finance this type of activity provided they can have some comfort that they will be able to achieve a rate of return which, when adjusted for risk, taxation and expenses of management, is equivalent to what they can obtain in other areas. On the basis of Australian experience to date (with the exception of the resources area) it is difficult for investors to obtain that comfort (Sub. 26, p. 40).

A number of participants cited the experience with the MIC scheme, as well as that of the Second Board, to support the view that the risk/reward equation has not justified a greater allocation of equity capital to new ventures.

As noted, the MIC scheme was based on the notion of an unjustified deficiency (or 'gap') in equity funding for small innovative companies. The scheme was initially well supported, and the large institutions played a significant role, but evidence to the inquiry confirms that despite the substantial tax concessions involved, investors received very poor returns, to put it mildly.

One case study of a 'survivor' was presented in the submission by AMP:

> CP Ventures is a venture capital organisation which began as an MIC. Analysis of CP Ventures shows that the company made twenty four investments in the period 1984-1989. In the same period, 11 of the investments have been written off. Internal rate of return calculations of the remaining investments show that only two investments have generated a return above bank interest. One of the investments was sold in 1989 for a profit while the other has since had a major provision allowed which effectively writes off the investment in 1990 (Sub. 23, p. 12).

AMP noted that its examination of those few investments under the MIC program which were profitable shows them to have resulted from short-term investments of less than one year.

Participants provided the Commission with a range of possible reasons for the poor performance of the MICs, including:

- the timing of the program;
- the need to invest quickly to receive tax benefits;
- excessive fees;
- deficiencies in management; and
- the inhibiting effect of constraints on where to invest (hi-tech, innovation, export orientation etc).

The widespread view is that the underlying problem was a lack of winners to pick, at least in the areas targeted by the MIC scheme. This was endorsed by those venture capitalists outside the MIC scheme, who told the Commission that they typically take up fewer than 5 per cent of the project opportunities that come their way and some noted that they continue to have surplus funds at their disposal looking for suitable investment opportunities. It was observed that the MIC program itself did not invest all of its government allocation of tax deductible funds, while many of the projects that were taken up turned out to be poor risks (Sub. 23, p. 13).

Reasons for rejecting investment proposals

The high rejection rate for venture capital proposals in Australia is consistent with the experience in the United States (Sahlman 1990). There are many reasons why an application may not be successful. In some cases, the capital providers may just consider a project to be inherently unsound, a view with which the rejected applicant would be unlikely to agree and therefore consider that the capital providers lacked sufficient evaluation skills. In other cases, however, a rejection might reflect the fact that the project is not well suited to the skills and experience of the capital provider.

As noted by Hambro-Grantham, venture capital companies tend to look for opportunities where they can make a positive contribution, managerial and/or financial, which they expect will increase the profitability of the project. In this regard, the investor's familiarity with the field in which the business operates is an important consideration.

To the extent that venture capitalists feel unqualified to evaluate the prospects for certain projects, there will be more rejections than otherwise. A number of participants commented on the scarcity of such skills. Some felt that it was the main constraint on capital availability in this area and a reason why just making more money available would be unlikely to succeed. The MIC scheme was in part designed to improve the expertise as well as financial resources of the industry. It is thought to have made a difference, but there is a question as to how quickly such skills can be developed.
In some cases, the organisation best placed to evaluate a new venture is an established company with experience in the area. This is particularly the case for projects that involve commercialisation of R&D. Little evidence is available on the extent to which small business gains access to equity finance by this means. However, information contained in the annual reports of some of the largest companies in Australia suggest that it is quite common -- though also subject to the economic climate.

In explaining its rejection of the majority of proposals (96 per cent) that come before it, BLE Capital observed:

> the primary determinant of business success is the capability, experience and enterprise of the owner-manager of management team. BLE Capital at present sees very few investment proposals where management appears capable of successfully establishing, leading and managing a growing business (Sub. 27, p. iii).

BLEC's investment philosophy is to 'back managers' rather than provide the value adding expertise which many regard as the hallmark of the venture capitalist. It is possible, therefore, that its experience reflects this approach. However the UK parent, 3i, has followed this philosophy for some 40 years with success (3i Group 1991). Moreover, as exemplified by the MIC program, the hands-on approach has not been without its problems, and a range of companies with different management styles to BLEC have indicated comparable rejection ratios and indifferent performance.

As noted in an earlier chapter, a number of participants commented on the inability of many small business managers to prepare a satisfactory business plan and investment proposal for consideration by financiers. This is likely to be symptomatic of more fundamental problems in the financial management of an enterprise. The Government has recognised this in establishing the National Industry Extension Service (NIES) which, to the extent that it can assist in improving management performance, would be addressing a root cause of the inability of many enterprises to attract capital.

A further and perhaps related reason why proposals do not obtain equity funding is that the potential investor and investee sometimes will be unable to agree on the value of the business. Typically the existing owner will place a higher value than an outsider may be prepared to pay, given perceptions of the risks involved.

Achieving the expansion of a small company that is needed to attract and retain outside equity is clearly a difficult thing even for the best of managers to achieve. In an interesting submission discussing 'The Nucleus Experience', Professor G S Freed charts the many obstacles that faced that company along its growth path. He also emphasises the importance of 'astute commercial management' as well as the need to break out of the confines of the relatively small Australian market.

> Australian ventures have a domestic market of about 3% of their US counterparts ... By the time Nucleus grew to $100m sales, two similar US companies had passed the billion dollar mark (Sub. 36, attachment p. 4).

An apparent dilemma for external capital raisings by small companies, therefore, may be that the level of expansion in sales and earnings that they would need to attract venture capital would require penetration of overseas markets. This in itself would raise the riskiness of a project in many investors' eyes.

Cyclical factors

While the problems just described are likely to endure, the recent depressed state of the equity market owes much to cyclical factors. There appear to have been few complaints about development capital availability in 1986-87, for example, even for start-up ventures. A number of participants predicted a resumption of greater activity levels when the economy picks up, although the losses sustained in the aftermath of the October 1987 stock market crash were thought likely to prevent a return of the previous exuberance, at least for some time.

Through the course of this inquiry there have been some signs of increased activity in the venture and development capital area. A number of new funds have been established. These include: Rothschild's Arrow Development Fund, Macquarie Investment Trust, Pacinvest and BZW's Peregrine Capital United. In addition, the two largest life offices have taken a stake in specialist intermediaries. In January, National Mutual acquired a majority holding in Advent Management and more recently AMP joined Westpac and 3i in BLE Capital, providing an injection of $24 million. In addition, AMP, the ACTU and the Australian Chamber of Manufacturers have set up the Development Australia Fund, involving some $300 million.

The recent activity has been such as to lead one financial commentator to observe:

> Finding ways of channelling equity funds towards small companies that can't get any at the moment has become the latest fund management fad, largely because its that time in the cycle when bonds have had their run, leading stocks have also risen a fair way, and investors are starting to look for better value (Kohler, AFR, 20 March).

While these developments illustrate the capacity of the market to respond to perceived opportunities, there has also been the suggestion that in some cases they were prompted by the prospect of government intervention. In a recent statement, the Minister for Industry, Technology and Commerce noted that discussions with the major financial institutions about a joint Capital Development Fund did not receive industry support, but had been 'a catalyst in sharpening their focus on development capital within their investment portfolios' (Button 1991). At the hearings, LIFA agreed that a number of initiatives had resulted partly from government pressure ('past nagging has borne fruit without the need for counter-productive regulation') but that they mostly reflected a view that there were profitable opportunities to exploit (Transcript, p. 267).

It is difficult to make judgements about the timing of such market developments. Delays in market response no doubt often reflect some inertia among existing institutional players, and entry of new players takes time. But delay can also be due to justifiable prudence, given perceptions of costs and risks relative to alternative opportunities. What seems clear is that there are considerable financial incentives within markets to 'get it right' and harsh penalties for getting it wrong.

Summing up

In sum, the past decade has seen rapid growth in intermediaries specialising in investments in smaller companies, supplementing the equity finance available directly from individual and corporate investors. This specialised industry offers a useful blend of capital, managerial and other assistance to emerging firms. It is a valuable innovation in intermediation in Australia. The further development of this industry will depend in large measure on the risks and rewards from investing in smaller companies relative to other investments, and on the skilled human resources available to the industry. These will also determine its access to capital.

The Commission does not consider that direct government intervention to expand the institutional funds available to smaller companies would improve the efficiency of the capital market or the economy generally.

10.5 Adequacy of the 'market place'

How well the search by investors for profitable opportunities translates into the appropriate level of financing activity for smaller companies depends not just on the skills of the suppliers of capital, but also on the adequacy of the market signals that they depend on. Unlisted companies, by definition, do not have access to the centralised, regulated and transparent market of the stock exchange. This has two, related disadvantages (which are really the obverse of the advantages offered by the ASX) including:

- lack of readily available information for seekers and sources of capital; and
- lack of a secondary market for disposing of securities.

Information

In the absence of a centralised market, seekers and sources of capital are obliged to find and deal directly with each other. This is a time-consuming and therefore costly process. Several participants in this inquiry supported the Beddall Report's assessment that:

> Small business people frequently lack knowledge of the appropriate sources of development finance and working capital and may be unaware of different methods of raising capital (p. li).

It should be emphasised again though that many small businesses by their nature do not want or `qualify' for external equity financing. The concern here is with more dynamic enterprises whose owner/managers would soon be aware of the need for external equity and have the incentive to inform themselves about where to find it. The BIE review of venture capital in Australia concluded that:

> ... young innovative businesses are now much better informed about the range of financial support which is available (BIE 1987, p. xix).

However, as noted, it is also likely that those small businesses that have been built around some technical innovation may have an owner who is less astute at financial matters.

Information about capital providers

For the smaller company seeking equity funds, a common starting point is its accountant or solicitor, who may have knowledge about potential private sources of capital as well as greater familiarity with the range of professional institutions that might be suited to their client's business. There is also a range of government agencies which serve as sources of information and advice to small business. These include such State bodies as the Business Development Unit and the Small Business Centre in New South Wales, the Small Business Development Corporations in Victoria, Queensland, South Australia and Western Australia and the Tasmanian Centre for the Development of Entrepreneurs.

Information of this type is also provided in brochures prepared in some of the banks for small business clients. The Commission was shown material of this kind prepared by the NAB and the CBA. There are also private sector directories in which venture capital providers advertise. These include Scitech, a monthly technology magazine, as well as several more general publications.

At the Federal level, apart from NIES -- which has more to do with advice about financial management than sources of finance -- there are parts of the Department of Industry, Technology and Commerce (DITAC) devoted to small business. The MIC licensing board, a unit of that

department, publishes a directory of venture capital companies which appears to be freely available from DITAC regional offices and state government small business offices. This directory provides a list of all MICs, as well as similar private and public sector organisations providing equity capital for unlisted companies. It also contains details of the past performance of each investment company, the nature of the investments that it prefers, the form of finance it provides and the nature of its involvement in investee companies.

The Commission understands that DITAC proposes to update the directory, and is examining the possibilities of providing it as a floppy disk, or on-line facility, possibly in concert with other government agencies.

Several capital providers indicated that they had found the Venture Capital Directory to be of value. For example, the CDB commented:

> ... it is a useful directory and I do know that we have had a number of inquiries from would-be equity investment companies who have got our name out of the book (DR Transcripts, p. 342).

The Small Business Association of Australia, while generally supporting the concept of a directory, expressed some reservations about the quality of the information provided:

> ... they had yield thresholds and specific areas of interest that were not disclosed in the Venture Capital Directory. That is why we believe that it really is very desirable that quite specific requirements be stated, and not the very broad generalisations that publications like the directory tend to contain (DR Transcript, p. 110).

Such a directory would clearly be more useful the more it narrowed down the field of inquiry for seekers of capital, subject to limitations on the detailed information intermediaries are prepared to provide. Perhaps of greater importance is that it should include a comprehensive coverage of equity sources and up-to-date information.

The Commission supports the updating of DITAC's Venture Capital Directory and suggests that, to ensure that it is of maximum continuing value, it should be updated regularly, widely available, comprehensive in coverage, and include as much detailed information as possible on the policies and practices of intermediaries.

Information about investment opportunities

Capital providers also take an active role in identifying potential investments. Venture capital providers tend to have their own networks for identifying potential investments. Investors can also make use of government informational facilities. The NSW Government's Department of Business and Consumer Affairs compiles a Register of Business Opportunities in NSW (ROBIN). ROBIN operates as a database, using information supplied by the seeker of capital, and is updated every six

months. The Business Development Unit which publishes ROBIN, stresses that it is merely an information service, and that any proposal should be thoroughly examined before any investment is undertaken. There are comparable initiatives in some other states, such as the 'Biz Match' program in Western Australia.

The Commission understands that DITAC, in conjunction with the state small business organisations, is presently exploring the feasibility of an electronic matching service, for use by international as well as domestic investors. It is apparently intended that the system would be available through agents of DITAC or the State offices, on a user pays basis. International links with Asian countries, and with a comparable data base in Europe (VC NET) are being investigated. The Commission requested participants' views on this matter in the draft report. The response received by the Commission was that such an inventory would have difficulty providing sufficient detail to be of value to would-be investors; that the companies on the register would tend to be regarded as being in the 'last resort' category; and that the available information would in any case date so quickly that its value would not justify the cost of its preparation. The Commission supports this assessment.

Alternative equity markets

The conclusion of the Campbell Report that the limited secondary market for small business equities serves to reduce their attraction for investors was generally supported by participants at this inquiry. LIFA, for example, noted that:

> In respect to smaller companies the liquidity in the marketplace falls away very rapidly. It is very difficult to accumulate a holding and, in many cases, near impossible to quit a holding (Sub. 26, p. 44).

For a time, the second boards provided a means of substantially increasing the liquidity of those smaller companies that were eligible for listing. However, as discussed previously, this is no longer the case.

Overseas examples

A number of overseas countries, including Japan, the United States and Britain, have mechanisms to facilitate trade in shares in companies that are not listed on the principle stock exchange (see Appendix H). These are known collectively as Over the Counter (OTC) markets. While the nature and operations of these markets differ between countries, they tend to share the following characteristics:

- they are not the main equity market of the country in which they operate, although they are sometimes run by the same organisation that operates that exchange;
- the listing requirements regarding size, spread of ownership, and track record are much less stringent than those of the main stock exchange, although the reporting requirements are generally similar;

- the stock is traded by electronic means, without the established centre of the stock exchange; and

- brokers and underwriters are not usually involved, as the transactions take place between principals. When a specialist does trade in the market, it is as a principal; that is, the specialist `makes a market', trading in the stock on his own account.

The United States was the first country in which an OTC market was established. There are currently two such markets; the NASDAQ[1] national market, which caters for companies unwilling or unable to comply with the listing requirements of the New York Stock Exchange (NYSE), and NASDAQ markets, which are state based, and cater for local companies.

The OTC market in Japan was substantially modified in 1983, to operate in a manner similar to the NASDAQ markets. The Tokyo stock exchange (TSE) operates regional markets, as well as a second board, which cater for similar companies to the NASDAQ (regional) market in the US. Companies whose stock is traded on the OTC in Japan generally have good growth potential, and are interested in eventual listing by the TSE, once they meet the size and track record requirements.

The alternative equity market in Britain is called the Unlisted Securities Market (USM), and is operated by the brokering firms of the official stock exchange. This is the result of an article of the rules of the stock exchange, which allow trading by brokers (members of the exchange) of unlisted stocks. This market has recently been merged with another alternative equity market, the Third Market, in an effort to increase the liquidity of the stocks traded on them.

The alternative equity markets overseas do not appear to cater for companies that are below the size that could be listed on the ASX. Indeed, as can be seen from table 10.2, their minimum size and track record requirements are generally more stringent than those proposed for the ASX.

This is so even for the exchanges which cater for regional or special companies with low growth potential, such as NASDAQ. This impression was supported by BLE Capital:

> ... the markets that operate overseas I think are generally really catering for businesses that are larger than we have really been focusing on here - the small businesses... Often the businesses ...that are traded on those unlisted securities markets are significant in their stage of development, but may not for all sorts of reasons be ready for a full stock-market listing (DR Transcript, p. 166).

In June 1991, the average capitalisation (in Australian dollars) of companies traded on the UK Unlisted Securities Market and on NASDAQ was $35 million and $82 million respectively. In comparison, if the 100 largest companies are excluded the average size of the other companies listed on the ASX was only $13 million.

[1] National Association of Securities Dealers Automated Quotation System.

Table 10.2: **International comparison of listing requirements ($A)**

Country	*Exchange*	*Capitalisation*	*Spread of Ownership*	*Track Record*
US	NYSE	$23 million	1.1m shares 2000 holders	$8.3m profit over last 3 years $6.8m profit in latest year
	NASDAQ national	$5.1 million 800 holders	500 000 shares	$1m pre-tax income latest year
	NASDAQ (regional)	$2.6 million 300 holders	100 000 shares	none
Britain (a)	London SE	$1.7 million	25 per cent of equity in hands of public	3 years in profit
	USM	none	10 per cent of equity in hands of public	2 years in profit
Japan	TSE	$10 million	6 million shares 1 000 holders 20 per cent of equity in hands of public	$9m profit over last 3 years $4m profit in latest year Dividends paid in latest year
	OTC	$2 million	2 million shares 200 holders	10c profit per share, latest year
Australia (b)	ASX	$1 million	100 000 shares 500 holders	$1m profit over last 3 years $400 000 profit in latest year

Notes: (a) The relevant authority has considerable discretion as to these listing requirements. For further information, see appendix H.
(b) Proposed for introduction in January 1992. Rates of exchange as at 23 November, 1991.

The use of alternative exchanges in other countries generally increased substantially over the last decade. The number of companies traded on the USM increased from 11 in 1980, to 400 in 1991. In October 1990, there were 300 companies whose stocks were traded on the OTC in Japan, as compared to 107 in 1982. Despite this growth, however, the number of companies traded on these exchanges remains very small in comparison with the numbers of incorporated companies in these countries. In all cases, their total capitalisation is below 5 per cent of the total equity market.

Australian initiatives

At present there is no market in Australia in which investors can trade in shares of companies that are not traded on the ASX. Austpac Holdings has informed the Commission of its current efforts to establish a new style of stock exchange. The proposed exchange is intended to provide a mechanism by which investors can buy and sell equity in small and medium Australian public companies (or other businesses that are legally able to offer equity to the public) that either do not meet the listing requirements of the ASX or do not wish to be listed.

Austpac Holding's proposal, which is to be called the 'Australian Unlisted Securities Quotation System' (AUSQS) would operate through an electronic trading service with a notice board advertising companies seeking to raise capital through share issues. Its aim is:

> ... to provide an alternative to debt funding for small and medium businesses and particularly to businesses involved in longer lead time investment, such as is common in the application of innovation development. The Quotation System would provide a mechanism whereby equity in unlisted limited liability companies can be sold and re-sold (Sub. 59, p. 1).

As with all arrangements by which equity is offered to the public, new share issues would be subject to the prospectus requirements of the Corporations Act. In addition to the provisions of the act, companies wishing their stock to be traded on the system must also comply with the requirements of the AUSQS. These essentially involve continuous disclosure of information likely to affect the market value of the company's stock. The rules allow a company to sell either in a 'real estate' style transaction or, if there are several interested parties, to hold an auction. A minimum of 2 per cent of equity will be the standard tradable package. The application by Austpac Holdings to operate a stock exchange is currently being reviewed by the ASC and the company considers that permission to begin operation is imminent.

In its supplementary submission, the ASX commented on Austpac Holding's proposal:

> In the ASX's opinion, the business rules of the alternative market would need to afford at least the level of protection as provided by the ASX Business Rules and Listing Rules (Sub. 79, p. 3).

To the extent that this level of protection is determined by government, it would appear reasonable that any new market should also meet this government determined standard. However, new markets should still have the freedom to decide what rules and methods they wish to employ to achieve the required standard, and not be compelled to adopt the same rules as the ASX.

The success of this type of market overseas might lie in its relative attractiveness for companies that are well known, and therefore can issue equity without the attendant expense and degree of disclosure required for a stock exchange listing. Alternatively, a company could satisfy the minimum size requirement of the stock exchange, but for another reason, such as lack of a track record, be unable to qualify for listing.

The pool of potential companies which might be attracted to such a market in Australia is likely to be smaller than in the large economies referred to above. The relative thinness of the Australian equity market, which was noted by the Campbell inquiry, remains a possible constraint on the development of this type of market. In addition, as shown, the ASX already lists shares of companies much smaller than those on stock exchanges overseas.

10.6 Other regulatory and taxation issues

Adequacy of legal business structures

Greater provision in State laws for 'limited liability partnerships' was suggested as one method by which a small business could improve its access to equity capital. Limited liability partnerships are a way of achieving similar limitations on the liability of equity investors in small business as in larger corporations. Advent Management Group observed that:

> limited liability partnerships have been universally adopted in the USA by venture capital investors. Recently, the UK has introduced them and they are now widely used there too. They have many advantages for investors in the area under discussion (Sub. 18, p. 5).

A limited liability partnership must consist of at least one general partner and at least one limited partner. The general partner(s) manage the partnership and have unlimited liability. The liability of limited partner is limited on condition that they do not participate in management although they may 'advise and consult with other partners'.

Limited liability partnerships are controlled through State partnership legislation. They have a long history in Tasmania, Western Australia and Queensland but are not as yet recognised in the other States. A Bill was introduced in New South Wales to provide for limited liability partnerships. Although it passed through the lower house, the State election was called prior to its passage through the upper house and the legislation lapsed.

Laws relating to limited liability partnerships are not uniform among those States that have them. For example, the number of partners are currently limited to 20 in Tasmania and Western Australia while there is no limit in Queensland and no limit was proposed in New South Wales.

Limited liability partnerships appear not to have been extensively used in those States where they have been available. Over the past decade, about seven hundred and fifty limited partnerships have been established in Western Australia. In Tasmania, the total number of limited partnerships in 1990 was nearly 80, annual registration over the previous four to five years varying between five and ten. Currently there are about 50 limited partnerships registered in Queensland.

Uncertainty about the legal position of transactions involving States with differing (or no) limited liability partnership law may have been a major deterrent. As Advent noted:

> ... lawyers say that it is not clear that if you have a limited partnership in Queensland that the limited liability of the investor applies if investors are Victorian and the business is being conducted in Victoria - because we do not have a limited partnership law in Victoria (Transcript, p. 155).

The Australian Small Business Association considered that the introduction of uniform legislation relating to limited partnerships in all States and Territories, as recommended by the venture capital working party, would improve the access to equity finance by small firms. It noted in its submission that:

> There is a structural inhibition to investment in unincorporated small business. The concept of the limited partnership would certainly be useful in overcoming this and encouraging investment in small business, offering a degree of protection but having clear taxation advantages. Limited partnerships provide a relatively simple and inexpensive vehicle without many of the formalities and complexities applicable to companies. The partners are able to claim as deductions all of the expenses if the partnership in the year in which they are incurred. The early introduction of this structure into States where it does not yet exist would certainly be helpful (Sub. 47, p. 11).

The Commission considers that uniform legislation relating to limited liability partnerships should be introduced in all States and Territories. It notes that the Standing Committee of Attorneys General currently has the question of uniform legislation applying to limited liability partnership on its agenda.

Taxation of capital gains and capital mobility

A number of participants argued that because capital gains are taxed on realisation, investors regard themselves as being locked into particular businesses, unless they would prefer to sell their existing businesses and to use the proceeds to take up new opportunities. It was a particular problem for investors in small businesses who wished to sell up to take advantage of a more attractive proposition. In essence they were encouraged to remain in a lower performing business in order to reduce their taxation liability.

This issue was of considerable concern to the Beddall Committee, which noted that:

> There were few submissions made to the Committee addressing tax issues which did not recommend some change to the current capital gains tax provisions (Beddall 1990, p. 145).

The Beddall Committee recommended provision for a capital gains tax rollover under which tax liability would be deferred if the proceeds of an asset sale were reinvested.

A number of participants strongly endorsed the Beddall recommendations. Among them was the MTIA which said:

> In a recent MTIA survey, about 15 % of respondents had considered selling assets to expand or replace their businesses but were deterred by CGT. This proportion will increase significantly as more assets acquired since 1985 are marketed and therefore face tax liability when sold (Sub. 28, p. 23).

An alternative solution which was suggested was simply to lower the capital gains tax rate. The Department of State Development of Western Australia supported a proposal by the Australian Society of Certified Practising Accountants that the capital gains tax rate for growing small businesses be reduced from 39 per cent to 10 per cent. It noted that:

> The ASCPA suggestion appears administratively simple and would have the effect of substantially reducing capital gains tax in its entirety (Sub. 50, p. 5).

Both of these proposals would weaken the capital gains tax. It was previously noted (chapter 9) that capital gains are already favoured as compared with income under the current taxation system. In effect the proposals would increase incentives to invest in activities which produce capital gains over a longer period relative to activities which produce income measurable for taxation purposes on an annual basis.

The Commission accepts that many small business owners feel that the existing capital gains tax provisions constitute an impediment to their ability to move between businesses. The Commission is also aware of the problems of providing exemptions to one category of tax-payer from the general provisions of the taxation system. The Commission considers that the costs of providing a simple rollover exemption would exceed the benefits in terms of mobility of capital. It notes, in particular, the greater possibility of tax avoidance through opening up a potential loophole in the tax system.

10.7 Concluding remarks

In reviewing external equity financing for small businesses, the Campbell Committee concluded:

> While small businesses find it harder than large businesses to obtain equity finance, it may be misleading to describe this as constituting a bias against small businesses or evidence of imperfections in the supply of equity finance. In the Committee's view, most of these perceived difficulties simply reflect the economic fact of their higher cost of investing in small amounts and the higher risk of investing in small businesses, especially if the scope for effective spreading of the risks were limited. These difficulties are compounded by a reluctance of existing proprietors of small businesses to dilute their effective control of the enterprise (Campbell 1981, p. 690).

The Commission finds itself, some ten years later and in the context of deregulated financial markets, substantially in agreement with this conclusion.

Since that report was issued, there have been significant regulatory and institutional changes in financial markets, most of which have facilitated the financing of smaller companies, whether by debt or equity. There have also been some initiatives specifically designed to promote or facilitate equity raisings by those firms. The experience of the MIC scheme and the Second Boards suggests that it is difficult to overcome the inherent problems of smaller companies in attracting and providing a competitive return on equity finance.

More recently, the policy-induced expansion of superannuation funds has raised the question of whether this will distort the allocation of equity away from smaller companies. This depends on a number of factors and it is not evident to the Commission what the net effect will be. The Commission considers, however, that any distortions in this area would be alleviated by a number of initiatives identified above and would in any case not justify regulations constraining institutional choice, or governments becoming involved in the provision of equity to small businesses.

11 GOVERNMENT-OWNED FINANCIAL INTERMEDIARIES

There is a range of government-owned financial intermediaries at Commonwealth and State level, most of which were established to address perceived market deficiencies. In view of the changes in the financial environment, particularly following deregulation, the Commission concludes that there is no longer any general economic justification for government provision of financial services. The Commission considers that government guarantees over borrowings diminish incentives for efficiency. It supports the Reserve Bank seeking more formal powers of supervision of State Banks.

At various times in Australia's history, both Commonwealth and State Governments have set up financial intermediaries, usually to meet perceived 'gaps' or inadequacies in financial markets. These intermediaries include:

- banks owned by the Commonwealth and State Governments providing a full range of banking services;
- specialist financial intermediaries operating on a quasi-commercial basis providing capital to particular classes of businesses; and
- government institutions providing capital to business which are funded, at least in part, by government subsidies.

The terms of reference of this inquiry specify that the Commission have regard to the role of government financial institutions other than the Reserve Bank of Australia. This chapter examines the rationale for government ownership of financial intermediaries, particularly in light of the changes in the operation and regulation of financial markets which have occurred since many of them were established. As part of this examination, the chapter reviews the objectives and operations of some key government financial institutions which provide capital to Australian business.

11.1 Tests for government ownership

The original motives for the establishment of government financial intermediaries fall into two broad categories. Firstly, they may have been established as commercial enterprises either to supply capital to sectors of the market which were perceived to be inadequately serviced by private institutions, or to add to competition in particular financial markets. Secondly, they may have been established to finance projects which, although not generating a commercial return, are perceived to be socially valuable. Such projects may be considered to provide `external benefits' to society or may be justified on the grounds of social obligations to particular regions or users of capital. Their establishment may also have accorded with the political/economic philosophy of the times.

The costs associated with government ownership of financial intermediaries are not always apparent. These costs relate to inefficient resource use where government financial intermediaries are poorly run, and market distortions where government-owned intermediaries provide loans on an uncommercial basis, or are given regulatory or other advantages over their private sector counterparts.

The effect of government ownership of financial intermediaries was considered by the Campbell Committee in 1981. It considered that government ownership of a financial intermediary was not justified unless it met certain tests (outlined in box 11.1). The Commission considers that these tests remain valid today. In essence:

- continued government ownership of a financial intermediary is not justified on economic grounds where it merely provides services already available, or potentially available, from private intermediaries;

- government financial intermediaries which operate on a commercial basis should be economically viable and compete on an equal footing with their private sector counterparts; and

- all government financial intermediaries, regardless of whether they have commercial objectives, should be operationally efficient.

The Campbell Committee stressed that the changing nature of financial markets meant that it was important regularly to re-evaluate the appropriateness of government ownership against these tests. Government financial intermediaries may originally have been established to address market deficiencies which no longer exist. The depth and flexibility of Australian capital markets has increased significantly over time, particularly in the decade since the Campbell Committee reported. It is appropriate, therefore, to reassess the role of some classes of government-owned financial intermediaries.

Effects of government ownership of intermediaries on the provision of capital

Government ownership can give a financial intermediary advantages in the form of a government guarantee of its obligations, exemption from regulatory requirements, and from the payment of taxation or dividends. Conversely, government imposed constraints may inhibit an intermediary where it is directed to provide financial services to particular sectors, or where a government owner is not prepared to subscribe additional capital to support its growth.

Box 11.1 **Tests for government ownership of financial intermediaries**

The Campbell Committee recognised that government financial intermediaries may have a general commercial function (such as enhancing competition) and/or a social role (such as the provision of sectoral assistance). The Committee outlined the conditions under which government ownership of a financial intermediary is justified: 'In respect of the commercial functions of government financial intermediaries (GFIs) these principles are:

(a) Each existing institution should be carefully evaluated to ensure that it is filling a market gap in the most cost-effective way and is expected to continue to do so in the changing financial environment. In addition, the conduct of these commercial functions should, over a period:

- be economically viable;
- be operationally efficient; and
- *not* cause market inefficiencies or distortions as a consequence of unequal competition with private sector competitors or, more generally, by inhibiting the development of a vigorous private sector.

(b) Where the conditions set out in (a) are not substantially met and are not capable of being met, serious consideration should be given to ending (either by sale as a going concern or by winding up) the government ownership of the commercial operation, unless continuing government ownership of the institution is judged by the government to generate overriding economic externalities or social benefits which could not be achieved more cost-effectively in any other way.

(c) Reviews of the range of operations and efficiency of GFIs should be undertaken regularly (no less frequently than every seven years) to ensure that the tests under (a) and (b) continue to be met.

(d) New GFIs should not be established unless they meet tests under (a) and (b).

In respect of the non-commercial functions of GFIs these principles are:

(a) The primary response in respect of non-commercial policy objectives should be the pursuit of those objectives by direct fiscal measures wherever practicable.

(b) Where direct fiscal action is not practicable the Government should explore the possibility of achieving its non-commercial objectives through the medium of private commercial institutions instead of through GFIs.

(c) In the event that a GFI continues to have an exclusive charter to perform specific non-commercial functions then its performance should be subject to stringent scrutiny and disciplines to ensure that these functions are conducted efficiently.'

Data source: Australian Financial System, Final Report of the Committee of Inquiry, 1981, pp. 455-6.

Government guarantee of borrowings

Some government financial institutions have an explicit government guarantee of their liabilities. This can reduce their borrowing costs. Even where there is no explicit guarantee, government-owned intermediaries may still be able to borrow on favourable terms because their government owner is perceived to stand behind their obligations.

The benefit of a government guarantee may be passed on to customers through cheaper pricing of loans and investments, absorbed in inefficient operations, or returned to the government in the form of higher profits or a guarantee fee. Where government institutions pass the benefit of their cheaper funding costs on to customers, their customers are being subsidised compared to non-customers, without due regard to their relative merits.

The existence of a government guarantee of the operations of a financial intermediary also means that interest rates paid by the intermediary on its deposits and borrowings are unlikely to reflect its own financial strength or the riskiness of its activities. Depositors and lenders who fund the bank can rely upon the guarantee and are relieved of the need to assess the riskiness of the banks operations. This can reduce incentives for the bank's management to behave prudently or perform efficiently.

This in turn can mean that returns on lending and investment do not match the risks that are being assumed. Institutions which provide risky capital at prices which cover their funding costs but not the true risks of lending may not be viable in the long-term, since economic downturns can produce extensive loan losses.

The size of the benefit provided by a government guarantee varies between financial intermediaries. In addition, the benefit is cyclical, rising in periods of uncertainty in financial markets. The benefit to a major commercial bank such as the Commonwealth Bank of Australia may not be significant in domestic markets, given the size and financial strength of its competitors and market perceptions that all banks are implicitly guaranteed by the Reserve Bank anyway.

Regulatory advantages

The cost of funds for government institutions may also be lowered if they are exempt from government regulatory requirements. This is so in the case of some State banks which have been exempted from the requirement that banks hold a non-callable deposit with the Reserve Bank earning interest at below market rates. This exemption provides these State banks with an income advantage, and can also allow them to charge borrowers less than other banks.

Efficiency of operation

A central test among those suggested by the Campbell Committee was that of operational efficiency. This refers to the level of operating costs incurred by an intermediary.

Private intermediaries which are not operationally efficient tend to suffer a competitive disadvantage and earn lower returns compared to other market participants. Such intermediaries may eventually be forced by their shareholders to alter their methods of operation, or even go out of business. Government institutions are not subject to similar pressures to be efficient or to demonstrate their efficiency. It is, moreover, difficult to assess the performance of an enterprise if there is no share price to signal the market's valuation. Government-owned enterprises are also less free than private ones to adopt cost saving measures (such as closing uneconomic branches) and are more vulnerable to union pressures on staffing and related issues.

For these reasons, a strong case can be made for private delivery of services even when they are provided to recipients on a concessional basis. Private providers usually have stronger incentives to minimise costs. This argument has even more force if the services being provided by the government-owned enterprise are similar to those supplied by private providers, since the nature of the service does not in itself require government involvement.

There is increasing recognition in Australia (and overseas) that the original reasons for government ownership of financial intermediaries may no longer apply. One example is the sale of the NSW Investment Corporation in 1989. The New South Wales Government has also announced its intention to sell the State Bank of New South Wales.

The remainder of this chapter considers the objectives and operations of major categories of government financial institutions in relation to the above criteria.

11.2 Government-owned banks

There are now four government banking groups in Australia. These are:

- the Commonwealth Bank of Australia (CBA) which is 70 percent owned by the Commonwealth government; and

- the three State government-owned banks -- in New South Wales, South Australia and Western Australia.

These institutions now operate in markets in which they compete with private intermediaries. In the context of the tests set by the Campbell Committee, the critical issues therefore are whether they are operationally efficient and economically viable.

Commonwealth Bank of Australia

The CBA was established in 1912. Its initial aims were to be a savings and trading bank run upon commercial principles, and to be a central bank. The central banking function was separated from the CBA's commercial operations upon the establishment of the Reserve Bank in 1959.

With its acquisition of the State Bank of Victoria in January 1991, the CBA became the largest Australian bank. Its asset base represents 24 per cent of the total assets of the Australian banking sector, and it has the most extensive branch network in Australia. It is also the largest lender for housing in Australia with a 32 per cent share of total housing lending provided by banks.

The current legislative charter of the CBA is very broad:

> (The bank's policies are required to be) directed to the greatest advantage of people of Australia and have due regard to the stability and balanced development of the Australian economy (Commonwealth Banks Act 1959, Section 9(2)).

In its early years, the CBA concentrated on its savings bank and central banking roles and shied away from direct competition with the private banks. However in 1947, it was specifically directed by legislation to compete in the market for general bank business. The CBA and its subsidiaries now provide a very wide range of services, typical of the major Australian banking groups. One rationale given for its retention by the Australian government is the competition it provides to the three major private banks.

Table 11.1: **Return on average assetsa for the four major banking groups, 1986-1991 (per cent)**

Bank	*1986* [b]	*1987* [b]	*1988* [b]	*1989* [b]	*1990* [b]	*1991* [b]
CBA	0.77	0.47	0.58	0.86	0.82	0.46[c]
Westpa [c]	0.73	0.69	0.91	0.82	0.45[c]	0.05[c]
NAB	0.78	0.73	0.95	1.13	0.90	0.77
ANZ	0.67	0.63	0.73	0.44	0.24	0.27

Notes: a Operating profit (after tax and abnormals and before minority interests and extraordinary items) divided by the average of total assets at the beginning and end of the accounting year.
b Figures are for the year ended 30 September, except for the CBA which has a 30 June balance date.
c These figures do not include surpluses of superannuation schemes, which the CBA and Westpac recognised as prepayment of employer contributions and included as an abnormal item.
Data source: KPMG Peat Marwick, various issues, 1991 preliminary results of the four major banking groups.

The CBA appears to have made significant advances towards commercialisation in recent years. The bank is required to perform economically and efficiently and to operate in accordance with commercial principles. It operates profitably and pays taxes and dividends. Its profitability appears to be commensurate with that of major private banks as shown in table 11.1. In September 1991, the bank was listed on the Australian Stock Exchange following the sale of 30 percent of its capital to the Australian public.

The Government guarantee of the CBA's liabilities under the Commonwealth Banks Act (1959) may not provide it with a significant advantage over its private sector competitors. The National Australia Bank (NAB) said that the CBA enjoyed no clear advantage over the three major private banks in raising retail deposits in Australia. However, the NAB said that the borrowing costs of the CBA were lower in long-term and foreign capital markets (Transcript, p. 182).

The Commonwealth Government does not place any formal Community Service Obligations[1] on the CBA. Nevertheless, the CBA is probably subject to more public pressure than other banks to provide services to all Australians. In consequence, the CBA may not be as free as other major banks to, say, close down unprofitable country branches. However, the bank does not appear to provide many services which would not be undertaken if it were privately owned. A possible exception is the operations of the Commonwealth Development Bank (discussed later).

State banks

The forerunners of the State banks were established by colonial governments in the last century. Broadly, their purpose was to serve social and economic needs that the private banks of the time were not seen to be meeting adequately. This encompassed the provision of savings bank services to small depositors and borrowers, and the provision of finance to promote the economic development of the colony. In some cases, the banks were directed to finance particular sectors. For example, the State banks in South Australia and Western Australia both have origins in agricultural banks serving the rural sector.

State banks traditionally have been regionally based and concerned primarily with catering to the household and small business (including rural) sectors. State banks have been among the poorest performers in the banking industry. However, their profit distributions to State government revenues are boosted because they are not liable for Commonwealth income tax.

The three State banks, the State Bank of NSW (SBNSW), the State Bank of South Australia (SBSA) and the R & I Bank of Western Australia (RIBWA) together account for 10 per cent of the Australian assets of the banking sector. However, this belies their importance in regional markets, as shown in table 11.2.

[1] Community Service Obligations are the non-commercial policy objectives which public enterprises are directed to pursue by governments - see IAC (1989).

Table 11.2: **Total assets and ranking of State banks, November 1991**

Bank	*Total assets ($ Million)*	*Australian Ranking*	*Home State*
SBSA	16 499	5	1
SBNSW	14 798	6	3
RIBWA	7 274	9	1

Note: Ranking of banks is by market share of business loans in applicable State market.
Data source: RBA 1991c, Table B.10.

State Governments responded to the deregulation of the banking sector in the mid 1980s by enacting legislation substantially increasing the flexibility of the State banks.[2] The State banks are now required to be commercial operations and generally charge market rates for business loans.

The State banks altered their behaviour markedly to meet the increased competition resulting from financial deregulation. They sought to expand beyond their home states, and across the whole spectrum of financial markets. They entered the large scale corporate and property finance markets. The rapid asset growth of the State banks from 1985 to 1988 is shown in figure 11.1.

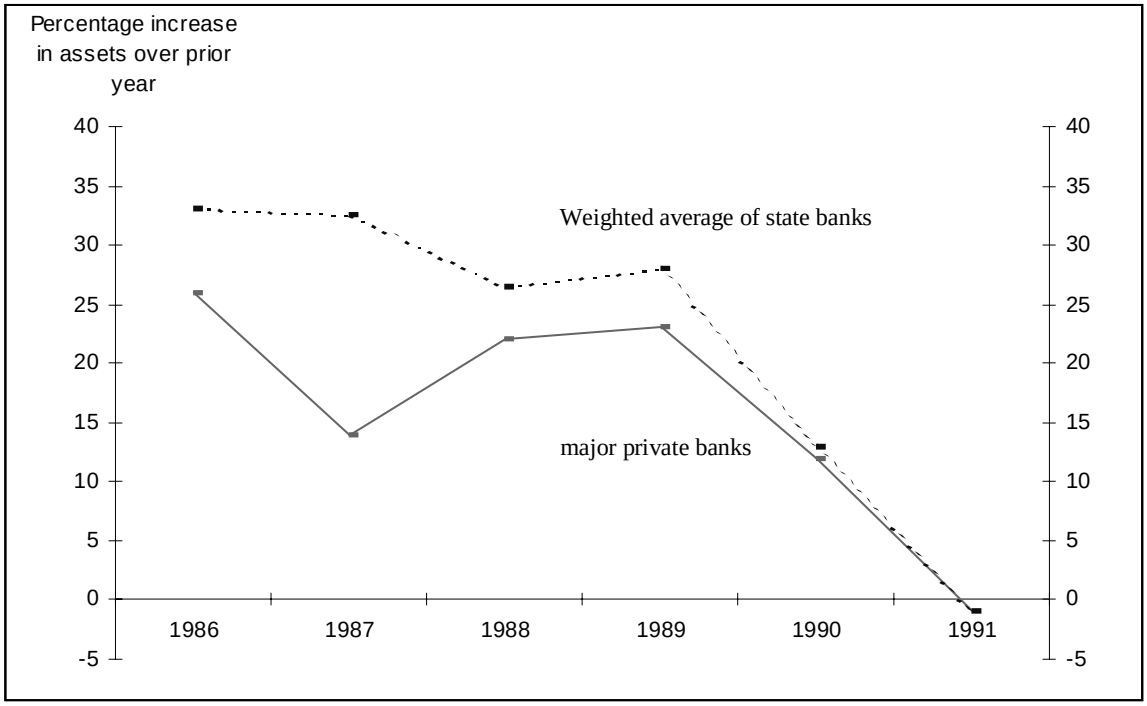
State Governments provide explicit guarantees for the deposits and other liabilities of their banks. It is not clear to what extent this gives them a cost advantage over major private banks. The advantage may be relatively small, partly due to the financial strength of the latter and partly due to the strong public perception that there is a Reserve Bank guarantee of the deposits of private banks.

State banks have been subject to a different regulatory regime to other banks. The Australian Constitution precludes the Commonwealth Parliament from legislating in respect of State banking. The question as to whether this exemption applies to State banks operating outside their home States has never been tested in the High Court. The conduct of the State banks has been the responsibility of their State Government, and have not been fully subject to Commonwealth banking legislation.

During the late 1980s, the Reserve Bank supervised State banks on a voluntary basis. Under these arrangements, State banks provided information to the Reserve Bank and complied with most of the prudential requirements applying to privately owned banks.

2 Amending legislation was passed in New South Wales (1981, 1986); Victoria (1988); South Australia (1983); and Western Australia (1987).

Figure 11.1: **Growth of State banks and major private banking groups, 1986-1991**



Data source: KPMG Peat Marwick, various issues; bank reports.

For example, the Reserve Bank monitored their compliance with capital adequacy rules and the prime asset requirement. A notable anomaly was the exemption of State banks from the lodgement of a non-callable deposit with the Reserve Bank.[3] This provided the State banks with a comparative cost advantage over private banks.

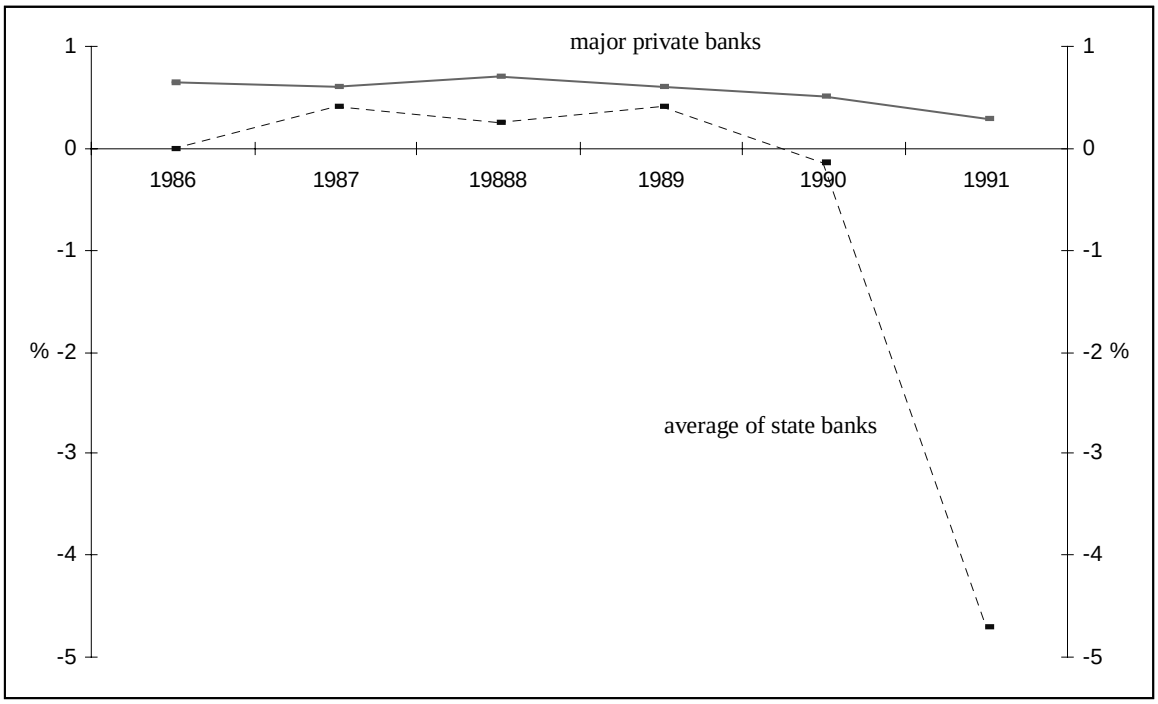
The recent record of the State banks suggest that these arrangements for their prudential supervision did not work satisfactorily. This appears to be due in part to lack of effective oversight on the part of some State Governments and difficulties faced by the Reserve Bank in enforcing standards based on voluntary arrangements.

The Reserve Bank is currently negotiating with the relevant State Governments to formalise its supervisory powers over State banks. It has entered into formal agreements with the South Australian and Western Australian Governments to supervise the SBSA and the RIBWA respectively. In addition, the New South Wales Government is negotiating the conferral of powers to the Commonwealth which will make SBNSW subject to Commonwealth banking legislation, including formal supervision by the Reserve Bank.

[3] Private banks and the Commonwealth Bank of Australia are required to maintain a deposit with the Reserve Bank equivalent to one per cent of their total Australian liabilities (excluding shareholders' funds). These deposits receive interest at the penalty rate of 5 per cent below the yield on 13 week Treasury Notes.

Despite the exemption from holding a non-callable deposit and their State Government guarantee, State banks have consistently been less profitable than other banks. The rapid expansion of State banks in the late 1980s was not translated into sustainable gains in return on assets as (see figure 11.2). While it is true that the whole banking sector is currently reporting high levels of bad debts and non-performing loans, those of the State banks appear to be disproportionately high. The non-performing loans of the Australian banking sector (that is non-accrual loans and loans over 90 days in arrears) are estimated at $29 billion as at June 1991 (RBA 1991e). The State banks represent only 10 per cent of total bank assets yet account for roughly 20 per cent of the non-performing loans of the Australian banking sector. The comparatively poor performance of State banks may be attributed to their relative inexperience in the areas of property development and corporate lending.

Figure 11.2: **Return on total assets[a] for State banks[b] and major private banks, 1986-1991 (Per cent)**



Note: a Return on total assets is operating profit (after tax equivalent and abnormal items and before minority interests and extraordinary items) divided by total assets at the close of the accounting year.
b SBSA's reporting date is June each year; the other banks report in September each year.
Data source: KPMG Peat Marwick, various issues; bank reports.

It is apparent that neither the banks nor their government owners understood fully the nature and extent of the risks being assumed by the State banks during their growth period. The banks were able to raise funds easily with the benefit of their government guarantees, creating a contingent liability for their owners. Risks on lending are cyclical, and massive losses have appeared during

the current economic downturn and associated decline in property values. In the cases of the State banks in Victoria, South Australia and Western Australia, this has culminated in the State governments being obliged to make large capital contributions to their banks. The State Bank of Victoria was subsequently sold.

Conclusions

Traditionally, government banks operated in limited markets and did not always compete directly with private banks. However, the range of products and services offered by both government and private banks has expanded in recent years. Government banks no longer appear to be providing any particular services or products which are not available from private financial intermediaries. A specific example of this has been the provision of banking services to small depositors and borrowers. Until the 1950s, all the savings banks in Australia were government-owned. However, the three major private banks and the six banks which converted from building societies, now provide a full range of savings bank services.

The Commission has not examined the economic viability or operational efficiency of the government banks in detail. They all acknowledge commercial goals, and operate similarly to privately owned institutions. Nevertheless, it is evident that the recent poor performances of individual State banks brings their ongoing viability as separate entities into question.

The Commission considers that there is no longer an economic justification for governments to retain ownership of banks, and supports the current trend towards privatisation.

Some inquiry participants expressed concern at the potential effect on competition of the privatisation of the government banks. There is clearly a case for governments to take this into account when considering the mode of sale and potential purchaser(s). The Medical Industry Association of Australia recommended that in privatising the State banks:

> The four major banks should be excluded as potential purchasers to at least maintain the competition the State banks provide (Sub. 22, p. 6).

However, the Commission notes that some major banks have relatively small market shares in particular regions, and considers that the impact of each sale should be considered on a case-by-case basis.

Government banks have a government guarantee for fund raising. While the competitive advantage this confers may not be great, the Commission considers that government banks should be required to compete on an equal footing as far as possible with their private sector counterparts. To this end, **the Commission recommends that the government guarantees be removed or a guarantee fee charged.**

State banks also differ from private banks in their prudential supervision. This is not desirable since privileges in this area can be equivalent to subsidies. The Commission considers that the differences between the prudential supervision of State banks and other banks should be minimised, within the constraints of the Australian Constitution. In view of the recent experience of the State banks, the **Commission supports the arrangements made by State Governments which give the Reserve Bank more formal powers of supervision of State banks. The Commission believes the Commonwealth Government should invite the relevant State Governments to make their banks subject to Commonwealth banking legislation.** This should include the requirement that State banks place non-callable deposits with the Reserve Bank.

11.3 Specialist financial institutions

In the context of this report, specialist institutions are defined as those government financial intermediaries which are directed by their owners to provide finance to particular sectors. They are differentiated from non-commercial intermediaries (considered in section 11.4) because they operate or purport to operate on business lines, and are funded by capital subscriptions and borrowings rather than budget appropriations.

The reasons for setting up such intermediaries have generally related to a desire to provide financial services which are judged to be not sufficiently available from private intermediaries. Two major specialist government institutions are:

- the Commonwealth Development Bank, which is a subsidiary of the CBA; and
- the Australian Industry Development Corporation Limited, which is 81 per cent owned by the Commonwealth Government.

Commonwealth Development Bank

The function of the Commonwealth Development Bank (CDB) is to provide debt and equity to businesses which would be unable to obtain funds from other sources on reasonable and suitable terms and conditions (box 11.2).

The CDB originally focused on lending to primary producers when it was established in 1959. However, its charter was widened in 1978 to allow it to provide loans for the establishment and development of small businesses. In 1985, this was further expanded to allow it to provide debt and equity finance for any business purpose.

Box 11.2: **Legislative charter of the Commonwealth Development Bank**

Commonwealth Banks Act 1959 (as amended)

Section 72. The functions of the Development Bank are –

(a) to provide finance for the purpose of establishing, acquiring or carrying on businesses (including businesses related to primary production), in particular small businesses, in cases where, in the opinion of the Development Bank, the provision of finance is desirable and the finance would not otherwise be available on reasonable and suitable terms and conditions;

(b) in accordance with policies approved by the Treasurer, to participate in businesses of a kind referred to in paragraph (a) in cases where, in the opinion of the Development Bank, participation is desirable and other persons would not be prepared to participate on reasonable and suitable terms and conditions; and

(c) to provide advice and assistance with a view to promoting the efficient organisation and conduct of businesses of a kind referred to in paragraph (a).

Section 73.

(1) In determining whether or not the finance shall be provided for a person, the Development Bank shall have regard primarily to the prospects of the operations of that person becoming, or continuing to be, successful and shall not necessarily have regard to the value of the security available in respect of that finance.

(2) The Development Bank shall not provide finance for a person to enable that person to acquire goods for use otherwise than in the course of his business.

The CDB is a small bank. As at June 1991, lending assets totalled $2 300 million and equity investments were $4.8 million, representing around one per cent of the total assets of the Australian banking sector.

The CDB is a subsidiary of the CBA, and has extensive business dealings with its parent. The CBA uses the CDB to assess some marginal loan applications, and provides staff, premises and other services to the CDB. However, the CDB indicated that its business dealings were conducted with the CDB on a commercial basis:

> .... we operate on a commercial basis, totally unsubsidised [by] the Commonwealth Bank (DR Transcript, p. 344).

The majority of the CDB's loans have traditionally been referred by the CBA. This practice has declined in recent years. Indeed, 56 per cent of its loan approvals for the year ended June 1991 were for clients of banks other than the CBA.

The liabilities of the CDB are guaranteed by the Commonwealth Government under the Commonwealth Banks Act (1959). The benefit provided by the guarantee is difficult to determine. Its parent, the CBA, can also raise funds on favourable terms by virtue of its inherent strength and government association. As a subsidiary of the CBA, the CDB is considered generally able to raise funds on the same terms as the major banks.

The CDB has generally reported relatively low returns in comparison to other banks, as shown in table 11.3. Despite a good performance in 1990, its capacity to generate adequate returns to its shareholder in the long run is not clear.

Table 11.3: **Return on equity of the CDB and the three major private banks, 1986-1991 (Per cent)**

Bank	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*
CDB[a]	5.5	7.8	9.1	9.8	12.9	4.1[b]
Westpac	14.4	15.2	12.8	12.5	7.0[b]	0.8[b]
NAB	13.9	11.5	12.6	14.0	12.3	9.3
ANZ	12.2	12.3	13.0	8.8	5.2	5.4

Notes: a CDB reports for the year to June; the other banks report for the year to September.
b These figures do not include surpluses of superannuation schemes, which the CBA and Westpac recognised as prepayment of employer contributions and included as an abnormal item.
Data source: KPMG Peat Marwick, various issues, CDB, Sub. 60, p. 9 1991; bank reports.

The CDB specialises in providing long-term finance to small businesses. While it will lend in amounts up to $2 million, a typical new loan is for $150 000. Forty five per cent of lending is to primary producers, down from 79 per cent six years ago. CDB loans are generally for significantly longer periods than those provided by other financial intermediaries. Table 11.4 shows that over 77 per cent of CDB's new lending in the year ending June 1991 was for terms exceeding five years, a significantly higher level than the major banks.

Table 11.4: **CDB loan approvals by term for the year ended June 1991**

Loan Term	*$ Millions*	*Per cent*
Up to 2 years	28 273	9
Over 2 to 5 years	44 258	14
Over 5 years	254 955	77

Data source: CDB.

In accordance with its charter, the CDB lends further out on the risk spectrum than other banks. It considers only loans which have been rejected previously by the applicant's primary bank. Many of the CDB's borrowers lack equity and are heavily geared, and it often holds a secondary security position ranking behind primary lender(s). In essence, the CDB seeks to provide risk capital to competent but undercapitalised small businesses.

Prior to 1985, lending controls over small business loans caused rationing of bank loans. Banks accepted only loans with very low risk. As a result, the CDB was able to obtain higher risk (but still worthwhile) lending opportunities which had been rejected by other banks. Since then, deregulation has allowed banks to do much of this lending themselves. In the CDB's words:

> Since deregulation ... the CDB has observed that the trading banks have been able to reach out further to help small business and rural customers of all kinds. As a consequence, the CDB's activities in recent years have taken in even riskier enterprises unable to satisfy the standards normally required for bank lending (Sub. 60, pp. 12-13).

There is no doubt that the CDB has built up substantial expertise in assessing and managing loans which other banks would view as being high risk. The CDB's charter requires that it focus on prospects of success rather than on the availability of security in its assessments of loan applications. It invests considerable resources in assessing higher risk small businesses. The CDB employs teams of specialists including investigating accountants, engineers and agricultural scientists. These specialists evaluate whether the business has a satisfactory cash flow. Whilst security is invariably taken, the CDB will not refuse a loan on the basis of insufficient security.

The CDB's approach to credit appraisal was praised by inquiry participants from the small business sector. A representative of the Australian Small Business Association, speaking in relation to his own business interests, said:

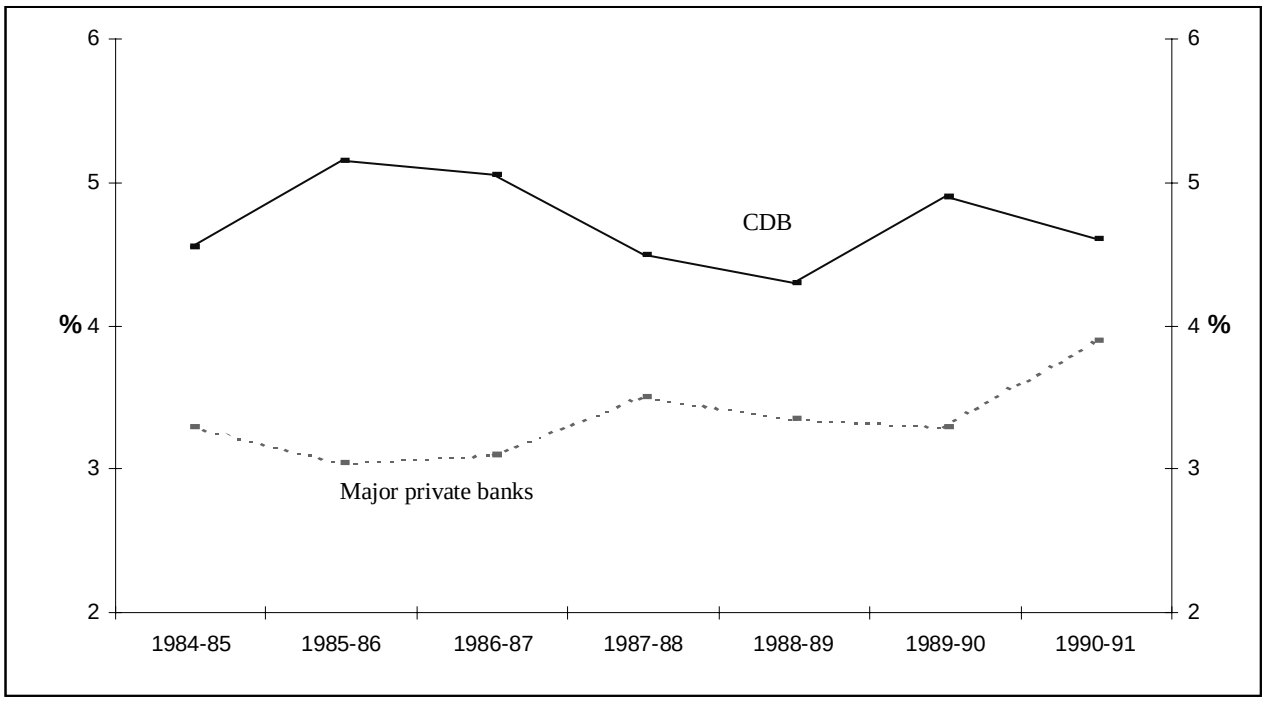
> The Commonwealth Development Bank had a very interesting approach to lending money. They in fact had accountants that were not just trained in accountancy but were accountants that had been used to going into business and knowing where the key spots were to look at. They came into my business for one and a half weeks. ....I believe that I have got a lot to thank for the approach - the way the Commonwealth Development Bank lent their money. (DR Transcript, p. 101).

The CDB does take a relatively strict approach to determining whether an applicant has adequate 'prospects for success'. It normally rejects approximately half of the lending proposals that it receives. At present, the rejection rate has increased to over 70 per cent, reflecting the poor outlook for many small businesses, mainly due to the recession and low commodity prices.

The CDB's specialist skills enable it to provide informal financial and management advice to applicants for finance. The CDB also monitors its loans very closely, providing further management input during the course of a loan. This has the effect of reducing the risks of a loan, since problems are more likely to be dealt with at an early stage.

Despite the apparent industry development component in its charter, the CDB considers there is no restriction which prevents it fully pricing for risk. The CDB says that it seeks a higher risk premium in the interest rates that it charges in comparison with other banks. This is to compensate for the higher allowance it must make for bad debts, and the greater credit assessment and loan monitoring expenses associated with its loan portfolio. The CDB says that its loans are generally more expensive than trading bank loans, and its borrowing costs are equivalent to those of other banks. This is consistent with evidence that the CDB's net interest margin is significantly higher than that of the trading banks as shown in figure 11.3.

Figure 11.3: **Net interest margin for CDB and major private banks, 1984/85-1990/91**



Note: Net interest margin is interest income less interest expenses as a percentage of total average assets.
Data source: CDB; KPMG Peat Marwick, various issues; bank reports.

While the CDB says that its loans are generally more expensive than trading bank loans, interest rates charged by the CDB appear to be in the same range as normal bank overdraft rates, particularly for loans under $100 000. In fact, CDB was praised by the NSW Farmers Association for providing finance at about the same cost as trading banks. (DR Transcript, p. 85).

The CBA does not differentiate between customers in pricing its term loans which account for 78 per cent of its loan portfolio. While term loan customers have the choice between fixed and variable interest rates, they are charged the same risk premium. The CDB said that there were commercial reasons why it was appropriate to charge the same risk premium to most customers:

> ... it is virtually impossible to define graduations of risk in regard to small businesses of the type seeking access to the CDB. It is considered impractical to assess such businesses other than as potentially viable or non-viable (Sub. 60, attachment 5).

However, the CDB is considering introducing interest reductions for customers with a good track record after a term loan has been established for 2 or 3 years. It also varies the rates that it charges more credit-worthy customers for equipment finance. This classification of customers into broad risk bands for the purposes of loan pricing is consistent with the practices of other banks and lending institutions.

The CDB considers that it could not profitably extend its activities by lending to riskier customers at higher interest rates. Loan applicants unable to establish adequate prospects for success in order to qualify for a CDB loan are already, at best, only marginally viable. The CDB suggested that lending to such customers at higher interest rates to compensate for additional risks would only further increase the risk for both the business and the CDB. The CDB said:

> ... there is no way that we could really extend our activity, frankly, without approving loans that would otherwise be approved by another financier (DR Transcript, p. 334).

Although the CDB has been permitted to provide equity finance since December 1985, it has a small portfolio with currently $4.8 million invested in 11 companies. The CDB attributes its low level of equity investment to 'a steep learning curve for the CDB' and a lack of suitable investments. The CDB will only make an equity investment where the fixed interest commitment on debt could not be serviced, and where there is strong potential capital growth. This type of equity investment offers low returns in the early years, and strong capital growth is required in order to furnish adequate returns to the investor. These criteria appear to be relatively strict, and it does not appear likely that the CDB will become a significant supplier of equity capital. It does, however, provide some debt facilities with equity-like characteristics such as repayment holidays for one or two years until a business is generating a positive income stream.

Australian Industry Development Corporation Limited

The Australian Industry Development Corporation is a statutory authority established by the Commonwealth Government in 1970. In 1989, the bulk of its operational assets were transferred to a subsidiary, Australian Industry Development Limited (AIDC) which was then partially privatised through listing on the Australian Stock Exchange. The Corporation continues as the borrowing and treasury vehicle for the AIDC Group. The Commonwealth Government retains 81 per cent ownership of AIDC.

The charter of the Corporation directs it to provide debt and equity funding in a way which promotes efficiency and competition in Australian industry (see box 11.3). It requires that AIDC give priority to manufacturing, services and technology industries.

Box 11.3: **Legislative charter of the Australian Industry Development Corporation**

Australian Industry Development Corporation Act 1970 (as amended)

Section 6. 1(A) The Corporation shall -

(a) give priority in the performance of its functions to serving the financial needs of industries concerned with, or activities connected with or incidental to -

(i) the manufacture, assembly, construction, processing, treatment, transportation or distribution of goods;

(ii) the provision of services (including services in the tourist industry) of a kind that are or may become subject to competition in markets within or outside Australia from industries outside Australia; and

(iii) the development, marketing or use of new or improved technology including research leading to such development, marketing or use; and

(b) perform its functions in such a manner as will

(i) promote greater efficiency in and competitiveness of Australian industry;

(ii) facilitate reconstruction of Australian industry to achieve long-term viability and competitiveness; and

(iii) promote new industries or enterprises that have good growth prospects.

Section 8(2) The Corporation shall act in accordance with sound business principles in the performance of its functions.

The AIDC is a relatively small financial intermediary with a loan portfolio of $2 305 million as at May 1991 and equity investments of $257 million as at June 1991. It has two core business areas:

- development financing: consisting of a borrowing/treasury operation raising debt funds from domestic and overseas sources, and a lending operation providing loans to businesses and projects; and

- development investment: which undertakes equity investments.

The AIDC operates at the wholesale end of financial markets. In general, the minimum loan is around $3 million, and equity investments are typically over $5 million. Over half of AIDC's loan and investment funds are channelled into manufacturing, processing and resource development sectors. The majority of AIDC's lending is for medium-to-large scale project development in Australia. It also lends to medium size companies involved in primary, manufacturing and tourism sectors. In practice, the AIDC's charter does not appear to place any restrictions on the scope or nature of its lending and investment activities.

The AIDC appears to be a more ready source of medium to long-term debt than traditional lending institutions. Table 11.5 indicates that around two thirds of its financing was for periods of longer than three years.

Table 11.5: **AIDC loans outstanding by term as at May 1991**

Term	*Number*	*$ Millions*	*Per cent*
Less than 3 years	48	736	32
More than 3 years	111	1 569	68

Note: The 'less than 3 years' category includes loans which had original maturities exceeding three years.
Data source: AIDC, Sub. 46, p. 10.

The medium to large end of the commercial debt market is highly competitive. The AIDC faces significant competition from domestic, foreign and merchant banks, placing pressure on it to operate efficiently and effectively.

The AIDC is required to conduct its operations on a commercial basis, and appears to have lending and investment policies which are conservative. (This was not always the case, AIDC experienced some difficulties in its early years arising from inexperienced management and losses on foreign currency borrowings.) However, the AIDC differs from most financial intermediaries in that it provides both debt and equity, and generally it is more willing to consider propositions which involve long-terms and extensive cash flow analysis.

AIDC said that it was able to undertake specialised cash-flow lending and lending to medium to longer term business where strong skills are required. These abilities derive from its specialist skill base. The AIDC recruits its finance executives mainly from industry, with line management or specialist experience such as engineering, metallurgy, geology and science, together with qualifications in finance. While AIDC probably places more emphasis on recruiting staff with industry experience, it is not the only merchant bank to do so.

A separate equity capital business was established within AIDC in 1984. AIDC's equity investments include small technology-based companies, new industry ventures and medium sized privately-owned companies. As at June 1991, AIDC held investments in 40 listed and unlisted

businesses representing a total investment of $257 million, or around 10 per cent of total lending and investment. The AIDC said that it had difficulty identifying investments offering sufficient returns to satisfy the requirements of its own non-government shareholders who focussed on short-term performance. However, AIDC is currently expanding its investment activities by entering the funds management field. For example, it is one of the managers of the Development of Australia Fund sponsored by the AMP Society, the Australian Council of Trade Unions and the Australian Chamber of Manufacturers.

The AIDC frequently provides management advice to the companies in which it has invested. As at March 1991, AIDC executives held 32 positions on the boards of various investee companies.
Since 1983, the Commonwealth Government has guaranteed the monetary obligations of the AIDC under the AIDC Act (1970). In the context of a decision in 1989 to commercialise further the AIDC, it was announced that the guarantee would not apply to new obligations entered into after June 1994. The guarantee has since been extended for a further four years to June 1998.
The government guarantee contributes to the profitability of the AIDC since low cost funds are on-lent at commercial rates. The lifting of the government guarantee, now scheduled for 1998, is likely to increase progressively the AIDC's borrowing costs. This will be mitigated to the extent that an implicit government guarantee exists while the Government is the main shareholder. Nevertheless, AIDC is likely to find it more difficult to sustain its traditionally conservative stance providing relatively low risk capital. AIDC said that it was considering conversion to bank status. This would assist it in raising lower cost funds, thereby allowing it to remain at the conservative end of wholesale lending and investment markets.

Table 11.6: **Return on average assets for AIDC, merchant banks and major private banks, 1986-1991 (Per cent)**

Year	*AIDC Development Financinga*	*AIDC Total*	*Merchant Banks*	*Banks*
1986	n.a.	0.95	0.62	0.72
1987	0.39	0.93	0.91	0.68
1988	0.59	1.03	0.75	0.86
1989	0.66	1.03	0.46	0.79
1990b	0.58	0.74	0.32	0.52c
1991b	-0.57	-0.26	n.a.	0.35c

Notes: a After allocation of overhead costs, tax and provisions.
b Data for 1990 and 1991 is for AIDC Ltd.
c These figures do not include surpluses of superannuation schemes, which the CBA and Westpac recognised as prepayment of employer contributions and included as an abnormal item.
Data source: AIDC, Annual Report 1990, p. 14 & p. 24; AIDC, Annual Report 1991, p. 12.; KPMG Peat Marwick, various issues; bank reports.

AIDC's profitability has been in line with that of the merchant banking industry over the past five years as shown in table 11.6. For the year ended June 1991, AIDC reported a pre-tax loss of $31 million which it attributed to doubtful debts in its property-backed loan portfolio. These results are not unexpected given that 91 per cent of the AIDC's risk assets are in the wholesale lending field.

It is not clear that the return on AIDC's Development Financing operations are commensurate with the high risks involved in equity investment. However, some participants commented that the AIDC in many aspects had a better track record than other development capital firms as it concentrated on the larger end of the market.

Conclusions

The institutions considered in this section share the characteristics that they:

- have charters which direct their lending and investment to particular areas;
- operate without annual budgetary assistance from the government; and
- benefit from government guarantee of their liabilities and the perceived security of government ownership.

A review of government ownership of specialist financial intermediaries of this type needs to consider first whether they are filling a genuine market gap. From this point of view the two cases considered here, the CDB and the AIDC, have somewhat different objectives.

In the case of the CDB, it is clear that it does provide capital not available from other banks. Since deregulation, trading banks have been able to supply debt to riskier small business customers. As a consequence, the CDB says its new lending has been to even riskier enterprises.

It is less clear that the AIDC provides capital to businesses which would not otherwise be provided by the market. It operates at the low risk, wholesale end of the capital markets. With the exception of the provision of equity to mid size companies, these markets are highly competitive. The AIDC's charter is very broad, and may not in fact have a significant influence on its lending and investment policies.

In broad terms, with the increased scope for entry into financial markets following deregulation, there appears to be much less justification for attempting to direct capital into particular areas.

In principle, the Commission considers that the explicit guarantee should be removed, or a guarantee fee paid. The benefit afforded by the guarantee to the CDB is probably not large. The removal of AIDC's guarantee scheduled for 1998 will raise its cost of funds, with consequences for the business it can profitably engage in.

The Commission considers that the AIDC should continue to move in the direction of private ownership.

As regards the CDB, the Commission notes that it has developed a strong reputation and skills in assessing businesses in a specialised area. These skills have been developed over a long period and are not readily emulated. As a result, the CDB may be able to continue operating in its specialist market, even though this market does not appear attractive to other intermediaries. The CDB's charter directs it to provide finance to small businesses which would not otherwise receive capital. To the extent that the Australian Government may wish the CDB to provide services beyond the point at which they can be commercially provided, the CDB may not sit comfortably as a subsidiary of a partly privatised CBA.

11.4 Government development corporations and assistance programs

There are a number of government authorities which provide capital to Australian business on a basis which involves an acknowledged cost to the government. These include the Queensland Industry Development Corporation, the Rural Finance Corporation of Victoria, the Tasmanian Development Authority and the Rural Adjustment and Finance Corporation of Western Australia. Two government financial intermediaries which have ceased operations in the past three years are the Victorian Economic Development Committee, and the Western Australian Development Authority. The New South Wales Investment Corporation was privatised in January 1989. Separate from these authorities is the Enterprise Investments Trust, which is managed by BCR Venture Management. The Enterprise Investments Trust's beneficiary is the state-owned South Australian Government Financing Authority.

The Queensland Industry Development Corporation, Rural Finance Corporation, and Tasmanian Development Authority were established to foster economic activity in their respective states, often in regard to particular regions or activities, such as the rural sector. Their activities typically include commercial and concessional lending and provision of advisory services. Along with the Rural Adjustment and Finance Corporation of Western Australia these organisations play a significant role in the delivery of certain types of government assistance programs. They administer the Commonwealth Rural Adjustment Scheme in their respective States. They also administer specific State schemes for the rural sector, for example schemes for soil conservation, farm water supply, natural disaster relief and young farmer assistance. The Tasmanian Development Authority is the administrative body for lending activity under the Commonwealth State Housing Agreement and the Queensland Industry Development Corporation has a Small Business Debt Assistance Scheme.

Table 11.7: **State Government development corporations as at June 1991**

Name	*Return*[a] *1990/91*	*Loans outstanding*[b] *($ Millions) (Per cent)*	*Activities*
Queensland Industry Development	0.96	1 005	Provision of rural and commercial finance, administration of government assistance schemes, management of development capital fund.
Rural Financial Corporation	4.15c	502	Provision of rural finance, administration of government assistance schemes, and administration of the loan and investment portfolio of the Victorian Economic Development Corporation.
Tasmanian Development Authority	0.01[d]	293	Provision of finance, business advice, and administration of government assistance schemes.
Enterprise Investments Trust	7.2	19	Provision of venture capital and development finance to listed companies with a market capitalisation of less than $30 million.

Notes: a Return on total assets is operating profit after tax equivalent and abnormal items, before extraordinary items, divided by total assets at the end of the accounting period.
b After provisions for bad and doubtful debts.
c Before writing off bad debts incurred with the acquisition of the Victorian Economic Development Corporation portfolio.
d 1990 financial results, 1991 financial results were not available at the time of going to press. Operating profit before abnormal item of a government grant. Income tax or its equivalent was not paid.

Data source: Annual Reports.

The Enterprise Investments Trust has invested a total $19 million in 15 small listed South Australian companies.

The Tasmanian Development Authority has a lower profitability than private lending institutions, reflecting its concessional lending activities (see table 11.7). It has received irregular subsidies and does not pay any income tax. The Rural Financial Corporation does not pay dividends to the Victorian government and the dividends foregone are a form of subsidy.

The criteria outlined earlier suggest that these intermediaries should be subject to stringent scrutiny. Where both commercial and assistance activities were undertaken, the delineation between these should be clear. The history of the Victorian Economic Development Committee (see box 11.4) illustrates the problems which arise when such organisations are poorly run and lack accountability. In addition, an inquiry into the Queensland Industry Development Corporation conducted in early 1990 found 'many instances of abuse of government schemes' for the period under the previous

Box 11.4: **The Victorian Economic Development Corporation**

The Victorian Economic Development Corporation (VEDC) was established by the Victorian Government in 1981 to stimulate economic development, including investment in country regions. In 1984, it was restructured to provide loan and equity funds under a broad charter. The VEDC was to operate on a commercial basis and undertake higher risk usiness than the conventional financial institutions. It was seen as playing a central role in overcoming perceived eficiencies in markets for the supply of equity capital and longer term debt capital for small and medium sized firms, and specialised types of finance, such as export pre-shipment finance. The VEDC grew very rapidly. In the three years to June 1988, its loan base grew more than fourfold to $266 million, an average annual growth rate of 62 per cent. Equity investments totalled $38 million. But in its 1987/88 annual report, the VEDC revealed that it was technically insolvent, having incurred losses of $105 million for the year. The Victorian Government appointed Mr Fergus Ryan of Arthur Andersen & Co. to review its operations. The VEDC was effectively wound up in December 1988 with its liabilities and the majority of its assets being transferred to the Rural Finance Corporation of Victoria.

The Ryan Report found a lack of competence at senior levels in the VEDC. The Chairman, General Manager and, at certain periods, the Board were held to have lacked sufficient banking and lending experience. This was reflected in the absence of any Board policy on prudential limits and exposures. Loans made to VEDC's five largest clients between July 1986 and November 1988 totalled nearly twice the amount of the VEDC's capital base. In several cases, VEDC board members, who had been appointed as directors of client companies, did not adequately deal with the conflicts of interest that arose when the client experienced financial difficulties.

VEDC's overriding emphasis was on making new loans and investments. During the three years to June 1988, it approved over 80 per cent of all finance applications received. It lacked appropriate procedures to ensure the effective assessment, approval and monitoring of loans. There were an insufficient number of appropriately qualified people employed. Account managers spent the majority of their time seeking new lending and investment opportunities, with little regard for the monitoring of existing exposures. The Ryan Report notes that the senior management of VEDC did not take funding risks into consideration, simply assuming that further funds would always be available as it expanded its asset base. While the Treasurer did impose a borrowing limit for 1987/88 of $250 million, no such limits were imposed for any other years. The Ryan Report found that the Department of Management and Budget had implicitly encouraged the expansion of the VEDC's portfolio.

Data source: Report of Inquiry: Victorian Economic Development Corporation, 1988.

State government, and evidence of subsidisation of loans which should have been made at commercial interest rates. The inquiry called into question whether the Queensland Industry Development Corporation board had the skills and experience necessary for a large lending operation (Polichronis, 1990).

There are a number of other government-owned financial intermediaries that have not been considered in this report. However, these are mostly confined to providing finance to particular industry groups or to support specific industry activities. Several participants commented on the activities of the Export Finance Insurance Commission. This organisation will be covered in the Commission's forthcoming report on 'Export Enhancement'.

11.5 Concluding remarks

Australian capital markets have undergone a considerable transformation since the various government financial institutions were established. The extensive deregulatory changes of the 1980s have meant that there are few barriers to entry to any segment of the finance sector. The result is an extensive, sophisticated and competitive capital market containing a range of intermediaries providing a diverse range of services.

In this new environment, the Commission can see no need on economic grounds for government provision of financial services.

APPENDICES

A CONDUCT OF THE INQUIRY

B PREVIOUS REPORTS DEALING WITH AVAILABILITY OF CAPITAL TO SMALL BUSINESS

C ECONOMY-WIDE EFFECTS OF REDUCING TAX DISPARITIES FAVOURING OWNER OCCUPIERS

D FOREIGN CAPITAL SUPPLY

E RECENT CHANGES IN FINANCIAL REGULATION

F SIGNIFICANCE OF SMALL BUSINESS AND PREVIOUS STUDIES ABOUT THEIR FUNDING

G COMPANIES AND SECURITIES LAW

H EQUITY EXCHANGES IN AUSTRALIA AND OVERSEAS

I LONG-TERM SAVINGS INCENTIVES IN OTHER COUNTRIES

APPENDIX A: CONDUCT OF THE INQUIRY

Following the receipt of its terms of reference on 7 December 1990, the Commission advertised the commencement of the inquiry in the national press and despatched circulars to organisations operating in the financial sector, business and manufacturing representatives and others likely to have an interest in participating. Following informal meetings with a range of potential participants, an information paper was released in March 1991, outlining the main issues of the inquiry and seeking submissions. Sixty-one submissions were received during the first phase of the inquiry. The initial hearings were held in Sydney (26 March 1991), Melbourne (3 April 1991) and Canberra (8 to 10 April 1991). Four further circulars were dispatched during the inquiry to keep participants and interested parties in touch with its progress, and provide the opportunity to obtain submissions and transcripts of the public hearings.

The draft report was released in September 1991. Copies were sent to all participants, interested parties and relevant government bodies, and were freely available to members of the public. In all some 800 copies were distributed. Wide press coverage of the draft report increased awareness of the inquiry and the dissemination of its conclusions and recommendations. Thirty submissions commenting on the draft were received. Details of the hearings to discuss the draft report were advertised through the circular that accompanied the draft report and through the national press. The draft report hearings were held in Sydney on 21 October 1991, Melbourne on 24 October 1991 and Canberra on 28 to 30 October 1991.

The Commission obtained two consultancy reports for this inquiry. The first, by Roger Bowden, Toan Pham and Ah-Boon Sim from the University of NSW, Centre for Banking and Finance, addressed the supply of foreign capital to Australia. The second, by Ian Harper, National Australia Bank Chair of Monetary and Financial Economics, University of Melbourne, examined the effect of the growth on superannuation funds on the banking sector.

The Commission also benefited from surveys conducted specifically for this inquiry by the BIE, MTIA, COSBOA and Mr A Burns, the results of which were outlined in their submissions.

In all, one hundred submissions were received by the Commission, as listed below. Listed separately are the 30 additional visits and meetings conducted by the Commission with organisations and individuals prior to completion of the draft report.

List of participants

Company/Organisation	Hearing attended		Sub. No.
	Initial	Draft	
Abbott Tout Russel & Kennedy	S		13
Advent Management Group	M		18
AIDC Limited	C		46
Alford, J D			62
Altrack Limited		S	63
Anchor Capital Services Pty Ltd			40
ANZ Banking Group Limited			16
Archbishop of Hobart, The Most Rev. Eric D'Arcy			81
Association of Superannuation Funds of Australia Ltd			90
AUSTPAC Venture Capital Pty Ltd	S		59
Australian Association of Permanent Building Societies			1
Australian Bankers' Association	C	M	52, 74
Australian Catholic Social Welfare			83
Australian Electrical & Electronic Manufacturers' Association Ltd			38
Australian Investment Advisers Ltd		C	65
Australian Investment Managers' Group			61
Australian Merchant Bankers Association		C	25
Australian Mutual Provident Society	S		23
Australian Petroleum Exploration Association Limited			43, 82
Australian Small Business Association (NSW)	S		20
Australian Small Business Association (Vic)		M	47, 73
Australian Small Business Association Ltd (WA)			5
Australian Society of Certified Practising Accountants			35
Australian Stock Exchange Limited	C		24, 79
Barclays de Zoete Wedd Australia	C		7
Barker, M D			48
BLE Capital Ltd.	C	M	27, 75
Bureau of Industry Economics			57
Burns, A R			93
Business Council of Australia		C	78
Chase AMP Bank Limited	C		30
Commonwealth Bank of Australia	C		49,92

Company/Organisation	Hearing attended		Sub. No.
	Initial	Draft	
Commonwealth Development Bank of Australia	C	C	60, 71
Council of Australian Machine Tool and Robotics Manufacturers			21
Council of Small Business Organisation	C	C	29, 80
Currie, Carolyn V		C	76
Dewhirst, M			53, 72
Energy Research Centre, ANU			86
Ernst & Young (Accountants)			37
Freed, Professor G A			36
Galore Group Limited			97
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Retailer Financial Services Pty Ltd			42
Rothschild Australia Corporate Ltd			51
SBP State Council Incorporated	S		12
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Techway	S		10
VEX Limited			98
Victorian Government (Premier of Victoria)			54
WATERCO			2
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Western Australian Government Department of State Development			50
Westhens Investments Pty Ltd	C		9

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Organisations and companies consulted

The Reserve Bank
Bankers Trust Australia Ltd
Australian Stock Exchange Ltd
Australian Industry Development Corporation Ltd
BLE Capital Ltd
ANZ Bank
Australian Bankers Association
JB Were & Son
Life Insurance Federation of Australia
Council of Small Business of Australia Ltd
Australian Bankers Association
Australian Manufacturing Council
National Mutual Funds Management
National Australia Bank
Business Council Of Australia Secretariat
Department of Industry, Technology And Commerce
The Treasury
Commonwealth Bank
Macquarie Bank
Westpac
AMP Society
Commonwealth Development Bank
Insurance and Superannuation Commission
Professor Gerry Freed
Potter Warberg
Australian Accounting Research Foundation
Parnell Kerr Forster
Greenchip Pty Ltd
Price Waterhouse
Commonwealth Funds Management Limited

APPENDIX B: PREVIOUS REPORTS DEALING WITH AVAILABILITY OF CAPITAL TO SMALL BUSINESS

The study group on structural adjustment (The Crawford Report), 1979

The Crawford group was required to study the nature and extent of adjustment problems of Australian manufacturing industry in reacting to changes in the internal and external environment, and to advise on long-term policies to deal with these problems.

The access of small firms to capital was constrained, according to the Crawford group, by the preference among Australian institutions for debt provision, and the consequent lack of equity in small firms which such institutions required for security:

> ... many small businesses are unable to obtain debt finance because their equity base is inadequate. There are no institutions of significance in Australia which offer small firms a package of equity and debt (p. 7.51)

The recommendations adopted by the group in this regard included that consideration of institutional changes be implemented to increase the availability of equity and long-term debt for small to medium business. The means recommended were either:

> ...suitable modifications to the Commonwealth Development Bank (to provide equity) and/or by the establishment of a specialised private sector financing institution, with a possible government shareholding (p. 34).

The needs of small business in recognising opportunities which new technology might bring, were recommended to be addressed through an extension service provided by the CSIRO, on the model of services provided by departments of agriculture to farmers.

The Myer Committee report into technological change in Australia, 1980

The Myer Committee was established to examine technological change occurring in Australia, and to review the effectiveness of current government policies and programs in facilitating the introduction of new technology.

Regarding the provision of venture capital:

> The Committee recognises the need for enhancing employment opportunities by promoting the growth of innovative small and medium sized enterprises (p. 192).

The Committee commented on the difficulties faced by such companies with the financial system and institutions in operation at that time, particularly in regard to:

> an inability to ... evaluate the asset value of a highly technical innovation, and to a general insistence on physical assets against which to advance development funds...

and recommended a government sponsored private venture capital corporation

> ... to provide risk capital to individuals and to small and medium sized enterprises to facilitate the bringing to production and the marketing of promising inventions and innovations (p. 192).

It was recommended that this corporation be financed through government loan guarantees of private capital, and that it should take a minority stake in ventures, with involvement in management, and with close attention to finance and technical monitoring.

Committee of inquiry into the Australian financial system (The Campbell Report), 1981

The Committee was required to inquire into and report on the efficiency and importance of the financial system, and the regulation and control of that system.

The conclusions reached by the Campbell Committee regarding small business were that the cost and availability of both debt and equity capital were greater for small business.

This was seen to reflect economies of scale in financial transactions, and the greater risk associated with small business, both of failure and of lack of liquidity. In addition, the limited size and sophistication of Australian capital markets, and the generally risk averse nature of Australian investors was seen to accentuate these problems, as were the distortions caused by government controls and regulations.

Lack of management skills was found to contribute greatly to the problems of small business. Where management was interested in attracting outside equity, it was found to be deficient in the ability to present a proposal in an attractive manner.

The Committee, however, found that:

> ... these disabilities, for the most part, do not reflect in-built deficiencies in the allocative role of the financial system (p. 699).

The general recommendations for 'freeing up' of financial markets were seen to be sufficient to address most of these problems. The committee therefore recommended no specific measures relating to small business on economic grounds.

The Committee noted, however, that there might be social or other reasons for fostering small business. If this was considered appropriate, it was recommended that the most cost-effective approach be undertaken. To this end, the Committee recommended:

> Encouragement should be given to the establishment of private Small Business Investment Companies (whose primary role would be to invest in the equity of small business, including new ventures and innovations) by making subscriptions to their shares eligible for personal tax relief (p. 700).

Developing high technology enterprise for Australia (The Espie Report), 1983

The Australian Academy of Technological Sciences conducted a survey of the state of Australian high technology industries, and attempting to identify any impediments to the establishment and operation of firms in those industries.

Its major findings were that Australia lacked an environment which enabled small, start-up firms to grow, particularly in their ability to attract capital. These firms were identified in international studies as the primary source of technological innovation.

The recommendations of the group were that a program be implemented, involving tax incentives, to encourage new investment in targeted areas, and under the control of a licensing board.

> The mechanisms prime objective is to encourage the formation and rapid growth of high technology enterprises. It has been designed to allow [eligible businesses] to make market oriented individual investment decisions on commercial risk/return criteria while at the same time providing the management support to eligible businesses considered essential during their formation and early growth phases (p. 64).

The Licensing Board was to be an independent body, responsible for the supervision of businesses within the program, and for allocating tax deductible capital approval to approved businesses

The review group on the Australian financial system (The Martin Report), 1983

The review group was formed to report on possible changes which might be made in the framework of official regulation and control of the financial system. The recommendations of the Campbell report of 1981 were to be considered in the light of the significant changes which had taken place in the Australian financial system in the interim, partly as a result of that report.

The group found that interest rate controls on trading bank loans limited the availability of bank loans to small business.

> The imposition of a maximum interest rate, however, limits banks' ability to differentiate loan propositions according to their riskiness. Accordingly, some riskier but viable propositions would be excluded...because banks do not have scope to charge an interest rate which includes an adequate risk premium (p. 309).

The group therefore recommended that such restrictions on interest rates be abolished.

The availability of equity finance was constrained, in the eyes of the group, by reluctance to cede control by proprietors of small businesses. The prohibition on advertising shares in unlisted companies was seen to be an impediment to raising equity capital. It was noted however, that there were no restrictions on the setting up of alternative stock exchanges and over the counter markets, and the group felt that this, if undertaken by the private sector, was the best solution to the problem. No change was therefore recommended.

Review of venture capital in Australia and the MIC program, Bureau of Industry Economics, 1987

The BIE report reviewed the developments in the venture capital market and the MIC program, with the task of assessing the effectiveness of the MIC program in addressing previously identified deficiencies in the venture capital market.

The BIE concluded that:

> ... the size of any venture capital gap which existed has probably declined substantially in the past few years as a result of financial deregulation, the emergence of MIC and non-MIC venture capital companies, and stronger competition among institutions supplying risk capital. A much wider choice of venture capital is now available to young and growing business (p.xviii).

These changes, despite a continuing 'gap' in the market, particularly for young companies in high technology industries, were thought to have so increased the efficiency and flexibility of capital markets that the tax incentive for MIC companies was no longer warranted.

The report concluded that the program should be terminated in 1988.

The Beddall House of Representatives standing committee report on industry, science and technology, 1990

The Standing Committee was required to report on the unique problems faced by small businesses as a result of government policies in the areas of regulation, taxation, superannuation, training, marketing, access to information/advice and industrial relations.

The Committee concluded that small business is disadvantaged in a broad range of areas, both by factors inherent to their size, and by the effects of government policies, both intended and unintended. In particular it noted that:

> A significant obstacle to successful growth and development of small business has been access to finance under appropriate terms and conditions (p. xlviii).

These obstacles included inadequate information, a lack of attention to the needs of small businesses seeking relatively small amounts of venture capital, and too great a reliance on collateral by banks and other providers of debt finance.

To address these problems, the Committee recommended that the Industry Commission examine:

- the lending practices of the banking sector in a deregulated financial environment, particularly in the provision of relatively small amounts;
- measures which might be undertaken to improve the access of small business to start-up and working capital on reasonable terms and;
- the effects of recent changes in taxation provisions concerning capital formation by small business and the extension of dividend imputation to life and superannuation funds (p. li).

Regarding the flow of information between providers seekers of finance, the Committee observed that:

> Small business people frequently lack knowledge of the appropriate sources of development finance and working capital and may be unaware of the advantages of different methods of raising capital (p. li).

and recommended that the Department of Industry, Technology and Commerce review present means of providing information about sources and forms of finance available to small business.

Apart from the problems outlined above, the Committee recognised that:

> A major factor inhibiting the success of a small business is the lack of managerial skills of the owner/manager. The lack of managerial ability in many cases is the result of, or is compounded by a lack of business education or experience (p. liii).

and recommended that the Commonwealth Department of Employment, Education and Training, in association with state bodies, conduct business management courses for potential small business owner/managers.

The Report of The House of Representatives Standing Committee on Finance and Public Administration (The Martin Inquiry), November 1991

The Committee was required to report on:

- the importance and profitability of the banking industry,
- the effectiveness of competition and any remaining barriers to entry and,
- the benefits of competition to different sectors of the economy.

In regard to availability of capital for small business, the Committee reached the following conclusions.

- Product innovation has been of benefit to all business, but small businesses require assistance in financial management and planning in order to make full use of the services offered. The Committee recommended that banks should develop more materials and advisory services for small business and noted that this would also benefit banks. (p. 248).

- Credit availability was found to have improved initially after deregulation. Tight monetary policy (in part made necessary because of banks' mistakes) was considered to be the main reason for the present apparent low availability of credit (p. 250).

- Credit assessment was found to have been inadequate after deregulation. This was largely attributed to the race for market share. The Committee considered that recent efforts by banks to tighten their credit assessment policies were appropriate, but advised that overreaction was a possibility. They also recommended that clients be fully advised of changes to the assessment of their credit-worthiness (p. 257).

- Business interest margins were found to be higher for small business than for large. This was due to the perception of higher risk in lending to small business, and the ability of banks to price for risk after deregulation. The Committee noted that small business as a whole was a higher risk category than large business. They recommended however, that more attention be paid to risk profiles of particular areas of small business, and to the fact that security for loans was invariably required, in deciding risk premiums for particular loans (p. 261).

- Disclosure of margins, fees and charges was found to be insufficient. The Committee recommended that the margins above the indicator rates be disclosed before and for the duration of an agreement. They further recommended that the Standards Australia comparative interest rate incorporating all charges and interest be made public to enable comparison between alternative loans (p. 263-4).

- Means of redress or settlement of disputes were found to be inadequate. The Committee were particularly critical of the banks' ability to block legal access to redress through abuse of the court system. They recommended that the Australian Law Reform Commission and the Senate Committee on Legal and Constitutional Affairs examine the matter (p. 265).

Report of the Task Force on the Commercialisation of Research (The Block Report), November 1991

The task force was appointed by the Minister for Science and Technology to:

> ...analyse Australia's performance in commercialising research, the impediments to commercialisation and methods of improving the commercialising of research (p. 60).

The Task Force noted venture capital companies and institutional investors, in particular superannuation funds, as having an important role to play in the provision of finance to start-up and developing companies. It identified several impediments to these institutions investing a 'proper' proportion of their funds in this way. These included their short time horizons and preference for highly liquid or foreign stocks. However, they also recognised that:

> ... the lack of a successful venture capital track record in Australia had also been a significant reason why venture capital companies were found to be currently unable to find funds to invest in long-term or start-up projects (p. 36).

The charge of short-termism was levelled particularly at the superannuation funds. The argument advanced by the Task Force was that the management of superannuation funds, as the beneficiaries of a government sponsored diversion of national savings, have a duty to consider the national interest when undertaking investments. The funds were considered to have too conservative an investment philosophy, caused in part by regulation, but also by reluctance to:

> ...undertake the people intensive, time-consuming process of searching for, assessing, making and monitoring direct investments as well as realising these illiquid investments in small businesses (p. 37).

The Task force recommended that superannuation funds, particularly those with more than 10 per cent of their assets invested off-shore, be encouraged or required to undertake a proportion of their investments in venture or development capital. The task force further recommended that regulatory impediments, such as the 'prudent man' rule be relaxed to encourage consideration of the national interest in making investment decisions.

The task force recommended the introduction of uniform legislation for Limited Liability Partnerships, with participation limited to professional investors. This limitation was seen to be necessary because:

> There may be some concern that limited partnerships allow investors to have limited liability without requiring increased disclosure (p. 40).

Professional investors were not considered to need as high a degree of protection as individuals.

Capital gains tax was seen to be an impediment to the efficient allocation of capital, in that:

> [investors are] ... encouraged to remain in a lower performing business in order to reduce their capital gains tax liability (p. 41).

The Task Force therefore recommended that capital gains tax should be deferred on the sale of technology oriented business. Such a 'roll-over' would have to approved by the IR&D board, and the purpose of the sale would need to be to re-invest the funds in another such business.

APPENDIX C: ECONOMY-WIDE EFFECTS OF REDUCING TAX DISPARITIES FAVOURING OWNER OCCUPIERS

C1 Introduction

Much recent comment on taxation policy has been directed to the favourable treatment of owner-occupied housing. Taxation arrangements for housing have drawn criticism for many years, especially on equity grounds, as favouring owner-occupiers over tenants. More recently they have achieved a new prominence in public discussion, as the tax reforms of the 1980s - including company tax imputation, and the taxation of capital gains on assets other than private income taxpayers' principal residences - have removed many other disparities in the taxation of property income.

Besides the long-standing equity concerns, several other objections are now raised more often against the favourable tax treatment of home ownership. Some of these objections are based on considerations of economic efficiency. Disparities in assistance between different kinds of asset, the argument runs, are liable to lead to resource misallocation. With an uneven playing field for investment, resources are allocated to housing which could earn a higher social rate of return in other activities.

Other objections are based on considerations of macroeconomic policy. Two main goals of recent macroeconomic policy have been to reduce Australia's current account deficit, and to increase the level of domestic business investment. These goals are difficult to pursue simultaneously, since increases in investment, unless accompanied by increases in domestic saving, lead to higher capital inflow from abroad, and larger current account deficits. Taxation arrangements favourable to housing, so it is argued, aggravate this dilemma, by directing scarce domestic saving towards housing, so that less is available to fund business investment. Changes in these arrangements, to the extent that they redirected domestic saving away from housing, would make possible a reduction in the current account deficit, or an increase in business investment, or both together.

These arguments against the current tax treatment of owner-occupied housing relate not to its direct effects on the housing sector itself, but to indirect effects on other sectors which compete with housing for funds, or on macroeconomic conditions. Assessment of these arguments requires an economy-wide analysis. This appendix aims to provide such an analysis, using a multisectoral model of the Australian economy developed for the purpose.

The focus of the analysis is on the effects of reducing disparities in tax treatment between housing and other investments. The objective is to find whether these disparities do have the effects which arguments against the current arrangements impute to them. The means chosen is to use the model to simulate a small reduction in the disparities.

Because of differences between the tax base of the existing tax system and the economic concept of income, no simple change in tax rates or tax exemptions is available which would reduce disparities between housing and other equity investment while otherwise leaving effective tax rates unaffected. Estimation of the effects of practical tax policy options for reducing disparities between housing and non-housing investment remains an outstanding task for research.

The analysis addresses the resource-allocation and macroeconomic arguments for reducing current disparities in favour of housing, but not the equity arguments. Neither does it address the social benefits which are sometimes claimed to arise from promoting a high level of home ownership, or the administrative difficulties inherent in many policy options for increasing taxation of owner-occupied housing. Thus the appendix does not provide a complete assessment of the cases for and against reform of existing arrangements, but only an assessment of some arguments which have been brought forward in favour of reform. Finally, not every aspect of these arguments is assessed; in particular, no judgement is make in this appendix on whether reducing the current account deficit is an appropriate policy objective.

The following sections of this paper, sections C2 to C4, provide background on the public policy debate, a description of current Australian direct taxation arrangements, especially as they create disparities between housing and other investment options, and a summary of the available policy analysis. Section C5 introduces the model, and section C6 describes and reports a simulation of the effects of reducing those disparities. Section C7 discusses the sensitivity of model results to assumptions about behavioural parameters, while section C8 concludes.

C2 Background

Long-standing arguments for the removal of the tax concessions in favour of owner occupied housing have been based on ideas of equity and fairness. Representative of these views is Groenewegen (1984):

> This favourable treatment of home owners ... is, however, in conflict with the objective of fairness, not only because of the different treatment of rent paying as against home-owning taxpayers, but also because home ownership is an important factor in the assessment of economic capacity to pay taxes, the principle which underlies the personal income tax in Australia.

Similarly, when the state taxation of imputed rent was taken over by the Federal government in 1915 the taxation of imputed rent was justified on grounds of fairness (Reece 1975).

A major aspect of this **concern** can be found in discussions of horizontal and vertical equity. It is the concept of horizontal equity, the equal treatment of people on the same income, that is most offended by the tax concessions to housing. Those taxpayers who receive a large proportion of their income from their principal residence (whether by rent or capital gains) pay less tax than those who, say, receive their entire income as a wage. It is, however, less clear-cut that there is vertical inequity as a result of the tax concessions. Flood and Yates (1987 p. 89) argue that:

> Although more of the benefits ... go to high income earners, the effects of the tax exemptions are mildly progressive and do help to redistribute income somewhat. However, this benefit arises only because of the large number of asset-rich income-poor households who are outright owners of their dwelling.

The fairness argument further manifests itself in the discussion over tenure discrimination; the preferred treatment of owner occupiers and public housing tenants over those in the private rental market (see Flood and Yates 1987, and Gruen 1988).

The current arrangements are also sometimes argued to be against the interests of some owner-occupiers. This arises because interest expenses are not tax deductible, and increase with inflation. For this reason Dixon and Toms (1987) suggested that the taxation of imputed rent would leave many home buyers better off, especially 'home buyers in the earlier period of repaying their mortgages.'

The tax concessions provided to housing have often been seen as distorting investment decisions. For example, the National Farmers Federation, in a submission on microeconomic reform to the Economic Planning Advisory Council, said that:

> The exclusion of the family home from capital gains tax and other exemptions applying to the family home substantially redirect investment into that area.
>
> These incentives to uneconomic or low real productivity investment are one contributor to high aggregate investment demand, inflow of foreign capital, high interest rates and an uncompetitive exchange rate (EPAC, 1990).

The Asprey Report (1975 p. 426) accepted that taxing the capital gains on housing would have the effect that 'the tendency for resources to be diverted into overlarge houses would be corrected.' This echoed an earlier statement by the Treasury that (1974 p. 10):

> to exempt owner-occupied housing altogether from a realised capital gains tax would also have adverse economic consequences because investment in this form vis-…-vis other assets would be favoured. Owner-occupiers already enjoy a more favoured tax treatment than others having the same `capacity to pay', because of the exclusion of imputed rent from the personal income tax base; consequently a further increase in the relative attractiveness of this form of investment, especially for the higher taxable income groups, is not warranted.

In a similar vein the tax concessions are seen as producing an 'inefficient tax system'; inefficient because it distorts decision making. For example, consider the comments of Head (1991):

> The special status of owner-occupied housing undoubtedly represents one of the most intractable constraints in the development of an efficient tax system. The exemption for capital gains on the principal residence provides a further incidence of preferential treatment.

There have been frequent calls for the ending of such concessions. The Priorities Review Staff (1975) suggested a system for taxing imputed rent, and the Deputy Chairman of the ANZ bank, Mr Bailey, in a 1989-90 budget submission recommended that the capital gains tax be extended to owner-occupied housing. Despite such calls and suggestions, there has not been an extensive public debate. This does not mean that the issue has been unnoticed. For example, the following passage appeared recently in the *Sydney Morning Herald* (Cleary, 1991):

> If you sell your home and make a capital gain, it is tax free. It's one of the last tax breaks...
>
> Rather than being a windfall to home owners, it has caused Australians to over-invest in housing, making homes more expensive and diverting investment away from productive ends.

This idea of 'productive ends' is the basis for the popular argument that investment in non-tradable goods (such as housing) is at the expense of investment in tradable goods and thereby contributes to Australia's current account difficulties. This view has been expressed, for example, by the then Minister for Finance, Senator Walsh (1988):

> Instead of enhancing ... our housing stock our top priority should be building up our import-replacing and export-producing industries.
>
> We do not help ourselves achieve this if we continually commit our scarce savings to the extension and the upgrading of our housing stock.

Similarly, Camtrom, in its submission to the Commission, recommended that a capital gains tax on owner-occupied housing be introduced 'principally as a signal to the community to focus on investments in income producing, wealth creating and employment creating activities.'

The view that Australia has invested unduly in housing has, however, been challenged. For example, the submission by the AMP, which, though recognising the 'incentives to invest in housing', concluded that 'We do not believe that the provision of capital to industry is in any way adversely affected by incentives to invest in housing.' The AMP submission bases its view largely on international comparisons of housing investment. Similarly, the Governor of the Reserve Bank, Mr Fraser (1991), noted the assistance given to home buyers. But on comparing Australian investment in housing as a proportion of gross domestic product and examining other indicators such as the number of persons per dwelling and owner-occupancy rates, Mr Fraser concluded that it did not appear that Australia devoted 'an excessively large proportion of our resources to housing.'

An argument raised against taxing the imputed rents and capital gains of owner-occupied housing is that there would be considerable administrative difficulties. Administrative difficulty has been one of the major arguments against taxing imputed rents (Asprey Report 1975, Albon 1990), and was one reason why the taxation of imputed rents in Australia by the Federal government was stopped in 1923 (Reece 1975). Similarly, the Asprey Report (1975) in arguing against taxing the capital gains on the principal residence argued there would be administrative difficulties, both for the taxpayer and for the tax office.

The Asprey Report (1975) noted other arguments against a capital gains tax on the principal residence, such as that any gain is likely to be illusory, as the taxpayer will usually buy a house of similar quality which has also appreciated, and that it would be an impediment to labour force mobility.

Supporters of the tax concessions also argue that there are social benefits from home ownership (Asprey Report 1975). The AMP submission put it that '... home ownership is the aspiration of most Australians; any changes to the incentives which reduce its attractiveness or availability would need to be carefully considered in the light of community attitudes and the ownership culture.' This view of the social benefits of home ownership has been challenged by writers such as Flood and Yates (1987) and Gruen (1988). For example, Gruen argues that:

> ... there is no reason why government should favour any tenure as such - i.e. they each have their inherent advantages (such as security for owner-occupation and public tenure versus flexibility and substantially lower transaction costs for private tenure).

This paper does not pursue the equity and social arguments further. To that extent the conclusions given are based on a narrow set of criteria.

C3 Current arrangements

C3.1 Tax treatment of housing

Imputed rent is the amount of rent that would be received by an owner-occupier if the house was rented out. For administrative reasons, however, any proposal to tax imputed rent would probably use a simplified method of calculation based on house values. Net rent would be taxed, rather than gross rent, so that expenses such as interest, insurance and depreciation would be deductible.

Between 1915 and 1923 imputed rents were taxed by the Federal government. This was done by including in the assessable income of the taxpayer five per cent of the capital value of the taxpayers residence. A number of amendments were considered by Parliament in 1923, but, largely because of a desire to promote home ownership, it was decided to end the scheme (Reece 1975). Currently imputed rents are not taxed, though there is no express provision excluding such taxation. It is sometimes argued that local government rates perform an equivalent function (de Leeuw and Ozanne 1981), but economic analysis of housing usually treats rates as simply a fee for service. Flood and Yates (1987), however, calculated that only 32 per cent of local government rates were returned to households in the form of services.

The taxation of capital gains is covered primarily by Part IIIA of the Income Tax Assessment Act (ITAA), introduced in 1985. Part IIIA still provides a favourable treatment of capital gains over other forms of property income, one advantage being that it is on real gains only (Groenewegen 1985). The effective tax on capital gains is further reduced because gains are taxed only upon realisation, not accrual, and because of a number of roll-over provisions which cause certain transfers not to be treated as realisations.

A major feature of Part IIIA is that the sole or principal residence of a person is not subject to tax. There are a number of provisions designed to restrain abuse of this exemption. If the residence is for some of the time rented out or used for business purposes, then capital gains upon realisation are taxed on a pro-rata basis. There are also curtilage provisions, which place limits on the extent to which the surrounding land and structures are treated as part of the dwelling.

C3.2 Is the tax treatment of housing concessionary?

That the non-taxation of imputed rent is often not seen as a tax concession is unsurprising, as the treatment accorded imputed rent is similar to that provided other household assets, such as cars and white goods, and other forms of non-monetary income. On the other hand, it is easier to see the exemption of the principal residence from capital gains tax as a tax concession, as it is explicitly exempted in the ITAA, and is treated unlike other personal assets of considerable value.

In deciding whether or not the current tax treatment of housing represents a tax concession, it is necessary to select a tax benchmark. A tax benchmark provides a basis for comparison between the current treatment and a non-concessionary treatment. Two common and well recognised benchmarks are provided by a 'comprehensive income tax' and by an 'expenditure tax'.

With a comprehensive income tax all income, however derived, is taxed. The definition of income usually associated with this system is the Haig-Simons definition, where income in each period t is equal to the value of consumption in the period (C_t) plus the change in wealth over the period ($W_t - W_{t-1}$).

So income in period t,

$$Y_t = C_t + W_t - W_{t-1}$$

While it seems unnatural to consider living at home as producing income, it is easier to see it as consumption, which is a component of income according to the Haig-Simons definition. While imputed rent falls under the consumption component of income, capital gains fall under the change-in-wealth component.

If a comprehensive income tax is used as the benchmark, then not taxing imputed rent and capital gains is a tax concession.

An expenditure tax, like an income tax, is a direct tax, in that it can be designed so as to tax individuals or households according to their personal circumstances or capacity to pay. It also resembles an income tax in its mode of collection. It differs from an income tax in its tax base, which includes only the part of income which is spent on consumer goods and services, and excludes the part which is saved. Purchases of residential property are counted as saving, and therefore not liable to tax (Albon et al. 1986).

If an expenditure tax is the benchmark system then the definition would suggest that in this case also not taxing imputed rents is a concession. In practice, however, an expenditure tax would be administered by taxing some expenditures, including housing, on a prepaid basis. So when a house is purchased the purchase would be treated as an expenditure, and in future years imputed rent, capital gains and interest payments ignored (Albon 1990). In this case then the current treatment of owner-occupied housing is nearly correct (Albon 1986). On the other hand, when using an expenditure tax benchmark the tax treatment of other investments is incorrect and disadvantageous. The cost of deviations from a benchmark are often referred to as tax expenditures. In Australia the Treasury (1990) estimates tax expenditures annually. The benchmark used draws on the idea of comprehensive income tax with the Haig-Simons definition of income as a starting point (Treasury 1990), but depends to a large extent on what are considered the main elements of Australia's current tax system. As a result the Treasury benchmark is a more accurate reflection of the advantage accorded investments in owner-occupied housing over other investments. On the question of imputed rents the Treasury notes that the 'untaxed imputed rent from owner-occupied housing (and the non-deductibility of expenses incurred in earning that income) give rise to a tax expenditure ...' The Treasury also classifies the principal residence exemption from the capital gains tax as a tax expenditure.

Perhaps the best means of assessing the tax advantages that owner-occupied housing receives is to compare it with rental housing, the income from which is taxed similarly to other investments. This is so even in comparison to companies, as the imputation system means that taxes on company income are largely determined by personal income tax rates.

Currently rent earned from rental housing is fully taxable, with deductions allowed for rates and other costs, interest expenses, and depreciation. In addition, real capital gains are taxed. As rents are likely to exceed operating costs owner-occupiers receive a benefit by not being taxed on their rental income. Owner-occupiers lose out, however, by not being able to claim interest expenses as a deduction, especially in periods of high inflation. Looked at this way, equity investments in owner-occupied housing are advantaged in comparison to other equity-financed investments, but debt-financed investment in owner-occupied housing is disadvantaged in comparison to other debt-financed investments.

Whichever benchmark is chosen, it remains true that overall housing is advantaged relative to other investments. Reductions in the tax disparity in favour of housing could be achieved either by raising taxes on owner-occupied housing, bringing the tax system as a whole closer to the income tax benchmark, or by lowering taxes on other investments, bringing the system closer to an expenditure tax.

C3.3 Disparities in taxation between housing and other investment

The size of the tax differential is the additional tax that would be collected from owner-occupied housing if it were taxed roughly on a par with other investments. Most authors and studies have chosen to see this difference as the size of the tax concession or expenditure, but, as noted, it need not be seen this way.

The Treasury tax expenditure statement makes no estimate of the revenue that would result from taxing imputed rents. The most detailed recent estimate is provided by Flood and Yates (1987 p. 42), who for 1984-85 estimated that there would be a first-round increase in revenue of $3240m. Albon (1986) provides a similar estimate of $3000m difference.

An estimate of the revenue gain from removing the principal residence exemption from the capital gains tax is difficult to obtain. Revenue collections would depend heavily on the extent of roll-over provisions allowed and the size of any threshold that was specified. The Treasury tax expenditures statement makes no estimate of the revenue forgone. Flood and Yates (1987) estimated that a tax on the real gains of owner-occupiers would raise $930m, and $460m from landlords.[1] Some indication can also be obtained from capital gains tax collections from landlords, shown in table C1. Despite the fall in collections in 1990-91 associated with a depressed residential property market, the future trend in revenue collected is likely to be upward. This is because the capital gains tax applies only to assets acquired after 19 September 1985, so that most real estate sales immediately after the new arrangements were likely to be tax-exempt; but the share of tax-exempt property in total sales will fall over time.

Overseas experience and estimates may also provide some guide. For example, in Canada the tax expenditure incurred in 1980 from not taxing imputed rents was Can$5bn, and from the principle residence exemption Can$3.5bn (OECD 1984). However this would also reflect aspects of Canada's capital gains tax: no inflation adjustment and a threshold on lifetime capital gains (OECD 1988).

1 This calculation includes the present value of future taxes on the unrealised capital gains made in 1984-85.

Table C1: **Capital gains and capital gains tax of individuals from real estate**

Income year	*tax year*	*capital gains*	*capital gains tax*
1985-86	1986-87	na	na
1986-87	1987-88	2	na
1987-88	1988-89	52	18
1988-89	1989-90	362	125
1989-90	1990-91	264	81
1990-91	1991-92	na	na

Data source: Treasury (1988) - (1991)

Another indication of the likely importance of taxing capital gains is to look at the capital gains of housing in recent decades. The National Housing Strategy (1991) notes that:

> Capital gains are a significant proportion of the investment return generated by housing...
>
> The past few decades have seen significant real increases in the price of houses in many parts of Australia. Between 1960 and 1989, median house prices increased in Sydney and Melbourne by 3.5 per cent and 3.3 per cent per annum in average real terms. These increases are attributable to a considerable extent to the premium attached to the location of land (for example, access to the inner city or water views) rather than to the value of the house itself.
>
> Real house price increases and capital gains to individual house owners, however, are not assured. In particular, real increases are highly dependent on the year of purchase and the year of resale.

C4 International comparison of tax treatment of housing

C4.1 The taxation of housing

An OECD (1990a) study of the tax systems of 17 OECD countries found that 11 of them (Belgium, Canada, Denmark, Finland, Germany, Greece, Italy, Netherlands, Norway, Spain and Sweden) included imputed rent in taxable income. But the OECD also found that 'In reality ... property tends to be undervalued, deductions are generous and the rates used do not reflect market rates of return on property.' In addition a number of countries that do not tax imputed income allow a number of cost items as deductions. For example, both the US and the UK allow interest expenses as a deduction, but do not tax imputed rents.[2]

[2] At the time of the study Australia also allowed limited deductibility of mortgage interest.

In contrast to the case of imputed rent the exemption of the principal residence from capital gains tax, in one form or another, is common internationally. The OECD (1988) concluded that the 'Exemption or substantial relief for gains arising on disposal of the principal private residence appears to be almost universal; Switzerland is the exception.' Table C2 provides a summary of the treatment for 10 OECD countries that include capital gains into their income tax.

Table C2: **Capital gains treatment of private residences**

Country	*Principal private residence*	*Other private residence*
Australia	Generally exempt	Taxable
Canada	Exempt	Taxable
Finland	Generally exempt	Taxable
France	Exempt	Generally taxable
Japan	First ¥30 million ($178 021) exempt	Taxable
Luxembourg	Generally exempt	Generally taxable
Norway	Exempt subject to conditions	Exempt subject to conditions
Spain	Exempt subject to re-purchase of new residence	Taxable
Sweden	Taxable on excess over re-purchase of new residence	Taxable
United States	Taxable on excess over re-purchase of new residence	Taxable

Data source: OECD (1988)

The United States also excludes capital gains tax on the first $125 000 for people over 55.

C4.2 Investment in housing

It could be expected that favourable tax regimes for housing would lead to differences in total housing stocks between countries. A simple basis for comparing Australian investment in housing with that in other developed countries is the ratio of investment in residential housing to gross fixed capital formation and to gross domestic product. Table C3 shows the results of such a comparison for a number of OECD countries, for the period 1976-1988.

Of the 22 OECD countries for which data was available, Australia ranked 15th in the amount of total investment allocated to residential housing and 10th when housing investment is expressed as a percentage of gross domestic product. Given the world-wide assistance to housing, which in some cases is greater than in Australia, this is unsurprising. However, a concentration on tax treatment alone provides little explanation of the country rankings. For example, in the United Kingdom as

well as imputed rents and capital gains being untaxed mortgage repayments are tax deductible, while Japan differs from other developed countries by providing little assistance to housing (Hagemann, Jones and Montador 1987). Table C3, however, shows the United Kingdom diverting less resources to residential housing than Japan. It should be noted that differences in measurement techniques between countries can result in considerable changes in ranking (Gruen 1988 p. 22). Explanations other than the tax treatment for the differences between countries can include cultural and geographic (land availability) factors, population growth and differences in wealth.

Table C3: **International comparison of investment in residential housing Average of 1976-88***

Country	*ratio of investment in residential housing to gross fixed capital formation*	*ratio of investment residential housing to gross domestic product*
Australia	22.3	5.4
New Zealand	19.4	4.5
Canada	27.9	6.1
USA	26.2	4.8
Japan	20.9	6.2
France	30.6	6.5
FRG	29.1	6.0
Turkey	15.6	3.2
UK	20.8	3.7

* Financial year for Australia and New Zealand, Calendar year for the rest. For Turkey the average is for 1976-1986.
Data source: OECD (1990b)

C5 A framework for economy-wide analysis

A suitable technique for analysis of the economy-wide effects of policies which discriminate between sectors of the economy is general equilibrium modelling. This technique simulates the transmission of shocks to one sector (say ownership of dwellings), through linkages to other sectors and through economy-wide constraints, to all parts of the economy.

The first generation of applied general equilibrium models (surveyed in Shoven and Whalley, 1984) concentrated on the development of a satisfactory representation of the flow of physical goods and services within the economy, and typically provided little detail on financial flows. The full representation of physical flows allowed a thorough treatment of indirect taxes, such as sales taxes or import tariffs, but the absence of detail on financial flows made it impossible to provide more than a very summary treatment of direct taxes. The ORANI model, the Commission's usual vehicle for economy-wide analysis, is such a model.

One direction in more recent modelling work has been to provide a more detailed treatment of direct taxation, and to incorporate financial flows. Applied models incorporating a range of financial assets include models of the U.S. economy by Slemrod (1983), Galper, Lucke and Toder (1988), and Goulder and Eichengreen (1989). In Australia, a stylised prototype model which incorporates financial assets, though directed towards monetary rather than tax policy analysis, is Adams' (1988) Monetarised Miniature ORANI.

For use in the present inquiry, a version of the ORANI model of the Australian economy, ORANI-TYCOON, has been developed to handle the particular issues raised. While simple in structure compared to other models incorporating financial assets, it provides a framework for analysis of the efficiency and macroeconomic policy considerations which have been most prominent in commentary on housing tax concessions.

C5.1 Theoretical structure

ORANI-TYCOON recognizes four classes of economic agents: Australian households, enterprises, and governments, and foreign residents. Households not only sell labour and purchase goods and services, but also buy financial assets: equity in Australian industries, bonds issued by Australian enterprises and governments, and claims on property overseas. Enterprises issue equity and bonds to fund investment in productive assets: fixed capital, working capital, and land. Governments issue bonds to finance budget deficits. Foreign investors buy Australian equities and bonds.

The ORANI-TYCOON theoretical structure allows households, enterprises, and foreign investors to react to changes in relative rates of return on different assets. Households divide this wealth between ownership of dwellings, non-dwelling equity, domestic debt securities, and foreign assets, treating them as substitutable to some degree, but not a as perfect substitutes. In demand for non-dwelling equity they substitute between equities offered by different industries. In demand for domestic debt, they distinguish between enterprise and government debt.

Enterprises supply both equity and debt securities, in proportions depending on relative costs of equity and debt finance. Foreign investor demand for Australian equity and debt securities depends on relative rates of return on Australian and overseas assets.

Households supply labour (or enjoy leisure), spend part of their income on consumption goods, and save the remainder. Consumption of goods and services and enjoyment of leisure together make up *full consumption.* Households allocate their resources between full consumption and saving according to the overall rate of return on their savings, and between consumption of goods and services and leisure according to the consumer price level and the wage rate.

The ORANI-TYCOON direct tax system does not account separately for company income tax, personal income tax, and withholding tax on income earned by foreign investors, but instead summarises all these stages of taxation on any income flow in a single effective tax rate. Effective tax rates may vary between Australian households and foreign investors, between labour and property income, and between equity income, income from loans, and income derived by Australian households from overseas assets. Tax rates on income from loans may differ between loans to enterprise and government, and rates on equity income may vary according to the industry from which the income derives. In particular, they may vary between housing and non-housing equity. The system also takes account of tax credits which foreign governments may allow to foreign investors on tax paid in Australia on Australian-sourced income.

The effective tax rates just described are marginal tax rates. Since the Australian income tax system is progressive, the average rate of tax on household income is lower than the marginal rate. The model approximates this progressive structure by a combination of a flat rate income tax and a lump-sum income subsidy to households.

Like the original ORANI model, ORANI-TYCOON is not a forecasting model, *but comparative static.* That is, it is not designed to represent the growth and development of the economy through time, but to compare different possible states of the economy at some future time. Thus simulation results represent only the effects of the policy change under examination, and exclude all other possible influences on the state of the economy. Furthermore, the results do not in general represent the instantaneous effects of the policy change, but changes after some adjustment period.

ORANI-TYCOON is designed to be capable of representing the responses of the economy over the *medium run.* By the medium run is meant a period of adjustment long enough for policy changes to affect stocks of physical capital and household ownership of financial assets, but not so long that

changes in levels of investment and saving feed through fully into capital stocks and household wealth. The degree of adjustment of stocks to flows depends on the length of the adjustment period, which is specified as a parameter in the database of the model. Besides adjusting with a lag to changes in the level of saving, household wealth also adjusts immediately to changes in financial asset prices.

In its current state of development, ORANI-TYCOON is available only as a linearised model; that is, the available solution procedure provides a linear approximation to the true solution. The approximation is good for simulations involving only small changes in tax rates, but serious errors may arise when tax rate changes are large. Accordingly this appendix reports only small-change simulation results. Meaningful simulation of large changes in tax rates would require the development of a large-change solution procedure.

In the context of the present study, the most obvious theoretical limitations of the model are the lack of a large-change solution procedure, the restriction to a single time period, and the simple treatment of financial asset demand, which does not incorporate modern portfolio theory (discussed in Appendix D). These limitations do not appear to undermine the simulation results presented below. These results can be explained in terms of economic mechanisms which would be expected to be incorporated in rather than contradicted by more complex analysis.

C5.2 Database

The ORANI-TYCOON database uses data from the standard ORANI database for 1980-81, and additional data on financial and physical assets and property income taxation. This additional data is calibrated to achieve consistency with the standard ORANI data, while reflecting as far as possible the asset and property income structure observed in more recent years. It also contains a range of new behavioural parameters describing supply and demand for financial assets. To allow attention to be focussed on housing and the financial flows the ORANI-TYCOON database is highly aggregated, with only five industries. These are:

1. Primary products and simply transformed manufactures
2. Elaborately transformed manufactures
3. Ownership of dwellings
4. Other services not elsewhere classified (nec)
5. Other services (general government)

Industry 1 includes the agricultural and mining industries, food products industries, and basic metals industries. Industry 2 contains the manufacturing industries not included in industry 1. Industry 3 includes owner-occupied housing, rental housing and public housing. Industry 5 includes those industries largely provided by general government, such as health, education, and public administration. Industry 4 contains the remaining service industries.

Table C4 shows the ownership structure of the four largely privately owned industries. Where information was not otherwise available the shares were based on the relevant income flows.

Other issues of concern in the database are the behavioural parameters chosen and the tax rates on the different investments.

Table C4: **Sources of funds, by industry** (Per cent of total industry funds)

	Domestic		*Overseas*	
Industry	*equity*	*debt*	*equity*	*debt*
Primary products and simple manufactures	60	24	11	6
Elaborate manufactures	64	17	17	2
Ownership of dwellings	82	18	0	0
Services nec	41	42	10	6

Tables C5 and C6 show the effective income tax rates implicit in the database. Following King and Fullerton (1984), these rates measure the wedge between real earnings of physical assets used in production, and real disposable income from the funds used to finance those assets. The wedge is measured as a percentage of returns on physical assets. Real earnings of physical assets are measured net of depreciation on fixed capital, but include capital gains on residential land. The effective rate of return depends upon rates for both corporate tax and personal income tax (for domestic residents) or withholding tax (for foreign investors). For personal income tax, the tax rates used are marginal rates; as explained in section C5.1, the effects on household disposable income and government revenue of differences between marginal and average tax rates in the progressive personal income tax system are accounted for elsewhere in the model.

Table C5: **Effective tax rates on equity income, by industry and investor** (Per cent)

Industry	*Domestic investors*	*Overseas investors*
Primary products and simple manufactures	38	43
Elaborate manufactures	38	41
Ownership of dwellings	4	na
Services nec	37	46

Table C5 shows that the tax rates implicit in the database for equity income accruing to domestic households are lower for housing than for other industries. This reflects both the non-taxation of imputed rent and the exclusion of owner-occupiers from capital gains tax. For other industries, the effective rate of tax on equity is close to the statutory corporate tax rate, but this is largely coincidental; with company tax imputation in operation, the effective tax rate depends mainly on personal income tax rates.

For equity income earned by foreign investors, the effective tax rates shown in table C5 take account of Australian corporate and withholding taxes, but not of tax levied in foreign investors' home countries, or of any tax credit allowed overseas for tax paid in Australia. Thus they indicate the effect of changes in pre-tax income from foreign-funded investment on Australian government tax revenue, but not the effect on disposable income received by foreigner investors.

As explained in section C5.1, the effect of tax credits received overseas on rates of return required by foreign investors from funds committed to Australia is accounted for elsewhere in the model. Foreign investors are assumed to receive full credit overseas for tax paid in Australia, but can take advantage of this credit only to the extent that they incur foreign tax liabilities against which the credit can be offset.

Taking all Australian sources of income together, total effective tax credits received overseas as entered in the database are equivalent to 20 per cent of total Australia tax paid. This reflects three factors. First, the large fraction of foreign earnings reinvested in Australia does not earn foreign tax credits. Second, credits in excess of tax liabilities overseas are assumed not to benefit taxpayers. Lastly, overseas residents in countries with company tax imputation systems similar to Australia's, and investing through foreign corporations, gain no advantage from the credit. To the extent to which effective tax credits are available overseas, reductions in Australian tax rates, with pre-tax rates of return held fixed, lead to increases in foreign governments' tax revenue, rather than foreign investors' disposable income.

Table C6: **Effective tax rates on real interest income, by borrower and lender** (Per cent)

Borrower	*Domestic lenders*	*Foreign lenders*
Enterprises (all industries)	23	-28
General government	63	1

The effective rate of tax on real income from lending to enterprises is lower than that on equity for two reasons. First, a greater fraction of interest income than of equity income is received by lower income households. Second, in the presence of inflation, a negative gearing effect reduces effective tax rates. The Australian income tax system treats the component of nominal interest payments which compensates lenders for inflation as a tax deduction for corporate borrowers, and taxable income for lenders. Since the corporate tax rate is higher on average than the average marginal personal tax rate of household sector lenders, the tax deduction received by companies for this component of interest expense exceeds the tax paid by lenders. This acts to reduce the effective tax rate. No such effect is generated by the real interest component of interest payments. The corporate tax deduction received by companies for this component of interest expense is offset by tax on income generated by the business; but for the inflation-compensating component, there is no such offset.

For income earned by households from lending to general government, inflation increases the effective tax rate, since no tax deduction applies to the borrower. For income earned by foreigners from lending to Australian enterprises, the effective Australian tax rate is negative, since tax deductions claimable by corporate borrowers exceed withholding tax payable by foreign investors.

The behavioural parameters specify the responsiveness of economic agents to changes in relative prices, for example, the change in private savings in response to a rise in the return from saving. In ORANI discussion of the behavioural parameters has usually focussed on the export and import price elasticities of demand. ORANI-TYCOON contains, however, a large number of additional behavioural parameters, some of the more important of which are given in table C7.

Table C7: **Key behavioural parameters**

Parameter	*Value*
Household	
Derivative of household savings ratio with respect to rate of return	1.0
Semi-elasticity of substitution between housing equity, non-housing equity, bonds and property overseas	50.0
Semi-elasticity of substitution between equity in different industries	100.0
Semi-elasticity of substitution between enterprise and government debt	500.0
Foreign investors	
Semi-elasticity of demand by foreigners for enterprise debt	2000.0
Semi-elasticity of demand by foreigners for government debt	2000.0
Semi-elasticity of demand by foreigners for equity	100.0
Corporations	
Semi-elasticity of transformation between debt and equity	50.0

A semi-elasticity of demand by foreigners for equity by of 100.0 means that a 1 percentage point rise in post-tax returns, say from 6 to 7, increases demand 100 per cent. Empirical estimates of these parameters were generally either not available or controversial. The latter is particularly so for the responsiveness of savings to increases in returns.

Table C8: **Interest elasticity of savings: estimates from U.S. studies**

Study	*Year*	*Estimate*
Boskin	1978	0.40
Howrey & Hymans	1978	...
Gylfason	1981	0.30
Friend and Hasbrouck*	1983	≤ 0
\Hendershott and Peak	1985	...
Makin	1986	0.10
Montgomery	1986	...
Makin	1987	0.39
Baum	1988	...
Makin	1989	0.04

...: insignificant
*: results ranged from statistically insignificant to negative

The controversy over the interest elasticity of saving has been largely a U.S. phenomenon, related to the debate in that country over the 1980s on the efficiency costs of taxes on property income. The general assumption that interest rates had little or no effect on saving was challenged by Boskin (1978), who found a statistically and economically significant positive effect. Howrey and Hymans (1978) however confirmed the earlier view, finding no statistically significant effect. As table C8 shows, studies since Boskin and Howrey and Hymans have continued to produce divergent results.

Estimates for saving elasticities outside the U.S. are comparatively rare; in particular, many Australian studies of saving and consumption do not allow for direct interest rate effects. This may perhaps by taken as a tacit judgement that these effects of interest rate changes on saving are not strong. The parameter setting of 1.0 for the saving ratio derivative in the database means that a one percentage point increase in average after-tax returns would raise the ratio of household savings to household consumption by one point. With an average after-tax rate of return in the database of approximately 5.0, a parameter value of 1.0 is equivalent to an interest elasticity of savings of 0.28.

There have been a number of studies of the extent of financial substitutability by the household sector. Estimates by Aivazian, Callen, Krinsky and Kwan (1986) for the U.S. suggest a far higher degree of substitutability between corporate and government debt than between debt and equity, or equity and mortgages. For Australia, Adams (1988) sets the own-interest semi-elasticity for government bonds higher than the semi-elasticities for equity in each industry. The semi-elasticities chosen reflect this, with a lower degree of substitution between equity and debt, and different types of equity, than between loans to government and enterprises. The implied elasticities are generally somewhat above those given by Aivazian et al. and Adams.

The choice between debt and equity at an enterprise level has also been the subject of a number of empirical studies. Marsh (1982), in reviewing previous studies found some evidence that suggested that the cost of debt and equity were important determinants of corporate levels of debt and equity. Many other factors, however, such as corporate size are also important factors, and the relative importance of the cost of debt and equity is uncertain. The selected parameter setting represents a conservative view of the sensitivity of the funding choice to costs of funds.

In the case of foreign investors no empirical estimates were available. The semi-elasticities chosen reflect a belief that the responsiveness of foreign debt is significantly greater than that of foreign equity. With an average rate of return of 4 per cent the elasticities implied are 4 for equity and 80 for debt.

Implicit in the database is an own-price elasticity of demand for ownership of dwellings of -0.88, so that as price facing consumers increases 1 per cent the demand for housing falls 0.88 per cent. This compares with estimates of -0.43 by Selvanathan (1988), -0.72 by Yates (1981), and between -0.84 and -1.26 by Chung and Powell (1987). Thus the elasticity implicit in the database lies within the range of econometric estimates, though towards the high end of the range.

C5.3 Economic environment

The economic environment adopted for these simulations is designed to enable the model to represent the responses of the economy over an adjustment period of ten years. Over this period, wage rates are assumed to adjust to maintain a fixed relation between labour supply and demand; and enterprises adjust capital stocks to equate the return to investment with the cost of capital. Government adjusts income tax rates so as to maintain a fixed fiscal position.

With an adjustment period of ten years, the capital stock adjustment coefficients are set so that the capital stock in each industry increases by about one half of a percentage point for each percentage point increase in the level of investment. Household wealth increases by 0.14 per cent for each one per cent increase in the level of household saving.

C6 The central-case simulation

This section describes and reports a simulation with ORANI-TYCOON of the medium-run effects of reducing the disparity in effective tax rates between ownership of dwellings and other economic activities. The simulation represents an increase in the effective tax rate on equity in housing, together with a decrease in effective tax rates on equity in other industries. These tax rate changes are such as to reduce by one tenth the disparity between the effective tax rate on housing equity and the average effective tax rate for equity in other industries, with no first-round change in total tax on equity income. The decrease in tax rates on non-housing equity applies equally to Australian households and foreign investors; for housing equity, the database assumes no foreign ownership.

The choice of scenario was conditioned by both technical and economic considerations. Technical considerations described in section C5 dictated that the scenario should involve only small changes in tax rates. Economically, the scenario involves a revenue-neutral change in the taxation of property income, which does not move the tax system as a whole closer to either the income tax or expenditure tax benchmark. This allows the effects of reducing disparities in income taxation across different forms of economic activity to be considered in isolation from the effects of increasing or reducing the overall tax burden on property income.

For housing itself, the tax change represents an increase in the average effective tax rate on housing equity income, from 3.7 to 6.1 per cent. This increase in the rate of tax could lead either to a rise in the rate of return before tax, or a fall in the rate of return after tax. Because the model assumes that investors are sensitive to changes in rates of return, most of the burden of the higher tax rate is borne by higher rates of return before tax. This leads in turn to a rise of 0.7 per cent in the price of housing services, and a fall of 0.6 per cent in residential land prices.

At the same time, the tax reduction on non-housing equity reduces gaps between pre-tax and after-tax rate of return on non-housing equity by about one tenth of a percentage point, with the greater part of the tax reductions being taken up by falls in pre-tax rates.

With housing services becoming more expensive relative to other consumer goods and services, households adjust their consumption patterns, so that consumption of housing services falls by 0.4 per cent, and consumption of other services increases. Thus there is a reallocation of resources away from housing towards non-housing industries, which expand by an average of 0.06 per cent.

Since housing is a capital-intensive activity, the shift in the structure of production away from housing leads to a small overall contraction, of 0.03 per cent, in the aggregate domestic stock of productive assets. With labour usage almost unchanged (because of the low labour supply elasticity and constant unemployment rate assumed in the model), total factor usage contracts by 0.01 per cent. Despite this, aggregate output expands slightly, by 0.01 per cent. This divergence between aggregate factor usage and aggregate output is attributable to improvements in the efficiency of resource allocation, induced by the reduction in disparities in tax rates between housing and non-housing equity (for technical reasons related to calibration of the database, it is likely that these efficiency gains have been somewhat underestimated in the model).

In these results, the benefits of improved allocative efficiency appear not so much as increases in output as decreases in capital requirements. The reduction in domestic usage of physical assets allows a reduction in net foreign liabilities. Thus, while domestic factor usage contracts by 0.01 per cent, national supply of labour and capital expands slightly, by 0.01 per cent. This expansion in national factor supply is attributable entirely to an expansion of 0.03 per cent in real national supply of capital.

With national factor supply expanding and domestic factor usage contracting, the share of Australian residents in domestic factor supply is obviously increasing. An increase is therefore to be expected in the share of Australian residents in aggregate domestic income (net domestic product). The share does increase in the simulation, by 0.04 per cent, slightly more than would be expected from the change in the factor supply share alone. This is because of an overall fall in the cost of foreign capital.

The fall in the cost of foreign capital is the net effect of two opposing causes. On the one hand, because the supply of foreign equity capital is assumed to be less than infinitely responsive to rates of return, the expansion in foreign equity financing involves small increases in rates of return on equity earned by foreigners. In other words, part of the cut in tax on non-housing equity is absorbed as a benefit to foreign investors. On the other hand, the cut in tax rates on non-housing equity leads to a change in the composition of foreign liabilities, away from debt towards equity. Because the national cost of foreign debt exceeds that of foreign equity, this compositional change tends to reduce the national cost of foreign capital. The reason why foreign debt carries a higher national cost than foreign equity is that in the presence of inflation, as explained in section C5 above, the effective rate of tax on foreign debt is negative, so that borrowing from foreigners is subsidised; whereas foreign equity financing is taxed. In this simulation, the benefits of the change in the composition of foreign liabilities exceed the costs of the rise in after-tax rates of return on foreign equity capital.

Overall, real national income expands by 0.04 per cent, or $150 million. Real national consumption however grows by only 0.01 per cent, or $40 million. The reason is that consumer prices increase relative to other prices, since housing is a purely consumer commodity. Thus the national consumption price index rises by 0.09 per cent. On the other hand saving, considered as a means of generating future (national) income, becomes more cost-effective, because of improved efficiency in the allocation of capital. Taking account of this in a national income deflator leads to a value for the deflator of only 0.07 per cent. With the shares of consumption expenditure and saving assumed in the model to be almost fixed, the effect is that real consumption expands only slightly, while real saving expands more considerably. The expansion in real saving leads over time to the expansion in the national supply of finance, referred to above.

The greater cost-effectiveness of saving in generating future income is not directly beneficial to investing households, since it arises from saving being redirected into investments which pay higher rates of tax, but not necessarily higher after-tax rates of return. But it is indirectly beneficial, since it allows government to reduce tax rates generally, without any deterioration in fiscal balance. In the simulation the reallocation of resources within the simulation period generate fiscal gains which are redistributed to households through a general reduction in all rates of income tax, of 0.4 per cent. Further benefits are accruing at the simulation horizon from the changed composition of new investment.

As noted above, the aggregate capital stock contracts slightly as a result of the tax changes, and this implies a decline in aggregate investment, estimated at 0.2 per cent at the simulation horizon. Associated with the decline in investment is a reduction in the surplus on capital account or equivalently, a reduction in the current account deficit. The income deficit component of the current account also falls, but less rapidly, so that at the simulation horizon a movement towards surplus is observed in the trade deficit, equivalent to 0.07 per cent of gross domestic product. This is achieved through growth in exports, of 0.4 per cent. To achieve this export growth requires wage restraint, so that money wage rates remain almost unchanged. With consumer prices rising, this implies a fall in real pre-tax wage rates. But this is almost entirely offset by the general income tax cut described above, so that the real after-tax wage rate is virtually unchanged.

The growth in exports is reflected in the activity level of the primary products and simply transformed manufactures industry, which rises by 0.3 per cent. The change in the composition of household consumption away from housing towards other goods and services induces an increase in output of elaborately transformed manufactures of 0.1 per cent. Household consumption of services also increases, but is more than offset by a decline in residential construction, so that overall output of ‘other’ services declines slightly, by 0.04 per cent.

Table C9 shows the effects on selected macroeconomic and industry variables of the changes in tax rates on equity income.

Overall these results support the proposition that a reduction in disparities in tax rates currently favouring owner-occupied housing would generate significant efficiency gains. Benefits would arise from reallocating capital away from housing, where it earns a low yield but provides tax benefits to its owners at the expense of the rest of the community, towards activities where the rate of return is higher. In the particular disparity reduction scenario simulated, benefits also arise through a reduction in disparities between foreign equity and debt. Overall, the marginal social benefit from reducing the disparity amounts to about 30 cents in every dollar by which the disparity is reduced.

Table C9: **Effect on selected macroeconomic and industry results of reducing disparities in taxation between housing and other equity investments** (Percentage changes)

Variable	*percentage change*
Macroeconomic	
real national income	0.04
real gdp	0.01
real consumption	0.01
real investment	-0.17
export volume	0.36
import volume	0.07
current account deficit *	-0.07
gdp price index	0.06
Industry output	
primary products and simple manufactures	0.26
elaborate manufactures	0.11
ownership of dwellings	-0.39
services nec	-0.05

Note: * absolute change in ratio to gdp.

Table C10 shows the effect on the amount and type of financial capital invested in the industries (excluding general government services). The results are shown as the dollar change resulting from an increase in tax on housing of $1, and consequent reduction in other equity taxes by the same amount. The results show a shift in capital to other industries from the ownership of dwellings. Household property overseas also falls by $1. Overall the effect of the tax increase is to reduce household wealth by $18, which consists of a decline in housing wealth of $25, offset by an increase in the value of other assets of $6.

The reductions in tax on non-housing equity lead to higher post-tax returns, together with lower pre-tax returns. Thus households substitute non-housing equity for other forms of investment, while firms substitute equity for debt funding. The exception is ownership of dwellings, where debt is now relatively more attractive. Effective tax rates are higher on government than enterprise debt, so that the general tax cuts increase the returns on government debt relative to enterprise debt. The result is that the composition of household debt changes in favour of government debt (up $4) and away from enterprise debt (down $10). The switch to government debt reduces the supply of household debt to enterprises enough that, despite the reduced enterprise demand for debt, the pre-tax rate of return on enterprise debt increases (by 0.003 percentage points). Overseas investment falls as it does not benefit from the initial fall in equity tax rates, and as a result becomes less attractive compared to investments in non-housing equity and government debt.

Table C10: **Effect of a $1 increase in tax on housing on the use and supply of debt and equity** (Dollar values of changes)

Variable	*debt*	*equity*	*total*
Housing			
household	3	-27	-24
foreign	0	0	0
Non-housing enterprises*			
household	-13	16	3
foreign	-4	5	1
total	-17	21	4
Total foreign liabilities	-10	5	-5

* excluding services (general government).

As with households the reduced taxes on foreign equity returns lowers the cost of equity to the firm whilst at the same time allowing post-tax returns to foreigners to increase, with a resultant rise in the supply of foreign equity, . In the case of debt, the increased household supply of debt to government has lowered the pre-tax return. For households this is offset by the general reduction in taxes that occurs, but as Australia levies little tax on government debt income accruing to foreigners this is of little benefit to overseas investors, who reduce their government debt holdings

considerably. In the case of enterprise debt the reduced corporate rates reduce the tax advantages of foreign debt, so that the after-tax rate of return falls. Foreigners are sensitive to the rate of return on debt and reduce supply considerably, with enterprise debt declining $4 and government debt by $6. Overall, foreign liabilities are reduced by $5.

In conclusion, a few remarks are offered on what inferences can be drawn from the simulation. First, the simulation results do support the view that improvements in allocative efficiency can be achieved by reducing disparities in tax treatment between housing and other equity investment. Furthermore, while inflation persists, measures to reduce disparities are likely to have nationally beneficial effects on the composition of Australia's external liabilities, replacing subsidised debt by tax-paying equity. The simulation suggests that in sum the net social benefits are considerable, amounting to net social benefits of about 30 cents in every dollar of tax burden transferred to housing from other equity investment.

The results obtained relate to a small reduction rather than complete elimination of disparities between housing and non-housing equity. For a complete elimination of the disparities, the balance of social costs and benefits might well be significantly different. In particular, the allocative efficiency benefits would be likely to decline in importance as the disparities were progressively reduced. Thus the benefit ratio of 30 cents in the dollar, referred to above, cannot be applied to the total dollar value of the disparities to obtain an estimate of the effects of the benefits of eliminating the disparities. That calculation would be likely to overestimate the total national benefits. Furthermore, any practical policy proposal would be likely to involve not only a reduction in disparities between housing and other equity, but some increase or decrease in the average rate of tax on equity as a whole. The effects of such changes in the average equity income tax rate are not included in these simulations.

The numerical results depend on the settings of behavioural parameters in the model, and these are subject to great uncertainty. Much remains unknown about the responsiveness of household and foreigners to changes in rates of return, and the flexibility of the composition of enterprise finance between debt and equity. The results presented above illustrate possible outcomes under one set of reasonable assumptions about these parameters, but other assumptions might reasonably be made, which would lead to numerically different outcomes. The sensitivity of the results to these parameter choices is discussed further in the next section. Furthermore, the results are also affected by simplifying assumptions imposed in the theoretical structure of the model. On the other hand, the economic mechanisms leading to the results reflect processes which could confidently be expected to operate in reality; so that the qualitative insights which can be derived from the simulation are more robust than the quantitative results.

C7 The sensitivity of the results to behavioural parameter settings

As noted the setting of the behavioural parameters in the model is open to considerable uncertainty. To provide some indication of the extent to which uncertainty in the behavioural parameters leads to uncertainty in model results, this section presents results from several simulations conducted using alternative parameter settings.

Four groups of parameters were selected for sensitivity analysis: those relating to household saving (simulations s1 and s2), enterprise supply of financial assets (e1 and e2), household demand for financial assets (h1 and h2), and demand by foreign investors for Australian financial assets (f1 and f2). For each group of parameters, two simulations were conducted, one (s1, e1, h1, f1) in which lower parameter settings were used, and one (s2, e2, h2, f2) in which higher settings were used. The values of the affected parameters in these simulations are shown in table C11.

Selected results from the sensitivity analysis simulations are shown in table C12. Overall the results are qualitatively consistent with those of the base case. In all cases real national income, real household consumption and the after-tax wage rate increases when higher parameter settings are used. The parameters to which the results are most sensitive are those for enterprise asset supply and household asset demand.

Table C11: **Parameter settings in sensitivity analysis simulations (semi-elasticities)**

Parameter	*base case*	*s1*	*s2*	*e1*	*e2*	*h1*	*h2*	*f1*	*f2*
Savings									
ss	1.0	0.5	2.0	1.0	1.0	1.0	1.0	1.0	1.0
Enterprise									
se	50	50	50	20	100	50	50	50	50
Household									
sh1	50	50	50	50	50	20	100	50	50
sh2	100	100	100	100	100	50	200	100	100
sh3	500	500	500	500	500	200	1000	500	500
Foreigners									
sf1	100	100	100	100	100	100	100	50	200
sf2	2000	2000	2000	2000	2000	2000	2000	1000	5000

ss: supply of savings (derivative).

se: transformation by enterprise between debt and equity.

sh1: substitution by households between housing equity, non-housing equity, bonds, and property overseas.

sh2: substitution by households between equity in different non-housing industries.

sh3: substitution by households between enterprise and government debt.

sf1: demand by foreigners for equity, by industry.

sf2: demand by foreigners for debt (enterprise and government).

In the case of e1 the degree of substitution by firms between debt and equity is reduced. As in the base case, the reduced taxes on non-housing equity increases the immediate post-tax return thereby increasing the supply of equity to enterprises. As substitution between debt and equity is more limited, the effect is more to lower the pre-tax rate of return on equity than to reduce the enterprise demand for debt. The overall effect is to increase the supply of capital to non-housing enterprises, rather than altering its composition. The larger non-housing capital stock is at the expense of consumption and also acts to reduce the pre-tax return from non-land assets (which increased in all the other simulations). In addition the increased investment requires further foreign capital inflow, which has the effect of increasing the current account deficit as payments to foreigners increase.

Table C12**: Sensitivity of selected results to changes in behavioural parameters**
(percentage changes)

Parameter	*base case*	*s1*	*s2*	*e1*	*e2*	*h1*	*h2*	*f1*	*f2*
real national income	0.04	0.04	0.04	0.01	0.09	0.02	0.05	0.03	0.05
real consumption	0.01	0.02	0.01	0.00	0.03	0.01	0.02	0.02	0.03
average after-tax wage rate	0.14	0.14	0.13	0.12	0.17	0.11	0.16	0.12	0.17
ratio of current account deficit to gdp (absolute change)	-0.032	-0.031	-0.034	0.016	-0.095	-0.016	-0.041	-0.028	-0.036
ratio of foreign liabilities to gdp	-1.20	-1.18	-1.26	0.11	-2.94	-0.54	-1.77	-1.47	-1.37
capital stock*	0.17	0.17	0.16	0.49	-0.27	0.14	0.19	0.16	0.18
housing consumption	-0.39	-0.38	-0.39	-0.40	-0.36	-0.23	-0.49	-0.39	-0.38
return on non-land national property	0.23	0.23	0.23	-0.06	0.61	0.13	0.29	0.20	0.26

Efficiency gains are in part to be expected from the switching of investment from housing to non-housing where the pre-tax rate of returns are greater. By reducing the sesspp parameter (h1), household investment becomes more fixed, and as tax rates are adjusted the change in the composition of investment is less marked than in the base case. This is shown by the fact that the decline in output of housing is less in h1 than all the other simulations. In contrast in h2 household responsiveness is greater, and the potential welfare gains are exploited to a greater extent than in the base case.

For s1 and s2, and f1 and f2, the results are similar to the base case. The most obvious difference between s1 and s2 is that the increased responsiveness of savings in s2 causes a reallocation by households away from consumption and into savings (illustrated by the greater decline in foreign liabilities in s2). Overall, however, the results are insensitive to the elasticity of savings, and the controversy over the interest elasticity of savings discussed previously above has little impact on the validity of the results.

C8 Conclusions

Current Australian taxation arrangements favour owner-occupied housing substantially over other forms of investment. The disparity in favour of housing may be regarded as under-taxation of housing or as over-taxation of other investments, depending on whether a comprehensive income tax or an expenditure tax is used as a benchmark.

Reducing disparities between housing and other investment would encourage the use of capital in activities where it earns rewards to its owners more by producing social benefits and less by creating private tax advantages. To the extent that the disparities were reduced by lowering rates of tax on non-housing equity income, and over the period in which the income tax system continues to distorted by inflation, a further benefit could be achieved by encouraging a substitution of tax-paying foreign equity for subsidised foreign debt.

The economic benefits of reducing the disparities would depend on the approach taken to reducing them, and on the responsiveness of households, enterprises, and foreign investors to changes in rates of return. Under the central-case simulation reported above, the net benefits at the margin are estimated at 30 cents per dollar of tax transferred from non-housing to housing investment.

Under the central-case assumptions, the reallocation of investment funds away from housing would be accompanied both by an increase in the level of funds employed in business, and an overall reduction in foreign liabilities. The increase in funds employed by business would arise not only from a fall in the cost of equity capital, but also from a shift in household demand away from housing toward business output.

In summary, the modelling exercise indicates that current disparities in taxation between housing and non-housing equity do have the effects attributed to them in the resource-allocation and macroeconomic arguments which have been brought forward in favour of reducing those disparities. Whether those arguments are valid in every respect, how much weight they should carry in comparison with other arguments, and the magnitude of the benefits which could be achieved with practical tax reform proposals, are questions not addressed in this appendix, but requiring consideration in assessing the cases for and against reform.

APPENDIX D: FOREIGN CAPITAL SUPPLY[1]

D1 Introduction

Most investment by Australian business is funded domestically. But the supply of domestic funds is limited, while foreign funds, relative to the size of Australian capital markets, are practically unlimited. Thus the availability of capital to Australian business depends heavily on access to foreign funds. Some hold that, with the establishment of highly integrated international capital markets, Australia has access to unlimited foreign funds at world market rates. Others hold that, as we accumulate external liabilities, further funds will be supplied only at increasingly high cost. Clearly views on this question, which forms the subject of this appendix, will affect views on possible domestic impediments to the supply of capital.

If foreign capital is freely available at constant cost, then arrangements which discourage domestic saving, or encourage the direction of funds to non-business uses, have no effect on the availability of capital to business. The removal of these arrangements would not make more capital available to business, but would merely reduce the call by business on foreign funds. The only changes which would increase the availability of capital to business would be those which reduce the cost of funds from abroad to business users, for a given return to the foreign supplier. If, on the other hand, the supply of funds from overseas is limited, then policy action to encourage domestic saving, or discourage non-business uses, can make more funds available to business at lower cost.

Views on the foreign supply question affect not only views on the effectiveness of changes in domestic arrangements in increasing the supply of funds to business, but also views on their direct implications for national welfare. Insofar as the level of foreign liabilities affects the cost of capital, the national cost of capital tends to exceed the private cost. An enterprise borrowing from overseas not only incurs a cost itself, but also imposes a cost on all other Australian borrowers, by worsening the terms on which they can obtain loans. In deciding how much or whether to borrow, it may be expected to take account of the first, private, cost, but not of the second, external, cost. If this external cost is significant, then the pursuit of private interest might lead to a level of foreign debt higher than socially desirable. Measures to increase the availability of domestic funds to Australian business might then tend directly to improve national welfare, by improving the terms on which we can obtain foreign capital.

[1] This appendix draws in part on a report, *Access and Efficiency in the Supply of Foreign Capital to Australia*, prepared by Professor Bowden, Mr Pham and Dr Sim of the Centre for Banking and Finance, University of New South Wales, on behalf of Unisearch Ltd as consultants to the Commission. Copies of the consultants' report are available from the Commission on request.

Views on the foreign capital supply question do indeed diverge widely. Many academic economists have taken it as evident that, under the current regime of liberalised and integrated international capital markets, the extent to which Australia can affect the cost of foreign capital by varying the level of its liabilities is minute. Equally, many business economists and political commentators have taken it as evident that as Australia's external liabilities accumulate, foreign investors will demand increasingly high compensation for their increasing exposure to risks specific to Australia. Both sides can produce impressive evidence for their views.

For the view that access to international foreign funds is unlimited, the main evidence is the efficiency of international capital markets. Participants and academic researchers agree that opportunities for even minute arbitrage profits in these markets are quickly seized and eliminated. Moreover, there is evidently a great mass of funds available for currency speculation, so that is has become almost impossible, even for the monetary authorities of the largest economies, to resist market forces in determining exchange rates. Combining these observations with various other plausible assumptions (discussed in later sections), it is inferred that real interest rates cannot diverge persistently across countries (*real uncovered interest parity*). If real uncovered interest parity does apply, then the cost of capital to a small country such as Australia is determined on world capital markets, and is independent of Australia's stance in those markets, and beyond the influence of domestic policy instruments.

For the other side, the evidence which carries most weight in Australia is perhaps this country's own recent experience. Since the mid-1980s, large deficits on current account have been accompanied by real interest rates much higher than in other developed countries. Some commentators have taken it as evident that these high interest rates have been necessitated by the reaction of foreign lenders to our high borrowing levels; and that continued rapid borrowing would lead to further interest rate rises.

More generally, there has been extensive debate, both popular and academic, in this and other countries over whether the observed behaviour of saving and investment is consistent with the predictions of financial economic theory. Thus, it has been claimed that investors do not diversify their portfolios across countries nearly as much as the theory predicts, but allocate a much larger share of their portfolio to their own country. Furthermore, it is claimed that a close connection can be observed between the level of national saving and domestic investment, which would not be expected if capital were indeed fully internationally mobile. Finally, there has been a large body of research into how and whether international financial asset prices and yields can be reconciled with theory.

These arguments are discussed later in this appendix. Before proceeding to do so, however, some preliminary remarks may usefully be made. First, while much of the literature deals with narrowly defined classes of securities, all forms of foreign liabilities are relevant in the present discussion: debt and equity, short-term and long-term debt, portfolio and direct investment. Such different kinds of liability are clearly subject to different market conditions, and conclusions reached for one kind cannot necessarily be extended to others.

Secondly, there are several ways of comparing yields across countries. Perhaps the most usual way is comparing yields on securities issued in a common location but denominated in different currencies. But one may also compare securities issued in different locations in a common currency. This latter kind of comparison is especially relevant for Australia, since much of our foreign debt is denominated in foreign currencies.

Thirdly, if the price of foreign capital does appear to rise as our foreign liabilities accumulate, this may reflect either limitations in foreign supply, or changes in the quality of Australian securities. Consider by way of analogy a trading enterprise offering bonds to foreign investors. As the volume of bonds on issue increases, their apparent yield may rise. This may indicate a reluctance on the part of investors to increase their exposure to this particular security. But it may also indicate that the perceived qualities of the security have changed, as a higher level of borrowing may increase the perceived risk of default. Furthermore, the higher level of borrowing may increase the variability of returns to shareholders. So yields on the enterprise's shares, if these are traded, may also rise, again not because of a change in investor behaviour, but because of a change in the nature of the security.

Similar arguments have been made for Australia as a whole; that a continued rapid incurrence of foreign liabilities is likely to raise the rate of interest on Australian bonds, not by satiating the market for them, but by impairing their quality. If this should occur to any considerable degree, the implications for economic well-being, both nationally and individually, would indeed be grave. But these implications, for all their gravity, lie outside the subject of this appendix. The relation between the level and cost of Australia's foreign liabilities, from which those implications arise, relates not to any limitation in the availability of foreign capital, but to our own limited capacity to absorb it.

Fourth, it is necessary to distinguish the question of whether the cost of capital is high or low in Australia compared to overseas, from the question of the sensitivity of the cost of capital to the level of foreign liabilities. Many influences might be suggested which would raise or lower the cost of capital above or below the level which a simple application of international interest parity theory would imply (some of these are discussed below). These influences would tend to make capital cheap or dear in Australia compared to other countries. But it may then be asked, whether the differentials created by these influences are themselves invariate, or whether they are apt to widen or narrow as our liabilities accumulate. Both questions are important, but the latter is that which bears upon the subject of this appendix - whether capital becomes dearer as the quantity obtained from abroad increases.

Finally, it is important to note that the expression 'international capital mobility' is used in two different senses. In the narrower sense, it involves an absence of regulatory restrictions and low transactions costs in international financial transactions. Under these conditions, investors face no significant impediments in reallocating their portfolios across countries in response to changes in economic conditions. For foreign capital to be available to Australia in unlimited supply, these conditions are necessary but not sufficient. It is also necessary that international investors should regard Australian securities as close substitutes for securities from other countries. Capital mobility in the broader sense involves not only an absence of impediments to transactions, but also perfect substitutability between securities from different domiciles.

The remainder of this appendix discusses the evidence for and against the proposition that the supply of foreign capital to Australia is practically unlimited. Section D2 summarises the theoretical background, and section D3 reviews the debates over the empirical evidence. Section D4 draws together the general conclusions derived in sections D2 and D3.

D2 Theoretical background

The branch of economics which bears on the question of the availability of foreign capital to Australia is international financial economics. This branch of the discipline combines and extends ideas from international monetary economics and finance theory in the endeavour to explain and predict the quantities and prices at which financial assets are traded internationally.

The ideas from international financial economics used in later sections of the appendix fall into three groups.

- In endeavouring to explain how money markets set spot and future exchange *rates (exchange rate dynamics*), theorists in international monetary economics have developed *certain interest parity conditions*, or relations between rates of interest on bonds denominated in different currencies.

- In finance theory, various financial asset pricing models use theories of decision making under uncertainty to derive relations between prices on financial assets with uncertain yields.

- In international financial economics, besides the problem of synthesizing financial asset pricing theory with exchange rate dynamics, new questions arise in endeavouring to explain price relations between assets traded in markets in which participants from different countries pursue different preferences or submit to different restrictions.

Section D2.1 presents the standard interest parity conditions, section D2.2 summarises the most commonly used asset pricing models in a single-country setting, and section D2.3 discusses some results in international financial economics which combine insights from asset pricing theory with exchange rate dynamics.

D2.1 Exchange rates and interest parity

Covered interest parity

Most expositions of the theory of international finance start with the covered interest parity condition. This condition is derived by considering an investor choosing between two investments with certain returns in two currencies. If the investor maximises the expected profits to be gained from both investments, the returns to each project, expressed in home currency, will tend to be equal. The allocation decision is based on an expectation of future earnings; with returns on two comparable assets certain, the only potential source of uncertainty is the possibility of fluctuations in the exchange rate.

The foreign exchange market offers, however, a tool with which the uncertainty of future exchange rates can be avoided. This is the forward market for foreign exchange. The forward market enables an investor to buy or sell foreign exchange to be delivered at a future date. The exchange rate for immediate delivery is called the spot exchange rate. Forward exchange rates refer to the price of foreign exchange to be delivered in the future. Assuming that the investor can match the maturity of his investment with that of a futures contract, he can buy foreign currency today to make the investment, and simultaneously sell foreign exchange in the forward market in the amount of the gross returns to the investment. This strategy eliminates all uncertainty associated with the foreign exchange transaction and is referred to as 'hedging'.

Standard forward contracts are available on different financial markets. For example, on the Sydney Foreign Exchange, $A100 000 contracts are traded for delivery in the months of March, June, September or December (Bruce, McKern, Pollard and Skully 1989). Banks may trade on the New York foreign exchange market in contracts of US$1 million. These contracts usually have a maturity of 30, 90 or 180 days, but can have maturities of up to one year (Rivera-Batiz and Rivera-Batiz 1985).

Transaction costs in these assets are low (of the order of 0.1 per cent of the value of the contract). Non-standard contracts can be made with a bank serving as an intermediary. In this case, transaction costs increase as the bank is providing a service by adjusting the standard contract conditions to individual investors' situations. The existence of non-negligible transaction costs may affect the conclusions reached with models in which transaction costs are assumed to be negligible. In most of what follows, however, transaction costs are assumed to be negligible.

By hedging returns to an investment in foreign securities are as certain as returns on an investment project at home. Assuming there are no transaction costs, the investor would be indifferent to investing in either project if the returns expressed in home currency units are the same. The *covered interest parity condition* is usually stated as:

$$i = i^* + f$$

where i is the return to an investment made at home, i* is the return on an investment made abroad, and *f* is *the forward premium* on foreign exchange (or *-f* is the *forward discount*), calculated as the difference between the forward and the spot exchange rates, divided by the spot exchange rate.

This equilibrium condition states that any difference between returns on two comparable assets must be covered by the forward premium. If the differential between returns in each country's currency does not equal the forward premium, there are opportunities for *arbitrage profits*. For example, if the rate of interest on Australian dollar bonds exceeded the sum of the rate of interest on U.S. dollar bonds and the forward premium, then *arbitrageurs* could make a certain profit by buying Australian dollar bonds, selling U.S. dollar bonds, and hedging against exchange rate changes. In doing so, they would raise the spot price of the Australian dollar, lower the Australian dollar interest rate, or lower the forward price of the Australian dollar, until covered interest parity between Australian dollar and U.S. dollar bonds was achieved. When the covered interest parity condition is satisfied, no opportunities for arbitrage profits remain.

For borrowers who hedge against exchange rate changes, the covered interest parity condition implies that the cost of capital should be the same whether bonds are issued domestically or abroad. This is because the exchange risk can be hedged against in the forward market and the foreign exchange premium should account for any interest differential.

The covered interest parity condition explains how it is possible for the monetary authority in a small open economy such as Australia to control domestic interest rates, even when capital is highly internationally mobile. High domestic interest rates are compatible with covered interest parity, provided that the rate of forward discount is high. Thus a rise in the domestic interest rate can be accommodated by an appreciation in the spot exchange rate, a depreciation in the forward rate, or a combination of both.

Deviations from covered interest parity

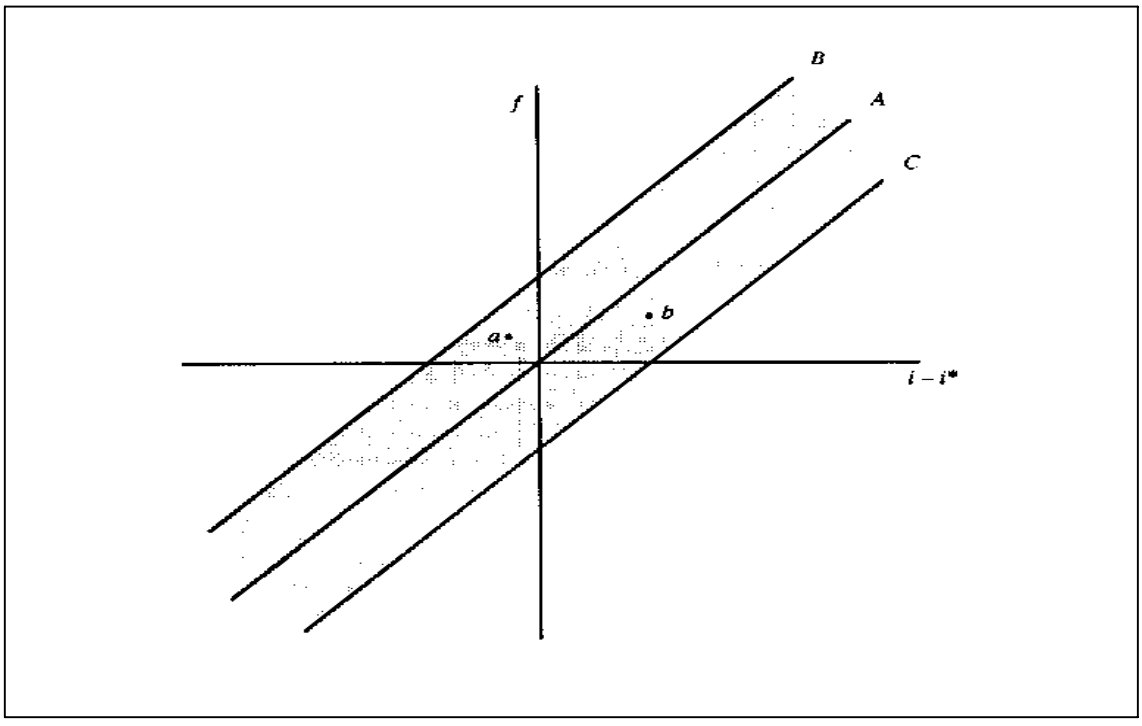
In spite of the appeal of the covered interest parity condition, a number of factors may impede its validity.

- Transactions costs apply to operations in the foreign exchange markets and the securities markets. Although the costs are usually small in relation to the amounts transacted, they still affect the returns upon which decisions are made. This can be illustrated in Figure D1 where the interest rate differential ($i - i^*$) is plotted against the forward premium on foreign exchange (f). If the covered interest parity condition holds strictly, the 45° line A describes the locus of points that yield an equilibrium in the international capital market. At point a, a capital outflow

from home occurs and at point b, a capital inflow occurs. When taking transaction costs into account, the shaded area between lines B and C do not offer any opportunities for profits. That is, asset market equilibrium is achieved with any point in the shaded area. Therefore points such as a and b are consistent with an equilibrium in the international financial market. At point a for example, the covered interest differential favours the foreign security *(f + i _ i* > 0)*, but switching to more foreign assets does not offer any profit opportunities as the differential is not sufficient to cover transaction costs.

- Government intervention and regulation of the financial market result in different returns on securities at home and abroad. Regulations affect transaction costs and rates of return. For example, selective ceilings on interest rates may be imposed to encourage borrowing by business. This would in turn reduce returns to lending. As another example, margin requirements forcing investors to set aside a fraction of the contract they enter constrain the way in which funds can be allocated. Margin requirements result in opportunity costs since the margin cannot be optimally invested in interest bearing assets.

Figure D1: **The covered interest parity condition and transaction costs**



- Taxation can significantly affect returns to capital in different countries. Thus differential taxation of earnings from foreign investment distorts the international allocation of capital as investors are faced with different net of tax rates of return from investing in different countries. This is apart from the potential change in conditions affecting returns which is linked to the concept of political or sovereignty risk.

The assets compared in this exposition were assumed to be comparable in terms of liquidity, maturity and risk. While operating in the forward market enables the investor to avoid exchange risk, there are still a number of risks involved in investing abroad. They are default risk and political risk. The risk of default requires that returns used in the interest parity condition be adjusted for risk.

Political risks are linked to the jurisdiction under which assets are held. They arise from the possibility of:

-- expropriation through nationalisation, or an asset freeze;

-- a change in taxation regimes; and

-- the imposition of exchange controls which prevent the repatriation of returns from a foreign investment.

The argument that political risk is different to other risks facing investors is based on the perception that investors have little recourse against a government imposing new regulations and do not have a right to participate in the local political life. This is claimed to set foreign investment apart and make it riskier than an investment in the investors' own country. To some, political risk is similar to another business risk facing a firm such as the risk of seeing input prices increase.

Political risks cannot generally be eliminated, but may be insured against. Alternatively, the effects of political risk on an investor's assets can be reduced by holding assets in different jurisdictions. The main effect of political risk on financial markets is to make assets in different countries less comparable. A persistent covered interest rate differential may therefore reflect a premium required by investors to invest in a specific country's assets.

Uncovered interest parity

Under the covered interest parity condition, the investor was assumed to hedge against exchange rate fluctuations. But not all investors are able and willing to do so. An alternative course is to evaluate the merits of two investment opportunities based on an expectation of exchange rate change. When foreign currency depreciates with respect to the home currency, the actual return to

the foreign investment is composed of the return in foreign currency and the loss incurred from the foreign currency's depreciation. The *uncovered interest parity condition* is often stated as:

$$i - i^* = x$$

where x is the expected rate of depreciation of the domestic currency. Thus assets denominated in currencies expected to depreciate have higher returns in order to compensate for the expected loss on the currency transactions.

If the uncovered interest parity condition is not satisfied, then opportunities exist for *speculative gains*. For example, if the rate of interest on Australian dollar bonds exceeds the uncovered interest parity rate, then foreign investors can expect to make speculative gains by unhedged investments in these bonds. By making such investments, they either drive up the spot price of the Australian dollar, drive down Australian dollar interest rates, or drive up the expected future price of the Australian dollar. If speculators perceive the future exchange rate as certain, or if they are not averse to risk, they will continue to invest in Australian dollar bonds until the perceived opportunity for speculative gain is eliminated. Of course, if the Australian dollar depreciates more rapidly than expected, such unhedged investors may turn out to make not gains but losses.

The simple statement of uncovered interest parity is an approximation for the restrictive assumptions under which it is derived (eg. the absence of transaction costs and risk). These assumptions are never fulfilled. However, uncovered interest parity provides a good explanation of the way in which returns to capital across national boundaries are determined.

Covered and uncovered interest parity conditions reflect the behaviour of two different types of investors. Covered interest parity implies that investors typically hedge against the risk of depreciation by using forward markets. Alternatively, the behaviour of a speculator is reflected in the uncovered interest parity condition. This investor is typically willing to take more risks than the investor who is willing to pay a premium to cover the risk of depreciation. Both types of investors may operate at the same time, thus both conditions may be valid descriptions of international capital market equilibrium.

Expectations and the forward premium

If the forward premium on foreign exchange represented accurately the expectations of investors regarding the foreign exchange rate in the future, the uncovered interest parity condition would reduce to the covered interest parity condition. However, the forward premium incorporates a premium for the risk attached to investing in foreign currency on an uncovered basis. This premium may vary, and there is thus not usually a consistent link, or differential, between the forward exchange rate and the corresponding expected rate. Only if the risk premium (defined in section D2.2) on foreign exchange transactions is consistently zero can the forward exchange rate be used to predict accurately the exchange rate. It would then be an unbiased estimate of the expected change in the exchange rate.

Real interest parity

Both covered and uncovered interest parity conditions have been developed in terms of nominal returns. A condition similar to uncovered interest parity can be derived for real returns to assets. Equilibrium in terms of real interest rates involves relating the expected rates of inflation between two countries through the 'purchasing power parity doctrine'. Purchasing power parity asserts that the rate of change in the exchange rate is equal to the difference between two countries' rates of inflation. If this actually is the case, then a similar condition links a change in the exchange rate to expected changes in inflation. Therefore, when bonds differ only in terms of their currency denomination the expected real returns must be equal internationally.

While appealing, this result rests on the purchasing power parity doctrine which has often been rejected in statistical tests as a description of short-run exchange rate behaviour (Cumby and Obstfeld 1982), and is therefore of limited value in explaining capital market equilibrium.

D2.2 Asset pricing under uncertainty [2]

An important feature of the choice faced by investors in deciding how to allocate funds across various financial assets is that future returns on those assets are more or less uncertain. This is especially true of stocks, where not only future dividend payments are unknown, but also the capital gain or loss from future changes in stock prices. But it is also true to some extent of bonds, since bond prices depend on market interest rates, and effect returns to investors who may wish to sell their bond holdings before their maturity date. Furthermore, bonds are subject to greater or lesser degrees to default risk. A further source of risk may be uncertainty in the future price level in the goods market, which may create uncertainty in the purchasing power of future returns, even when future nominal returns are known with certainty.

Two important properties of the return on a risky asset are its expected value (or mean) and variance. *Risk-neutral* investors are concerned only to maximise the expected return on their portfolio, but *risk-averse* investors are also concerned to minimise its variance. A common simplifying assumption in the theory of decision-making under uncertainty is that these are the only properties of the probability distribution of returns with which investors are concerned. This special case is called *mean-variance analysis.*

[2] The portfolio allocation theory and the asset pricing models briefly described below are presented more fully in many texts on financial economics (e.g. Copeland and Weston, 1983).

In mean-variance analysis, a portfolio is described as *mean-variance efficient* in no other portfolio of the same value can be constructed which offers a lower variance for the same expected return, or a higher expected return for the same variance. Each investor selects a mean-variance portfolio according to the quantity of funds at her disposal, and her degree of risk aversion.

A risk-averse investor will prefer a risk-free asset to a risky asset with the same expected rate of return. Conversely, the certain return which he would consider equally attractive as a given risky return is lower than the expected value of the risky return. This certain return is called *the certainty equivalent*. The difference between the expected return on the risky asset and the certainty equivalent is the *risk premium.*

A measure of risk aversion with the advantages of being dimensionless and of being found, in some empirical studies, not significantly dependent on the value of the investor's wealth, is the *coefficient of relative risk aversion.* A common assumption in empirical studies of financial markets is that the coefficient of relative risk aversion typically has a value of about 2.0 (Friend and Blume, 1975, Newberry and Stiglitz, 1981).

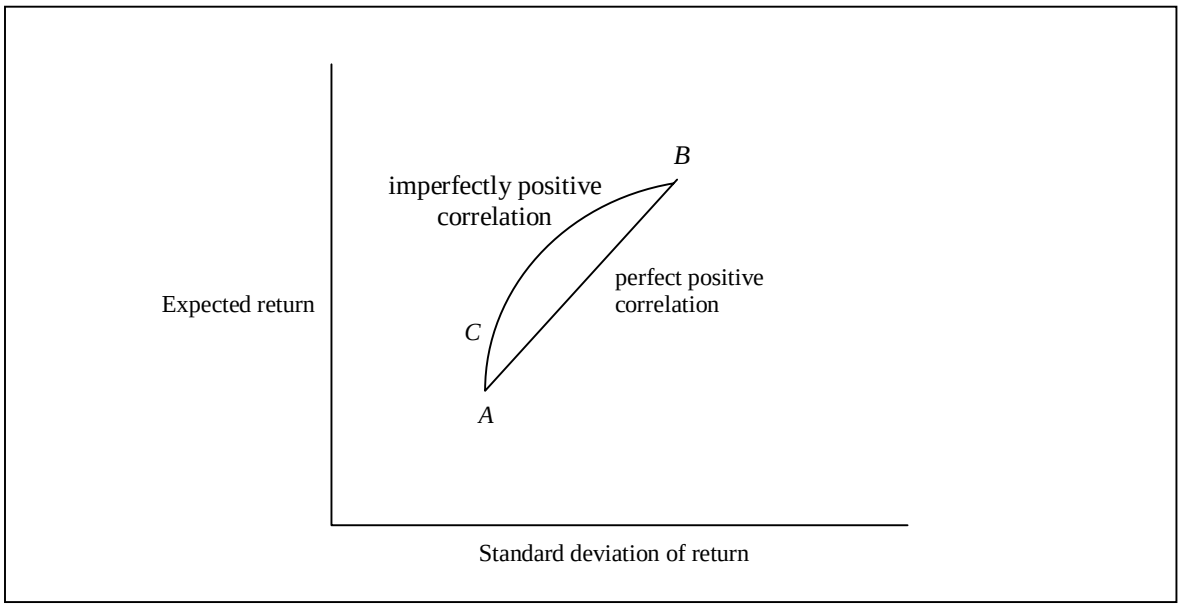
Portfolio allocation theory

Portfolio allocation deals with the problem faced by an investor in deciding how to allocate funds between different financial assets so as to achieve the best possible risk-return combination. A key concept in the solution to that problem is *diversification.* Spreading funds between several assets results in a portfolio with an overall rate of return equal to the average rate of return on the assets that compose it, but with overall relative risk lower than the average risk of the individual assets. This decrease in risk is obtained by combining assets whose returns are not perfectly positively correlated.

Figure D2 shows how a portfolio is constructed. Assets are represented in expected value and standard deviation (the square root of variance) space. Standard deviation is used as a measure of an asset's risk. Returns to two assets *A* and *B* are assumed to be negatively correlated. This means that for a given expected return, their combination in a portfolio results in lower risk than if assets *A* and *B* were perfectly positively correlated. This latter situation is represented by the straight line linking points *A* and *B*, and any point to the left of this line has a lower variance. When *A* and *B* are not perfectly positively correlated, a portfolio consisting of these two assets is found along the curve linking *A* and *B*. For a given expected income, the variability of returns is lower along the curve than they are on the line segment between *A* and *B*.

An extension of the basic portfolio framework includes a risk free asset among the possible investment opportunities. Returns to the risk free asset are not correlated with returns to any other asset. Investors are assumed to be able to borrow at the risk free rate. Now investors can combine the risk free asset with any other asset or portfolio in the efficient set. In Figure D3 the risk free asset (*F*) is combined with two different efficient portfolios. The lines between *F* and the efficient portfolios describe the expected returns and variability associated with each new portfolio

Figure D2: **Constructing portfolios**



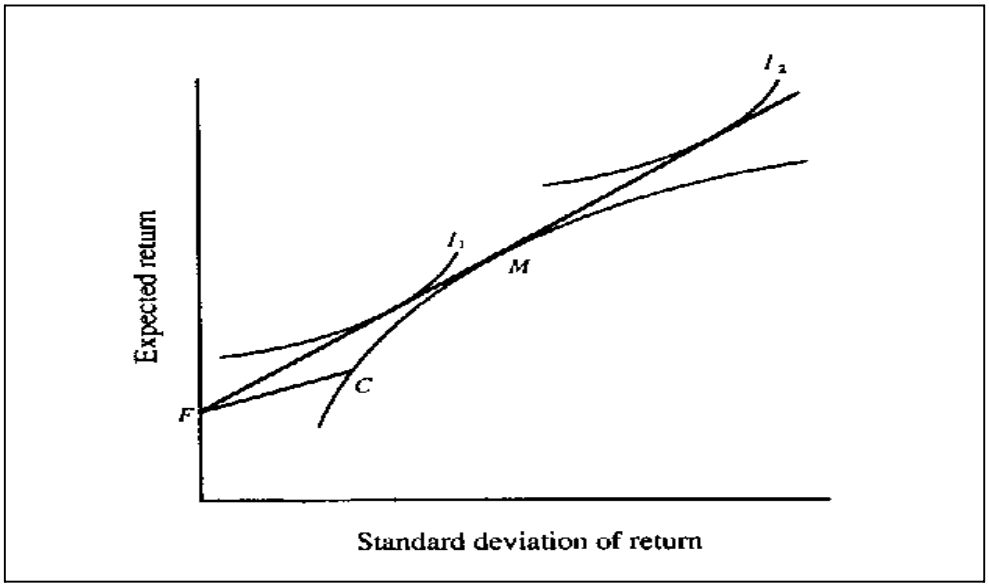
composed of risky and risk free assets. The combinations along segment *FM* are superior to those between *F* and *C* because for a given level of variability higher expected income can be achieved. In addition, because the investor can borrow at the risk free rate without limit, investments on the ray from *F* beyond M are also possible and are superior to the portfolio combinations along the old efficient frontier.

This has given rise to the concept of two-fund separation according to which investors combine risky assets in a risky portfolio *M* which is efficient and combine this risky portfolio with the risk free asset *F*.

When a risk free asset is introduced in the analysis, all investors choose their portfolios as combination of the 'two funds'. Risk averse investors choose to invest in combinations of the risky and risk free assets found between *F* and *M*. Less risk averse investors borrow at the risk free rate to invest more heavily in the risky portfolio. This overall portfolio is found along ray *FM*, beyond *M*.

In Figure D3, the attitudes toward risk of two investors are represented by *indifference curves*. An investor is indifferent to the combinations of returns and risk found along an indifference curve. The highest indifference curve that can be attained by a relatively risk averse investor is I1 . This investor chooses a portfolio on the segment *FM*. Alternatively, a less risk averse investor displays an indifference map from which indifference curve I2 is generated. This investor prefers to borrow at the risk less rate and invest more heavily in the risky market portfolio.

Figure D3: **Risk free rate, market portfolio and investor choices**



The capital asset pricing model

The portfolio model described above provides a framework for understanding how investors allocate funds among securities in response to given rates of return on securities. The capital asset pricing model (CAPM) builds on the portfolio allocation framework to produce a model of financial market equilibrium which yields predictions about those rates of return.

In addition to the assumptions underlying the portfolio model, the CAPM assumes that investors have homogeneous beliefs. This means that their assessment about expected asset returns and risk are the same, but they still may have different attitudes toward risk.

Under the assumptions of the CAPM, the same portfolio M of risky assets is efficient for all investors. This portfolio must therefore have the same composition as the stock of all financial assets traded in the market, that is, the *market portfolio.* Each investor's total portfolio is a combination (along ray *FM* in Figure D3) of the risk free asset and the market portfolio.

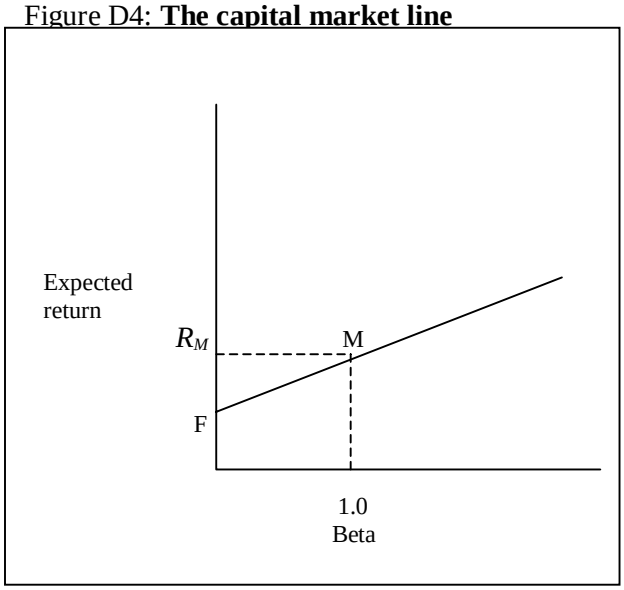
The efficient set is linear and is called the *capital market line*. This line shows a linear relation between the risk and expected return of a portfolio. The slope of the capital market line is the rate at which risk is exchanged for expected income. This rate is constant for all levels of risk and faced by all investors, regardless of their risk aversion. It is interpreted as the equilibrium *price of risk:* the difference between expected returns on the market portfolio and the risk free asset, divided by the standard deviation of the market portfolio.

The CAPM equates the expected return on any asset with returns to the risk free asset plus a risk premium. This risk premium is calculated as the market price of risk multiplied by a measure of the risk associated with the asset. This measure of risk is commonly called beta and is the ratio of the asset's covariance with the market portfolio to the variance of the market portfolio. When risk is defined as beta, the price of risk is redefined as the difference between returns to the market portfolio and the risk free asset. The linear relation between risk and expected income is retained (Figure D4).

The beta of the risk free asset is equal to zero since its returns are not correlated with the market portfolio. Alternatively, the beta for the market portfolio is equal to one since the covariance of a random variables with itself is equal to its variance. Assets with a beta less than one are less risky than the market portfolio, while assets with a beta greater than one are riskier than the market portfolio.

Beta is an appropriate measure of risk which is consistent whatever the type of asset or portfolio it is used to characterise. It represents that part of an asset's risk for which a risk averse investor requires compensation: a risk premium.

Figure D4: **The capital market line**



The risk attached to an asset's return can be divided into risk that is attributable to the general state of the economy, and risk that is intrinsic to the particular asset. The former type of risk is measured by the risk attached to the market portfolio and is referred to as *systematic risk.* The asset specific risk is called *unsystematic risk.*

Unsystematic risk can be avoided through proper portfolio diversification. Systematic risk however cannot, and it is this risk that requires compensation. Systematic risk is measured by the degree to which an asset's returns vary with the market portfolio. The idea is to capture the variation of returns in comparison with the rest of the economy. This is what is measured by beta, the covariance of an asset's return with returns to the market portfolio divided by the variance

of the market portfolio. Therefore beta measures the risk for which an investor requires a risk premium.

While the CAPM has been useful both conceptually and for practitioners, it is a model, and therefore a simplification of actual financial market behaviour. One simplifying assumption which has caused particular trouble in international contexts is that there are no differences in preferences or circumstances between different investors which affect their evaluation returns. Such differences might for example be created by different tax regimes facing domestic and foreign investors.

Arbitrage pricing theory

An alternative theory of financial asset pricing, developed in part in response to this problem, is arbitrage pricing theory (APT). This theory relaxes the requirements for similarity across investors, and requires only that all investors agree on a common set of risk factors which generate systematic changes in asset returns, and on the sensitivity of returns on each asset to each risk factor. An arbitrage argument is used to show that in market equilibrium assets a price will be established for each risk factor, so that the equilbrium yield on each security is equal to the risk-free rate plus a risk premium for each risk factor, calculated as the exposure of the security to the risk, multiplied by the price of the risk.

A major task in empirical studies using the APT is identifying the set of risk factors.

D2.3 International asset pricing under uncertainty

The treatment of interest parity and forward exchange rates in section D2.1 does not take account of the effects on financial market behaviour of uncertainty in future exchange rates. But easing problems caused by this uncertainty is the service which forward exchange markets exist to provide. Without taking account of uncertainty and risk aversion, a satisfactory treatment of forward exchange rates and interest relativities is impossible. Likewise financial asset pricing theory cannot be applied to international asset markets until it is extended to take account of the multiplicity of exchange rates. This section briefly describes some results on international asset prices and yields obtained by theories which take account of both the multiplicity of exchange rates and uncertainty.

Interest parity and risk

As explained in section D2.1, if expectations of future exchange rates are held with certainty, or investors are risk-neutral, then the forward exchange rate is equal to the expected future rate, the forward discount is equal to the expected rate of depreciation, and the international interest rate differential exactly offsets the forward discount. Given covered interest parity, these three conditions are mutually equivalent, and may for convenience be referred to indifferently as uncovered interest parity.

If expectations of future exchange rates are not held with certainty, and investors are risk-averse, then uncovered interest parity does not apply. Risk-averse investors do not take up all opportunities to make positive expected profits, as required for uncovered interest parity, but only those opportunities for which the expected profit is sufficient to compensate for the risk involved. Theoretical models (e.g. Kouri, 1977, Dornbush, 1983) predict that interest rates will deviate from uncovered interest parity by a margin which can be interpreted as a risk premium. This premium may be either positive or negative (i.e. a discount). The same risk premium appears as a deviation of the forward rate from the expected future rate, and the forward discount from the expected depreciation rate. Deviations from uncovered interest parity are then equal to the sum of the forecast error and the risk premium.

These theoretical models mostly incorporate relatively simple treatments of portfolio allocation, which cover only money and debt securities. The international application of financial asset pricing models covering stocks as well as bonds is discussed below.

The international asset pricing model

Several variants of the single-country capital asset pricing model discussed in section D2.2 have been extended to a multi-country setting. The resulting models are known collectively as the international asset pricing model (IAPM).

Solnik (1974) bases his international asset pricing model on a continuous-time version of the single-country CAPM. Assuming a single good in each country and purchasing power parity, he shows that investors from all countries can select efficient portfolios as combinations of just three funds: a portfolio of stocks hedged against exchange risk; a portfolio of bonds, speculative with respect to exchange risk; and their own country's risk-free asset. Since the stock portfolio is the same for all investors, it is the world market portfolio. As in the single-country CAPM, only systematic risk is priced; in this model, systematic risk is covariance with the world market portfolio.

The three-fund theorem contrasts strongly with the actual pattern of investment, which sees investors from most countries specialising heavily in their own country's stocks. Stulz (1981) develops a version of the IAPM designed to be compatible with that observation, based on the consumption-based version of the single-country CAPM (Breedon, 1979). He allows for several consumer goods in each country, some of which are traded internationally and some not. For goods not traded internationally, the law of one price need not hold. Because they face different consumer prices and have different tastes, investors from different countries make different assessments of real returns on the same security, even though they are assumed to make the same assessment of nominal returns. Consequently, investors from different countries hold different stock portfolios.

Unfortunately the consumption-based IAPM suffers from still-unsolved technical difficulties. Stulz derives systems of asset price equations for investors from different countries. These may be inverted to provide an asset demand system for each country. As yet however no-one has succeeded in solving the general equilibrium system formed by all these asset demand systems, to show how asset prices are set in a market which brings together investors with diverse preferences.

An international arbitrage pricing model

The difficulties encountered with the IAPM have led Solnik (1983) to develop an international arbitrage pricing theory (IAPT) model. The difficulty in the IAPM arose because differences across countries in consumption tastes, or deviations from purchasing power parity, caused investors from different countries to apply different price indexes in deflating expected nominal returns. The IAPT requires investors to agree only on the sensitivity of returns on each security to each risk factor. Then, in an integrated world capital market, investors from all countries can agree on equivalent prices for all risk factors.

D3 Empirical evidence on capital mobility

The last section outlined the theoretical considerations which inform the standard view of international capital mobility. According to this view, capital is highly mobile internationally, real yields are equalised across countries, at least over the long run, and the supply of foreign capital to a small country like Australia is virtually unlimited. This view is not however universally accepted. Several arguments are brought forward which claim to show that capital is far less mobile in reality than the standard theory would suggest. This section examines some of these arguments, and some counter-arguments against them.

The first argument to be considered is that from *under-diversification*. According to this argument, investors do not diversify their portfolios internationally as much as the theory underlying the standard view would indicate, but instead specialise strongly in domestic securities. The inference is that investors are influenced in reality by factors which theory fails to account for; the theory is therefore empirically unreliable; and the view that capital is highly internationally mobile therefore lacks a sound basis.

The second argument also finds fault with the theoretical account of the international allocation of funds for investment. Whereas the first argument relates to the existing stock of financial assets, the second argument relates to the flow of investment in physical assets. According to this argument, a close relation can be observed between national saving and domestic investment, which would not be expected to exist with high international capital mobility. Whereas the first argument finds its evidence in casual observation, the second has been supported by considerable econometric work.

The third argument is based on the observation of large and persistent differences across countries in asset yields. This need not be inconsistent with high international capital mobility, if these yield differences can be explained by premia demanded by international suppliers of funds for country-specific risks, for example exchange risk. Capital might still be highly mobile, and risk-adjusted rates of return might still be equalised across countries. But even with high capital mobility, the presence of substantial risk premia would call into doubt the inference that a small country could obtain virtually unlimited funds at virtually constant cost. It would now be necessary to ask, whether an increase in external liabilities could be achieved, without incurring a substantially larger risk premium and accordingly a substantially higher cost.

The fourth argument also relates to yields; but instead of comparing asset yields between countries, it examines the price structure of financial assets within a single country. According to the Capital Asset Pricing Model (as explained in section D2), the risk premiums applying to different assets should depend on the correlation of their yields with the yield on the market portfolio. If capital markets are fully internationally integrated, then the relevant market portfolio should be a global market portfolio, of all securities traded on the integrated world market. Conversely, if the market appears to apply a risk premium, not only for covariance with the global market portfolio, but also and independently for covariance with the a domestic asset portfolio, the inference is that capital markets are to some extent nationally segmented. This in turn would suggest some limitation in the foreign supply of funds.

D3.1 Under-diversification

Many simple models of international portfolio allocation predict that investors should diversify their holdings widely across countries. For example, Solnik's (1974) three funds theorem asserts that investors from all countries will willingly hold the same stock portfolio (which must therefore have a country composition representative of the actual world supply of stocks). Such predictions may be rejected merely by casual observation, since it is clear that even in small open economies, investors tend strongly to specialise in domestic assets. It may therefore be agreed at once that the account of international capital market behaviour provided by such simple models is inadequate.

The question to be addressed is therefore which of the assumptions in these simple models are responsible for the inaccurate prediction of high diversification, and how their replacement by more accurate assumptions affects the models' other predictions. Some realistic features which have been suggested for incorporation in this context include transactions costs, discriminatory tax effects, the presence of non-marketed assets, and differences in tastes across countries.

If investors face higher transactions costs when trading on foreign markets than on their own domestic markets, they may be expected to hold a higher proportion of their portfolio in domestic securities than they would otherwise. One study which bears on the effects of such costs, though it does not deal directly with under-diversification, is Jorion and Schwartz (1986) (discussed further in section D3.4). These authors analysed Canadian stock prices and found evidence of segmentation between the Canadian and U.S. stock markets. They divided Canadian stocks into those interlisted on U.S. exchanges, and stocks not interlisted, and found no strong evidence that the prices of interlisted stocks obeyed a different rule from stocks which were not interlisted. Since U.S. investors can deal in interlisted Canadian stocks as easily as in U.S. stocks, this suggests that transactions costs are not, in this case, a major cause of segmentation. It may more tentatively be inferred that they are not likely to be a major cause of under-diversification. This conclusion may not however generalise to countries separated by greater physical and cultural barriers than Canada and the United States.

The proposition that transactions costs are only a minor cause of under-diversification is supported for a broader range of countries by Golub (1990), who finds that changes in gross international holdings of securities are small, both compared to the changes which would be expected with full diversification, and to the volume of foreign exchange transactions. Golub infers from the high volume of foreign exchange transactions that transactions costs are low; and from the small changes in gross international asset holdings, that willingness to hold foreign assets is limited. He concludes that the main reason for under-diversification is not transactions costs but investor preferences.

The different effects of national tax regimes on investors is another potential cause of under-diversification. A simple theoretical model is provided by Stulz (1981*b*), who demonstrates that a tax on foreign assets can eliminate home-country holdings of some foreign stocks.

A practical example with a different mode of operation is the Australian system of company tax imputation. This system reduces the total tax burden on investment in Australian stocks by Australian investors, but does not affect the taxation of foreign investors by their own national taxation authorities. The result is that Australian investors can obtain a higher after-tax return than foreign investors from the same Australian stock. But if the yield on Australian stocks is determined by foreign capital supply, foreign investors must be able to obtain the same after-tax return on Australian stocks as on foreign stocks. So Australian investors can obtain a higher after-tax return on Australian stocks than foreign investors can obtain from foreign stocks. But in general, Australian investors cannot expect to obtain a higher after-tax return from stocks domiciled in foreign countries than the investors resident in those same countries. So Australians can obtain a higher after-tax return from Australian stocks than from foreign stocks. Clearly this is likely to induce them to hold a large share of their portfolio in Australian stocks.

It seems evident that discriminatory tax effects, when present, can be a powerful force for under-diversification. But not all tax regimes create such effects to any significant extent. Some other factor may therefore be required to explain why under-diversification is so pervasive.

The effects of international taste differences are analysed by Stulz (1981a), who shows that, if domestic assets are better hedges than foreign assets against changes in the domestic price of the domestic consumption bundle, then investors may choose to hold portfolios heavily weighted with domestic assets. Hartley (1986) analyses the effects of non-marketable assets (such as human capital), and suggests that investors may hold domestic marketed assets to hedge against random variation in returns on their non-marketable assets.

What do these suggested explanations imply for international capital mobility? In sum, they suggest that apparent under-diversification may be consistent with a high degree of mobility. For example, company tax imputation in Australia is likely to encourage Australian investors to specialise in Australian stocks, but may have no effect on the willingness of foreign investors to hold Australian stocks. The conclusion may be drawn, that under-diversification is not in itself strong evidence against the proposition that the supply of foreign capital is practically unlimited.

The factors considered here as possible causes of under-diversification reappear in section D3.4, as possible causes of market segmentation (defined in terms of price effects). Since most empirical analysis of the effects of these factors has concentrated on price rather than quantity effects, it is reviewed there rather than here.

D3.2 Comparisons of saving and investment rates

The suggestion that information about national saving and investment rates might be used to make inferences about international capital mobility was made originally by Feldstein and Horioka (1980). These authors were interested in the implications of international capital mobility for national saving policy. In a closed economy, any policy change which leads to an increase in national saving must lead also to an equal increase in domestic investment. But

> ... if capital is perfectly mobile between countries, then most of any incremental saving will leave the home country (if it is already a capital exporter) or will replace other foreign source capital that would otherwise be invested in the home country (if it is already a capital importer) (p. 314).

This is because the additional saving would be invested in the home country only up to the point at which it could earn returns equivalent to those available internationally. Thus 'with perfect capital mobility, there is little or no relationship between the domestic investment in a country and the amount of savings generated in that country' (p. 327-8). Conversely, they argued, if a close relation could be observed between domestic investment and saving, this would show that capital is far from perfectly mobile (in the broader of the two senses described in section D1).

Feldstein and Horioka accordingly proceeded to compare saving and investment rates across countries, and observed a strong correlation. They found that 'International differences in domestic savings rates among major industrial countries have corresponded to almost equal differences in domestic investment rates' (p. 328), and concluded that 'portfolio preferences and institutional rigidities impede the flow of long-term capital among countries' (p. 328).

This study aroused considerable interest, and several further studies have been undertaken supporting or disputing its conclusions. The main points at issue are as follows.

- Are saving and investment rates indeed as closely correlated as Feldstein and Horioka claim?

- If saving and investment rates are highly correlated, is this because changes in saving cause changes in investment, as Feldstein and Horioka assume; or does the correlation arise from some other source?

- If changes in saving do cause changes in investment, is this because capital is not internationally mobile, or for some other reason?

- If capital is not internationally mobile, is this because governments maintain barriers against capital movements; because existing capital markets contain natural barriers; or because investors' and capital users' attitudes and objectives limit capital flows, even in the absence of artificial or natural barriers?

Besides testing the existence and alternative explanations of the saving-investment correlation, critics of the Feldstein-Horioka thesis have also provided indirect evidence against the inference from correlation to immobility, by pointing to saving-investment correlations in situations in which capital is, they claim, clearly highly mobile.

Is there a savings/investment correlation?

The first question to arise from the work of Feldstein and Horioka is whether the correlation they find between saving and investment is a reliable empirical regularity, or merely an accidental property of their data. Several authors have applied the same basic statistical technique as that used by Feldstein and Horioka to other time periods and other countries, and have generally confirmed their results.

Sachs (1981) investigated the relationship between investment and the current account balance. The hypothesis was that changes in investment opportunities are the major cause of current account imbalances in industrial countries. To test this Sachs regressed the current account to income ratio on the investment to income ratio. He estimated that of each one per cent increase in the investment rate, 0.65% on average is financed by foreign capital inflow, and only 0.35% by domestic savings.

Feldstein (1983), Penati and Dooley (1984) and Golub (1990) examine whether savings and investment rates are correlated when the sample period is extended. The hypothesis is that national capital markets have become more integrated over time. This implies that the correlation between cross section averages of savings and investment rates would fall over time. Before conducting this test Penati and Dooley re-estimated the regression of Feldstein and Horioka using a larger set of industrial economies. They found that the estimated parameters were similar to those of the original study. When the hypothesis of increasing capital mobility over time was tested neither Feldstein or Penati and Dooley found any evidence to show that capital had become more mobile over time. Golub on the other hand confirms the results of Feldstein and Horioka but finds that the degree of capital mobility has risen over time. This could be explained by the fact that the sample period used by Golub extended into the 1980s where it would be expected that capital markets would be highly integrated.

Penati and Dooley also examined the contradiction between the results of Feldstein and Horioka and Sachs. They first tested the results over different time periods. It was found that the negative correlation between investment and current account rates was sensitive to the time period chosen while the correlation between savings and investment rates was stable over all time periods examined. The authors also tested the specification used by Sachs by using an instrumental variables approach. The instruments chosen were the predicted values of investment rates from the Feldstein and Horioka equation. Upon estimation Penati and Dooley find that the correlation between investment rates and changes in current account balances disappears. They conclude that the findings of Feldstein and Horioka are valid while those of Sachs are open to criticism.

Dooley, Frankel and Mathieson (1987) also test the results of Feldstein and Horioka and find them applicable to developing as well as developed countries when ordinary least squares regression is used. They also find that there is no evidence to support the assumption that capital has become more mobile over time.

In summary, the finding of Feldstein and Horioka, that saving and investment rates are highly correlated, has been confirmed by later studies. Furthermore, most studies find that the correlation has not grown significantly weaker over time. This leads to the next question; is the inference from high correlation to low capital mobility valid? This is discussed in the next section.

Savings and investment correlations and causality

While the empirical regularities found by Feldstein and Horioka have been confirmed, their interpretation has been vigorously disputed. Where Feldstein and Horioka interpreted the correlation as evidence of a causal link between saving and investment, several other authors have argued that the correlation may be generated by variation in some common factor which affects both saving and investment. Others argue that the causality may run in the reverse direction from that assumed by Feldstein and Horioka, not from saving to investment, but from investment to saving.

Following Obstfeld (1986), several theoretical studies have demonstrated that variation in population growth or productivity growth could generate correlated changes in saving and investment. But the econometric evidence suggests that these factors do not explain the correlation actually observed (Summers 1988, Feldstein and Bacchetta 1991). Furthermore, econometric studies using the instrumental variables technique (designed to eliminate the influence of all third factors) have rejected the common factor explanation, not just for these two factors, but generally (Dooley, Frankel and Mathieson 1987, Feldstein and Bacchetta 1991).

The reverse causality hypothesis, that changes in investment are not the effect of changes in saving, but the cause, has been argued by several authors, notably Summers (1988). The mechanism suggested is government action to control the current account deficit. High levels of investment would by themselves lead to large current account deficits; but governments counteract by maintaining their own saving at high levels. Summers names this mechanism the *maintained external balance hypothesis.*

The empirical evidence on the reverse causality hypothesis has been variously interpreted. Summers (1988) and Bayoumi (1990) report econometric results which appear to favour reverse causality, while Feldstein and Bacchetta (1991), with similar data but a different analysis, obtain results consistent with the original hypothesis.

In summary, there are good reasons for questioning the inference from correlation between investment and saving to causation of investment by saving. Plausible arguments have been put that the correlation is created by some third factor (or combination of factors) which affects both investment and saving. The evidence so far available however does not favour this hypothesis. It has also been argued that the correlation is created by a reverse causation running from investment to saving, arising from government action to maintain external balance. The evidence on this hypothesis is unclear.

Saving sensitivity and capital immobility

Even if Feldstein and Horioka (1980) were right in assuming that the correlation between saving and investment reveals a causal link running from saving to investment, there might still be explanations for the causal link which do not involve capital immobility. Two alternative explanations have in fact been put forward, both of which involve country size.

Several authors, notably Murphy (1984), suggest that changes in the level of savings in a large country may affect the world rate of interest, and so lead indirectly to changes in the level of domestic investment. Wong (1990) replies that 'for all practical purposes, [this mechanism] is just not very important: ... only one country -- the USA -- has a share in the world savings pool of over even 10 per cent'. Frankel points out that the world interest rate mechanism cannot explain correlations between saving and investment rates compared across countries, and reports econometric evidence showing that for comparisons across time periods, the correlation remains strong even when the possibility of a world interest rate effect is allowed for (Frankel 1986a, 1991a).

Harberger (1980) suggests that country size may be important in another way. In a large and diverse economy, shortfalls in saving in some sectors or regions can be made good by saving surpluses in other regions, without any need for international capital movement. Dooley et al (1987) show that while this might lead to lower current account to gdp ratios in large countries, it would not affect the correlation between saving and investment.

In summary, there appear to be no strong grounds for rejecting the inference, that a causal link from saving to investment is evidence for capital immobility. The alternative explanations which have been advanced lack theoretical and empirical support. For the broader question therefore, the choices reduce to rejecting the causal link from saving to investment, or accepting the inference made by Feldstein and Horioka (1980), that capital is not far from being perfectly mobile internationally.

Explanations for capital immobility

Possible explanations for capital immobility (in the broader of the two senses distinguished in section D1) fall into three groups: (a) governments may impose capital controls or otherwise erect artificial barriers to capital movements. (b) transactions costs or other market imperfections may present natural barriers. (c) the behaviour of market participants need not necessarily tend to the elimination of yield differentials and a perfectly flexible distribution of funds across countries. Investors for example, if they regard securities of different domiciles as imperfect substitutes, may be less than perfectly flexible in allocating their assets across countries.

Regarding the first possible explanation, many countries have maintained significant capital controls for part or all of the post-war period. In general, capital controls have been more prevalent in less developed economies than in industrialised economies, and more prevalent under the Bretton Woods fixed exchange rate system (operating before 1973) than under the later flexible exchange rate system. If capital controls are the source of the saving-investment correlation, then a higher degree of correlation would be expected among less developed than among industrialised economies; and before 1973 than after 1973.

These expectations are not borne out. As discussed above, the econometric studies provide little evidence of weakening in the saving-investment correlation over time. And many studies have found that the correlation is significantly stronger among industrialised economies than among less developed economies (e.g. Summers 1988, Dooley et al 1987). While some influence from capital controls cannot be ruled out, it is clear that some other factor must be found to explain the behaviour observed.

The second possible explanation, natural barriers to capital flows, has found little favour. As discussed further in section D3.3, international capital markets are characterised by relatively low transactions costs. The small transactions costs which do exist appear completely inadequate to explain the strong saving-investment correlations which are observed. Furthermore, as with artificial barriers, so also natural barriers would be expected to be greater for less developed than for industrialised economies; but as discussed just above, the observed correlations are greater among industrialised economies.

The third possible explanation, that the behaviour of market participants does not in fact tend to perfect capital mobility, even in the absence of natural or artificial impediments, has been advanced by several authors, notably Frankel (1991a). For several reasons, in particular because of deviations from purchasing power parity (see sections D2.1 and D3.3), covered nominal interest parity for short-term bonds does not imply real yield parity for physical capital. Frankel cites several theoretical studies showing how saving-investment correlations can arise in conditions in which purchasing power parity does not hold, and real interest rates are not equalised across countries (the source of deviation from purchasing power parity most studied is perhaps the existence of non-traded goods). Whether these theoretical models can explain the correlations actually observed remains to be seen.

Summary and conclusions

The results of these studies may be summarised as follows. The correlation observed by Feldstein and Horioka (1980) between national saving and domestic investment has been confirmed. Capital controls may be part of the explanation, but the prevalence of the relationship across countries and time periods suggests that they are only a small part. Furthermore, the fact that the correlation is higher for industrialised economies than for less developed countries raises doubt whether capital barriers of any kind play an important part in generating the correlation.

Discounting large-country effects as a possible source of correlation, there remain in the field three explanations: that both saving and investment respond to some third factor; that governments adjust fiscal policy to pursue some external balance objective; or that in the absence of perfect international mobility for physical goods (and with the consequent failure of purchasing power parity), even frictionless capital markets do not bring about perfect capital mobility. The common-factor hypothesis is plausible, but fails to find empirical support. The evidence on the maintained external balance hypothesis is unclear. Little empirical evidence for or against the hypothesis involving a failure of purchasing power parity is as yet available.

In conclusion, the observed relationship between national saving and domestic investment does not provide strong evidence against the hypothesis of high international capital mobility. While the correlation raises important questions about the operation of international financial markets, these questions can only be resolved by studying these markets more directly. This line of research is followed further in the next section.

D3.3 Yield differentials

This section examines the empirical evidence on variation in rates of interest across countries. If capital is highly internationally mobile, and different countries' securities highly substitutable, one might expect international capital flows to eliminate differences in yields on securities across different countries. But in fact, large and persistent differences are often observed.

The strongest form of the yield equalisation hypothesis is real yield equalisation. This hypothesis has been rejected fairly consistently in empirical tests (eg. Hodrick 1979, Howard 1979, Cumby and Obstfeld 1984, Mishkin 1984a, b, Mark, 1985, Cumby and Mishkin 1986, Gaab, Granziol and Horner, 1986). As explained in section D2, real yield equalisation depends on purchasing power parity, which is not observed over the short run, though it may provide a useful approximation of exchange rate behaviour over the long run.

The weakest form of the hypothesis is that internationally traded bonds denominated in the same currency, and free from default risk, but issued in different jurisdictions, should be traded at similar prices. This requires only that markets be competitive, and transaction costs low. This weak form of the hypothesis has been consistently verified (see Johnson 1979, Fiekele 1982, Kreicher 1982, and Hartman 1984, as cited in Obstfeld 1986).

Also consistently verified is the next weakest form of the hypothesis: covered interest parity. This requires that no opportunities are foregone for making risk-free profits by arbitrage between bonds denominated in different currencies, using forward exchange cover to eliminate exchange risk. Studies confirming covered interest parity include Aliber (1973), Frenkel and Levich (1975, 1977, 1981), Turnovsky and Ball (1983), Taylor (1987), Frankel and MacArthur (1988), and Frankel (1989).

Most effort in this area has gone into the study of deviations from uncovered interest parity. As explained in section D2, uncovered interest parity requires that no opportunities are foregone for making risky (expected) profits by speculating in bonds in different currencies. If investors are risk averse, then uncovered interest parity will not be observed, since investors will exploit only those speculative opportunities for which expected profits suffice to compensate for risk.

Most of the studies discussed below are concerned with risk premia on bonds traded in international financial markets (or, equivalently, on currency futures). These studies fall into three groups. One group is concerned with estimating various properties of the risk premium econometrically. Another group estimates the risk premium synthetically, using models of portfolio choice which relate the risk premium to variables for which estimates are available. The last group incorporates portfolio choice theory into econometric modelling in an endeavour to explain the observed behaviour of risk premia.

As discussed in section D2.1 above, uncovered interest parity is a condition which applies to rates of interest on bonds traded in international financial markets by agents concerned only to maximise expected profit. Under these circumstances, bond prices are bid up or down until differences in yields on bonds denominated in different currencies exactly offset expected changes in relative exchange rates.

A difficulty in testing the uncovered interest parity condition is that expected changes in exchange rates are not readily observable. Another way of making the same point is to distinguish between ex ante and ex post deviations from uncovered interest parity. The ex ante deviation is the difference between the interest rate differential and the expected rate of depreciation, while the ex post deviation is the difference between the interest rate differential and the actual rate. The relevant rate of depreciation for the uncovered interest parity condition is the expected rate, but what can be observed is the actual rate.

Many studies attempt to circumvent this difficult by relying on assumptions about market efficiency in expectations formation. Roughly speaking, these assumptions amount to the proposition that market participants take full advantage of all available information in forming expectations of future exchange rates. The assumption of market efficiency imposes various restrictions on errors in expectations. For example, traders do not consistently overestimate or underestimate the exchange rate. While the forecast error may be large for any individual period, over many periods it averages out at close to zero. That is, expectations are *unbiased*. Furthermore, there is no correlation between forecast errors in successive periods; an overestimate in one period is just as likely to be followed by an underestimate as by an overestimate in the next period. That is, forecast errors are not *autocorrelated*. When the conditions on forecast errors are satisfied, the expected future exchange rate is an efficient predictor of the actual future rate.

If currency futures markets exist, then the assumptions about the behaviour of market participants which imply uncovered interest parity imply also that forward exchange rates are equal to expected future exchange rates. In fact, the two conditions are essentially equivalent. As discussed above, in the presence of currency futures markets, interest rates are usually found to satisfy the covered parity condition. Given that covered interest parity is satisfied, the uncovered interest parity condition is equivalent to the proposition that the forward rate is equal to the expected future rate. Similarly, deviations from ex post uncovered interest parity are equal to deviations between the forward rate and the actual future exchange rate.

Under the assumption that currency future markets are efficient, in the sense described above, uncovered interest parity implies that the forward rate is an efficient predictor of the future rate. If uncovered interest parity does not apply, then although the expected future rate is an efficient predictor (or would be, if it were observable), the forward rate need not be. Tests of the efficiency of the forward rate as a predictor of the future rate are therefore joint tests of market efficiency and uncovered interest parity.

The studies discussed below investigate the behaviour of short-term interest rates, generally one week to six months, for which exchange cover is available. Their findings on deviations from uncovered interest parity do not necessarily describe the behaviour of rates on longer term bonds.

Empirical research into this topic began in the second half of the 1970s, as the Bretton Woods fixed exchange rate system was progressively replaced by floating exchange regimes. As part of the attempt to understand the behaviour of exchange rates and interest rates under the new regime, researchers (e.g. Levich, 1979, Geweke and Feige, 1979, Frankel, 1980, Hansen and Hodrick, 1980, Bilson, 1981) sought to test whether forward rates were efficient predictors of future rates. Assuming no risk premium, this was equivalent to testing the efficiency of futures markets.

A consensus was established by this line of research (see also Longworth, 1981, Cumby and Obstfeld, 1982, 1984, Hsieh, 1982), that forward rates are not generally efficient predictors of future exchange rates. Substantial and persistent deviations were found frequently to occur between forward rates and actual future exchange rates. Indeed many studies (notably Meese and Rogoff, 1983) found that forward rates had no significant predictive power. Other studies found a significant negative correlation between the forward premium and the actual rate of depreciation, implying that as a predictor of the future rate, the forward rate was inferior to the spot rate.

These findings aroused some controversy, since they seemed inconsistent with the structure and conduct of currency futures markets. Casual observation shows that these markets are highly competitive, and offer good opportunities and strong incentives to use information efficiently.

One approach towards resolving the contradiction is to incorporate uncertainty and risk aversion into the analysis. This allows the negative results from tests of the efficiency of the forward rate as a predictor of the spot rate to be reinterpreted as rejections not of market efficiency but of uncovered interest parity. The deviation of the forward rate from the actual future rate is now considered to be the sum of the forecast error and a risk premium. Much effort has been expended in attempting to explain exchange rate and interest rate behaviour in these terms.

A difficulty in testing the risk premium explanation of deviations from uncovered interest parity is that the risk premium is not observable. The risk premium is equal to the difference between the deviation from ex-post uncovered interest parity and the forecast error; but while the deviation from ex post interest parity is observable, the forecast error is not. The forecast error is unobservable because it depends on participants' expectations of the rate of depreciation, and expectations are private to those who hold them.

With ingenuity, some information about the risk premium can be extracted from observed market behaviour, under the assumption that market expectations are formed efficiently. The restrictions which this assumption places on the behaviour of the forecast error allow estimation, not of the risk premium itself, but of some of its properties. In this way, Fama (1984) and Hodrick and Srivastava (1986) obtain some surprising results. They find that for most currencies examined the risk premium is much more variable than, and negatively correlated with, the expected rate of depreciation. This implies that the main source of variation in forward exchange rates and international interest rate differentials is variation in risk premiums.

Even before this time, several researchers had tested models designed to explain variation over time in the risk premium. These attempts were generally unsuccessful. For example, Frankel (1982), using a portfolio balance model based on mean-variance optimisation, found no statistically significant risk premium; and Hodrick and Srivastava (1984), using a consumption-based CAPM-type model, found that restrictions predicted by the model were violated. The failure of these attempts to estimate models of the risk premium is open to various interpretations. It need not indicate some fundamental error in approach, but may indicate merely that the particular model estimated is inappropriate. Since there is no unique theoretical model of financial asset pricing, and since more or less stringent restrictions must be imposed on both the deterministic and the stochastic aspects of the model to enable it to be estimated, mispecification is always a possibility.

Other studies, however, brought forward evidence suggesting that this approach, of assuming that international financial markets form expectations efficiently, and that ex-post deviations from uncovered interest parity are essentially attributable to risk premiums. Two lines of argument are offered. One is that the observed deviations are too great to be accounted for by risk premiums. The magnitude of the risk premium should depend on the level of risk involved, and on the degree of risk aversion of investors. The level of risk can be estimated from market data, while some consensus exists on the range within which the coefficient of relative risk aversion may lie (e.g. Friend and Blume, 1975, Newberry and Stiglitz, 1981). Simple calculations based on mean-variance optimisation (e.g. Frankel, 1986b) yield synthetic estimates of the risk premium itself, and of variation over time in the risk premium, several orders of magnitude smaller than observed deviations from interest parity.

The second line of evidence derives from survey data on exchange rate expectations. While the reliability and meaningfulness of such data may be questioned (e.g. Hodrick, 1987), it does offer the possibility of separately observing the two components of the forward discount, expected depreciation and the risk premium. The statistical analysis of this direct observation presented by Froot and Frankel (1989) flatly contradicts the findings of studies which assume market efficiency. Froot and Frankel find that the systematic component of deviations from uncovered interest parity is not fully attributable to the risk premium, but may be fully attributable to systematic errors in expectations.

These results can be paralleled in studies of Australian interest rates and exchange rates. Thus when Thorpe, Hogan and Coote (1988) assume market efficiency they find, consistently with Fama, that the variance of the risk premium exceeds that of the expected rate of depreciation against a trade-weighted index (though the correlation is statistically significant only for one month bonds, and not for three month or six month). On the other hand, using survey data, they find, consistently with Froot and Frankel, that the variance of the expected rate of depreciation significantly exceeds that of the risk premium. Smith and Gruen (1989), using different survey data, obtain similar results. They, and Bowden, Pham and Sim (1991), also estimate exchange rate premiums for Australian dollar bonds synthetically, and find, consistently with Frankel (1986b), that the synthetically estimated risk premium is so small as to be economically insignificant.

As yet, the problem of explaining observed deviations from uncovered interest parity has found no generally accepted solution. The problem remains an active area of economic research, and some ideas have been proposed which may help to provide at least a partial resolution of the contradictions and failures which have been encountered.

One idea which has already achieved some success is to search for and take account of systematic variations in risk over time. Thus Giovannini and Jorion (1987, 1988) find that high conditional variances on rates of return on forward contracts are associated with high domestic interest rates. Taking account of this in synthetic calculations substantially increases estimated variations in risk premiums, though even these greater variations remain too small by a factor of five to account for changes in observed deviations from interest parity. For Australia, Smith and Gruen (1989) find that variability in the exchange rate is much greater following a recent large depreciation than at other times, and can justify a substantial risk premium. But this risk premium is still too small to explain observed deviations from ex post uncovered interest parity, and in any case applies only for a period of a few weeks following the depreciation. Attempts have also been made to estimate econometrically models allowing for variability in risk, and with both successes and failures being reported (e.g. Mark, 1988, Kaminsky and Peruga, 1990).

Another idea often mentioned goes by the name of the peso problem. A currency suffers a peso problem when market participants perceive some possibility of a certain event occurring in the near future which would have a severe effect on the exchange rate. In the Australian context, an example of such an event, which would lead to a currency depreciation, would be a large cut in officially controlled interest rates. If expectations are surveyed or market behaviour analysed statistically over some period in which the event does not occur, then participants appear to form expectations irrationally, or the risk premium appears excessive; but this appearance may be misleading. It may be that participants' perceptions are accurate, and the analysis has produced a misleading conclusion by relying on too short a data period.

A related argument is urged in Frankel and MacArthur (1988), who find from survey data that market participants expect exchange rates to regress toward purchasing power parity. While most studies find no significant tendency for exchange rates to regress to purchasing power parity in reality (e.g. Adler and Lehman, 1983, Mishkin, 1984), it may be that the tests used have been too weak, and the data series too short, to reveal a tendency that does in fact exist. Frankel (1991a) compensates for lack of power by using an unusually long data series (119 years, for the U.S.-U.K. exchange rate), and finds a statistically significant tendency to regress to purchasing power parity. Frankel and MacArthur (1988) find that the rate of regression expected by market participants agrees roughly with that estimated to occur in reality. Like the peso problem, this argument suggests that apparent discrepancies between expected and actual exchange rates may arise not from irrational expectations formation by market participants, but from the use in analysis of short data series for actual exchange rates.

In summary, the behaviour of international financial markets in setting exchange rates and interest rates remains poorly understood. It is clear that uncovered interest parity does not hold ex post, but there is no agreement on how much of the deviation from parity is attributable to errors in expectations, and how much to the risk premium. Subsidiary unanswered questions are whether risk premiums are large enough to explain the apparent deviations from ex ante interest parity required under the assumption that market expectations are rational; and whether the apparent irrationality of exchange rate expectations, revealed by survey data, is attributable to genuine irrationality, deficiencies in the survey data, or limitations in the data for actual exchange rates.

D3.4 Tests of international integration in equity markets

This section reviews empirical studies of equity yields and prices. Most of these studies aim to test whether equity markets are internationally integrated or segmented.

Capital market segmentation, as originally defined, is a situation in which legal or other barriers prevent some investors from holding some securities. Segmentation obviously prevents full diversification, and is also liable to influence capital asset prices. In particular, segmentation violates the assumptions of the capital asset pricing model, so its presence invalidates that model's predictions about relations between asset prices.

It is clear however that effects similar to those of segmentation as originally defined above may be produced by barriers which are less than prohibitive. Examples of such barriers are taxes or transactions costs which do not apply equally to all investors. They may also be produced by variation across investors in attributes such as ownership of non-marketable assets. The description segmented is therefore often applied to any capital market in which relative asset prices are affected by differences in circumstances faced by different investors. It is in this broader sense that the term will be used here.

Segmentation may arise either within single countries (for example, as an effect of progressive direct taxation) or internationally. Both intra-national and international segmentation have been studied, but researchers are agreed that international segmentation is more likely to be significant. It is international segmentation which is of concern in this appendix.

Empirical studies of segmentation commonly proceed by selecting some model of asset pricing in an internationally integrated market, and testing some of the restrictions on relative asset prices predicted by that model to determine whether they are satisfied in practice. These tests are in general joint tests of market integration together with the other assumptions of the model. If they are satisfied, the inference is that segmentation is absent or insignificant; if they are rejected, one may infer either that markets are segmented, or that some other assumption of the pricing model is inapplicable.

Studies of international equity market segmentation fall into two groups. One group compares average equity yields across countries, and tests whether international variation in average yields can be explained by the assumed pricing model under the hypothesis of market integration. The other group compares yields on stocks within countries to determine which risk factors are priced, and what prices are placed on them, and tests whether these prices are consistent with integration.
Studies comparing average equity yields across countries include Wheatley (1988) and Cumby (1990). Using a consumption-based CAPM for a U.S. investor, Wheatly examines yields on equity market portfolios for eighteen countries (including Australia), and finds no evidence of segmentation. His tests of integration are however of low power, so that very large deviations from the predicted pricing line would be needed for segmentation to be detected. Cumby, also using a consumption-based CAPM, and examining indices of stock returns for four countries, finds that the integrated model is rejected for the period 1974-87, but accepted for 1980-87. He concludes that the results are consistent with greater international integration of equity markets during the 1980s.

Stehle (1977), Jorion and Schwartz (1986), and Bowden et al. (1991) all use the CAPM to test price relations between different domestic stocks for evidence of international market integration. The tests are based on the prediction of the CAPM, that only systematic risk is priced. If the equity market is internationally integrated, then systematic risk is defined with respect to an international market portfolio; if the market is segmented, then systematic risk is defined with respect to the domestic market portfolio.

Stehle examines the pricing of U.S. stocks, and finds no strong evidence for or against integration in a global equity market. Jorion and Schwartz (1986) examine the pricing of Canadian stocks over the period 1968-82, and test whether they are priced in a segmented market or in a global North American market. They isolate a component of Canadian market risk which is independent of the global market risk. If the Canadian market is integrated with the U.S. market then, according to the CAPM, this independent component should have no effect on stock prices. They find that the data strongly reject this prediction. Bowden et al. (1991) conduct a similar test to determine whether the Australian stock market is integrated with the U.S. stock market, using data for 1985-89, and likewise strongly reject integration.

Cho, Eun and Senbet (1986) and Gultekin, Gultekin and Penati (1989) test for international capital market integration using the APT. For an integrated market, the APT predicts that the same risk factors affect stock prices in all national stock markets, and that the price of each risk factor is uniform across stock markets. Cho et al. examine each pair of combinations of eleven national stock markets over the period 1973-83, identifying risk factors, and testing whether they bear the same price in each member of the pair. They find significant differences in risk factor prices across markets, and conclude that either capital markets are segmented internationally, or else the APT is not a valid model of international stock prices.

Gultekin et al. (1989) examine prices of U.S. and Japanese stocks between 1977 and 1984. They find strong evidence for segmentation before the relaxation of capital controls in Japan in December 1980, but little evidence after 1980.

On the whole, the evidence appears to favour segmentation over integration. In particular, studies comparing stock prices within national markets generally find signs of segmentation. Some of the evidence does suggest increased market integration in the 1980s.

D4 Application to Australia

This section discusses the application to Australia of the arguments and evidence presented in section D3.

Apparent under-diversification and saving-investment correlations provide only weak and indirect evidence against the unlimited capital availability hypothesis. There are many plausible explanations for these phenomena which do not involve capital immobility. The most relevant evidence on capital mobility comes from the yield comparison and segmentation studies.

Over recent years, rates of interest on short-term Australian dollar bonds have been consistently in excess of those required for ex post uncovered interest parity. For example, between January 1985 and September 1989, a U.S. investor would have earned an average of 3.3 per cent per year more on Australian three month Treasury bills than on U.S. bills (Smith and Gruen, 1989, pp. 20-22). Unfortunately, as discussed in section D3.3, the explanations for such large and persistent deviations from interest parity remain obscure.

This does not mean that the reason for high short-term Australian dollar interest rates is unknown. The immediate reason at least is perfectly clear: short-term Australian dollar interest rates were high in the latter part of the 1980s because the Reserve Bank of Australia kept them high. This is consistent with interest parity, which allows differentials of any magnitude between Australian dollar and foreign currency interest rates, provided that they are offset by forward discount rates on the Australian dollar of similar magnitude. When the Reserve Bank raises Australian dollar interest rates, the exchange rate appreciates, or the forward rate depreciates, until the forward discount rate matches the interest rate differential.

The real problem is to account for the persistent differences between forward discount rates and actual rates of depreciation. The Australian dollar has typically traded at a substantial forward discount over a period in which it has not experienced a corresponding overall depreciation. The 3.3 per cent per year excess rate of return on Australian dollar bonds, referred to above, corresponds to a forward discount on the Australian dollar an average of 3.3 per cent greater than the actual rate of depreciation.

What have the implications been for Australia of these deviations from ex post uncovered interest parity? They have allowed the differential between Australian and foreign interest rates, imposed by the central monetary authority, to be accommodated with less exchange rate instability than would otherwise have been required. If money markets had correctly foreseen the future exchange rate, and had also foreseen the interest rate differential that would be maintained, then uncovered interest parity would have required the Australian dollar to trade higher on the spot market, so as to make room for a rate of depreciation sufficiently rapid to offset the interest rate differential.

For example, if in January 1985 financial markets had correctly foreseen the exchange rate in September 1989, and the time path of the interest differential between January 1985 and 1989, then uncovered interest parity would have required a spot exchange rate in January 1985 17 per cent higher than that actually observed. The apparent violation of uncovered interest parity has allowed a period of persistently high domestic interest rates to be combined with what appears, at least with hindsight, to be a surprisingly low exchange rate, especially over the earlier part of the period, and a surprisingly low rate of depreciation.

To keep the question in perspective, it should be remembered that the interest rate differentials referred to do not apply to all of Australia's external debt. In the first place, they apply only to that part of the debt which is denominated in Australian dollars. As at June 30 1990, this was estimated at about 42 per cent of the total. Furthermore they apply in full only to the short-term part of that debt; debt due to mature within one year represented 35 per cent of the total (ABS, 1991).

In relation to debt, therefore, high interest rates in recent years do not indicate any limitation in the availability of foreign capital to Australia. Rather, they indicate that, despite the high international mobility of capital, Australian monetary authorities retain and exercise control over short-term Australian dollar interest rates. The significance of the observed deviations from uncovered interest parity is that the exercise of this control has generated movements in the exchange rate smaller than those that would have been indicated by some simple theoretical models.

While these arguments show that no limitation in the availability of foreign debt capital to Australia need be assumed to explain the recent period of high interest rates, they do not establish that capital availability is unlimited. But the evidence does generally point towards that conclusion. Firstly, the synthetic estimates of risk premiums are generally small. Even the larger estimates obtained when allowance is made for variation over time in the variance of the exchange rate are only of the order of 0.5 per cent, and these larger estimates apply only to certain special circumstances.

Secondly, even if the synthetic estimates are rejected in favour of the hypothesis that risk premiums are large enough to explain observed deviations from interest parity, the inference cannot be made that capital availability is limited. To make that inference it would be necessary to show that large exchange risk premiums can be generated merely by high levels of foreign debt. High risk premiums generated by deviations of exchange rates above purchasing power parity, or of domestic interest rates above international interest rates, do not indicate any limitation in the availability of foreign debt capital, but merely a fear, whether created accidently or, as in recent Australian experience, by design of the domestic monetary authority, of a large rapid depreciation. The same applies if persistent deviations from ex post uncovered interest parity are attributed not to a risk premium but to apparently irrational expectations.

It appears therefore that the unresolved problems raised by deviations from uncovered interest parity do not provide any strong evidence against the unlimited availability hypothesis for debt. It is of course possible that an eventual resolution to those problems will involve rejection or modification of unlimited availability. As yet, however, there is little sign of such an outcome, while the partial resolutions which have so far been suggested are compatible with virtually unlimited availability.

For equity capital, there does appear to be some evidence for limitations in foreign supply. Studies of yields on comprehensive stock market indexes have not generally found significant segmentation for open industrialised economies, though it is not clear whether this is because segmentation is absent or because the tests applied are of low power. Studies of yields on individual stocks or small groups of stocks in small open economies have found price relations which are difficult to explain on the hypothesis that the stock prices are set in international capital markets, but easy to explain on the hypothesis that stock prices are set by domestic investors. This suggests that foreign equity capital is not available in such unlimited volume as to exert an overwhelming influence on domestic stock prices.

Many reasons have been suggested for limitations on the availability of foreign equity capital. These include the information and transaction costs facing foreign investors contemplating investments in Australian equity, and a scarcity of foreign investors with the qualities and motivation to undertake direct investment. Given that foreign investors provide only a minor part of total domestic equity capital, such factors would need to constrain foreign equity capital supply only mildly to prevent foreign financial markets from exercising overwhelming influence on Australian stock prices.

Finally, it may be concluded that no strong evidence has been found against the proposition that the supply of foreign debt capital to Australia is virtually unlimited; but that evidence does exist for limitations, though perhaps only mild limitations, on the supply of foreign equity capital.

APPENDIX E: RECENT CHANGE IN FINANCIAL REGULATION

1980	
May	Limit on trading banks' ownership of merchant banks increased from 33.3% to 60%.
December	Removal of interest rate ceilings on deposits with trading and savings banks.
1981	
July	Removal of restrictions on overseas investment by Australians.
August	Minimum term for trading bank certificates of deposit reduced from 3 months to 30 days.
December	The final report of the Campbell Committee tabled in Parliament.
1982	
March	Savings banks permitted to accept fixed deposits.
June	Reserve Bank of Australia (RBA) ceased providing quantitative lending guidance to trading and savings banks.
	Relaxation of limitations on the assets of authorised dealers. Introduction of tender a system for Treasury Bond sales.
August	Relaxation of controls on the assets of savings banks. Commonwealth bank account debits (BAD) introduced.
1983	
January	State financial institutions duty (FID) first introduced.
October	Trading banks permitted to hold increased foreign exchange balances.
	RBA withdrew from the Australian forward currency market, and relaxed restrictions on foreign currency holdings and the setting of exchange rates by trading banks.
	December Float of the Australian currency. Trading banks no longer required to settle foreign exchange position at the end of each day. All substantive exchange rate controls removed.
	Report of the Martin Review group published.

1984

April	Deregulation of Australian Stock Exchanges. Fixed fee charges by stock brokers abandoned. Australian financial intermediaries permitted to hold up to 50 per cent, foreign financial intermediaries permitted to hold up to 15 per cent of a stockbroking company.
June	Authority to trade in foreign exchange granted to 40 non-banks. Australian Payments Council established.
August	Savings banks permitted to offer cheque accounts. Withdrawal of prohibition on the payment of interest on short-term trading bank deposits. Removal of limits on the size of fixed deposits with savings banks
	Removal of limitations on trading bank ownership of merchant banks.
	Trading banks permitted to borrow funds for terms in excess of four years.
September	30/20 rule providing tax concessions to life insurance companies and superannuation funds holding at least 30 per cent of their assets in government or semi-government securities abolished.
	Maximum permissible individual holdings in a trading bank increased from 10 per cent to 15 per cent.
	December Limit on foreign ownership of stockbroking firms raised from 15 per cent to 50 per cent.

1985

January	Relaxation of limits on foreign investment in Australian securities.
February	Sixteen foreign banks invited to accept banking authorities.
April	Lifting of all bank interest rate ceilings, except for housing loans of under $100,000.
May	LGS convention replaced by the Prime Asset Ratio (PAR), with banks required to hold 12 per cent of Australian dollar liabilities in prime assets such as cash and government securities.
July	Treasury indexed bonds issued
September	Introduction of Capital Gains Tax

October	Relaxation of policies relating to foreign investment in non-bank financial intermediaries.
1986	
April	Interest rate ceilings on new bank housing loans under $100,000 removed, with a subsidy paid to savings banks to maintain existing loans at the rate of 13.5 per cent per annum.
June	Banks required to report all banking group exposures to individual clients exceeding 10 per cent of banking group capital.
	Industrial Relations Commission (IRC) introduces award superannuation.
July	Foreign Investment Review Board (FIRB) regulations relaxed.
August	Raising of maximum foreign ownership of authorised dealers from 25 per cent to 50 per cent, and relaxation of restrictions on their operations.
1987	
April	Abolition of deposit subsidy scheme for savings banks operative since April 1986.
	Removal of limitations on ownership of stockbroking firms by Australian financial intermediaries.
	Abolition of withholding tax on Australian dollar loans made by off-shore banks.
December	Insurance and Superannuation Commission (ISC) established, with responsibility for supervision of superannuation, life and general insurance (transferred from the Insurance Commission which was abolished).
1988	
May	Introduction of 15 per cent tax on the income of life offices and superannuation funds.
July	Changes in provisions relating to superannuation, including rates of tax on funds and benefits, reasonable benefit limits and deductible contributions.
August	Introduction of new capital adequacy guide-lines for banks based on Bank for International Settlements guide-lines.

September	Banks' Statutory Reserve Deposit (SRD) requirement replaced by Non-Callable Deposit with the RBA of 1 per cent of total liabilities.
1989	
July	Introduction of restrictions on superannuation fund assets and liabilities. Superannuation reasonable benefit limits changed.
	Benefits limits for public sector superannuation funds brought into line with those for private sector funds.
August	Compliance with bank capital adequacy reporting guide-lines extended from banking group to consolidated group.
September	Interest paid on non-callable deposits held by banks with the RBA increased from 5 per cent per annum to 5 per cent below the Treasury bond note yield.
November	Banking Act changed to give RBA explicit powers in respect of prudential supervision of banks. Removal of distinctions between trading and savings banks. Improved arrangements for reporting of bank statistics to RBA. Replacement of SRD with non-callable deposit.\
1990	
May	Banks' PAR requirement reduced from 10 per cent to 6 per cent of total assets, excluding non-callable deposits.
	Establishment of an Australian Banking Ombudsman.
1991	
January	Establishment of the Australian Securities Commission (ASC), with responsibility for administering the new Corporations Law.
July	Federal Government imposes freeze on redemptions of units of a number of unlisted unit trusts.
November	Government of Western Australia grants formal supervisory power of R&I Bank of Western Australia to RBA.

Data sources: Reserve Bank of Australia, Bulletin

CCH Australia, Australian Superannuation and Employment Benefits Guide, 1991

Australian Bankers Association, Submission to the Parliamentary Inquiry into the Australian Banking Industry, 1990

Insurance and Superannuation Commission, Annual Report
E Carew, Fast Money,

APPENDIX F: SIGNIFICANCE OF SMALL BUSINESS AND PREVIOUS STUDIES ABOUT THEIR FUNDING

Defining small businesses

A small business is generally recognised as having the characteristics of being independently owned and managed; closely controlled by owner/managers who also contribute most, if not all, of the operating capital; and the principal decision making functions rest with the owner/manager (BIE 1981). For the purposes of collecting statistics though a 'size' definition is used to approximate these characteristics. The Australian Bureau of Statistics defines a small business as one employing less than 100 people in the manufacturing sector and less than 20 in other sectors. A small agricultural business is defined as one with a turnover of between $20 000 and $400 000 per year.

Contribution of small business to the economy

Small businesses make a significant contribution to the economy in terms of employment and output. In 1989-90, 693 000 small businesses accounted for around 96 per cent of all non-farm private sector businesses and employed more than 2.5 million people (48 per cent of the total private sector non-farm workforce and 36 per cent of the total non-farm workforce). This consisted of around 863 000 self employed persons and 1.7 million employees. In agriculture about 106 000 (94 per cent) of recorded enterprises were small[1]. There are no official estimates of the contribution of small firms to Australia's output, however the Beddall Committee estimated that small businesses contribute roughly 30 per cent of Australia's GDP.

Small businesses operate in every sector of the economy, although their contribution differs widely between sectors. They are concentrated in such areas as the retail trade, construction and finance, property and business service industries (see table F1). Most small businesses (68 per cent) operate in the services area. Nearly 50 per cent of all persons working in their own business, work in the construction and retail trade industries. The significance of small business employment showed some marked differences between industries. The construction industry has nearly three-quarters of its workforce in small businesses, almost twice the share of manufacturing employment accounted for by small business. Small businesses account for only 10 per cent of employment in the mining industry.

1 Australian Bureau of Statistics, *Small Business in Australia 1990*, Catalogue no. 1321.0, 1991.

Small firms as job-generators

Some British and American research suggests that small firms contribute disproportionately to employment growth, given their number of employees and output. However the overseas evidence is somewhat mixed and little Australian research has been done on this issue. Other overseas studies indicate that a minority of small firms are responsible for employment growth. For example, a study by Stoey et al (1987) found that one-third of the jobs generated by the newly created manufacturing firms in Northern England from 1965 to 1978 were attributable to only 4 per cent of firms. Similarly Teitz et al. (1981) found that employment growth in California was apparently concentrated in only about 13 per cent of small firms.

Table F1: **Small business employment statistics by industry sector, Australia, 1989-90**

Industry	*Persons Employed ('000)*	*Small business employment (per cent)*	*Per cent of small business total employment*
Mining	7.8	9.9	0.3
Manufacturing	471.1	42.5	18.5
Construction	348.2	72.1	13.7
Wholesale trade	199.4	43.7	7.8
Retail trade	554.5	52.7	21.8
Transport & storage	123.8	51.5	4.9
Finance, property & business services	349.4	43.1	13.7
Community services	193.1	35.1	7.6
Recreation, personal & other services	297.0	53.5	11.7
Total[a]	2547.0		100.0

Notes: a includes the Electricity, gas and water and Communication industries
Data Source: Australian Bureau of Statistics, Small Business in Australia 1990, Cat. No. 1321.0, Canberra.

Between 1983-84 and 1989-90 small firms made a significant contribution to employment growth in each of the non-farm sectors in Australia, particularly manufacturing, construction and transport and storage (table F2). Comparing the share of small business employment in 1983-84 with the share of employment increase accounted for by small businesses from 1983-84 to 1989-90 suggests that small firms have not contributed disproportionately to employment growth in Australia. However direct conclusions should not be too readily drawn from this data as firms will cross into different size classifications as they grow or shed labour. The data may also reflect changes in technology over this period that favour the establishment of new small firms rather than growth in the size of existing small firms.

Table F2: **Increase in employment by size group as a percentage of total sectoral employment, Australia, 1983-84 to 1989-90**

Sector	*Increase in persons employed*	*Small business employment (%) 1983-84*	*Share of employment increase accounted for by employer size group: (per cent)*			
			< 20	*20-49*	*50-99*	*100+*
Manufacturing	93 000	39.4	43	20	13	24
Construction	159 100	74.0	68	8	5	19
Wholesale trade	95 900	44.8	40	20	11	29
Retail trade	181 600	56.5	35	11	13	41
Transport and Storage	53 800	54.0	43	5	25	27
Finance, property and business services	287 300	47.1	36	11	16	37
Community services	162 100	36.7	31	4	7	58
Recreational, personal and other services	150 700	58.1	42	19	..	38
Total	1 029 100	48.7	42	12	11	36

Note: .. Less than 1 per cent.
Data source: ABS, Small Business in Australia 1990, Catalogue 1321.0, Table 1.6.

Due to the difficulties with cross-sectional data, longitudinal data, where the employment growth of individual firms can be tracked through time, is often preferred by researchers. Williams (1989) conducted such a study for the period 1973 to 1987 with a sample of 13 789 new enterprises across all sectors, equivalent to 5 per cent of the estimated increase in the national numbers of enterprises for this period. Extrapolating the net employment growth these firms achieved he reached the tentative conclusion that small enterprises in Australia in the period 1973 to 1987 generated 1.4 million net new jobs, approximately 68 per cent of the nation's net increase in jobs.

A much smaller study by the Bureau of Industry Economics (Phillips and Papadopoulos, 1989) of firms in high technology industries found that small firms contributed disproportionately to employment growth in these industries given their overall number of employees.

Role of small businesses in innovation

The ABS provides statistics on the size of firms undertaking research in Australia. These allow an approximate comparison of relative involvement in innovation by firm size. The comparison is rough as inventions and technical improvements are not always the outcome of a formal R & D program but can also result from continuous minor improvements and modifications in production processes from 'learning by doing'. Also the survey does not cover the commercialisation of prototypes, which is often the most time consuming and costly part of innovation.

While small businesses account for 96 per cent of all non-farm private business, the ABS found, in 1988-89, only around half of the businesses recorded as performing R & D were 'small'. Small businesses accounted for only 25 per cent of the person years and 20 per cent of the expenditure devoted to R & D. However this result would at least partly reflect the concentration of small businesses in less research intensive industries, for example, retailing. Indeed 55 per cent of small businesses recorded as performing R & D were manufacturing businesses. Sixty-two per cent of these funds were spent on experimental development rather than basic or applied research.

The innovativeness of a firm appears to be a function of the age of the firm and not merely its size and the industry in which it operates. Several studies have confirmed that among small firms in a given size category, young firms appear to have a greater propensity to innovate than older firms. On the basis of their aggregate R & D, it appears that a minority of small firms play a significant role in innovation.

Previous studies of small business funding

Presented below are details of eight studies which have identified the sources of funds used by small businesses.

BIE, Finance for small business growth and development, 1981

This study uses postal survey results to examine the experiences of over 3 000 small firms in obtaining finance in the two years to June 1978. A small firm in the manufacturing sector was defined as one with less than 100 employees and in the non-manufacturing sector as one with less than 20 employees.

Although this study is over ten years old, it has a larger sample size than subsequent surveys and covers most of the non-agricultural sectors. Table F3 summarises the survey results.

The study found that over half of the small businesses that received finance from external sources received funds from trading banks and over one quarter from finance companies. Other financial institutions were seldom used by small businesses. Existing shareholders/partners were a substantially greater source of finance than new shareholders/partners. Results from the survey indicate that the Commonwealth Development Bank was a fairly important source of finance for manufacturing firms. (This data precedes the widening of the CDB's charter in 1985 gave the bank greater freedom to lend to non-manufacturing firm.) Government agencies were an insignificant source of funds for both manufacturing and non-manufacturing firms.

Table F3: **Access of manufacturing and non-manufacturing small firms to particular sources of finance, June 1976 to June 1978**[a]

Source of finance	*Manufacturing (%)*	*Non-manufacturing*[b] *(%)*
Trading banks	54.6	53.8
Finance (including hire-purchase) company	26.9	33.0
Existing shareholders/partners	35.0	31.0
New shareholders/partners	3.2	4.0
Commonwealth Development Bank	9.6	2.5
Personal loan (from a person not associated with the firm)	6.5	10.5
Trade customers or trade suppliers[c]	5.0	5.0
Solicitor or accountant	3.2	4.3
Assurance society or superannuation fund	5.1	4.8
Savings bank or building society	2.8	3.1
Stockbroker or merchant bank	2.5	1.0
Government agency or department	3.6	0.5
Other	4.3	3.7

Notes: a The percentages do not add to 100 as many small firms have access to more than one source of finance.
b Includes construction, wholesale and retail trade, road transport, real estate and travel agents, restaurants, hotels and clubs, technical, business and personal services. The survey did not cover firms known to be engaged in primary industry, property ownership, the provision of finance and the professions.
c This 5 per cent does not represent trade creditors, which are used by virtually all firms, but only special loans given by trade customers or suppliers.
Data source: BIE, 1981, table 3.3, p. 33.

DITAC, Small Business Review 1987, 1988

DITAC surveyed the software industry in late 1986. It received 400 usable responses covering an estimated 30 per cent of the firms in this industry. For this survey, DITAC defined a small business as having less than 20 full-time and part-time employees. Approximately 290 of the firms that responded were in this category - eighty-four perÿcent of which used and/or sought funds to finance expansion in the previous two years. Medium sized firms were defined as those using between 20 and 99 full or part-time employees. Sources of funds used by small and medium sized software firms are shown in table F4.

The study found that the majority of funds used by software firms was sourced from retained earnings and proprietors and shareholders, with trading banks playing a small role. Small software firms had a 59 per cent success rate in obtaining all the required external funds, 26 per cent obtained some of the finance they sought and 15 per cent were totally unsuccessful.

Table F4: **Software firms - sources of growth funds**

Source	*Small firms (%)*	*Medium sized firms (%)*
Firm's own funds	47	51
Proprietors/shareholders	34	20
Trading banks	12	13
Finance companies	4	7
Venture capital	2	3
Development banks	0	3
Other	2	4
All[a]	100	100

Notes: [a] may not add due to rounding.
Data source: BIE, 1988.

BIE, Small Business Review 1987, 1988

In 1987 the BIE surveyed 119 firms working in either biotechnology, communications technology, information technology, microelectronics, new materials, scientific and medical instruments. The survey provides interesting data on the sources of finance used by firms in various stages of the firms life.

A small firm was defined as having fewer than 100 employees at the time of the survey or at 30 June 1985. Firms with fewer than 20 employees made up 57 per cent of the respondents. Table F5 below shows the major survey results.

Existing partner/shareholders was the most commonly used source of funds with trading banks the second most frequently used source. However it can be seen that existing partners/shareholders were a more important source for very young firms, whereas trading banks were only an important source of finance for firms which had been established for five years or longer. Finance companies were a minor source of capital to respondents, even for those among the older categories. State government agencies were also significant for firms who had been operating for at least two years. Grants for Industrial Research and development (GIRD), MICs and other venture capital companies appear to be an important source of finance especially for companies which had been operating for less than 10 years. However the proportion of firms obtaining finance from these sources would be higher for the firms surveyed than for all high technology firms in general as the MIC investee businesses and firms receiving R & D grants were given prominence when selecting the sample of firms to be surveyed.

Table F5: **Sources of external finance, December 1985 to December 1987**

Source	*% of firms obtaining finance*[a]	*Percentage of firms in each age category obtaining finance*[b] *less than 2 years*	*2 to 5 years*	*5 to 10 years*	*more than 10 years*
Existing partners/shareholders	39.8	40.0	46.4	39.1	29.4
Trading banks	37.3	13.3	17.9	56.5	64.7
GIRD grant	32.5	40.0	35.7	34.8	17.6
MICs, venture capital companies	22.9	40.0	28.6	8.7	17.6
State government agencies	20.5	-	28.6	30.4	11.8
AUSTRADE/EMDG grants	10.8	6.7	14.3	17.4	-
Stock exchanges (Main & Second Board)	9.6	13.3	14.3	8.7	-
Finance companies	3.6	6.7	-	4.3	5.9
AIDC, CDB	3.6	-	3.6	-	11.8
New shareholders, partners	3.6	6.7	3.6	4.3	-
Other	14.5	-	28.6	8.7	11.8

Notes: a Expressed as a percentage of the 83 firms which obtained finance. Percentages sum to more than 100 because many firms obtained funds from more than one source.

b Expressed as a percentage of all firms in each age category which obtained finance. The number of firms in the various age categories are: less than two years (15), two to five years (28), five to ten years (23), more than ten years (17). Percentages sum to more than 100 because many firms obtained funds from more than one source.

Data source: BIE, 1988, p. 39.

The Victorian Small Business Development Corporation, A report on todays finance needs of small business, 1987

In 1986 the Victorian Small Business Development Corporation conducted a telephone survey of small businesses in Victoria, spread across all sectors of the economy except mining. They received 209 responses and of these 80 had obtained finance within the last year with only two business operators indicating they had difficulty in obtaining finance. Banks were found to be the major source of finance for small businesses in Victoria (table F6).

Table F6: **Sources of finance for small Victorian businesses, December 1986**

Source	*% of firms obtaining finance*
Bank	73.8
Government agencies	1.2
Finance companies	15.5
Private	2.4
Other	7.1

Data source: Small Business Development Committee, 1987.

Holmes and Kent, An empirical analysis of the financial structure of small and large Australian Manufacturing Enterprises, 1990

Professor Holmes of the University of Queensland surveyed 2553 manufacturing firms in the metal and engineering industry in 1990. Almost 400 firms responded of which 65 per cent employed less than 20 persons.

The primary source of start-up funds used by the firms surveyed is shown in table F7. While the focus is on small business, the results for large firms are included for comparison. The study found that 74 per cent of the small manufacturing firms commenced operations with funding primarily from the personal funds of owners. The only other significant source of finance were the trading banks. The personal funds of the owner were a less important source for large businesses. The survey also sought information on sources of capital accessed subsequent to establishment. The results are shown in table F8. For both large and small firms the main sources of additional funding were the owners and trading banks.

Table F7: **Primary sources of start-up funds for firms in the metal and engineering industries, 1990**

Source	*Firms with less than 20 employees*	*Firms with more than 100 employees*
	%	%
Personal funds of owners	74	50
Borrowings from Trading Bank	19	21
Borrowings from Finance Company	1	-
Borrowings from Merchant Bank	-	3
Other - Borrowings	2	3
Other - Owners Equity	1	21
No answers	3	2
	100	100

Data source: Holmes and Kent, 1990.

The most common form of debt finance used by small firms in the metal and engineering industry was found to be a trading bank overdraft. However, trading bank term loans, lease finance from a bank or finance company and trade credit were also commonly used (table F9). The majority of respondents were well aware of traditional sources and forms of debt finance. There was less awareness of funding available from the merchant banking sector and finance company term loans.

Table F8: **Sources of additional funding for small firms in the metal and engineering industry, 1990**

Source	*Firms with less than 20 employees*	*Firms with more than 100 employees*
	%	*%*
Additional funds provided by owner(s)	45	36
Borrowings from Trading Bank	39	41
Borrowings from Finance Company	2	1
Borrowings from Merchant Bank	-	7
Other	2	7
Not applicable	9	6
No answer	3	2
	100	100

Data source: Holmes and Kent 1990.

Table F9: **Sources of debt currently used by, and known to, small firms in the metal and engineering industry, 1990**

Source	*Sources currently used* [a]	*Aware of source*
	%	%
Trade (supplier) credit	28	75
Trading bank - overdraft	67	86
- Term loan	29	53
- Lease	15	46
Finance company - Term loan	9	27
- Lease	23	45
- Other	3	9
Merchant bank - Overdraft	1	9
- Term Loan	2	9
- Lease	-	9
- Other	-	4
Other sources	10	7

Note: a Percentages do not add to 100 per cent as more than one response for each category was possible.
Data source: Holmes and Kent 1990.

Victorian Small Business Development Corporation and Department of Manufacturing and Industry Development survey, 1991

A telephone survey of 96 Victorian businesses was undertaken by Department of Manufacturing and Industry Development (DMID) and the Ministry of Small Business through the Small Business Development Corporation in February and March 1991. Of the 96 firms, 77 were either manufacturing enterprises with fewer than 100 employees or non-manufacturing enterprises with

fewer than 20 employees. The typical source of finance again was banks, as shown in table F10. Venture capital loans were a significant source of finance. The majority of these loans were from government agencies. This reflects the sample selection whereby 51 survey respondents were DMID client firms.

BIE Survey, 1991

In May 1991, the BIE conducted a telephone survey of 204 small manufacturing firms in conjunction with the Australian Chamber of Manufactures. There was a bias in the survey towards well established businesses (table F11). Bank overdrafts were again the most commonly used source of finance by small firms. However, substantial numbers of firms used bank term loans, bank bills or leasing finance from a bank or finance company.

Table F10: **Sources of finance, Victoria, February/March 1991**

Source of finance	*Per cent* [a]
Bank loans/overdraft	91
Overseas borrowing	6
Venture capital loans [a]	18
Equity capital: private/internal	22
other	9

Notes: [a] Percentage do not total to 100 per cent as more than one response for each category was possible. Includes VEDC, AIDC, MICs, VIC, CDB, and DMID.
Data source: DMID and SBDC, Victorian Government, Sub. 54, Appendix B.

Table F11: **Sources of finance to small manufacturing firms, May 1991**

Source of finance	*Used by firms* [a] *(%)*
Bank overdraft	73.5
Bank term loan	28.5
Bank bills, commercial bills etc	19.5
Bank leasing finance	22.1
Finance Co. - leasing	21.6
Finance Co. - term loans	3.0
Merchant Bank	0.5
Commonwealth Development Bank	2.9
Other Government agency	0.5
Other loans	0.5

Note: [a] Percentages do not add to 100 as finance from more than one source is used.
Data source: BIE, Sub. 57, p. 10, table 3.3.

COSBOA Survey, 1991

COSBOA surveyed its membership in August and September of 1991 on the various types of finance used by small businesses. The survey received 235 responses with a significant bias towards businesses that had been operating at least 3 years in the retail sector in Western Australia. Eighty-one per cent of the sample had less than 20 employees. The survey results are presented in table F12 and are similar to those obtained by the BIE 1991 Survey. The major type of finance used by respondents were bank overdrafts and term loans, and leasing and/or hire purchase contracts from finance companies.

Table F12: **Sources of finance to small firms, August/September 1991**

Source of finance	Used by firms [a] (%)
Bank overdraft	70
Bank term loan	47
Bank leasing finance	17
Finance Co. - leasing	40
Finance Co. - term loans	8
Life Assurance Society loan	2
Commonwealth Development Bank	1
Personal loan from financial institution, used for business purposes	12
Other	5

Note: [a] Percentages do not add to 100 as finance from more than one source is used.
Data source: COSBOA, Sub. 80, p. 4, table 4.

APPENDIX G: COMPANIES AND SECURITIES LAW

Introduction

This appendix looks briefly at the history of companies and securities regulation in Australia and the development of the new national corporations law focusing on the fundraising provisions of the Corporations Act. Discussed also are the classes of companies that can be formed under the legislation and the distinction between public and private (proprietary) companies and their requirements to comply with the formalities under the law.

The contents, especially the prospectus requirements of the new laws are compared with the provisions that existed under the Companies Code and the different arrangements regarding exemptions from the prospectus provisions are discussed.

The prospectus reforms in the new Corporations Law makes it less prescriptive than the old law. The changes reflect a shift from an administrative regulatory regime to providing a framework within which the market can operate, by ensuring transparency in transactions through general disclosure provisions.

The new laws provide a more flexible framework within which the market can operate. Those responsible for prospectuses are required to provide information that investors need and are liable if the information provided is false or misleading. Under the new law the scope of civil liability has been extended in respect of both the class of person who may be liable and the class of person who may bring a claim.

Despite the wider liability, potential defendants have access to a number of reasonable defences and these are discussed and compared with the old laws. While the intent of the new law appears to be for reasonable liability, some requirements particularly the 'due diligence' defence can be interpreted in a number of ways. Due diligence has been interpreted by some as imposing a standard similar to that applied in the United States, which is onerous, thus adding to the cost of capital rasing. However another interpretation is that the precedent of case law under the Trade Practices Act 1974 is more appropriate and does not set such an onerous standard.

History of companies law

The Corporations Legislation Amendment Bill 1990 was passed by the Senate on 13 December 1990 and the necessary enabling legislation was subsequently passed by all States and Territories.

Soon after (on the first of January), the Australian Securities Commission (ASC) came into operation - charged with administering the new Corporations Law.[1]

The new Corporations law was introduced in response to a perception that companies and securities regulation in Australia was too complex and fragmented between the States. There had been moves to unify company law in Australia over the previous thirty years. In 1961, uniform companies legislation was introduced, but was criticised as ineffective.[2] In 1974 the Rae Report[3] recommended that a new national regulatory body be established by the Federal Government. Concern was also expressed about the quality of prospectuses:

> We are also alarmed by the frequency and serious nature of failures to meet appropriate standards of full, accurate and timely disclosure. Many of the several hundred prospectuses we received were misleading or failed to give sufficient information to enable an investor to make reasonable judgments on the merits of a venture. Likewise we found that many companies have neglected to make adequate disclosure to stock exchanges in published accounts and in statements to the market, while others have published accounts which have been misleading or deceptive.[4]

In the late 1970's the Commonwealth and the States agreed to the establishment of a new federal scheme known as the National Companies and Securities Scheme. Under the agreement a new regulatory body, the National Companies and Securities Commission (NCSC) was established. Commonwealth legislation was passed relating to takeovers, securities, companies and related matters. The States passed mirror legislation. The basic legislation was in conformity with the existing legislation in the various States. The new national Companies Code and corresponding State Codes made a number of improvements to the previous position, but fell short of uniform national regulation of companies and securities law. Under that arrangement companies were regulated separately by each State and Territory Corporate Affairs Commission (CAC). Each State CAC separately registered firms. As a result companies required the use of agents all over the country to obtain data on companies incorporated in other States and Territories. Nationally operating companies were required to submit to the control of a number of jurisdictions.

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1 The Corporations Bill was passed by the Federal Parliament on 23 May 1989 and the Corporations Act was assented to on 14 July 1989. The commencement of the Corporations Act was delayed as a result of the decision in New South Wales & Ors v Commonwealth of Australia (1990) 1 A.C.S.R. 127, in which the High Court held by a 6-1 majority that section 51(xx), the Corporations power of the Constitution did not give the Commonwealth power to control the incorporation of trading and financial corporations.

2 Criticisms were highlighted in the Rae Report which exposed certain malpractices, frauds, and deficiencies in the securities industry during the mining boom.

3 'Australian Securities Markets and their Regulation', Part 1, Report from the Senate Select Committee on Securities and Exchange, Volume 1 Report, AGPS, Canberra, 1974.

4 'Australian Securities Markets and their Regulation', Part 1, Report from the Senate Select Committee on Securities and Exchange, Volume 1 Report, AGPS, Canberra, 1974, pp. 15.1-2.

Difficulties in gathering information from different jurisdictions meant that it was difficult to administer the law. The problems associated with the lack of an adequate enforcement body and jurisdiction based laws also resulted in the imposition of costs on business. These costs came about because nationally based companies had to comply with the different laws in all jurisdictions, and were exacerbated whenever a jurisdiction found it necessary to change the law. There were increasing moves in the mid 1980's for the replacement of the cooperative scheme with federal legislation.

The Senate Standing Committee on Constitutional and Legal Affairs examined the performance of the cooperative scheme and concluded that it had outlived its usefulness. It unanimously recommended that:

> ... the Commonwealth should enact comprehensive legislation covering the field currently regulated by the cooperative scheme.[5]

In addition to concerns about the content, companies were critical of requirements involved in the administration and approval of prospectuses. In its submission to that Senate Committee the Business Council of Australia stated:

> The minute checking of prospectuses by the CAC's is a major cause of delay and frustration. ... It is believed that the CAC should have no role whatsoever in checking prospectuses. It would be better for the Act or Regulations to state the requirements for prospectuses clearly, require certification by a Solicitor and/or Accountant that these requirements have been complied with, contain strict provisions against misleading information (including omission of important information) and much larger fines for non compliance. The emphasis could then move to enforcement instead of minute checking.[6]

There was increasing support from the business community that the Commonwealth should assume responsibility for the regulation of companies and securities law. Typical of business comment to the Senate Standing Committee on Constitutional and Legal Affairs was the comment of the Confederation of Australia Industry:

> The present system of State and Federal co-operation on company regulation has now proven its limitations and should be abolished. Instead, the Federal Government should use its powers in this area to enact national legislation which would result in a better and more efficient system.[7]

The ASC replaced the National Companies and Securities Commission and was formed with the aim of improving enforcement of the law.

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5 Parliament of the Commonwealth of Australia, 'The Role of Parliament in relation to the National Companies Scheme', Report by Senate Standing Committee on Constitutional and Legal Affairs, April 1987, AGPS, Canberra, p. 74.

6 Submission from the Business Council of Australian at pp. 1-2, transcript of evidence, at pp. 376-377. (as cited in the Senate Standing Committee on Constitution and Legal Affairs, Report on the Role of Parliament in Relation to the National Companies Scheme, April 1987, AGPS, Canberra, p. 42).

7 Australian Financial Review, 30 March 1987, at p. 2. (as cited in the Senate Standing Committee on Constitutional and Legal Affairs Report on the Role of Parliament in Relation to the National Companies Scheme, April 1987, AGPS, Canberra at pp. 65-66).

The new Corporations law has taken up the enforcement focus. In a recent speech, MrÿA.G. Hartnell, Chairman of the ASC stated:

> Enforcement of the law is, without question, the prime focus and commitment of the ASC. There is no doubt that the enforcement of the law under the system that we had to date is totally inadequate to deal with a dramatic increase of what are clearly abuses of company law.[8]

The structure of the Corporations Law must be considered in light of the purpose of regulating the securities industry. Mr Justice Marks commenting on the policy reasons for securities regulation stated:

> A policy of the Code is the supervision and regulation of the stocks and shares and securities industry to protect the market against dishonesty, including insider trading, misleading information, market rigging, market manipulation and so on.[9]

This view also characterises the new Corporations law:

> Basic policy justification for securities legislation may be the desirability of a minimum standard of fairness in the securities market and the benefits of such legislation in the protection of individual investors. The prevention of fraud and the promotion of disclosure in the securities market may also be necessary for the maintenance of an efficient market and in order to maintain investor confidence in the markets integrity.[10]

The aim of the new prospectus rules in the Corporations Act was to increase substantially the level of disclosure to the marketplace about securities that are offered for sale and to simplify the prospectus approval process.

The Attorney General stated in the second reading of the Bill:

> ... the fundraising provisions of the legislation will be substantially simplified and new provisions introduced to shift the thrust of the fundraising controls from the regulatory authority to the market ...[11]

Companies and other organisations

The word `company' has no single definition which has generally been accepted in the community. It is used colloquially to describe not only registered companies but also partnerships. [12] The basic difference is that a company is registered, and is recognised as a separate legal entity and can sue and be sued.

8 Hartnell, A.G., 1990, 'Current directions for the ASC - Effective corporate regulation', speech to the Australian Institute of Company Directors, Victorian Division, Melbourne, p. 2.

9 *Controlled Consultants Pty Ltd v Commissioner for Corporate Affairs* (1984) 8 ACLR 458 at 473.

10 Australian Corporations Law, Principles & Practice, 1991, Vol. 3, Butterworths, Sydney, p. 71,128.

11 Corporations Bill, 2r, H of R, 23 May 1988, pp. 2993-5 at p. 2994.

12 Partnerships are defined in the State Partnership Acts as the carrying on of business in common by persons with a view to profit.

There are various advantages of carrying on business through a company. Incorporated companies have limited liability. That means that the liability of the shareholders is limited to the total number of shares they hold in the company.[13] The property owned by the company is regarded as separate from the property owned by the shareholders. Generally the composition of the company's membership is flexible, subject to certain restrictions as to the transfer of shares in the case of a proprietary company.

The shareholders of a company are in fact co-owners of the company's assets but are not able to break up the company when they like, which is the case in most partnerships.

In order to obtain registration, a company must lodge a copy of the memorandum and articles of association with the ASC. The memorandum of association contains basic information about the purpose and other related features of the company. The articles of association are provisions for the effective daily management of the company.

The disadvantages of forming a company arises from the need to comply with formalities set out in the Companies Codes and now under the Corporations law.

The Companies Codes and now the new Corporation law sets out the methods by which companies may be formed and differentiates between various classes of companies that may be registered. The most common form of company is limited by shares. Such a company has a nominal capital which is divided up into shares. The shareholders agree to take up shares in the company and their liability is limited to the nominal paid-up value of those shares.[14]

Guarantee companies are limited by guarantee, that is, the members' liability is limited to the amount of the guarantee they have nominated. Companies can be both limited by guarantee and shares. Another form of company recognised by the law, but little used, is an unlimited company, where there is no limitation on the liability of members.[15] Another class of company recognised by the legislation are mining companies which may be a 'no liability' company.[16] Members are under no obligation to make payments on the par value of the shares they have agreed to take up. The directors may make calls on the shareholders requiring them to pay up so much of the balance owing on the shares. Failure of the shareholder to make payment results in the forfeiture of those shares.

[13] Partners on the other hand are liable to the full extent of their assets unless the partnership is a limited liability partnership which is available in some States.

[14] Shareholders will not be obliged to make any payments to the company, nor to any creditors of the company should it go into liquidation, in excess of the nominal value of their shares.

[15] Section 115 Corporations Act 1989 (Section 33(2) Companies Code).

[16] Section 115(2) Corporations Act 1989 (Section 33(2) Companies Code).

Public and private (proprietary) companies

Another distinction made in the legislation is between public and private (proprietary) companies. Different rules operate with regard to disclosure, transferability of shares and other matters. A proprietary company is allowed a maximum number of shareholders (50); it must restrict the right of individual shareholders to transfer their shares; it is prohibited from raising moneys either by share or loan issues to the public; and it must prohibit any invitation to the public to deposit moneys with the company.[17]

Most companies are proprietary companies. The advantages enjoyed by proprietary companies are that they need only appoint two persons as directors, membership need only be two persons,[18] there are no restrictions on the age of directors, directors cannot be dismissed by the shareholders, unless there is a specific provision in the company's articles of association. The management of proprietary companies is thus relatively simple, without the various formalities that are required for public companies.

When prospectuses are required

This section discusses the content of the new laws and compares them to the old requirements under the Companies Code where there have been significant changes.

Fund raising may take a number of different forms. The most used form of equity fund raising, is the issue of shares to members of the public in return for cash or some other consideration. Public companies raise in practice the majority of their equity capital from the public. Companies may however raise money by way of loan capital through the issue of debentures, unsecured notes or bonds.[19]

[17] Section 116 Corporations Act 1989 (Section 34 Companies Code).

[18] Section 114 Corporations Act 1989 (Section 33 Companies Code).

[19] All these are known as securities. Companies may issue loan capital rather than share capital. A debenture is a general term to describe a document in which a company acknowledges a debt due to a creditor. A debenture may be secured or unsecured. A company, whether proprietary or public may issue debentures, or may issue unsecured notes to persons who wish to 'invest' in the company, and must receive either cash, or assets equivalent in value for the shares that are issued. (Section 9 Corporation Act 1989 previously section 5 Companies Code).

When a company wishes to raise money from the public either in the form of shares or debentures it must issue a prospectus.[20]

The Act imposes restrictions on the allotment of shares. Prospectuses must be acted upon within 6 months. Companies may by resolution in a general meeting alter their share capital.[21]

Under the old Companies Code, prospectuses were required when an offer was deemed to be an 'offer to the public'.[22] This test was progressively watered down in the courts until it was interpreted to mean an offer to 'any member of the public', rather that an offer to the public at large. Under the new law, all offers, invitations and issues of securities, with certain exceptions[23] have to be accompanied by a prospectus. The new Corporations Law eliminates the 'offer to the public' concept and replaces it with a prohibition that a person shall not offer for subscription or purchase, or issue invitations to subscribe for or buy securities,[24] shares, debentures, prescribed interests[25] of a corporation unless:

- a prospectus has been lodged with the ASC;
- the prospectus complies with the Corporations Law; and
- the prospectus has been registered by the ASC if registerable.[26]

20 A 'prospectus' provides material information about the relevant investment opportunity. The aim is to protect prospective investors from exploitation by the securities issuer. 'Prospectus' was defined in Section 5(1) of the Companies Code as: 'a written notice, circular or instrument inviting applications or offers from the public to subscribe or purchase, or offering to the public for subscription or purchase, any shares ... in a corporation'. The Corporations Act dispenses with the notion of 'offer to the public' and defines 'prospectus' in section 9, to mean 'a written notice or other instrument: (a) inviting applications or offers to subscribe for or buy the securities; or (b) offering the securities for subscription or purchase'. Such a definition covers much more than 'prospectus' in the normal sense of the word, but also covers for example, a simple letter offering to one person securities for subscription or purchase.

21 Section 193 Corporations Act 1989 (Section 121 Companies Code).

22 'Offer to the public' - The High Court in CAC (S.A.) v Australian Central Credit Union (1985) 3 A.C.L.C. 792 stated that under section 5(4) it not necessary that the offer be made 'to the public generally' or that it be 'capable ... of being acted upon by any member of the public ... whether selected as clients of the person making the offer or issuing the invitation or in any other manner' and 'notwithstanding that the offer is capable of acceptance only by each person to whom it is made or that an offer or application may be made pursuant to the invitation only by a person to whom the invitation is issued'.

23 Excluded offers, issues and invitations are defined in section 66 of the Corporations Act 1989.

24 Securities' includes shares, debentures, prescribed interests and units of shares (such as options or rights) and prescribed interests issued or made available by the relevant corporation - Section 92 Corporations Act 1989.

25 A company may issue 'prescribed interests'. They are unit trusts but also cover a wider range of investments. A prescribed interest includes a right to participate in the profits, assets or realisation of any financial undertaking of the company.

26 Section 1018(1) Corporations Act 1989.

Some activities are excluded from prospectus requirements

A prospectus is not required either:

- where the issue or offer is excluded under section 66 of the Corporations Act; or
- where it has been made by a body incorporated in a State or Territory which is exempted by the Regulations to the Act.[27]

There are also some significant exceptions relating to listed securities in section 1018 of the Corporations Act. They are relevant to secondary trading on the ASX.

Exclusions from the need for a prospectus appear to be based on the likely extent to which the parties purchasing the shares can inform themselves about an issuing company's activities. An exclusion applies when:

- the minimum subscription is at least $500,000 per person;
- no consideration is paid for the subscription or purchase;
- they involve personal offers of securities (other than prescribed interests) to less than 20 people in a 12 month period;
- offers are to executives or close associates of executives;
- they involve certain dividend reinvestment schemes (expanded by regulation);
- they are offers of debentures or convertible notes to existing holders of debentures or convertible notes;
- they involve offers of debentures of excluded corporations and any other issue.

In addition to these exclusions the Minister has some discretion to make other exemptions through regulation.

The following exemptions are available under regulation from the prospectus requirements of the Corporations law:

- pursuant to a takeover scheme or a scheme of arrangement;[28]
- to holders of dealers licences or exempt investment advisers, acting as principals;
- to Life Insurance Companies;
- to a trustee of a superannuation fund, constituted under a statute or having net assets of a least $10 million;

27 Section 1017 Corporations Act 1989.

28 Corporations Regulations 7.12.02 and 7.12.06.

- to a terminating building society or a friendly society;
- to an investment company;
- in relation to a right or interest in a superannuation fund;
- to shareholders in relation to issue of additional shares in substitution for dividends (that is, dividend investment scheme and bonus issues);
- to a person who, for the purposes of investment in securities, controls an amount of not less than $10 million (that is, an investment fund manager).[29]

Some groups or arrangements previously exempt from prospectus laws are not under the new law.

Professional investors

The professional investors exemption from a prospectus, under the Companies Code is no longer available. It must come under one of the new exclusions: i.e. `personal offers'[30] or `large investors' exemption[31] to avoid the requirement for a prospectus. In addition certain institutional investors are excluded in the Regulations.

Rights issues[32]

The exemption from the prospectus provisions in the case of rights issues which applied under the Code has been narrowed under the Corporations Law.

Whereas rights issues of debentures or convertible notes are exempt, the traditional rights issue letter to existing shareholders will no longer be appropriate. A rights issue of shares now requires a prospectus unless it can be brought within any of the exclusions in Section 66 of the Corporations Act. However the prospectus must only be lodged and not registered with the ASC.

Employee share plans

As in the case of rights issues, unless an offer or issue of shares to employees under an `employee share plan' falls within one of the categories in section 66 of the Corporations Act, a prospectus will be required. There is an exception for `executive officers' their `close relatives' and their family companies, but this does not apply to employees generally.

29 For example, a rearrangement where a company is in financial difficulty.

30 Section 66(3)(d) Corporations Act 1989.

31 Section 66(3)(a) Corporations Act 1989.

32 Rights issues arise for example, where a corporation will issue shares as a term and condition of an earlier issue of shares. That is where a company with share capital offers new shares to its shareholders in proportion to their existing holdings, each shareholder is said to have 'rights' to his proportion of the shares issued.

The new laws are less prescriptive than the old laws

When the national corporations law was drafted the opportunity was taken to introduce a number of substantial reforms. These reforms reflected a significant input from the business community. Some of the main reforms involved new provisions, introduced to shift the thrust of the fundraising controls from the regulatory authority to the market.

Accordingly, the new arrangements have been streamlined and represent a shift from a highly directive administrative regime to one with increased emphasis on criminal law and civil law regulation. A criminal law prosecution is an action by the community against an individual for the breach of stated community norms. The criminal law system exists generally to serve a number of social goals, including punishment, retribution, the reform of offenders, and most importantly deterrence which, from an economic point of view, means providing incentives to conform with stated community norms.

A civil law regime, on the other hand, provides the means of enforcing private rights between individuals. An administrative regulatory regime involves a greater role for government. It usually involves the broad delegation of discretionary power from the legislature to a Minister, his department or a statutory body, so that effectively the responsible authority becomes the law-maker (through the power to pass regulations), prosecutor and often judiciary in one. Administrative regimes involve a closer relationship between government and the market and, commonly, direct negotiation between participants and the administering authority regarding the way the latter performs its role.

In the second reading of the Bill, the Attorney General stated:

> ... to ensure that fundraising activities are not impeded by delays or the imposition of unnecessary costs by the regulatory authority, the Australian Securities Commission (ASC) will not pre-vet prospectuses. There will also be no pre-vetting of part A statements, profit forecasts and asset valuations during a takeover. As well, the complex and detailed rules as to the content of prospectuses will be replaced by much more basic disclosure rules designed to provide investors with information they need to make informed investment decisions.[33]

The Companies Code set out what information was required in a prospectus.[34] The new legislation replaced the requirement that a comprehensive list of facts be included in the prospectus with the much more general requirement that the prospectus contain:

> ... all such information as investors and their professional advisers would require and reasonably expect to find in the prospectus, for the purpose of making an informed assessment of:
>
> (a) the assets and liabilities, financial position, profits and losses, and prospects of the corporation; and

33 Corporations Bill, 2r, H of R, 23 May 1988, pp. 2993-5

34 Section 98 of the Companies Code set down guidelines for the inclusion of reports of experts (i.e. accountants, valuers etc).

(b) the rights attaching to the securities.[35]

With this new law the onus is left with the company as to what constitutes information investors would 'reasonably expect to find'. In addition pre-vetting of prospectuses by the ASC is replaced by reduced obligations:

The ASC is bound to:

> refuse to register a prospectus if:
>
> (a) it appears that the prospectus does not comply with the requirements of the Act; or
>
> (b) the ASC is of the opinion that the prospectus contains a false or misleading statement or that there is an omission from the prospectus.[36]

On the other hand, where a prospectus has been lodged it seems that the only instruments that the ASC can use to deal with prospectuses which it feels are contrary to the law, are the issue of a 'stop order'[37] or the use its power to ask for a supplementary prospectus (where there has been a significant change affecting the information provided in the prospectus.[38])

Mr Leigh Hall, General Manager, Investment Operations of the AMP Society in an address to the Business Law Regulation Forum stated:

> Under the old regime issuers complained of extensive delays and unnecessary costs. Issuers were subjected to exhausting compliance with checklists monitored by the Corporate Affairs Commissions. It was intended that under the new arrangements they could get away from all that and instead would provide the information that investors needed. Just to make sure that issuers did this, those responsible for the prospectus were made liable for its content.[39]

Overall, the role of the ASC is more that of a 'corporate policeman' than an administrator. This is contrary to the role that had previously existed where the State Corporate Affairs agencies performed an administrative function of a public registry. The ASC is less interventionist in its role and the emphasis is on providing a framework within which the market can operate, by ensuring transparency in dealings through the general disclosure provisions, rather than telling market participants what they should do and what should be included in a prospectus.

35 Section 1022, Corporations Act 1989.

36 Section 1020A Corporations Act 1989.

37 Section 1030 Corporations Act 1989.

38 Section 1024 Corporations Act 1989.

39 Hall, Leigh, 1991, 'Companies and Securities Regulation', address to the Business Law Regulation Forum, Canberra, p. 11.

Persons potentially liable under the new laws has broadened

The Companies Code contained provisions against misleading statements in prospectuses.[40] Civil remedy was available against any director, promoter or other person who authorised the issue of the prospectus, where it contained information that was misleading or there was a non-disclosure of a material matter which resulted in a person suffering loss because they relied on the prospectus. Defences were available to persons who would otherwise be liable.

In addition to civil liability for the loss sustained by a person relying on a prospectus, it was also a criminal offence which carried a penalty of a maximum fine of $20,000 or imprisonment for five years or both.[41]

The Corporations Act significantly increases the exposure to potential liability of persons involved in the issue of a prospectus.[42] Indeed anyone who is involved in the issue of a prospectus in which there is found to be a material statement that is 'false or misleading' or from which there is a 'a material omission' faces not only civil, but also criminal liability under the Act.

Generally, the persons who may be sued are the corporation itself, directors and promoters, experts, professional advisers (the auditor, bank, solicitor, stockbroker, or underwriter), other advisers and persons who authorised or caused the issue of the prospectus. This represents a substantial extension of the law.

All persons involved in the preparation of the prospectus will be responsible for the prospectus. Each of the persons who may be liable under section 1005 has defences available and will generally only be liable if they have not exercised due diligence.

The scope of civil liability has also been extended in respect of the class of persons who may bring claims.[43]

Despite the wider liability, potential defendants have access to a number of reasonable defences.

The courts over recent years have been concerned that information distributed to shareholders is accurate and not misleading. The directors of the company have an obligation to act bona fide and in the best interests of the company.

40 Sections 107 and 108 of the Companies Code.

41 Section 108 of the Companies Code. Criminal liability under the Corporations Act 1989 is found in section 1996.

42 Section 1006(2) Corporations Act 1989.

43 Section 1005 Corporations Act 1989.

Criminal liability for false of misleading statements or omissions from a prospectus is found in section 996 of the Corporations Act which provides:

> A person must not authorise or cause the issue of a prospectus in relation to securities of a corporation:
>
> (a) in which there is a material statement that is false or misleading; or
>
> (b) from which there is a material omission.[44]

It is notable that under the corresponding offence under section 108 of the Companies Code, liability arose in authorising or causing the issue of a prospectus in which there was an 'untrue statement or a non-disclosure'. The onus was on the person charged to prove, on the balance of probabilities, that the statement or non-disclosure was not material. Under section 996 of the Corporations law, it is for the prosecution to prove beyond reasonable doubt that an alleged false or misleading statement or omission is material. This is a return to the traditional common law notion of criminal liability[45], and amounts to a less onerous position for persons involved in the preparation of a prospectus than existed under the previous law.

A defence to criminal liability under section 996 of the Corporations Act is that, in respect of false or misleading statements, the defendant believed on reasonable grounds that the statement was true and not misleading, after making such inquiries (if any) as were reasonable, or that the omission was inadvertent.[46]

A similar defence was available under section 108 of the Companies Code if a defendant had reasonable grounds to believe and did believe that the statement was true, or the non-disclosure was immaterial or inadvertent.[47] In addition the common law provided remedies for negligent misstatement or fraud.

Civil liability in respect of prospectuses is in section 1005 of the Corporations Act which provides:

> ... a person who suffers loss or damage by conduct of another person that was engaged in a contravention of a provision of this Part ... may recover the amount of the loss or damage by action against that other person ... whether or not that person ... has been convicted of an offence in respect of the contravention.[48]

44 Section 996 Corporations Act 1989.

45 'Directors' prospectus liability under the Corporations Law', Mallesons Stephen Jaques Executive Law, August 1991.

46 Section 996(2) Corporations Act 1989.

47 Section 108 Companies Code.

48 Corporations Bill, 2r, H of R, pp. 2990-2995.

The necessary elements to establish a cause of action are:

- the plaintiff's loss or damage;

- the fact that a prospectus was issued by someone, that it contains a false or misleading statement or omission.

Civil liability provisions for contraventions of the market and prospectus provisions of the Act, are based on section 82 of the Trade Practices Act 1974. Unlike section 107 of the Companies Code, the Corporations Act does not expressly require that the person acquired securities on the faith of the prospectus. However, case law under the Trade Practices Act 1974 indicates the importance of showing reliance by the person on the prospectus in order to establish the loss or damage was caused by the other person's contravening conduct. In other words it is necessary for the applicant to prove, on the balance of probabilities, a causal connection between the contravention and the loss or damage suffered, so that, in effect, the old and new provisions work in a similar way.

Once these ingredients are established, then an action may be brought against all or any of the persons liable under the Act. Defendants would be liable unless they can establish one of the stated defences.

At first glance the new corporations law may appear to be over zealous in its coverage of potential parties who may be liable. However, the aim or intent of the law appears to focus on enforcing what should be the natural responsibility of parties involved in the writing and development of the prospectus.

The Attorney General in the second reading of the Bill stated:

> ... Obligations will be imposed on those engaged in fundraising to promote self-enforcement by the market. There will be a general prohibition on misleading or deceptive conduct in relation to the issue of or trading in securities... [49]

The defences which are available to people who work on the prospectus, are based mainly on the notion that they cannot be held liable if they undertook a reasonable effort in ensuring that the work they did, did not contravene the law.

Defences differ from person to person. The issuer and those with access to detailed information about the issue have the greatest responsibility and exposure. A general defence is that the person complaining had knowledge of the contravention prior to subscribing for or purchasing the securities.[50]

There are other defences for specific classes of persons: such as if they withdrew consent to the issue of the prospectus; the prospectus was issued without their knowledge; they had reasonable grounds to believe the statement to be true and not misleading, and they made such enquiries as were reasonable.

49 Section 1007 Corporations Act 1989.

50 Section 1010 Corporations Act 1989.

Section 1010 of the Corporations Act provides a limited defence for advisers such as stockbrokers, underwriters, auditors, bankers, solicitors and other professionals. Such persons will not be liable under section 1005 for a false or misleading statement or omission if they can establish that the offending statement or omission was not included in or omitted from (as the case may be) that part of the prospectus for which they had responsibility or that statement was not included in the form and context to which they had agreed.[51] A person needs to insist upon an express statement in the prospectus that they were only involved in the preparation of a particular part.

The liability of an underwriter and stockbroker named in a prospectus is the same as a promoter or director. They are primarily responsible for the misleading statements in a prospectus.

While the intent of the law appears to be for 'reasonable liability', some requirements (particularly 'due diligence') can be interpreted a number of ways

The Corporations Act provides a general defence for the issuing corporation, promoters, stockbrokers and underwriters, and persons who authorised or caused the issue of the prospectus.[52] The general defence under section 1011 of the Corporations Act provides that the company, the promoter, the stockbroker, sharebroker or underwriter are:

> ... not liable in an action under section 1005 for a false or misleading statement in, or for an omission from a prospectus if it is proved that the false or misleading statement or the omission:
>
> (a) was due to a reasonable mistake;
>
> (b) was due to reasonable reliance on information supplied by another person (not being a servant or agent or director of the defendant); or
>
> (c) was due to the act or default of another person, to an accident or to some other cause beyond the defendant's control;
>
> and, in the case to which paragraph (c) applies, that the defendant took reasonable precautions and exercised *due diligence* to ensure that all statements to be included in the prospectus were true and not misleading and that there were no material omissions from the prospectus.[53]

51 Section 1010 Corporations Act 1989.

52 Every director must sign the prospectus and therefore appears to authorise it. Section 1021(13) Corporations Act 1989.

53 Section 1011 Corporations Act 1989.

It is now a matter for the courts as to how burdensome the due diligence requirements will be.

The concept of due diligence is relatively new in Australia, but has been used in the United States, Canada and the United Kingdom.[54] It has meant that extensive enquiries must be undertaken to ensure that nothing contained in the prospectus is false or misleading that there has been no material non-disclosure. In the United State or Canada this usually involves 3 categories of investigation: financial, business and legal on behalf of each of the issuing corporation and the underwriters. Experience in these countries indicates that in order to take advantage of the defence directors, officers and underwriters need to conduct independent investigations of the material provided in the prospectus.

The fact that the new law makes the issuers of prospectuses liable, in order to ensure that they provide investors with the information they require to make an informed decision together with the fact the process is still unfamiliar has caused advisers to companies to be overly cautious. According to Leigh Hall:

> The net result to date, has been that prospectuses have taken a long time an enormous amount of money to produce.[55]

He also states that there is doubt whether such advise is soundly based and if advisers are being too cautious or conservative they should be aware that they are causing unnecessary costs to the investor and commercial sector. He was also critical of the lack of useful information to the investor and applauded the recent developments which have demonstrated how certain prospectus could be shortened.

The expression 'due diligence' has been interpreted by some as imposing the 'due diligence' standard as applied in the United States, and the consequent belief that will dramatically increase the cost of capital raising. However another view is that the term 'due diligence' as is used in the defence provided by section 1011(1)(c) of the Corporations Law is in a form taken from section 85 of the Trade Practices Act 1974.

Case law under the Trade Practices Act 1974 establishes that a for a person to escape liability:

> It is not necessary that all conceivable steps to avoid a contravention should have been taken so long as action has been taken which would be thought appropriate by a person genuinely desiring to avoid the prohibited activity.[56]

54 The relevant legislation in those jurisdictions is respectively, the Securities Act 1933, the Ontario Securities Act 1978 and the Financial Services Act 1986(UK).

55 Hall, Leigh, 1991, 'Companies and Securities Regulation', address to the Business Law Regulation Forum, Canberra, p. 11.

56 Taperell, G.Q. and others, Trade Practices and Consumer Protection, 3rd Edition, Butterworths, Sydney, 1983, p. 765.

Some positive steps must have been taken except in the rare case where nothing could practicably have been done. What amounts to the taking of reasonable precautions and the exercise of due diligence is a question of fact depending on the circumstances of the particular case.

It was held by the Court in a case under the Trade Practices Act 1974, that a defendant must prove that they took reasonable precautions and exercised due diligence, not as a general matter of business, but 'to avoid the contravention'. A defendant could not be said to have taken precautions and exercised due diligence to avoid the perils of a contravention of the Act if it had no cognizance of the peril.[57]

The task of showing that the person took reasonable precautions and exercised due diligence to ensure there were no material omissions from the prospectus must be gauged in conjunction with the standard of disclosure set by section 1022, which requires disclosure of all such information as investors and their professional advisers would reasonably require, and reasonably expect to find in the prospectus, for the purpose of making an informed assessment of (in effect) the financial position and prospects of the corporation and the rights attaching to the securities.

57 Adams v Eta Foods Ltd (1987) 19 F.C.R. 93.

APPENDIX H: EQUITY EXCHANGES IN AUSTRALIA AND OVERSEAS

H1 The Australian Stock Exchange

Nature and legal foundation

The Australian Stock Exchange (ASX) is a corporation operating under the Companies Act (1990). It is responsible for operating the first board of listed Australian stocks, as well as the National Guarantee Fund. The legal foundation of this responsibility is the Australian Stock Exchange and National Guarantee Fund Bill (1987). The bill does not prohibit other stock exchanges to operate, and an application for an over the counter (OTC) market is presently before the ASC (Austpac Holdings, Sub. 59).

Since the introduction of the Bill, the state stock exchanges have become fully owned subsidiaries of the ASX, responsible for operation of the second board as well as options trading in their own state. Each state stock exchange charges a levy on transactions for the maintenance of the exchange, a proportion of which is directed to the ASX.

The companies listed on the first board are registered at one of the state stock exchanges, which is the company's home exchange, and to which all correspondence with the ASX is directed. The stocks of all the companies listed are traded on a national computerised system, known as the Stock Exchange Automated Trading System (SEATS).

The National Guarantee Fund consists of the pooled assets of the state fidelity funds, which are maintained for the protection of investors in the case of parties being unable to fulfil their obligations, or of a dealer becoming insolvent. The fund is administered by the ASX, and can be supplemented by an additional levy on transactions if it falls below a desirable level. In addition, there is a national development fund, under the direction of the ASX, which exists to pay for the capital costs of national clearing and settlement systems.

The ASX has responsibility, through its state subsidiaries for the operations of the options market in 26 leading securities and gold. Options are agreements reserving the right to buy or sell at some future date, the unit of a commodity, stock, financial instrument or specified currency.

Futures markets are the responsibility of the Sydney Futures Exchange. These contracts involve an agreement to buy or sell standardised units of commodities, securities or currencies at some specified future date.

Both options and futures markets have grown considerably in recent years. They add considerably to the flexibility of dealings in the underlying securities. It is uncertain however, to what degree dealings in these types of contracts affects the price of the underlying securities.

Listing and quotation requirements

The required value of a listed company's capital, when fully paid up, varies between different types of company. The listing requirements for major classes of industries are set out below.

Industrial companies

Limited Liability Industrial Companies[1] are required to have a minimum issued capital of $300 000, distributed to at least 300 members of the public. Members of the public must hold shares of the same class to the number of

- 140 000 shares if the issued capital does not exceed $400 000
- 200 000 shares if issued capital does exceed $400 000

Paid up value of the issued shares must be a minimum of 20 per cent of the total equity. The company must be a going concern, with a before-tax profit of at least $500 000 for each of the past three years, derived from the company's ordinary business.

Mining companies

Mining Companies are required to have a paid up value of $1.5 million, issued in tradable packets of shares of the one class to at least 300 members of the public. At least 200 000 of these shares must be in the hands of these members of the public, with a paid up value of;

- $100 000 or 25 per cent if the issued capital does not exceed $2 million
- $500 000 or 15 per cent if the issued capital does exceed $2 million

The company must have firm proposals and have completed geological or seismic examinations sufficient to verify its deposits.

Management companies

Management Companies seeking listing of units in a unit trust must have a minimum of $500 000 in the hands of at least 200 members of the public in tradable packets, for each trust under management.

1 All companies other than mining.

Exempt foreign companies

Certain foreign companies are permitted to maintain a listing in Australia, and to issue equity. These companies are exempt from rules of the ASX other than those relating to registration, transfer and issuing of certificates, and maintaining an informed market. Foreign companies may be listed on the ASX if they meet the following criteria:

- They must have net tangible assets exceeding A$500 million, or have had a pre-tax profit of at least A$100 million, from their main activities for at least the last three years.

- They submit the annual report for the past five years.

- They must be listed on another exchange and the rules of that exchange regarding protection of investors must be acceptable to the ASX.

- They must establish an Australian share register and pay a listing fee.

- They must observe the rules relating to transference of securities into or out of Australia.

- They must immediately inform the ASX of any change in circumstances in any other exchange which is likely to lead to the formation of a false market in the stock of that company.

Additional rules

There are additional rules for specific types of company.

- High technology companies must issue a prospectus detailing new processes or products which it is hoping to develop or exploit.

- Stockbroking companies must issue a prospectus including details of the nature of the company and its likely activities.

- Companies established to acquire assets from an existing company may issue either a prospectus or an information memorandum. This memorandum must detail that the assets have been held by the previous owner for a minimum of two years, or that the value of the assets has increased while in the hands of that owner.

Listing fees for ASX

Companies wishing to list on the ASX must pay both an initial fee and annual fees, both of which are assessed on a sliding scale relating to the amount sought. The fees are calculated on the par value of the shares quoted, not on the issue price, which could be at a discount or premium to the par value. Exempt foreign companies are charged fees in accordance with the size of their Australian share registry.

Initial fees begin at $2 988 for raisings up to $1 million with an additional charge of 0.29 per cent of every additional dollar, up to $5 million. For raisings over $125 million, the initial fees are $76 569 plus and 0.02 per cent of each additional dollar raised.

Fees for additional raisings of already listed companies begin at $480 for raisings up to $100 000, and 0.2027 per cent of the excess up to $250 000, increasing to $8 763, and 0.0029 per cent for amounts over $100 million.

Annual fees are payable by all companies listed on the ASX. These are charged according to the value of securities granted official quotation, from $2 819 for $500 000, and 0.0702 per cent of the excess up to $1 million, to $32 800 and 0.0054 per cent for over $150 million.

Off-market transfer of shares

Trading in stock of listed companies without recourse to a broker is permitted under Australian law. The only requirement in this case is that the registry be updated using the correct procedures.

Market information requirements

The ASX requires the disclosure of information which affects the value of securities or the decisions of investors, where investors have a legitimate interest, or it is available elsewhere. The intention of such a requirement is to prevent the establishment of a false price for securities traded on the exchange.

Requirements include the issuing of half yearly and annual profit and loss statements, immediately figures are available and no later than three months after the end of the reporting period. These are not required to be audited.

Wherever possible, a standard format for reporting is required. In addition, certain key indicators are required. These include:

- Group operating profits as a percentage of sales revenue.
- Group operating profit after tax as a percentage of shareholders equity.
- Group earnings per ordinary share, after allowing for preference dividends, if any.
- Net tangible asset backing per ordinary share.

In addition to the above, management companies of property trusts are required to report within two months, and those of listed trusts are required to provide half yearly audited accounts to unit holders. Mining companies are required to provide quarterly information on their activities, including the location and stage of current projects, within one month of the end of the quarter.

In addition to the reporting requirements described above, companies are required to immediately report information which could affect the price of its securities. Such information includes:

- changes in the company which may affect the character of its business;
- the holdings of other listed companies;
- any declaration as to payment of dividends;
- any resolutions to be put to a general meeting;
- calls on partly paid shares;
- communications from the tax authorities as to the status of the company;
- changes of address or board members;
- notices from large shareholders;
- any intention or action to appoint receivers or to wind up the company.

Unit trusts must additionally report information which enables unit holders to appraise the value of the trust. Mining companies must report any significant hydrocarbon find.

Regulation and enforcement

The companies code and the Australian Securities Commission exist to deal with fraudulent practices, and other illegal dealings. The ASX imposes its own rules on participating companies where these rules are deemed to be insufficient. The most important of these rules deal with transactions with related parties, and any issuing of shares which will dilute the holdings of existing investors.

The ASX has the power to deny listing to a company not complying with the conditions for listing, but relies on government agencies to supervise compliance with these and other legal requirements. The ASX does, however, carry out a measure of surveillance, using computer aided index measures. These identify unusual movements, which may suggest possible market manipulation and warrant investigation. If a breach is identified, it is reported to the appropriate authority; the ASC if the breach is of a legal nature, and to the ASX Membership and Companies Division if there is a breach of ASX rules.

The ASX has no legal, coercive power over the operations of the companies which it lists, other than to report offenders to the ASC, or to take action in the courts. It can put pressure on companies or individuals not complying with its requirements through:

- Moral suasion
- Public and private inquiries of listed entities

- The issue of press releases
- Suspensions
- Delisting

However, the ability of the ASX to enforce its listing rules may be constrained by the possibility of legal action being taken against it, for damage to investor confidence.

The government reserves the right to disallow any rule that the ASX imposes, because of possible external effects. For example, a review of possible changes to rules relating to equal voting rights for all shares has been discussed.

Imminent changes to listing rules

In June, 1991, the ASX released its proposed amendments to its listing rules[2]. The purpose of these changes is given by the ASX as to:

- simplify and clarify the prerequisites for companies and trusts seeking admission to the official list;
- set a minimum admission criteria;
- prohibit the listing of "cash box" companies on ASX;
- clarify the spread requirements;
- raise the minimum value per share (issue price);
- clarify the discretion ASX has to admit companies to the official list.

In addition to the closure of the second boards, the ASX proposes to increase the minimum capitalisation and shareholder distribution requirements, as well as introducing more stringent reporting rules.

The major changes to the listing requirements are presented below, with the existing requirements in parentheses.

- Capitalisation of industrial companies, when fully paid-up, must be at least $1 million ($300 000), with at least 500 (300) shareholders each holding at least 2000 shares of the same type.
- The company must have had an operating profit before tax of at least $1 million over the past three years ($500 000), and at least $400 000 in the past year, in predominantly the same business, and with audited accounts.
- Minimum share, and trust unit price to be 50c (20c).

[2] ASX, (1991), "Proposed Listing Rule Amendments to become operative Late 1991."

- A company's product, service or technology is sufficiently developed to provide a reasonable expectation of earnings within the next three years.

The changes to reporting requirements are as follows:

- The term `company' is defined as broadly as possible when determining applicability of the ASX rules. Thus, the requirement to report any information which may affect the value of a company's shares applies to all associated legal, administrative or fiduciary arrangements.

- Cash flow statements will be required in the half-yearly, as well as the annual report.

The ASX intends to introduce these changes to its rules on January 1, 1992.

H.2 Equity markets in other countries

United States

New York Stock Exchange

The New York Stock Exchange (NYSE) is the major stock-trading market in the US. In November 1991, there were 1 774 companies listed on the NYSE, with a total capitalisation of $US2 820 billion. Share turnover for the NYSE in 1990 was $US1 325 billion on a volume of 39.7 billion shares traded.

The listing requirements for the NYSE are as follows:

- Pre-tax income of US$6.5 million in the past three years, with a minimum of US$4.5 million in the year immediately preceding listing.

- Net tangible assets of at least US$18 million.

- Shares to the value of at least US$18 million in the hands of the public.

- A total of at least 1.1 million shares in the hands of the public.

- A total of at least 2 000 holders of at least 100 shares.

Alternative equity market

The alternative equity exchange in the United States is divided into two parts, the NASDAQ[3] *national market*, and various NASDAQ markets, which generally operate at a state level. The role of these two is quite different. The national market acts as a means for companies to acquire sufficient capital and track record to graduate to the established stock exchange, while the state

[3] National Association of Securities Dealers Automated Quotation System.

markets generally trade stocks of companies which are either not seeking or are incapable of such growth. Of the 4 600 companies operating on the alternative equity market, 2 600 are listed on the NASDAQ national market and 2 000 on the NASDAQ market. Turnover of shares on the NASDAQ national market in the year 1990 was $US452.4 billion, with 33.4 billion shares being traded.

The National Association of Securities Dealers, which operates the NASDAQ markets, is a self-regulating body. The rules for listing, information, and trading for companies, and those relating to capital and disclosure requirements of market makers, are intended to ensure public confidence and an efficient market.

The Securities and Exchange Commission, as well as the parallel state authorities take an interest in matters such as fraud, and other areas involving the United States criminal and companies laws.

Transactions on the NASDAQ market are carried out through market makers; specialist intermediaries that are registered to trade particular stock on their own account. There must be a minimum of two market makers for any particular stock for it to be traded. Market makers offer to buy and sell the stock in which they are registered, on the electronic trading system. They must meet specified capital requirements.

To be listed on the NASDAQ national market, a company must meet the following requirements:

- net tangible assets of at least $US4 million
- a public issue of at least 500 000 shares, with a minimum value of at least $US3 million.
- Pre tax income of $US750 000 in the latest year or two of the last three years.
- Minimum of 800 share holders if between 0.5 and 1 million shares are publicly held, and 400 if in excess of 1 million.
- Minimum of two market makers registered to trade the company's stock.
- Minimum share price of $US5.

A company must have been operating at a profit to be eligible for listing, although, in contrast to the NYSE, there are no specific requirements as to size of profits or time periods. It is possible therefore, for companies with good prospects for growth, for example with new technology, to have their shares traded, within a short period after they commenced operation.

The different rules enforced in each state, and the associated compliance costs for companies, limit the NASDAQ (regional) market to purely local companies. The opportunities for fraud arising from a segmented market are of concern to regulators, who are endeavouring to harmonise regulatory policies (Wall St. Journal, June 18, 1990, p. 1).

The requirements for listing on the NASDAQ market (besides state regulations) are:

- net assets of at least $US2 million
- a public issue of at least 100 000 shares.

Japan

The Tokyo Stock Exchange

There are eight stock exchanges currently operating in Japan, each of which operates a first, and some a second board. The Tokyo stock exchange however, is by far the largest, with the highest turnover.

The listing requirements for the Tokyo Stock Exchange (TSE) are as follows:

- Net assets of at least Y1 billion, or a minimum of Y100 per share, whichever is higher.
- 6 million shares must be outstanding, of which at least 20 per cent must be in the hands of the public.
- Minimum number of shareholders; 1 000 if total share issue is less than 10 million shares, 1 500 for 10-20 million, and 2 000 plus 100 for each block of 10 million shares above 30 million.
- The company must have been incorporated and continuously in operation for the past five years.
- Pre-tax profit over the last three years must have been at least Y200 million in the first year, Y300 million in the second year and Y400 million in the latest year before listing.
- The company should have paid a dividend of at least Y5 per share in the latest financial year.

Alternative equity markets

The equity market in Japan has traditionally been divided between those companies which can list on the Tokyo Stock Exchange (TSE), and those which are listed on regional exchanges, either because they are purely local concerns, or because they do not qualify for listing on the TSE.

The rapid growth of the over the counter (OTC) market in Japan has divided these companies again, with those interested in acquiring the track record and asset strength required for listing on the TSE increasingly listing on the OTC. The second board of the TSE, and regional stock exchanges continue to cater for local, non-growth companies. The OTC market was substantially modified in 1983, along the lines of the NASDAQ system operating in the United States.

Share turnover of the Japanese OTC market accounted for US$130 billion in 1990, which is nearly equal to the value of turnover of the second portion of the TSE board for that year. In October 1990, there were 300 companies whose stocks were traded on the OTC, as compared to 107 in 1982.

Listing Requirements for the Japanese OTC are as follows:

- Two million shares outstanding, of which 300 000 must be in the hands of the public. If the number exceeds two million, 150 000, plus 7.5 per cent of shares outstanding, must be in the hands of the public.

- Capitalisation of Y200 million, at the end of the immediately preceding year.

- Pre-tax profit of at least Y10 per share.

- Must not be listed on the stock exchange.

- Minimum of 200 shareholders, for a company with less than 20 million outstanding shares, 400 if more than 20 million shares outstanding.

For a company to be listed on the OTC, two securities firms must agree to trade in the stock of that company, although other dealers may also apply to trade in the stock. These dealers quote bid and offer prices, and effect transactions based on them. In addition, dealers provide shares and make a market with other securities firms and investors. For a traded company to remain on the market, prices must be quoted at least twice a week.

The legal position of the Japanese OTC market is not clear as the Securities and Exchange Law of Japan precludes the operation of an exchange in competition with the TSE. Because of this uncertain position, there is no government regulation of the OTC. The listing rules of the OTC are determined by the Japan Securities Dealers Association. The Ministry of Finance is currently examining means of regulating this market.

One of the reforms undertaken in 1983 was permission for firms registered on the OTC to offer shares direct to the public (that is; not through dealers). The following standards apply for publicly issuing shares on the OTC.

- Companies must have an after-tax income of at least Y10 per share.

- The latest dividend payment of Y5 per share.

- Profits should be trending upward, although prospects, such as technology products and management are also considered.

- At least 100 000 shares should have been traded in each of the last three months, on at least half of the total number of trading days.

- The maximum number of shares issued should not exceed 30 per cent of the existing number, or 1.5 million.

- The issue price is the average of the daily lows for the week prior to the issue.

Despite its rapid growth, some problems with the OTC market remain. These are listed below.

- The number of companies registered is still very small.
- Shares available to the public are generally a small proportion of the total equity of the company. For this reason, the share price could be very volatile.
- The requirements for registration are still very difficult for small companies to meet, limiting their access to equity finance.

Britain

The London Stock Exchange

The London Stock Exchange (LSE) is the only stock exchange in Britain, and the largest in Europe. Besides providing access to equity for British companies, the LSE lists a large number of foreign companies. In November 1991, there were 2 483 companies listed on the LSE, of which 531 were foreign. Total capitalisation of the exchange was œ1 969 billion.

The listing requirements of the LSE are as follows:

- Market capitalisation of equity for which listing is sought of œ700 000.
- Minimum of 25 per cent of that equity in the hands of the public.
- A trading history of at least three years in profit.

The directors of the LSE appear to have a great deal of discretion in the manner in which they apply these requirements. The minimum requirements can be waived if the LSE is satisfied that a viable market for the equity would exist. Thus, the 25 per cent of equity in the hands of the public is waived if the company concerned is large enough for less than that proportion to be considered to offer sufficient liquidity to investors.

Alternative equity markets

The Unlisted Securities Market (USM) is operated by the brokering firms of the official stock exchange, although the companies whose equity is traded are not in any way connected with the LSE. This distinction is the result of an article of the rules of the stock exchange, which allow trading by brokers of unlisted stocks:

> The Exchange...allowed bargains to be transacted between matched buyer and seller, subject to specific approval from the Stock Exchange. The intent of this provision was that of allowing a limited degree of marketability for companies which did not otherwise meet the Stock Exchange qualifications for a full listing. (Buckland and Davis 1989, p. 1)

The USM was established in 1980, and has grown steadily. In 1980 there were 11 companies' stocks traded on the USM, with 370 in 1987, and 400 in 1991. In June 1991, the average capitalisation of companies traded on the USM was œ15.5 million. The total market capitalisation was œ6 211 million.

- There is no minimum capitalisation size, although raisings need to be of a size that trading in them would be economical.

- The company must have been trading for a least two years, and at least 10 per cent of the value of capitalisation must be in the hands of the public.

Until January 1991, there was another alternative equity market, the Third Market, which was operated by the LSE itself. This was merged with the USM, in an attempt to increase the liquidity of stocks traded on the two markets.

APPENDIX I: LONG-TERM SAVINGS INCENTIVES IN OTHER COUNTRIES

Many OECD countries have introduced schemes designed to provide incentives for various forms of saving. The reasons for their introduction vary, but typically include:

- increasing national saving, either to increase the availability of domestic funds for investment, or to reduce future demands on the welfare system by an ageing population by encouraging individuals to save for their own retirement; and

- changing the allocation of private savings to areas seen to promote some social or economic goal.

Britain

The *Tax Exempt Special Savings Account* (TESSA) was introduced in January 1991. All deposit taking intermediaries, such as banks and building societies, may offer these accounts. In the short time that they have been available, TESSA accounts have proven very popular, with 1.5 million accounts being opened in the first three months (UK Budget Speech, 1991).

The maximum allowable amount for contributions in the first year is œ3 000, and œ1 800 per year in subsequent years, up to a limit of œ9 000 at any one time. Investors are entitled to all interest income free of tax, provided the capital is left undisturbed for 5 years.

There is no official impediment to individuals `rolling over' their TESSA accounts to take advantage of interest rates higher than provided by their present bank or building society, and thus promoting competition between deposit taking institutions. However, substantial penalties for early withdrawals from TESSA accounts have been imposed by these institutions.

> Apart from offering a variety of bonuses and incentives on a range of amounts deposited, which make it well-nigh impossible for savers to compare rates of return on different TESSAs, there are also varying degrees of penalty imposed on those contemplating a switch (*Financial Times*, 19 June 1991).

*Personal Equity Plans (*PEPs) were introduced in 1987, as part of a program intended to promote greater share ownership among individuals. Since the introduction of the scheme, 1.2 million PEPs have been set up with investments totalling over œ3 billion (UK Budget Speech, 1991).

Individuals are allowed to invest £6 000 per year in a PEP, half of which may be invested through a pooled fund, such as a unit trust, and the remainder invested by the individual through a broker. Neither the capital gains nor the dividend income from a PEP is taxable.

There are restrictions with PEPs as to how the funds are invested. When the scheme was first introduced, the tax concession was applied only to investments in British firms. This has since been extended to firms domiciled in any EC country.

United States

The United States introduced *Individual Retirement Accounts* (IRAs) in the early 1980s to encourage retirement savings.

IRAs may be opened at most banks, as well as some other financial institutions. The incentives involve a tax deduction for contributions (up to a limit of $2 000 per year) and deferral of the tax on returns until the funds are withdrawn, at age 59. There is a ten per cent penalty if funds are withdrawn before this time. The government has recently proposed an exemption from this penalty if the funds are to be used for the purchase of a first home. Since 1986, the tax concession has been limited to those with an income of $40 000 for families, and $25 000 for individuals.

Since the introduction of IRA accounts in 1982, they have become an increasingly popular form of saving. By 1986, $40 billion had been deposited in this form of account.

How much of this saving is the result of substitution from other less tax-favoured forms of saving, and how much is actually new saving, is difficult to determine. Attempts to determine the net effect of IRAs on personal savings have produced ambiguous results. One study by Venti and Wise (1990), using consumer expenditure surveys between 1982 and 1985, found that there was no evidence of substitution from other forms of saving, such as government bonds or unit trusts. Rather, saving in the form of IRAs increased at the same time as other forms.

The likely effect of a tax sheltered savings incentive on national saving is also important. The tax deduction for contributions to an IRA account make the incentive to save in this manner more attractive the higher the marginal tax rate payable. They also make them more expensive for government, the higher the marginal tax rate. The cost to revenue of the IRA scheme, and the realisation that individuals with existing assets were merely reshuffling these assets to maximise after tax income, led to the adoption of the restrictions on eligibility to lower income groups in 1986 (1986 Tax Reform Bill). Yet individuals with higher incomes tend to save a higher proportion of that income. The IMF (1990) concluded that the likely net effect of the restrictions on eligibility was to reduce the effect of IRAs in increasing the national savings rate in the United States.

A scheme similar to Britain's TESSA has also recently been proposed, with a minimum investment period of 7 years. This scheme is to be called the Family Saving Account (FSA).

Canada

Canada has operated a scheme, entitled *Registered Retirement Savings Plans* (RRSP), since 1957. An individual is permitted to allocate up to 20 per cent of gross income, to a maximum of C$7 500, to a recognised savings vehicle. Most financial intermediaries, including banks, insurance companies and trust companies, can offer RRSPs. The plan is intended to supplement employer sponsored retirement plans, and the 20 per cent must include any employer contribution. The contribution to an RRSP is tax deductible and the income is tax exempt until withdrawn from the plan. The lower income expected in retirement, and the consequent lower rate of marginal tax payable thus encourages saving until retirement.

The permissible limits on contributions to RRSPs were raised in the mid 1970s, to the present 20 per cent. This appeared to increase total personal saving although, as in the United States, the net effect of savings incentives on aggregate personal savings is difficult to determine (IMF 1990).

In 1991 the maximum allowable limit was reduced to 18 per cent of gross income. The dollar limit was increased to C$11 500 per year, which will increase by C$1 000 per year to C$15 500 in 1995. The rate of increase in the limit will then be linked to increases in average wages. Unused entitlements to RRSP contributions from previous years may be added to the present limit for any year.

BIBLIOGRAPHY

BIBLIOGRAPHY

Access Economics 1990, *Australia's Foreign Debt: Choices for the Future*, Report prepared for the Business Council of Australia, Canberra, February.

Adler, M. and Lehman, B. 1983, 'Deviations from Purchasing Power Parity in the Long Run', *Journal of Finance*, vol. 39, pp. 1471-8.

Aivazian, V. A., Callen, J.L., Krinsky, I. and Kwan, C.C.Y. 1986, 'An Empirical Portfolio Analysis of Financial Asset Substitutability: The Case of the US Household sector', *Quarterly Review of Economics and Business*, vol. 26, pp. 47-65.

Albon, R. 1986, *Taxation Policy in the Eighties*, Allen & Unwin, Sydney.

----- 1990, 'Housing and Taxation - Commonwealth Issues', *Australian Tax Forum*, vol. 7 no. 3, pp. 337 - 352.

Albon, R. P., Findlay, C. C. and Jones, R. L. 1986, 'Issues in the Taxation of Income from Capital: Housing, Superannuation and Capital Gains', in Head, J.G., (ed.), *Taxation Issues of the 1980s*, Australian Tax Research Foundation, Sydney.

Aliber, R.Z. 1973, 'The Interest Rate Parity Theorem: A Reinterpretation', *Journal of Political Economy*, vol. 81, pp. 1451-59.

ANZ Bank 1991, *ANZ Submission to the Parliamentary Inquiry into the Australian Banking System.*

Argus D. 1991, *Address to the Parliamentary Inquiry into the Australian Banking System by Mr Don Argus, Managing Director of the National Australia Bank.*

Asprey Report (Taxation Review Committee) 1975, Full Report, Australian Government Printing Service, Canberra.

Australian Bureau of Statistics (ABS) various issues, *Australian National Accounts, Flow of Funds*, Catalogue No. 5232.0, AGPS, Canberra.

----- various issues, *Balance of Payments*, Catalogue No. 5310.0, AGPS, Canberra.

----- various issues, *Foreign Investment in Australia* Catalogue No. 5305.0, AGPS, Canberra.

----- various issues, *Lease Finance*, Catalogue No. 5644.0, AGPS, Canberra.

----- various issues, *National Accounts*, Catalogue No. 5204.0, AGPS, Canberra.

----- various issues, *Public Unit Trusts*, Catalogue No. 5645.0, AGPS, Canberra.

----- unpublished data underlying the Australian National Accounts: Flow of Funds, Catalogue No. 5232.0, AGPS, Canberra.

----- 1991a, *Foreign Investment Australia*, 1988-89, Catalague. No. 5305.0.

----- 1991b, *Small Business in Australia 1990,* Catalogue No. 1321.0, AGPS, Canberra.

Australian Manufacturing Council (AMC) 1990, *The Global Challenge, Report on Australian Manufacturing in the 1990s.*

Australian Taxation Office (ATO) 1990, *Annual Report*, AGPS, Canberra.

Bailey, W. 1991, *Address by Mr W. Bailey, Chairman of the Australian Bankers Association (ABA) to the Parliamentary Inquiry into the Australian Banking Industry.*

Baum, D.N, 1988, 'Consumption, Wealth, and the Real Rate of Interest: A Reexamination', *Journal of Macroeconomics*, vol. 10, no. 1, pp. 83-102.

Bayoumi, T. 1990, 'Saving-Investment Correlations: Immobile Capital, Government Policy or Endogenous Behaviour?', *IMF Staff Papers*, vol. 37, pp. 360-87.

Bilson, J.F.O. 1981, 'The "Speculative Efficiency" Hypothesis', *Journal of Business*, vol. 54, pp. 435-52.

Boskin, M.J. 1978, 'Taxation, Saving, and the Rate of Interest', *Journal of Political Economy*, vol. 86, no. 2, pt. 2, pp. s3-s27.

Bowden, R. and Martin, V. 1990a, No, *business cycles are not all alike: Australia and the United States compared*, Mimeo, Department. of Economics, University of Melbourne.

----- 1990*b*, 'Reference cycles in the time and frequency domains: duality aspects of the business cycle', in P.C.B. Phillips and V.B. Hall (eds) *Models, Methods and Applications of Econometrics: Essays in honour of Rex Bergstrom.* Allen and Unwin, London.

----- 1991, 'International business cycles and financial integration', Mimeo, Dept of Economics, University of Melbourne.

Bowden, R., Pham, T. and Sim, A.-B. 1991, *Access and Efficiency in the Supply of Foreign Capital to Australia*, Report prepared for the Industry Commission Availability of Capital Inquiry by the Centre of Banking and Finance of the University of New South Wales.

Bowen, L. 1986, Parliamentary Debates, House of Representatives, p. 3948.

Bruce, R., McKern, B., Pollard, I. and Skully, M. 1989, *Handbook of Australian Corporate Finance*, third edition, Butterworths, Sydney.

Buckland, R. and Davis, E. W. 1989, *The Unlisted Securities Market*, Clarendon Press, Oxford.

Bureau of Industry Economics (BIE) 1981, *Finance for Small Business Growth and Development*, Research Report 10, AGPS, Canberra.

----- 1987, *Review of Venture Capital*, AGPS, Canberra.

----- 1988a, *Small Business Review 1987*, AGPS, Canberra.

----- 1988b, *The Taxation of Corporate Investment Income: Australia's Place in the World*, AGPS, Canberra.

----- 1989, *Commercial Opportunities from Public Sector Research*, Research Report 32, AGPS, Canberra.

----- 1990, *Does the Australian Tax System Favour Company Debt?* Business Taxation Paper No. 4, AGPS, Canberra.

-----1991, *'Australia's Cost of Capital'*, Discussion Paper 15, AGPS, Canberra.

Carew, E. 1991, *Fast money 3 - The Financial Markets in Australia*, Allen and Unwin, Sydney.

Cho, D., Eun, C. and Senbet, L. 1986, 'International Arbitrage Pricing Theory: An Empirical Investigation', *Journal of Finance*, vol. 41, no. 2, pp. 313-329.

Chung, C. and Powell, A. 1987, *Australian Estimates of Working's Model Under Additive Preferences: Estimates of a Consumer Demand System for Use by CGE Modelers and Other Applied Economists*, Impact Project, Preliminary Working Paper No. OP-66, Melbourne.

Cleary, P. 1991, The Sydney Morning Herald 2 July 1991, p. 12

Committee of Inquiry into the Australian Financial System 1981, *Final Report of the Committee of Inquiry into the Australian Financial System*, (Campbell Report), AGPS, Canberra.

Commonwealth Gazette various issues, *Australian Banking Statistics*, AGPS, Canberra.

Copeland, T.E. and Weston, F. 1983, *Financial Theory and Corporate Policy*, Addison-Westley, Massachusetts.

Cumby, R.E. 1990, 'Consumption Risk and International Equity Returns: Some Empirical Evidence', *Journal of International Money and Finance*, vol. 9, pp. 182-92.

Cumby, R.E. and Mishkin, F. 1986, 'The International Linkage of Real Interest Rates: The European-US Connection', *Journal of International Money and Finance*, vol. 5, pp. 5-24.

Cumby, R.E. and Obstfeld, M. 1981, 'A Note on Exchange-Rate Expectations and Nominal Interest Differentials: A Test of the Fisher Hypothesis', *Journal of Finance*, vol. 36, pp. 697-703.

----- 1984, 'International Interest-Rate and Price-Level Linkages under Flexible Exchange Rates: A Review of Recent Evidence', in Bilson, J. and Marston, R. (eds*), Exchange Rate Theory and Practice*, University of Chicago Press.

Department of Industry, Technology and Commerce (DITAC) 1990, *Australian Venture Capital Directory*, AGPS, Canberra.

Dixon, D. and Toms, J. 1987, *Housing Finance in Australia: The Impact of Taxation*, Occasional Paper No. 3, Australian Tax Research Foundation, Sydney.

Dooley, M., Frankel, J. and Mathieson, D. 1987, 'International Capital Mobility: What do Saving-Investment Correlations Tell Us?', *IMF Staff Papers*, vol. 34, pp 503-30.

Dornbusch, R. 1983, 'Exchange Rate Risk and the Macroeconomis of Exchange Rate Determination', *Research in International Business and Finance*, vol. 3, pp. 3-27.

de Leeuw, F. and Ozanne, L. 1981, 'Housing', in Aaron, H. and Pechman, J. (eds.*) How Taxes Affect Economic Behaviour*, The Brookings Institution. Washington, D.C.

Edey, M. and Britten-Jones, M. 1990, *The Australian Macro-economy in the 1980s: Saving and Investment*, the Proceedings of a Conference on 20-21 June 1991, Research Department, Reserve Bank of Australia.

EPAC (Economic Planning and Advisory Council) 1988, *Trends in Private Saving*, Council Paper No. 36, December, AGPS, Canberra.

----- 1990a, *Trends in Corporate Debt*, Council Paper No. 41, January, AGPS, Canberra.

----- 1990b, *Australia's Capital Needs in the 1990s*, Council Paper No. 43, October, AGPS, Canberra.

----- 1990c, *Microeconomic Reform; A composite set of submissions presented to the Economic Planning Advisory Council*, Discussion Paper 90/02, AGPS, Canberra.

ESPIE Committee 1983, *Developing High Technology Enterprise for Australia*, AGPS, Canberra.

Fama, E.F. 1984, 'Forward And Spot Exchange Rates', *Journal of Monetary Economics*, vol. 14, pp. 319-38.

Feldstein, M. 1983, 'Domestic Saving and International Capital Movements in the Long Run and the Short Run', *European Economic Review*, vol. 21, pp. 129-51.

Fieldstein, M. and Bacchetta, P. 1991, 'National Saving and International Investment', in Bernheim, B.D. and Shoven, J.B. (eds.), *National Saving and Economic Performance, University of Chicago Press.*

Feldstein, M. and Horioka, C. 1980, 'Domestic Savings and International Capital Flows', *The Economic Journal*, vol. 90, pp. 314-29.

Fieleke, N.S. 1982, 'National Saving and Investment', *Saving and Government Policy*, Conference Series No. 25, Boston: Federal Reserve Bank of Boston.

Finn, E. and Ziegler, F. 1987, 'Prudence and Obligations in the Investment of Trust Funds.' *The Australian Law Journal*, vol.61, pp.329-340.

Fitzgerald, V.W. and Harper, I.R. 1991, 'Super Preferred or "Level Playing Field"? - Implications for the Saving and Financial System', *Paper presented to the Third Annual Melbourne Money and Finance Conference, Sebastopol, Victoria*, 6-7 December 1991.

Flood, J. and Yates, J. 1987, *Housing Subsidies Study*, Australian Housing Research Council, Project series No. 160, AGPS, Canberra.

Foreign Investment Review Board (FIRB) 1991, *Annual Report*, AGPS, Canberra.

Frankel, A.B. and Montgomery, J.D. 1991, 'Financial Structure: An International Perspective', *Brookings papers on Economic Activity*, Volume 1: 1991.

Frankel, J.A. 1980, 'Tests of Rational Expectations in the Forward Exchange Market', *Southern Economic Journal*, vol. 46, pp. 1083-101.

----- 1982, 'In Search of the Exchange Risk Premium: A Six-Currency Test Assuming Mean-Variance Optimization', *Journal of International Money and Finance*, vol. 1, pp. 255-74.

----- 1986a, 'International Capital Mobility and Crowding0out in the U.S. Economy: Imperfect Intergration of Financial Markets or of Goods Markets?', in Hafer, R. (ed.), *How Open is the U.S. Economy?*, Lexington Books, Lexington , Massachusetts.

----- 1986b, 'The Implications of Mean-Variance Optimization for Four Questions in International Macroeconomics', *Journal of International Money and Finance*, vol. 5, pp. S53-75.

----- 1991a, 'Quantifying International Capital Mobility in the 1990s', in Bernheim, B.D. and Shoven, J.B. (eds), *National Saving and Economic Performance*, University of Chicago Press.

----- 1991b, '*The Cost of Capital in Japan: Update' Business Economics*, April

Frankel, J. and Levich, R. 1975, 'Covered interest arbitrage: Unexploited profits?', *Journal of Political Economy*, vol. 83, pp. 325-38.

----- 1977, 'Transaction costs and interest arbitrage: Tranquil versus turbulent periods', *Journal of Political Economy*, vol. 3, pp.267-74.

-----1981, 'Covered Interest Arbitrage in the 1970s', Economics Letters, vol. 3, pp. 267-74.

Frankel, J.A. and MacArthur, A.T. 1988, 'Political Versus Currency Premia in International Real Interest Rate Differentials: A Study of Forward Rates for Twenty Four Countries', *European Economic Review*, vol. 32, pp. 1083-1114.

Fraser, B. 1991, 'Some Comments on the Economy, Deregulation and Housing', *Reserve Bank of Australia Bulletin*, March 1991, Sydney.

Freebain, J. 1990, *Effective Real Tax Rates on Some Australian Investments*, Background Paper No. 3, EPAC, October, AGPS, Canberra.

Friend, I. and Blume, M.E. 1975, 'The Demand for Risky Assets', *American Economic Review*, vol. 65, pp. 900-922.

Friend, I. and Hasbrouck, J. 1983, 'Savings and After-Tax Rates of return', *Review of Economics and Statistics*, vol. 65, no. 4, pp. 537-543.

Froot, K. and Frankel, J. 1989, 'Forward Discount Bias: Is It An Exchange Risk Premium?', *Quarterly Journal of Economics*, vol. 59, pp. 139-61.

Gaab, W., Granziol, M.J. and Horner, M. 1986, 'On Some International Parity Conditions: An Empirical Investigation', *European Economic Review*, vol. 30, pp. 683-713.

Galper, J., Lucke, J. and Toder, E. 1988, 'A General Equilibrium Analysis of Tax Reform.' in Aaron, H., Henry, J., Galper, J., Harvey and Pechman, J. (eds.*), Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax*, The Brookings Institution, Washington D.C.

Geweke, J.F. and Feige, E.L. 1979, 'Some Joint Tests of the Efficiency of Markets for Forward Foreign Exchange', *Review of Economics and Statistics*, vol. 61, pp. 334-41.

Giovannini, A. and Jorion, P. 1987, 'Interest Rates and Risk Premia in the Stock Market and in the Foreign Exchange Market', *Journal of International Money and Finance*, vol. 6, pp. 107-23.

Giovannini, A. and Jorion, P. 1988, 'Foreign Exchange Risk Premia Volatility Once Again', *Journal of International Money and Finance*, vol. 7, pp. 111-113.

Golub, S.S. 1990, 'International capital mobility: net versus gross stocks and flows', *Journal of International Money and Finance*, vol. 9, pp. 424-43.

Goulder, L.H. and Eichengreen, B. 1989, 'Savings Promotion, Investment Promotion, and International Competitiveness', in Feenstra, R.C. (ed.), *Trade Policies for International Competitiveness*, University of Chicago Press.

Groenewegen, P. 1984, *Public Finance in Australia*, second edition, Prentice-Hall of Australia, Sydney.

----- 1985, The 1985/86 *Budget and the 19 September 1985 Tax Reform Measures, their Growth and Fairness Aspects*, Discussion Papers No. 4, 1983-86, Legislative Research Service, Canberra.

Gruen, F. 1988, *Some Economic and Social Aspects of Housing in Australia*, Discussion paper 88/08, Economic Planning and Advisory Council (APEC), Canberra.

Gultekin, M., Gultekin, B. and Penati, A. 1989, 'Capital Controls and International Capital Market Segmentation: The Evidence from the Japanese and American Stock Markets', *Journal of Finance*, vol. 44, pp. 849-69.

Gylfason, T. 1981, 'Interest Rates, Inflation, and the Aggregate Consumption Function', *Review of Economics and Statistics*, vol. 63, no. 2, pp. 233-45.

Hagemann, R. P., Jones, B. R. and Montador, R. B. *1987 Tax Reform in OECD Countries: Economic Rationale and Consequences*, Working Papers No. 40, OECD Department of Economics and Statistics, Organisation of Economic Cooperation and Development, Paris.

Hall, L. 1991, *'Companies and Securities Regulation.' address to the Business Law Regulation Forum, Canberra.*

Hansen, L. and Hodrick, R. 1980, 'Forward Exchange Rates as Optimal Predictors of Future Spot Rates: An Econometric Analysis', *Journal of Political Economy*, vol. 88, pp. 829-53.

Harberger, A.C. 1980, 'Vignettes on the World Capital Markets', *American Economic Review*, vol. 70, pp. 331-37.

Harrington, D.R. 1987, *Modern Portfolio Theory, The Capital Asset Pricing Model and Arbitrage Pricing Theory: A User's Guide, second edition*, Prentice-Hall, New Jersey.

Hartley, P. 1986, 'Portfolio Theory and Foreign Investment - The Role of Non-Marketed Assets', *Economic Record* vol. 62, pp. 286-95.

Hartman, D.G. 1984, 'The International Financial Market and U.S. Interest Rates', *Journal of International Money and Finance*, vol. 3, pp. 91-103.

Head, J.G. 1991, 'Taxation issues in the 1990s', *Australian Tax Forum*, vol. 7, no. 1, pp. 1-48.

Hendershott, P.H. and Peek, J. 1985, 'Household Saving: An Econometric Investigation', in Hendershott, P. H. (ed.) *The Level and Composition of Household Saving,* Ballinger.

Hodrick, R.J. 1979, 'Some Evidence on the Equality of Expected Real Interest Rates across Countries', Mimeo. Carnegie_Mellon University.

----- 1987, *The Empirical Evidence on the Efficiency of Forward and Futures Exchange Markets, Harwood.*

Hodrick, R.J. and Srivastava, S. 1984, 'An Investigation of Risk and Return in Forward Foreign Exchange', *Journal of International Money and Finance*, vol. 3, pp. 5-29.

----- 1986, 'The Covariation of Risk Premiums and Expected Future Spot Exchange Rates', *Journal of International Money and Finance*, vol. 5, pp. 5-21.

Hogan, W. 1990, 'International Capital Adequacy Standards', *Working Papers in Economics*, University of Sydney, No. 146, October.

Holmes, S. and Kent P. 1990, *An Empirical Analysis of the Financial Structure of Small and Large Australian Manufacturing Enterprises*, Renfrew K. (Ed), proceedings of the 5th National Small Business Conference, Toowoomba, June 28-30, 1990.

House of Representatives Standing Committee on Finance and Public Administration 1991, *A Pocket Full of Change - Banking and Deregulation, AGPS*, Canberra.

House of Representatives Standing Committee on Industry, Science and Technology 1990, *Small Business in Australia: Challenges, Problems and Opportunities* (Beddall Report), AGPS, Canberra.

Howard, D.H. 1979, 'The Real Rate of Interest on International Financial Markets', *International Finance Discussion Paper*, no. 136, Board of Governors of the Federal Reserve System.

Howrey, E.P. and Hymans, S.H. 1978, 'The Measurement and Determination of Loanable-Funds', *Brookings Papers on Economic Activity*, no. 3, The Brookings Institution, pp. 655-706.

Hsieh, D.A. 1982, 'Tests of Rational Expectations and No Risk Premium in Forward Exchange Markets', National Bureau of Economic Research, *Working Paper*, No. 843.

Insurance and Superannuation Commission (ISC) 1990a, *Quarterly Statistical Bulletin*, December, AGPS, Canberra.

----- *Annual Report 1989-90*b, AGPS, Canberra.

International Monetary Fund (IMF) 1990, United States: Recent Economic Developments, Supplementary Material, 9 August 1990.

Irvine, M. 1991, *Clarifying the Link between the Cost of Capital and Australia's Competiveness*, McKinsey and Company, Australia.

J. B. Were & Son 1991, *Australian Equity Market Profile*, May.

Johnston, R.B. 1979, *'Some Aspects of the Determination of Euro-currency Interest Rates'*, Bank of England Quarterly Bulletin, pp. 35-46.

Jorgensen, D. 1991, *International Comparisons of the Cost of Capital*, Havard University.

Jorion, P. and Schwartz, E. 1986, 'Integration vs. Segmentation in the Canadian Stock Market', The *Journal of Finance*, vol. 16, pp. 603-16.

Juttner, J. and Leudecke, R. 1991, 'Interest rates, exchange rates and foreign debt', *The Economic Record*, June.

Kaminsky, G. and Peruga, R. 1990, 'Can a Time-Varying Risk Premium Explain Excess Returns in the Forward Market for Foreign Exchange?', *Journal of International Economics*, vol. 28, pp. 47-70.

Kerin, J. 1991, *1990-91 Budget Speech*, AGPS, Canberra.

King, M.A. and Fullerton, D.(eds) 1984, *The Taxation of Income from Capital: a comparitive study of the United States, United Kingdom, Sweden and West Germany*, University of Chicago Press.

Kohler, A. 1991, *Australian Financial Review*, 20 March 1991.

Kouri, P.J.K. 1977, 'International Investment and Interest Rate Linkages under Flexible Exchange Rates', in Aliber, R.Z. (ed.), *The Political Economy of Monetary Reform*, Macmillan, London.

KPMG Peat Marwick, various issues, *Financial Institution Performance Survey*.

Kreicher, L.L. 1982, 'Eurodollar Arbitrage', *Federal Reserve Bank of New York Quarterly Review*, vol. 7, pp. 10-21.

Levich, R.M. 1979, 'On the Efficiency of Markets for Foreign Exchange', in Dornbusch, R. and Frenkel, J.A. (eds), *International Economic Policy: Theory and Evidence*, John Hopkins University Press, Baltimore.

Longworth, D. 1981, 'Testing the Efficiency of the Canadian-U.S. Exchange Rate under the Assumption of No Risk Premium', *Journal of Finance*, vol. 36, pp. 43-9.

Lowe, J., McKenna, J. and Tibbits, G. 1990, 'Small Firm Growth and Failure: Public Policy Issues and Practical Problems', *Proceedings of the Fifth National Small Business Conference*, Institute of Industrial Economics, Toowoomba Queensland, 28-30 June 1990.

Lucas, R.E. 1982, 'Interest Rates and Currency Prices in a Two Country World', *Journal of Monetary Economics*, vol. 10, pp. 335-60.

Makin, J.H. 1986, 'Savings Rates in Japan and the United States: The Roles of Tax Policy and Other Factors', in Adams, F. G. and Wachter, S. M. (ed.) *Savings and Capital Formation*, D. C. Heath.

Makin, J.H. 1987, *Savings, Pension Contributions and the Real Interest Rate*, Working Paper 11, American Enterprise Institute.

Makin, J.H. and Couch, K.A. 1989, 'Savings, Pension contributions and the Real Interest Rate', *The Review of Economics and Statistics*, vol. 71, no. 3, pp. 401-407.

Mark, N. 1985, 'Some Evidence on the International Inequality of Real Interest Rates', *Journal of International Money and Finance*, vol. 4, pp. 189-208.

----- 1988, 'Time-Varying Betas and Risk Premia in the Pricing of Forward Foreign Exchange Contracts', *Journal of Financial Economics*, vol. 22, pp. 335-54.

Marsh, P. 1982, 'The Choice between Debt and Equity: An Empirical Study.' *The Journal of Finance*, vol. 37, no. 1, pp. 121-144.

----- 1990, *Short-termism on Trial, Institutional Fund Managers Association of the United Kingdom.*

McFarlane, I. 1989, 'Money, Credit and the Demand for Debt', Reserve Bank of Australia Bulletin, May.

Meese, R. and Rogoff,K. 1983, 'Empirical Exchange Rate Models of the Seventies: Do They Fit out of Sample?', *Journal of Financial Economics*, vol. 14, pp. 3-24.

----- 1988, 'Was It Real? The Exchange Rate-Interest differential relation over the Modern Floating-Rate Period', *Journal of Finance*, vol. 43, pp. 933-48.

Mews, R. 1991, *Prospectuses for Equity Raisings*, Address to the Securities Institute of Australia.

Milbourne, R. and Cunberworth, D. 1990, *Australian Banking Performance in an Era of De-regulation: an Untold Story?*, Kensington, Centre for Applied Economic Research.

Mishkin, F. 1984a, 'The Real Interest Rate: A Multi-country Empirical Study', *Canadian Journal of Economics*, vol. 17, no. 2, pp. 283-311.

----- 1984b, 'Are Real interest Rates Equal Across Countries? An Empirical Study', *Canadian Journal of Economics*, vol. 39, pp. 1345-58.

Montgomery, E. 1986, 'Where Did All the Saving Go?', *Economic Inquiry*, vol. 24, no. 4, pp. 681-697.

Murphy, R. 1984, 'Capital Mobility and the relationship between Saving and Investment Rates in OECD Countries', *Journal of International Money and Finance*, vol. 3, pp. 327-42.

Newberry, D. and Stiglitz, J. 1981, *The Theory of Commodity Price Stabilization: A Study in the Economics of Risk*, Wiley, New York.

Obstfeld, M. 1986, 'Capital Mobility in the World economy: Theory and Measurement', *Carneigie-Rochester Conference Series on Public Policy*, vol. 24, pp. 55-104.

OECD (Organisation for Economic Co-operation and Development) various issues, '*Main Economic Indicators'*, Paris.

----- various issues, '*Economic Outlook: Historical Statistics'*, Paris.

----- 1984, *Tax Expenditures, a review of the issues and country practices*, Paris.

----- 1986, *Venture Capital, Context Development Policies*, Paris.

----- 1988, *Taxation of Net Wealth, Capital Transfers and Capital Gains of Individuals*, Paris.

----- 1990a, *The Personal Income Tax Base, A comparative survey, OECD Studies in Taxation*, Paris.

----- 1990b, *National Accounts, detailed tables, Volume II*, Paris.

Pappas, Carter, Evans and Koop 1991, 'Innovation in Australia', *Report for the Industry, Research and Development Board.*

Penati, A. and Dooley, M. 1984, 'Current Account Imbalances and Capital Formation in Industrial Countries, 1949-81', *IMF Staff Papers*, vol. 31, no. 1, pp. 1-24.

Phillips, R.W. and Papadopoulos, C. 1989, 'Small Business and Employment Growth in Australia', in Dunlop, W.C. and Williams, A.J. (eds.*), Job Creation and the Small Business Sector in Australia,* University of Newcastle Institute of Industrial Economics.

Polichronis, J. 1990, *Inquiry into the Operations of the Queensland Industry Development Corporation (QIDC).*

Price Waterhouse 1991, *Restructing the Second Board Market.*

Priorities Review Staff 1975, *Report on Housing*, AGPS, Canberra.

Reece, B. F. 1975, 'The Income Tax Incentive to Owner-occupied Housing in Australia' *Economic Record*, vol. 51, pp. 218 - 231.

Report of the Task Force on the Commercialisation of Research 1991, *Bringing the Market to Bear on Research*, AGPS, Canberra.

Reserve Bank of Australia (RBA) various issues, *'Bulletin'.*

----- *various issues, Financial Flow Estimates.*

----- 1981, *Occasional Paper 8A: Australian Economic Statistics*, 1949-50 to 1980-81.

----- 1991a, *Occassional Paper 8: Australian Economic Statistics*, 1949-50 to 1989-90, February 1991.

----- 1991b, *Australian Banking Statistics.*

-----1991c, *Report and Financial Statement 30 June 1991*.

----- 1991d, *Reserve Bank of Australia's Submission to the Parliamentary Inquiry into the Australian Banking Industry.*

Rivera-Batiz, F. and Rivera-Batiz, L. 1985, *International Finance and Open Economy Macroeconomics*, Macmillan, New York.

Ross, S., Westerfield, R., and Jaffe, J. 1990, *Corporate Finance*, Second Edition, Irwin, Boston.

Sachs, J.D. 1981, 'The current Account and Macroeconomic Adjustment in the 1970s', *Brookings Papers on Economic Activity*, vol. 1, pp. 201-82.

Securities Institute of Australia 1991, *The Securities Industry.*

Selvanathan, S. 1988, *Empirical Regularities in OECD Consumption*, Economic Research Centre, the University of Western Australia, Discussion Paper 88.01.

Shann, E. 1991, 'Bond Yields the Key to Short Rates', *Business Review Weekly*, 30 August, p. 45.

Shoven, J. B. and Whalley, J. 1984, 'Applied General Equilibrium Models of Taxation and International Trade: An Introduction and Survey.' *Journal of Economic Literature*, vol. 22, no. 3, pp. 1007-1051

Slemrod, J. 1983, 'A General Equilibrium Model of Taxation with Endogenous Financial Behaviour.' in Feldstein, M. S. (ed.), *Behavioural Simulation Methods in Tax Policy Analysis*, University of Chicago.

Small Business Development Corporation 1987, *A Report on Todays Finance Needs of Small Business*, Small Business Finance Committee, March 1987.

Smith, J. and Gruen, D.W.R. 1989, 'A Random Walk Around The $A: Expectations, Risk, Interest Rates and Consequences For External Imbalance', *Reserve Bank of Australia Discussion Paper*, 8906.

Solnik, B. 1974, 'An Equilibrium Model of the International Capital Market', *Journal of Economic Theory*, vol. 8, pp. 500-24.

----- 1983, 'International Arbitrage Pricing Theory', *Journal of Finance*, vol. 38, no. 2, pp. 449-457.

Stehle, R. 1977, 'An Empirical Test Of The Alternative Hypotheses Of National And International Pricing Of Risky Assets', *Journal Of Finance*, vol. 32, pp. 493-502.

Stevens, G. 1991, 'The Rise in Private Debt in the 1980s: Why Did it Happen, and Will It Continue in the 1990s?', in EPAC (Economic Planning and Advisory Council) 1991, *The Surge in Australia's Private Debt: Causes, Consequences, Outlook*, June, AGPS, Canberra.

Stigler, G. 1967, '*Imperfections in the Capital Market', Journal* of Political Economy, June.

Stockman, A.C. 1978, 'Risk, Information, and Forward Exchange Rates', in Frankel, J.A. and Johnson, H.A. (eds), *The Economics of Exchange Rates*, Addison-Wesley, Reading.

Storey, D., Keasey, K., Watson, R. and Wynarcyk, P. 1987, *The Performance of Small Firms: Profits, Jobs and Failures*, Croom Helm, London.

Stulz, R.M. 1981a, 'A Model of International Asset Pricing', *Journal of Financial Economics*, vol. 9, pp. 383-406.

----- 1981b, 'On the Effects of Barriers to International Investment', *Journal of Finance*, vol. 36, pp. 923-34.

Summers, L.H. 1988, 'Tax Policy and International Competitiveness', in Frenkel, J., *International Aspects of Fiscal Policies*, University of Chicago Press, Chicago.

Swan, P. 1982, 'An Optimum Business Tax Structure for Australia', *in Australian Financial System Inquiry, Commissioned Studies and Selected Papers,* Part 3.

Taperall, G., et.al. 1983, *Trade Practices and Consumer Protection*, third edition, Butterworths, Sydney.

Taylor, M.P. 1987, 'Covered Interest Parity: A High Frequency, High-quality Data Study', *Economica*, vol. 54, pp. 439-438.

Teitz, M.B. et. al. 1981, *Small Business and Employment Growth in California*, Working Paper No. 348, Berkeley, Institute of Urban and Regional Development, University of California.

The National Housing Strategy 1991, *Australian Housing: The Demographic, Economic and Social Environment*, Issues Paper 1, Commonwealth Department of Community Services and Health, Canberra.

The Review Group on the Australian Financial System 1983 (Martin Report), AGPS, Canberra.

The Study Group on Stuctural Adjustment 1979 (Crawford Report), AGPS, Canberra.

The Treasury 1974, *Capital Gains Taxes*, Treasury Taxation Paper No. 10, AGPS, Canberra.

----- 1988, Economic Statement May 1988, statement delivered on 25 May 1988 by the Honourable P. J. Keating, M.P., Treasurer of the Commonwealth of Australia, AGPS, Canberra.

----- 1990, *Tax Expenditure Statement*, AGPS, Canberra.

----- 1991, Treasury Submission to the House Representatives Standing Committee on Public Finance and Administration.

Thorpe, S., Lindsay, H., and Coote, R. 1988, 'Risk Premiums - Implications For The Exchange Rate And Interest Rates In Australia Since 1984', ABARE manuscript.

Tullio, G. and Contesso, F. 1986, 'Do After-Tax Interest Rates Affect Private Consumption and Savings? Empirical Evidence for 8 Industrial Countries: 1980-83', Economic Papers, Commission of the European Communities, no. 51.

Turnovsky, S.J. and Ball, K.M. 1983, 'Covered Interest Parity and Speculative Efficiency: Some Empirical Evidence for Australia', *Economic Record*, vol. 59, pp. 271-80.

Venti, S.F. and Wise, D.A. 1990, 'Have IRAs Increased U.S. Saving? Evidence From Consumer Expenditure Surveys', *Quarterly Journal of Economics*, August 1990, pp. 661-698.

Walsh, P. 1988, *Address by the Minister for Finance, Senator Peter Walsh, to a seminar entitled "The business outlook for 1988/89; Government policy, the economy, financial and property markets"* Press release No. 28/88.

Western Australian Corporate Affairs Department 1990, *Report on a review of the second board market and capital raising processes in Western Australia*, Discussion Draft.

Wheatley, S. 1988, 'Some tests of International Equity Integration', *Journal of Financial Economics*, vol. 21, pp. 177-212.

Williams, A. 1986, *The Characteristics and Performance of Small Business in Australia (1973 to 1985), a study of the characteristics of small business ventures and their owner managers, and a longitudinal investigation of their economic performance*, University of Newcastle.

----- 1989, 'Small Business in Australia as a Job Creator: A Longitudinal Study in Australia (1973-1987)', in Dunlop, W.C. and Williams, A.J. (eds.), *Job Creation and the Small Business Sector in Australia*, University of Newcastle Institute of Industrial Economics.

Wong, D.Y. 1990, 'What do savings-investment relationships tell us about capital mobility?', *Journal of International Money and Finance,* vol. 9, pp. 60-74.

Yates, J. 1981, 'The Demand for Owner-Occupied Housing', *Australian Economic Papers*, vol. 20, no. 37, pp. 309-324.7