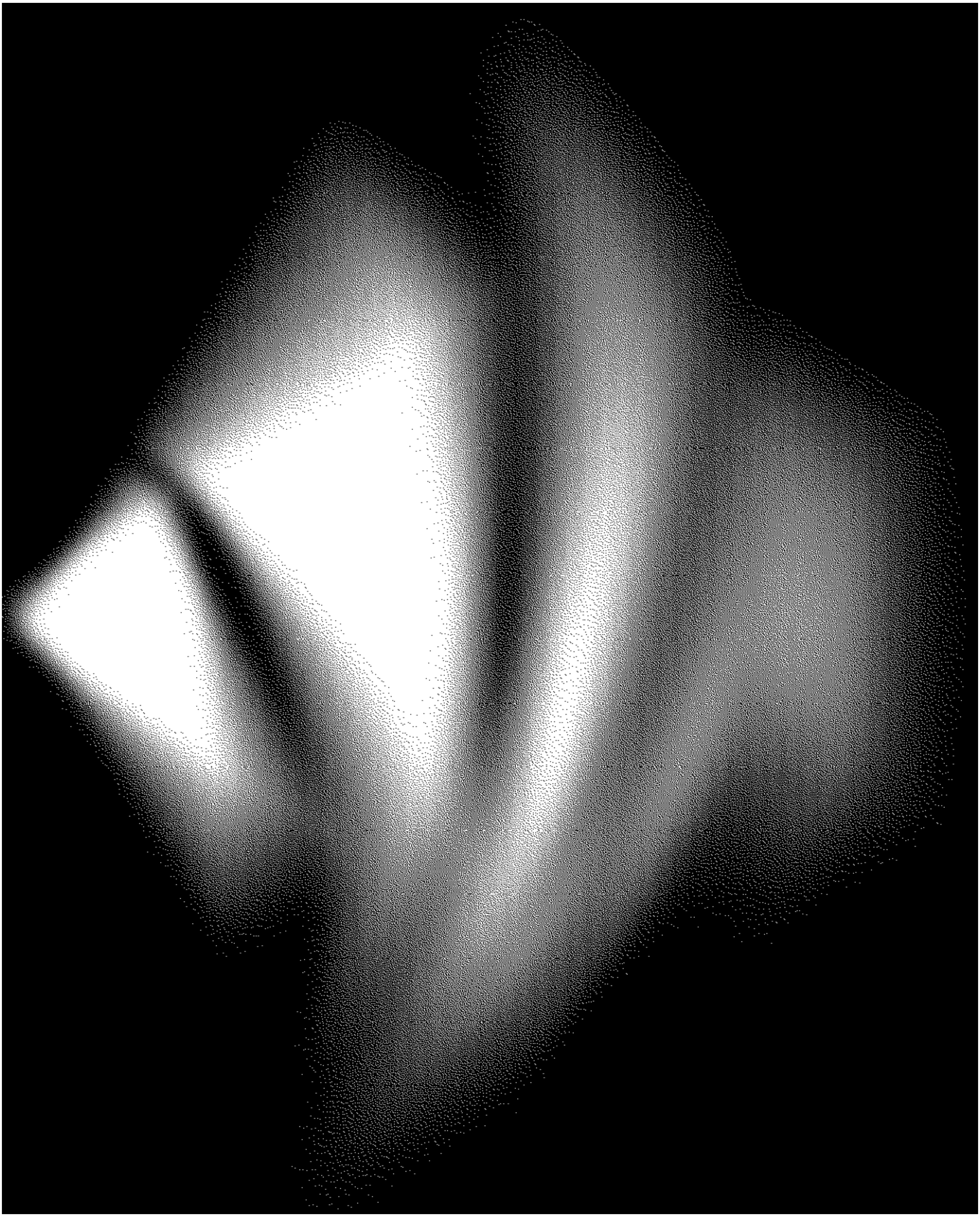
Trade & Assistance Review 2000-01

PRODUCTIVITY COMMISSION



ISBN 1 74037 070 8

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An appropriate citation for this paper is:

Productivity Commission 2001, *Trade & Assistance Review 2000-01*, Annual Report Series 2000-01, AusInfo, Canberra, December.

The Productivity Commission

The Productivity Commission, an independent Commonwealth agency, is the Government's principal review and advisory body on microeconomic policy and regulation. It conducts public inquiries and research into a broad range of economic and social issues affecting the welfare of Australians.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Information on the Productivity Commission, its publications and its current work program can be found on the World Wide Web at www.pc.gov.au or by contacting Media and Publications on (03) 9653 2244.

Foreword

The Productivity Commission is required to report annually on industry assistance and its effects on the economy. This review of trade and assistance issues and developments over the past year contains the Commission's latest estimates of assistance to the manufacturing, agriculture and mining sectors. It also presents estimates of barriers to trade in selected services for Australia and its trading partners. And it discusses some recent international policy developments affecting Australia's trade and economic prospects.

Trade & Assistance Review 2000-01 forms part of the Commission's annual report series. Its companion volumes are the Commission's *Annual Report 2000-01*, and *Regulation and its Review 2000-01*.

Gary Banks
Chairman

11 December 2001

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Abbreviations

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACIS	Automotive Competitiveness and Investment Scheme
ACS	Australian Customs Service
AFC	Australian Film Commission
AIDS	Auto Immune Deficiency Syndrome
AMC	Australian Magnesium Corporation
ANZSIC	Australia and New Zealand Standard Industrial Classification
APEC	Asia Pacific Economic Cooperation
APSC	Asia Pacific Space Centre
ATC	Australian Tourist Commission
AWBI	Australian Wheat Board International
CIE	Centre for International Economics
COMET	Commercialising Emerging Technology
CRC	Cooperative Research Centres
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAA	Dairy Adjustment Authority
DEP	Dairy Exit Program
DFAT	Department of Foreign Affairs and Trade
DIAP	Dairy Industry Adjustment Package
DISR	Department of Industry, Science and Resources
DRAP	Dairy Regional Assistance Program
DSAP	Dairy Structural Adjustment Program
DVF	dried vine fruits
ERA	effective rate of assistance
EFIC	Export Finance and Insurance Corporation

EMDG	Export Market Development Grants
EU	European Union
FLICs	Film Licensed Investment Companies
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GST	goods and services tax
GTL	gas-to-liquid
GVA	gross value added
IC	Industry Commission
IIF	Innovation Investment Fund
IR&D	Industry Research and Development
ITOL	Information Technology Online program
MEAs	Multilateral Environmental Agreements
MNRF	Major National Research Facilities
NRA	nominal rate of assistance
NSE	net subsidy equivalent
NSW	New South Wales
OECD	Organisation for Economic Co-operation and Development
ORR	Office of Regulation Review
PBLs	Policy and Project By-Laws
PC	Productivity Commission
PIIP	Pharmaceutical Industry Investment Program
PMV	passenger motor vehicles
R&D	Research and development
RTAs	Regional Trading Arrangements
SDAP	Supplementary Dairy Assistance Program
SIIP	Strategic Investment Incentive Program
SIP	Strategic Investment Program
TAG	Tasmanian Auditor General
TCF	textiles, clothing and footwear
TEXCO	Tariff Export Concession
TRIMS	Trade Related Investment Measures

TRIPS	Trade Related Aspects of Intellectual Property Rights
US	United States (of America)
WEA	Wheat Export Authority
WTO	World Trade Organization

Overview

Industry assistance provides benefits to people associated with the businesses that receive it, but generally comes at a cost to people in other sections of the economy. Transparency and careful analysis are required to ensure that industry assistance schemes, either individually or cumulatively, do not impose an unwarranted burden on the community.

In *Trade & Assistance Review 2000-01*, the Commission:

- reports its latest estimates of assistance to Australian industries;
- documents recently announced or introduced changes in assistance arrangements; and
- describes and comments on selected trade policy developments.

The purpose of the *Review* does not extend to assessing the merits of specific assistance programs or trade policy initiatives.

Key messages

- Most Australian industries receive limited rates of tariff and/or budgetary assistance.
- Exceptions are the *passenger motor vehicles* industry, the *textiles, clothing, footwear & leather* industry and the *dairy* industry. Particular firms or projects can also receive high rates of assistance.
- In the services sector, budgetary assistance is limited but trade in some services is restricted through regulation.
- Transparency and careful analysis are required to ensure that industry assistance and regulation do not impose an unwarranted burden on the community.
- A number of aspects of the recent WTO decision at Doha on multilateral trade negotiations proffer benefits for Australia, although the extent to which these are realised will depend on the course of the detailed negotiations that lie ahead.
- While bilateral and other regional trade agreements can offer benefits in some cases, their potential effects need to be assessed carefully.

Manufacturing

Assistance to the manufacturing sector has declined significantly over the last decade, largely due to a program of phased reductions in tariffs on manufactured goods.

- The effective rate of tariff assistance for manufacturing (which takes into account the effects of tariff assistance on industries' inputs as well as on their outputs) is estimated to have fallen from 14 percent in 1991-92 to under 5 percent in 2000-01.
- Budgetary assistance to the sector, while less significant, has remained at around 2 percent of sectoral gross value added since 1991-92.

In total, the sector is estimated to have received tariff and budgetary assistance equivalent to a (net) subsidy of $5.4 billion in 2000-01.

These aggregate figures hide significant variations in assistance to the different industries within the manufacturing sector.

- At the high end, the *passenger motor vehicles* and the *textiles, clothing, footwear & leather* industries attracted effective rates of tariff assistance of 14 percent and 23 percent, respectively, in 2000-01.
- By contrast, most other manufacturing industries receive effective tariff assistance of less than 5 percent.
- Budgetary assistance also varies significantly among manufacturing industries.

Australian firms initiated 21 anti-dumping cases in 2000-01, all related to imported manufactured products. This was comparable to the previous two years. 53 anti-dumping and countervailing measures were in force in 2000-01, much the same as in the last few years but down from 103 measures in 1993-94. Nevertheless, relative to its share of world trade, Australia continues to be one of the most intensive users of anti-dumping and countervailing measures.

Agriculture

Effective assistance to the agriculture sector has also declined over the last decade, in part due to the unwinding of various statutory marketing arrangements.

- The average effective rate of assistance for the agriculture sector — which is not directly comparable with the effective rate for the manufacturing sector — is estimated to have fallen from around 12 percent in 1991-92 to around 6 percent in 1999-2000 (the latest year for which data are available).

- Budgetary assistance for primary producers has declined from the equivalent of 6.5 percent of their gross value added in 1991-92 to less than 3.5 percent in 2000-01.

In total, the sector is estimated to have received assistance equivalent to a (net) subsidy of $657 million in 1999-2000.

Again, these aggregate figures hide significant variations in assistance to the different industries within the agriculture sector.

- At the high end, the *dairy* industry has historically received assistance well above the average, with an effective rate of 52 percent in 1999-2000. The total quantum of support to the *dairy* industry has declined by more than half since its deregulation in July 2000. Nevertheless, dairy farmers continue to receive substantial support in the form of an adjustment package totalling around $2 billion over 8 years, funded by a levy on milk consumers.
- When *dairy* industry assistance is excluded, the sectoral effective rate for all other agricultural activities taken together falls to 2 percent.

Mining

The total of tariff and budgetary assistance to the *mining* sector is small, equivalent to a net subsidy of $131 million in 2000-01. Government policies on native title, the environment and royalties have a more substantial impact.

Services

The *services sector* receives limited budgetary assistance and, because of the nature of services trade, is not subject to tariff protection. Rather, trade in services tends to be restricted by regulations, some of which apply only to foreigners wanting to invest or work in Australian services industries, while others apply to both foreign and domestic businesses.

Compared with other economies, Australia has:

- liberal trading regimes for *engineering*, *architecture*, *distribution* (which includes the wholesale and retail industries), *banking* and *telecommunications*;
- moderately restrictive trading regimes in *legal*, *accountancy* and *maritime* services; and
- a high level of bilateral restrictions on *international air passenger transport*.

Budgetary assistance

Despite some fluctuations, total Commonwealth budgetary assistance has remained broadly at its early 1990s level. Budgetary assistance worth $3.7 billion was provided to industry in 2000-01.

There are significant variations in budgetary assistance at the industry grouping level.

- *Primary production*, the *passenger motor vehicles* industry, the *petroleum, coal, chemicals & associated products* industry (which includes pharmaceuticals), and *mining* are the largest recipients of budgetary assistance.
- A similar pattern emerges when budgetary assistance is measured as a proportion of industry size, except that *mining* is replaced by *textiles, clothing, footwear & leather*.
- In 2000-01, *passenger motor vehicles* received by far the highest level of measured budgetary assistance as a proportion of industry size (although there is considerable overlap between the Commission's estimates of budgetary and tariff assistance for this industry).

The incidence of assistance may also vary significantly between different firms within a particular industry.

The Government announced and/or introduced a range of budgetary assistance initiatives during 2000-01, including measures related to *research & development, film production, food processing,* the *textiles, clothing & footwear* industry, and the *passenger motor vehicles* industry. It also provided a number of firm- and project-specific assistance packages. Unless applications for selective assistance are vetted carefully and transparently, a proportion of such assistance could impose an unwarranted burden on the community.

Trade policy issues

Australia's approach to trade reform over recent decades has focussed mainly on unilateral trade liberalisation, supported and reinforced by participation in the multilateral trading system. Australia also has regional trade arrangements with some small neighbouring countries, and pursues regional initiatives to encourage trade liberalisation though the Asia Pacific Economic Cooperation (APEC) forum.

A broad-ranging round of multilateral trade negotiations was launched recently by WTO member governments. Some aspects of the mandated negotiating agenda appear promising for Australia, not least the agreement to negotiate on substantive reductions in agricultural support. However, given the ambitious scope of the agenda, uncertainties surrounding some of the language in the declaration and the political considerations that can influence trade negotiations, the extent to which the potential gains are realised will depend on the course of the detailed negotiations that lie ahead.

Over the last year, the Australian Government has also been exploring bilateral trade agreements with some trading partners. Such agreements are not always desirable: they can have either positive or negative economic effects. For Australia to gain substantial benefits from joining a regional trading agreement, its coverage would have to be comprehensive, and include agricultural products. While it may be possible to obtain some net benefits from a more limited agreement, continuing unilateral reform and multilateral liberalisation offer the greatest gains.

1 Introduction

Assistance is defined in the *Productivity Commission Act 1998* in very broad terms as:

> … any government act that, directly or indirectly, assists a person to carry on a business or activity, or confers a pecuniary benefit on, or results in a pecuniary benefit accruing to, a person in respect of carrying on a business or activity.

Assistance to industry takes many forms. It includes tariffs, quotas, anti-dumping duties and regulatory restrictions on imported goods and services, as well as tax concessions and subsidies for domestic producers. Local producers may also benefit from services provided by government agencies which are underpriced.

Assistance generally provides benefits to the firms and industries that receive it, but comes at a cost to other sections of the community or economy. For example, direct business subsidies increase returns to recipient firms and industries, but come at a cost to the public purse. To meet this cost, governments must increase taxes and charges, cut back on other spending, or borrow additional funds. This adversely affects other parts of the economy. On the other hand, in some cases certain forms of industry support — most notably R&D funding — can deliver net community benefits.

The Commission has a statutory obligation to report annually on industry assistance, and this year's *Trade & Assistance Review* contains several elements:

- estimates of effective assistance to industries in the agriculture, manufacturing and mining sectors (chapter 2);
- estimates of trade restrictions in the services sector (chapter 3);
- budgetary assistance estimates for all sectors (chapter 4);
- data on anti-dumping and countervailing activity (section 2.6); and
- information on other developments in assistance arrangements for specific firms, industries and activities (sections 2.3, 2.4 and 4.3).

The estimates and related information help to reveal which groups in the community gain and which groups lose from industry assistance. They provide a broad indication of the resource allocation effects of selective government industry policies, and can highlight the community costs of inappropriate industry support.

However, caution is required in interpreting the estimates. Among other things, the estimates apply predominantly to Commonwealth assistance schemes, and cover only those measures which selectively benefit particular firms, industries or activities and which can be quantified given practical constraints in measurement and data availability. There are also some methodological and coverage differences between the different sets of estimates, as well as some areas of overlap. Further, while industry assistance can distort resource allocation within the economy, assessing whether the benefits of any particular industry support program exceed its costs involves case-by-case consideration — a task beyond the scope of the *Trade & Assistance Review*.

This year's *Review*, as well as reporting on industry assistance, reports on two key developments in international trade policy over the last year (chapter 5). First, it describes and discusses the outcomes of the Fourth Ministerial Conference of the World Trade Organization (WTO), held recently in the Qatari capital, Doha. The conference launched a new round of multilateral trade negotiations. While this provides only a mandate for detailed negotiations rather than an actual agreement for trade liberalisation, a number of aspects of the conference declaration proffer some benefits for Australia. The second matter is Australia's involvement in regional trading arrangements. Australia has shown renewed interest in entering such arrangements over the last year. The Commission documents these developments and outlines some considerations relevant for determining the merits of entering regional trading agreements.

2 Manufacturing, agriculture and mining

Historically, industries in the manufacturing and agricultural sectors have received high levels of assistance. Manufacturing industries have been assisted mainly through tariffs, while agricultural assistance has been provided mainly through domestic marketing arrangements. Industries in both sectors have also enjoyed budgetary assistance. Assistance to both sectors has declined over the past decade, although some of the industries continue to receive high levels of assistance.

Tariffs and budgetary assistance do not have a major effect on the mining sector. Other government measures, including native title, environmental regulation and royalties, are far more significant for the sector.

In this chapter, the Commission:

- summarises output and trade data for manufacturing, agriculture and mining;
- outlines the Commission's assistance measurement methodology;
- provides estimates of assistance to the three sectors, describes trends in assistance to agriculture and manufacturing, and discusses existing and foreshadowed assistance arrangements applying to them; and
- updates data on anti-dumping and countervailing activity.

2.1 Production and trade: a snapshot

Manufacturing accounts for around 12 percent of Australia's gross domestic product and employment (table 2.1), and around one fifth of Australia's exports (ABARE 2000). Some of the largest manufacturing industries are the *food, beverages & tobacco* sector, *machinery & equipment* (which includes the passenger motor vehicle industry), *metal products*, and *petroleum, coal & chemical products*.

The agricultural sector accounts for less than 4 percent of Australia's gross domestic product, 5 percent of employment (see table 2.1), and around one fifth of Australia's exports (ABARE 2000).

Mining accounts for around 5 percent of Australia's total gross domestic product, 1 percent of total employment (see table 2.1), and around 35 percent of Australia's exports (ABARE 2000). Coal, gold, iron ore, alumina, aluminium, copper and nickel are the largest mining industries.

World merchandise exports increased by 13 percent in the year 2000 to US$6186 billion. During the same period, Australia's merchandise exports increased by 14 percent to US$64 billion. This is equivalent to around 1 percent of world merchandise trade (WTO 2001b).

Table 2.1 **Manufacturing, agriculture and mining sectors' shares of total gross product and employment, 2000-01**[a]

Sector	*Gross product*[b]		*Employment*	
	Value	*Share of total*	*Persons employed*	*Share of total*
	$m	%	'000	%
Manufacturing				
Food, beverages and tobacco	17069	23.0	183	16.2
Textiles, clothing and footwear	2916	3.9	86	7.6
Wood and paper products	4658	6.3	73	6.5
Printing, publishing and recorded media	6463	8.7	120	10.7
Petroleum, coal and chemicals	10814	14.6	110	9.8
Non-metallic mineral products	4622	6.2	44	3.9
Metal products	11359	15.3	182	16.1
Machinery and equipment	14079	19.0	241	21.4
Other manufacturing	2260	3.0	89	7.9
Total	74240	100	1130	100
Total manufacturing as a percentage of total gross product and total employment		**12.6**		**12.4**
Agriculture, forestry and fishing				
Agriculture	17777	91.7	369	86.0
Forestry and fishing	1599	8.3	28	6.5
Total (incl. services)	19376	100	32	7.5
Total agriculture as a percentage of total gross product and total employment		**3.3**		**4.7**
Mining				
Mining	28147	94.6	64	82.0
Services to mining	1591	5.4	14	18.0
Total	29738	100	78	100
Total mining as a percentage of total gross product and total employment		**5.0**		**0.9**

a Figures may not add to totals due to rounding. **b** Gross product data are the industry gross value added at basic prices using 1999-2000 chain volume measures. Total output is the total gross value added.

Source: (ABS 2001b) and (ABS 2001c).

2.2 Scope of the Commission's assistance estimates

The Commission has adopted several measures to help quantify and compare the diverse assistance arrangements which affect businesses in the agriculture, mining and manufacturing sectors. These are defined in box 2.1. In brief, the key measures are:

- the *nominal rates of assistance*, which is a measure of assistance to an industry's or activity's outputs, or on its inputs;
- the *effective rate of assistance* and the *net subsidy equivalent*, which are measures of the net assistance to the land, labour and capital resources used in a particular industry or activity; and
- the *standard deviation in nominal rates* and the *standard deviation in effective rates*, which are indicators of the dispersion of output assistance and net assistance, respectively, among the industries within a sector.

These measures help to explain how the overall assistance structure affects the allocation of resources between different industries or activities within the economy, as well as how different types of assistance affect the incentives to produce and, to a lesser extent, to consume, certain commodities.

Notwithstanding the usefulness of these measures, caution is required when using the Commission's assistance estimates to draw inferences about the allocation of resources between different industries or activities. The key qualifications are that:

- the measurement methodology uses a 'static' framework, so the estimates do not take account of the 'dynamic' responses of producers and consumers to the incentives created by the provision of assistance;
- nominal rates of assistance, unlike effective rates, do not take into account the *net* impacts of assistance on various inputs and outputs;
- the net subsidy equivalent simply measures the transfers of income to producers from consumers, taxpayers and intermediate suppliers — it does not indicate the 'economic welfare' costs to the community of assistance;
- differences in calculation of the agricultural, manufacturing and mining estimates, particularly effective rates, mean that caution is required when making intersectoral comparisons; and
- the Commission's estimates do not take into account all forms of assistance.

These issues, and the Commission's assistance measures and methodology, are explained in more detail in appendix A of *Trade & Assistance Review 1998-99* (PC 1999).

Box 2.1 **Definitions of assistance measures**

The **gross subsidy equivalent** is an estimate of the change in producers' gross returns from assistance. It is the notional amount of money, or subsidy, necessary to provide an activity with a level of assistance equivalent to the nominal rate of assistance on its output.

The **nominal rate of assistance on outputs** is the percentage change in gross returns per unit of output relative to the (hypothetical) situation of no assistance. The nominal rate measures the extent to which consumers pay higher prices and taxpayers pay subsidies to support local output.

The **standard deviation in the nominal rate of assistance on outputs** measures the dispersion of the nominal rates of output assistance for the different industries in a sector around the sectoral average nominal rate. It is an indicator of the potential for distortions in production and consumption patterns within the sector resulting from the output assistance provided to the sector.

The **consumer tax equivalent** is the transfer from final consumers due to the price-raising effects of assistance. It is the sum of the gross subsidy equivalent of assistance, which measures the higher prices paid for domestically produced goods, and the effect of border assistance on the price of imports purchased by final consumers.

The **tax equivalent on materials** is an estimate of the net change to user industries' input costs due to government assistance altering the prices paid for intermediate inputs. It is the notional amount of money user industries pay for intermediate inputs to provide the producers of those inputs with a level of assistance equivalent to the nominal rate of assistance on materials.

The **nominal rate of assistance on materials** (intermediate inputs) is the percentage change in the prices paid for materials used in the production process, due to government intervention.

The **net subsidy equivalent** is an estimate of the change in returns to an activity's value added due to assistance. It is the notional amount of money, or subsidy, necessary to provide a level of assistance equivalent to the effective rate of assistance. It is equal to the gross subsidy equivalent plus any assistance to inputs or value-adding factors, less the tax equivalent on materials used in the production process.

The **effective rate of assistance** is the percentage change in returns per unit of output to an activity's value-adding factors due to the assistance structure. The effective rate measures net assistance, by taking into account the costs and benefits of government intervention on inputs, direct assistance to value-adding factors and output assistance.

The **standard deviation in the effective rate** measures the dispersion of the effective rates of assistance for the different industries in a sector around the sectoral average effective rate. It is an indicator of the potential for distortions in resource allocation within the sector resulting from the overall assistance structure.

2.3 Assistance to manufacturing

The manufacturing sector receives assistance from a range of government programs. Tariff assistance — which includes the impact of tariffs on import prices, as well as the effects of duty exemptions and concessions — is the main form of assistance received by the sector, accounting for around three quarters (or $4.6 billion) of *measured* assistance for manufacturing in 2000-01. Budgetary assistance ($1.6 billion) accounts for the remaining quarter of *measured* assistance received by the manufacturing sector. Budgetary assistance includes budgetary outlays, such as production bounties, certain export incentives and input subsidies, as well as 'tax expenditures' such as income tax concessions.

Nominal and effective rates of assistance to manufacturing, derived from tariffs, are presented in tables 2.3 and 2.4. The key estimates from these tables, together with related developments in manufacturing assistance, are discussed below. Combined tariff and budgetary assistance to manufacturing industries is reported in table 2.2. Budgetary assistance is discussed in more detail in chapter 4.

Trends in tariff assistance to the manufacturing sector

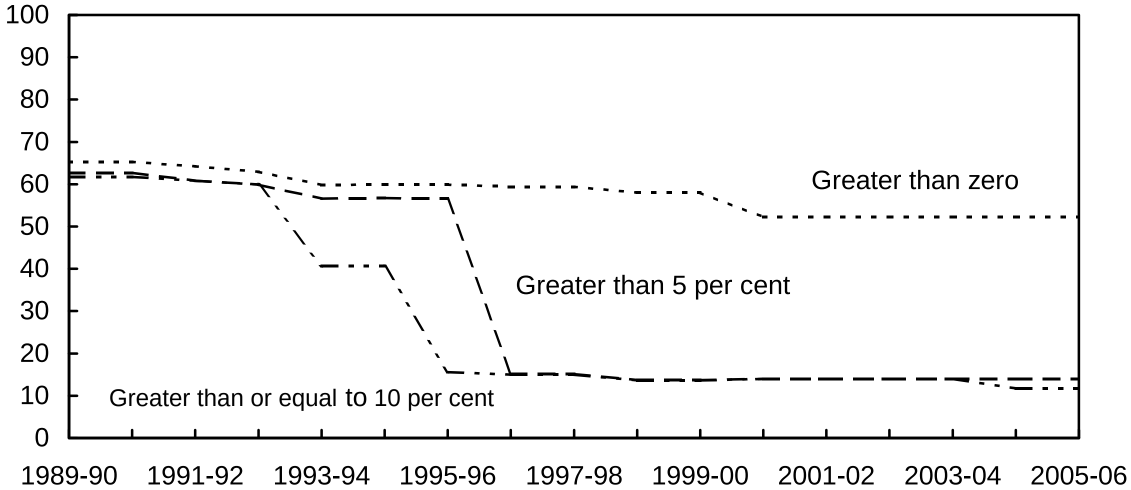
Movements in tariff assistance over the last decade

The proportion of tariff items with general rates greater than 5 percent fell significantly during the 1990s (figure 2.1). This fall can be attributed to the effects of a series of tariff policy changes over this period. In 1988, the Government announced a four-year program of phased reductions in tariffs from 1988 to 1992. This was followed by a further tariff reduction program, which took affect from 1992 to 1996.

The remaining tariff items with general rates greater than 5 percent are largely associated with just two industries: *textiles, clothing & footwear* (TCF) and *passenger motor vehicles* (PMV).

The fall in tariff rates over the period is also reflected in declining effective rates of assistance for the manufacturing sector (figure 2.2). Between 1989-90 and 1999-2000, the effective rate of assistance to manufacturing decreased from more than 16 percent to 5 percent. Higher tariff rates on TCF and PMV imports are reflected in higher effective rates of assistance for these sectors, although their assistance levels also declined significantly over the period. Between 1989-90 and 1999-2000, the effective rates of assistance for the TCF and PMV industries decreased from around 85 percent and 55 percent to around 26 percent and 15 percent, respectively.

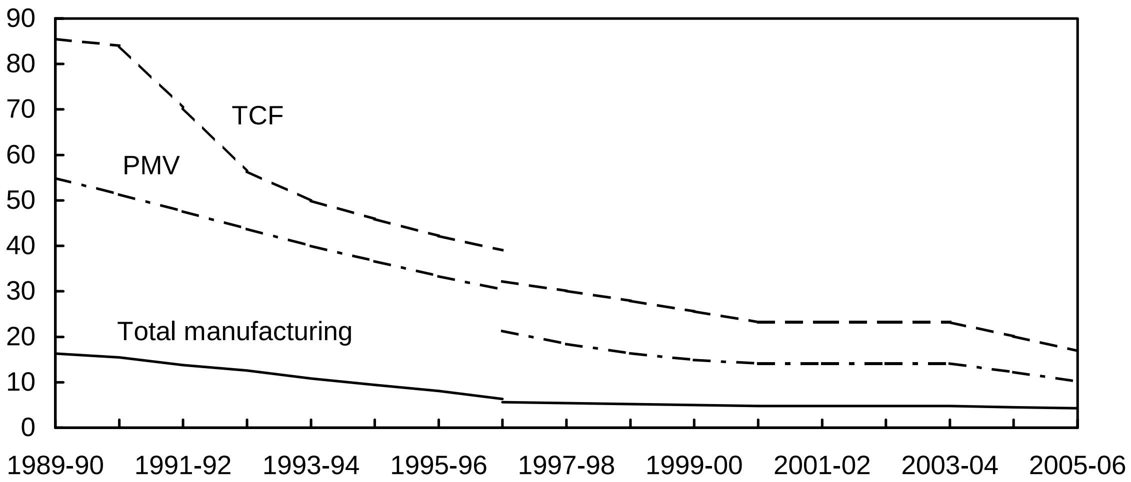
Figure 2.1 **Proportion of tariff line items[a] for selected general rates[b], 1989-90 to 2005-06[cd]**
percent



a A tariff line item is defined as an 8-digit import item as outlined in the Australian Customs Tariff Schedule. **b** The general rate is defined as the rate of duty applicable to individual tariff line items. **c** Rates for the years 1989-90 to 1995-96 and 1998-99 are averages for the year. From 1996-97 to 2003-04 and 2005-06, excluding 1998-99, the rates are for 1 July, while for 2004-05 the rates are for 1 January 2005. The rates at 1 July 2000 are assumed to also apply for the periods 2001-02 to 2003-04. **d** Tariff rates exclude the excise component of general rates on excisable goods.

Data source: PC estimates based on the Australian Customs Tariff Schedule.

Figure 2.2 **Average effective rates of assistance to manufacturing[a], TCF and PMV, 1989-90 to 2005-06**
percent



a Breaks in the series reflect periodic revisions to industry inputs and outputs. These changes occur gradually over time, due to factors such as changing technology and relative input and output prices.

Data source: PC estimates.

The dispersion of assistance across the manufacturing sector has also fallen over this period. The standard deviation of effective rates declined from more than 20 percent in 1989-90 to around 6 percent in 1999-2000.

Future movements in tariff assistance

Assistance to manufacturing is expected to fall marginally between 2000-01 and 2005-06. In 2000-01, the nominal and effective rates of assistance to manufacturing were 3.1 percent and 4.8 percent, respectively. In line with announced tariff changes, the nominal and effective rates of assistance are expected to stay at about these levels until 2005-06, when they are expected to fall to 2.8 percent and 4.3 percent, respectively. These changes primarily reflect the impact of tariff reductions scheduled to occur in 2005 under the TCF and PMV plans (discussed below). Other industries to be affected by phasing arrangements are the *petroleum, coal & chemical products*, *fabricated metal products* and the *other machinery & equipment* industries.

Declining TCF and PMV tariffs relative to the manufacturing average tariff rate (refer to figure 2.2 above) are expected to result in a decline in the dispersion of assistance across the manufacturing sector. Based on announced changes, the standard deviation of effective rates is projected to fall by 1.3 percentage points — from 5.6 percent in 2000-01 to 4.3 percent in 2005-06.

The estimated net subsidy equivalent of tariff assistance to manufacturing was around $4.6 billion in 2000-01, and is projected to fall to $4.1 billion in 2005-06 (in 2000-01 prices). The TCF and PMV industries accounted for around 35 percent of the estimated net subsidy equivalent to the manufacturing sector in 2000-01. This share is projected to fall to around 28 percent by 2005-06.

Combined tariff and budgetary assistance to manufacturing

As noted earlier, as well as tariff assistance, manufacturing industries also receive assistance in the form of budgetary outlays and tax concessions. Total budgetary assistance to the manufacturing sector accounted for $1.6 billion in 2000-01. Budgetary assistance is reported in more detail in chapter 4.

The incidence of both tariff and budgetary assistance in 2000-01, among manufacturing industry groupings, is reported in table 2.2. Care is required in interpreting the table as some assistance schemes are counted in both categories — the ‘totals’ column is adjusted accordingly. The estimates are provided in net subsidy equivalent form — that is, the dollar value of the assistance received. Hence, they do not relate the assistance received to industry size. In these absolute terms, however, the TCF and PMV industries remain among the most highly assisted. Other industry groupings receiving high levels of combined assistance in absolute terms include *food, beverages & tobacco, petroleum, coal, chemicals & plastics* (which includes pharmaceuticals), and *metal products*. In total, the manufacturing sector received $5.4 billion in measured assistance in 2000-01.

Table 2.2 **Tariff and budgetary assistance net subsidy equivalents[a], by manufacturing industry subdivision, 2000-01**

$ million

Industry Grouping	*Tariffs*	*Budgetary*	*Total[b]*
Food, beverages and tobacco	1039.3	78.8	1117.8
Textiles, clothing, footwear and leather (TCF)	756.6	112.6	809.9
Wood and paper products	278.8	26.6	305.2
Printing, publishing and recorded media	84.5	22.2	106.7
Petroleum, coal, chemical and assoc. products	578.0	202.6	778.8
Non-metallic mineral products	118.9	15.6	134.4
Metal products	572.0	95.2	664.9
Motor vehicles and parts (PMV)	819.9	639.7	886.5
Other transport equipment	-18.7	52.1	33.3
Other machinery and equipment	239.9	155.4	390.5
Other manufacturing	110.9	45.1	144.3
Unallocated manufacturing[c]	-	106.0	56.0
Total	**4580.1**	**1551.9**	**5428.9**

a The net subsidy equivalent is the dollar value of the net assistance to the land, labour and capital resources used in a particular industry or activity. **b** The total net subsidy equivalent has been adjusted to take account of programs included in both tariff and budgetary assistance. These programs include tariff concessions or tax expenditures such as the PMV export facilitation scheme, the Automotive Competitiveness and Investment Scheme, the TCF import credits scheme, duty drawback and TRADEX. **c** Unallocated includes general programs where details of claimants and/or beneficiaries is unknown.

Source: PC estimates.

Recent developments in sectoral or industry-specific assistance

General tariff arrangements

The Commission's *Review of Australia's General Tariff Arrangements* (PC 2000c) was released in July 2000. The Commission was asked, primarily, to report on the scope for a post-2000 reduction in tariffs of 5 percent or less, other than those included in the TCF and PMV plans, including consideration of the appropriateness of the Tariff Concession Scheme and Project By-law arrangements. In the report, the Commission recommended the abolition, sooner rather than later, of the general tariffs under reference and the Tariff Concession System. The Commission also considered that, *if* the general tariff arrangements are to continue, there would be merits for expanding the Project and Policy By-law schemes provided that they are confined to unprotected domestic production. It also made recommendations to reduce the administration and compliance costs of the schemes.

In December 2000, the Government announced that it would retain the general tariff rate at 5 percent and also retain the 3 percent duty on business inputs under the Tariff Concession Scheme. In announcing its decision, the Government stated that it:

> …accepts the Productivity Commission's view that there are benefits to be obtained from the removal of the general tariff, but that such benefits would be relatively small.
>
> …We consider there would be benefit in holding these current arrangements for the present and moving to withdraw them at a time consistent with trade and fiscal objectives (Costello and Minchin 2000).

In May 2001, the Government announced changes to the Policy and Project By-Laws Scheme (PBLs) to "…increase the competitiveness of Australian industry, by encouraging involvement in major investment projects and global supply chains, and lower industry input costs." The major changes include (AusIndustry 2001):

- broadening the number of sectors covered by By-Laws, from mining, resource processing, agriculture, and food processing and packaging, to also cover manufacturing and gas supply;
- limiting the concession to capital goods not produced domestically or 'technologically superior' imports of capital goods in the case of manufacturing;
- defining eligibility in terms of 'functional units' (that is, stages of production), rather than individual capital good items, even though some individual goods can be produced in Australia; and
- applicants are required to provide an Australian Industry Participation Plan to demonstrate that Australian industry has been given 'full, fair and reasonable opportunity' to supply the proposed project.

The Government further stated:

> The new PBLs provide a positive response to the Productivity Commission's Review of Australian General Tariff Arrangements, deliver on industry requests for expanded eligibility, remove the limiting criteria for split consignments, and reduce compliance costs by consolidating administration in a one-stop-shop … The new arrangements also deliver on the Government's commitment in response to the Liquefied Natural Gas Action Agenda for a by-law that caters for the needs of major projects.

The new PBL arrangements are estimated to cost around $46 million per year in forgone tariff revenue (Minchin 2001d).

Passenger motor vehicles

PMV remains one of Australia's most highly assisted industries, although its assistance has declined significantly since the mid-1980s. This is largely explained by tariff phasing arrangements over the last decade. PMV tariffs were reduced gradually from 35 percent in 1992 to 15 percent by January 2000. In 1997, the Government announced that the PMV tariff will remain at 15 percent until January 2005, when it is scheduled to fall to 10 percent. The Commission projects that the effective rate of tariff assistance for PMV will then be around 10 percent — still well over double the manufacturing average.

In January 2001, the Automotive Competitiveness and Investment Scheme (ACIS) replaced the previous PMV Export Facilitation Scheme. Under the ACIS, eligible firms can use transferable credits to reduce the customs duty payable on eligible imports. The scheme limits the benefits to 5 percent of sales for an individual firm in any year. Total import duty forgone under the scheme is capped at $2 billion over the five year period from 2001 over which the scheme will operate. The introduction of the ACIS was not expected to have a significant impact on measured assistance to the PMV industry, relative to the earlier assistance arrangements.

Earlier, in September 2000, the *ACIS Administration Amendment Bill 2000* had altered the ACIS legislation to introduce administrative changes to the scheme. Among other things, the changes increased the discretionary powers of the regulator to determine what is 'approved' plant and equipment and 'approved' research and development for the purposes of the ACIS, and the 'maximum claimable value' of such investments under the ACIS (Minchin 2000c).

In December 2000, General Motors Holden announced that it would build a new engine plant in Victoria. The plant will require an initial investment of $400 million, with further investments of around $300 million by 2005 (Bracks 2000). The quantum of government assistance provided to Holden in relation to the plant is unclear. The Commonwealth Government acknowledged that the Victorian State Government had offered a special package to secure the Holden investment (Minchin 2000e), although the amount of any such assistance was not revealed by the Victorian Government. The Commonwealth Government also indicated that it had provided Holden with a Strategic Investment Incentive of $12.5 million, and that Holden would also be eligible to obtain funds for the investment under the new ACIS (Minchin 2001a).

In March 2001, the South Australian Government announced that Mitsubishi Motors had accepted a State-funded loan package to the value of $20 million. The loan is interest-free, and the need to repay it is contingent on certain export market and job creation targets being met. In the event that these targets are reached, only half of the loan is required to be repaid.

The Commonwealth Government also announced a grant of $500 000 to Mitsubishi Motors to assist the company to develop feasibility plans for future production in Australia. The grant is to be matched by the South Australian Government and Mitsubishi Motors. The Government also held discussions with Mitsubishi Motors to explain the benefits available to the company from the Government's $2 billion ACIS scheme (Minchin 2001c).

In the May Budget, the Commonwealth Government announced that registered businesses would be able to claim full GST input tax credits on fleet vehicles, thereby reducing the cost of motor vehicles to businesses by around 9 percent. The Government noted that:

> Almost half of the passenger motor vehicles sold in Australia in 2000 were fleet sales and of these almost 70 percent were Australian made. A big beneficiary of this announcement will clearly be Australia's car makers (Minchin 2001e).

In July 2001, the Government introduced changes to *the Motor Vehicle Standards Amendment Bill 2001*. In doing so, it noted that rising imports of used cars 'may undermine the passenger motor vehicles plan'. Under the new arrangements:

- the new Low Volume Scheme will restrict the importation of used vehicles (except used motorcycles) to 'specialist' and 'enthusiast' vehicles and prevent importation of what are effectively standard vehicles;
- a new scheme will regulate registered automotive workshops; and
- imported used vehicles are required to be modified by registered automotive workshops, on a vehicle by vehicle basis, to comply with appropriate national standards.

The Office of Regulation Review considered that the Regulation Impact Statement accompanying the Bill did not satisfy the Government's stated requirements.

In November 2001, the Victorian Government announced that the Ford Motor Company had decided to invest $500 million in Victoria to produce a new four-wheel-drive vehicle. The Victorian Government will provide assistance to the project largely in the form of payroll tax relief, with further assistance being provided through Government funding of industry infrastructure, training and R&D (Bracks 2001). The Premier reported that the level of assistance would be disclosed in departmental annual reports. The project will also receive assistance from the ACIS. The current tariff rate on 'off-road vehicles', including four-wheel-drive vehicles, is 5 percent.

Textiles, clothing and footwear

Like PMV, the TCF industry's assistance has declined significantly since the mid-1980s, but it remains one of Australia's most highly assisted industries. In 2000-01, TCF had an effective rate of tariff assistance of around 23 percent, with total (combined) assistance of around $800 million in net subsidy equivalent terms. Most TCF assistance is provided through tariffs. All TCF tariffs (apart from those already at rates of 5 percent or less) were reduced to rates of 25 percent, 15 percent or 10 percent in July 2000. TCF tariffs are to remain at these levels until January 2005, when tariffs on apparel and certain finished textiles, footwear and fabrics are scheduled to decline immediately to 17.5, 10 and 7.5 percent, respectively. The Commission projects that the effective rate of assistance for TCF will then be around 17 percent — still well over three times the manufacturing average.

A new package of budgetary assistance measures for the TCF industry — the main component of which is the TCF Strategic Investment Program (SIP) — commenced in July 2000 and is scheduled to run until 2005. The SIP is projected to cost $700 million over the five years. The main activities eligible for SIP funding are investment in new TCF plant and equipment, R&D and product development. Total benefits under the scheme are subject to a limit of 5 percent of sales of eligible products in the previous year. The SIP also provides regional adjustment assistance in the form of payments to assist the purchase of 'state of the art' second hand plant and equipment where existing firms have consolidated or merged.

This year, several changes were made to the operation of the SIP under ministerial directions. In March 2001, the Government introduced new features to the design of the scheme (Minchin 2001h):

- claims for eligible expenditure incurred in two years prior to the commencement of the SIP and the first year of the scheme (ie 1998-99 to 2000-01) now receive the assistance in full;
- the SIP has been extended to also cover knitting mills and clothing manufacturing activities that operate on a fee or commission basis or use materials transferred from other entities; and
- a built-in mechanism now allows the transfer of SIP's benefits to new owners of SIP recipient companies in the case of takeovers or buy-outs.

In May 2001, the Government announced further changes to the SIP to "…provide earlier and more flexible access to grant funding". The changes are intended to allow eligible firms to receive part of their grants 4-6 months earlier than they otherwise would (Minchin 2001h and 2001b), but do not alter the quantum of assistance. The policy change subsequently made available an advance payment to the receiver of the Bradmill Group to fund employees' entitlements and restructuring of the company (Minchin 2001j).

While the new assistance arrangements embodied in the SIP may have implications for the distribution of assistance within the TCF sector, assistance at the broad industry grouping level is unlikely to change significantly between 2000 and 2005.

Table 2.3 **Nominal rates of tariff assistance on outputs,[a] manufacturing subdivisions, 1989-90 to 2005-06, selected years**

percent

ANZSIC[b] Industry grouping								
Code	*Description*	*1989-90*	*1996-97*	*1997-98*	*1998-99*	*1999-2000*	*2000-01*	*2005-06*
21	Food, beverages and tobacco	5.0	2.2	2.2	2.2	2.2	2.2	2.2
22	Textiles, clothing, footwear and leather	37.6	14.7	13.8	12.8	11.8	10.7	8.0
23	Wood and paper products	9.5	3.9	3.9	3.8	3.8	3.7	3.7
24	Printing, publishing and recorded media	5.8	1.3	1.3	1.3	1.3	1.3	1.3
25	Petroleum, coal, chemical and associated products	6.4	2.3	2.3	2.3	2.3	2.3	2.2
26	Non-metallic mineral products	3.0	1.8	1.8	1.8	1.8	1.8	1.7
271-3	Basic metal products	4.0	1.9	1.9	1.9	1.9	1.9	1.9
274-6	Fabricated metal products	13.3	3.8	3.8	3.8	3.8	3.7	3.7
281	Motor vehicles and parts	28.0	9.5	8.5	7.6	7.1	6.8	5.2
282	Other vehicles	10.0	1.0	1.0	1.0	1.0	1.0	1.0
283-6	Other machinery and equipment	14.9	2.6	2.6	2.4	2.3	2.1	2.1
29	Other manufacturing	16.3	3.9	3.9	3.9	3.8	3.8	3.8
21-29	**TOTAL MANUFACTURING**	**10.5**	**3.5**	**3.4**	**3.3**	**3.2**	**3.1**	**2.8**

a Assistance provided by tariffs and certain non-tariff measures. **b** Industry subdivision and group from the Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993 edition.

Source: PC estimates.

Table 2.4 **Effective rates of tariff assistance,[a] manufacturing subdivisions, 1989-90 to 2005-06, selected years**

percent

ANZSIC[b] Industry grouping								
Code	*Description*	*1989-90*	*1996-97*	*1997-98*	*1998-99*	*1999-2000*	*2000-01*	*2005-06*
21	Food, beverages and tobacco	4.5	4.4	4.5	4.6	4.5	4.6	4.6
22	Textiles, clothing, footwear and leather	85.5	32.2	30.1	27.9	25.6	23.2	16.9
23	Wood and paper products	13.9	5.5	5.5	5.5	5.5	5.6	5.6
24	Printing, publishing and recorded media	6.5	0.9	0.9	0.9	0.9	0.9	0.9
25	Petroleum, coal, chemical and associated products	11.0	3.9	3.9	3.9	3.9	3.9	3.7
26	Non-metallic mineral products	4.1	2.7	2.8	2.7	2.7	2.7	2.6
271-3	Basic metal products	7.5	3.0	3.0	3.0	3.0	3.0	3.0
274-6	Fabricated metal products	20.0	4.6	4.6	4.6	4.7	4.6	4.5
281	Motor vehicles and parts	54.9	21.3	18.4	16.4	14.9	14.1	10.2
282	Other vehicles	10.0	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6
283-6	Other machinery and equipment	19.8	2.7	2.6	2.3	2.2	2.1	2.0
29	Other manufacturing	24.7	4.8	4.6	4.6	4.7	4.7	4.7
21-29	**TOTAL MANUFACTURING**	**16.3**	**5.6**	**5.4**	**5.2**	**5.0**	**4.8**	**4.3**

a Assistance provided by tariffs and certain non-tariff measures. **b** Industry subdivision and group from the Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993 edition.

Source: PC estimates.

2.4 Assistance to agriculture

The agricultural sector receives assistance from a wide range of government programs. Statutory marketing and regulatory arrangements form the major component of assistance to agriculture, with budgetary assistance (including R&D, adjustment assistance and tax concessions) and tariffs on outputs being less important. Economic assistance can also exist as a by-product of quarantine restrictions for many agricultural products. The assistance associated with the above measures is partly offset by tariffs and other taxes on the inputs used in agriculture.

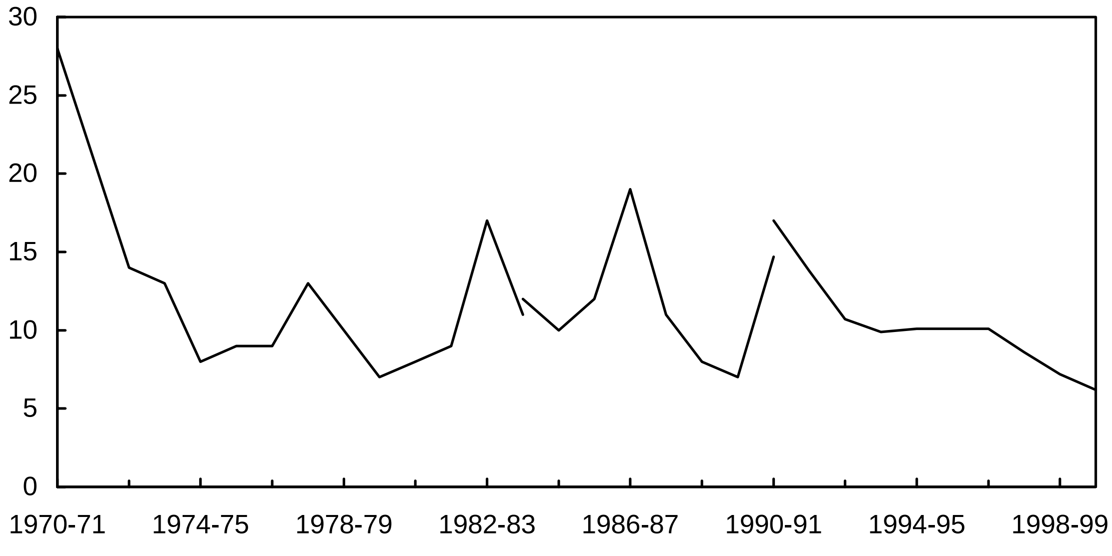
In this year's *Trade & Assistance Review*, the Commission has updated the estimates of assistance to agriculture to 1999-2000 — the latest year for which ABS value of production data are available (ABS 2001a). It also presents revised estimates for 1998-99, along with previously published estimates for earlier years. Nominal and effective rates of assistance for agriculture are reported in tables 2.5 and 2.6, and illustrated in figures 2.3, 2.4 and 2.5. The net subsidy equivalent (NSE) is presented in tables 2.7 and 2.8. The tables appear at the end of this section. The key estimates from these tables, together with related developments, are described and discussed below.

Trends in agricultural assistance

Average effective rates of assistance to agriculture since 1970-71 are presented in figure 2.3.

Assistance to agriculture has typically been more variable than assistance to manufacturing, with changes in estimated assistance reflecting more than just changes in assistance policies. These changes also reflect fluctuations in world commodity prices and in the value of output, as well as the counter-cyclical nature of many agricultural assistance programs. However, during the period of sustained high economic growth since the early 1990s, assistance to agriculture has on average trended downwards.

Figure 2.3 **Average effective rates of assistance for agriculture, 1970-71 to 1999-2000**[a]
percent



a Breaks in series reflect the effects of periodic revisions to industry inputs and outputs. These changes occur gradually over time, due to factors such as changing technology and relative input and output prices.

Data source: PC estimates.

Assistance in 1999-2000

Assistance levels

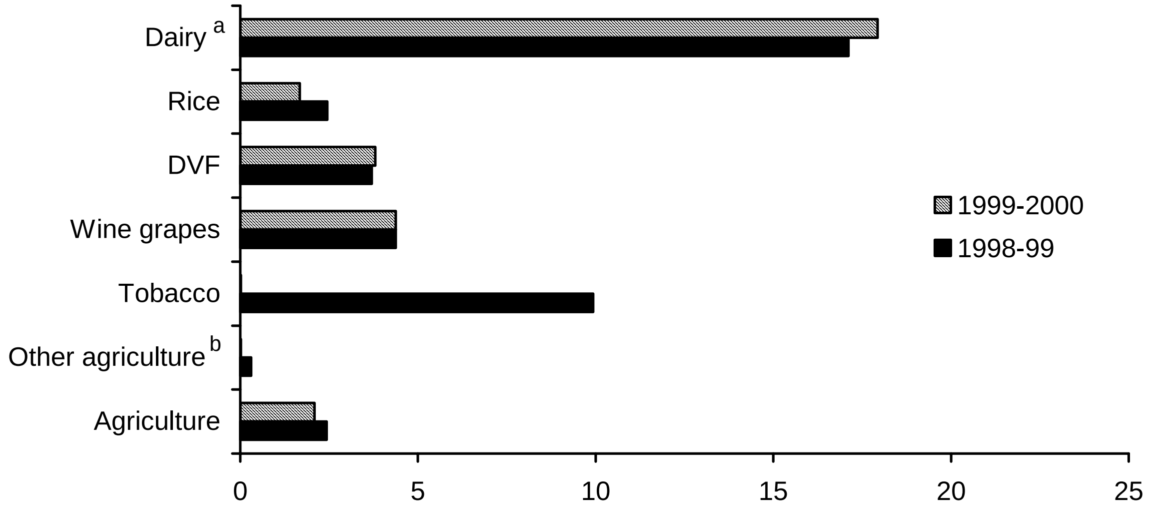
Overall, assistance to agriculture was lower in 1999-2000 than in 1998-99.

- The average *nominal* rate of assistance to agriculture fell by around half a percentage point to 2 percent. Only a few agricultural industries had nominal rates of more than one percent. These were manufacturing milk, market milk, rice, dried vine fruit and wine grapes. Nominal rates rose slightly for the dairy and dried vine fruits industries, while rates fell for the rice industry. Nominal rates also fell significantly for the tobacco industry following the completion of transitional arrangements put in place as part of the industry's restructuring program in 1995 (see IC 1996b) (figure 2.4).
- The average *effective* rate of assistance for agriculture fell from 7 percent to 6 percent in 1999-2000. There were slight rises in effective rates for dairy, sugar, dried vine fruits and wine grapes industries. There were falls for the rice, wheat and tobacco industries — significant in the case of tobacco. The dairy industry remained by far the most highly assisted agricultural industry in 1999-2000, with an effective rate of 52 percent, although assistance is likely to have fallen somewhat following the deregulation of the industry in July 2000 (see below). Sheep meat, beef, wheat, eggs, poultry, bananas, vegetables, apples and pears, oilseeds and tobacco all had effective rates of two percent or less (figure 2.5).
- The *NSE* for agriculture fell by 9 percent, from $719 million to $657 million. The fall in NSE reflects falls in output assistance ($52 million) and assistance to value adding factors ($14 million), while input assistance increased slightly ($4 million) (see table 2.8). Among the different agricultural activities, milk production enjoyed the largest NSE of $463 million in 1999-2000, up slightly from $453 million in the previous year. Other activities with high NSEs include wine grapes ($40 million), beef ($32 million), wool ($26 million), wheat ($22 million) and sugar ($20 million) (table 2.7).

The variation in assistance across agricultural commodities increased slightly in 1999-2000. The standard deviation of the effective rate increased from 29 percentage points to 32 percentage points, while the standard deviation of the nominal rate remained unchanged at 8 percentage points.

Figure 2.4 **Nominal rates of assistance to agricultural commodities, 1998-99 and 1999-2000**

percent

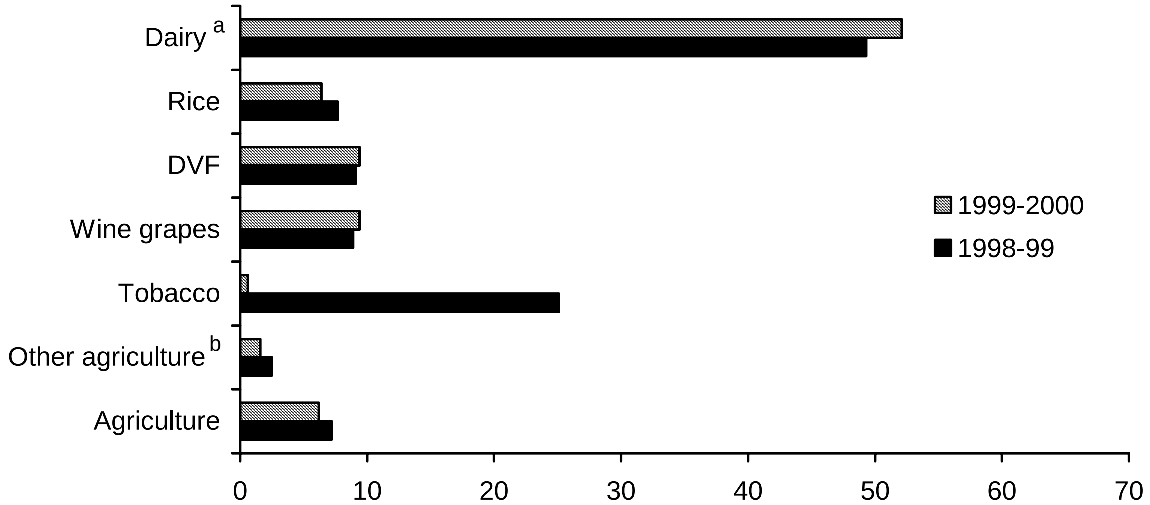


[a] Support to the dairy industry is expected to decline significantly in 2000-01. See text. [b] Other agriculture includes: sheep meat, wool, beef, eggs, poultry, pig meat, wheat, barley, oats, maize, sorghum, apples and pears, citrus, deciduous canning fruits, bananas, vegetables, sugar, cotton and oilseeds. All these sectors have nominal rates below 1.5 percent.

Data source: PC estimates.

Figure 2.5 **Effective rates of assistance to agricultural commodities, 1998-99 and 1999-2000**

percent



[a] Support to the dairy industry is expected to decline significantly in 2000-01. See text. [b] Other agriculture includes: sheep meat, wool, beef, eggs, poultry, pig meat, wheat, barley, oats, maize, sorghum, apples and pears, citrus, deciduous canning fruits, bananas, vegetables, sugar, cotton and oilseeds. All these sectors have effective rates below 5 percent.

Data source: PC estimates.

Forms of assistance

Statutory marketing and regulatory arrangements were the most significant form of assistance in 1999-2000. These arrangements accounted for around 69 percent of the total agricultural NSE. Arrangements for market milk accounted for most of this (around 68 percent), while the remainder of the NSE was largely for manufacturing milk.

Research assistance accounted for 25 percent of the NSE, with support for wheat, beef, dairy, wool, sugar, barley, vegetables and sheep meat accounting for 70 percent of this total.

Revenue forgone from tax concessions was also a significant source of assistance, accounting for 8 percent of the NSE. Concessions for wheat, beef, dairy, wool, sugar, barley, and wine grapes accounting for around 70 percent of this total.

Adjustment assistance represented 6 percent of the NSE, the major beneficiaries being beef, wool, wheat, dairy and sheep meat producers who received 85 percent of the total.

Other forms of assistance include tariffs, specific industry programs and export incentives.

Developments in sectoral or industry-specific assistance

Assistance to agriculture has fallen over the last decade, in part due to an unwinding of statutory marketing arrangements applying in many agricultural industries. Recent changes in both industry and assistance arrangements for selected agricultural industries are discussed below.

Dairy

The dairy industry has long been one of the most highly assisted and regulated industries in Australia. Industry regulation, and its associated assistance, has traditionally split the dairy industry into two distinct parts, market milk and manufacturing milk. Market or drinking milk is produced for direct human consumption, while manufacturing milk is used to make a variety of processed food products, like butter, cheese and milk powders.

Assistance in 1999-2000

In 1999-2000, the dairy industry received most of its assistance from two main sources. Manufacturing milk producers received most of their assistance from the Domestic Market Support Scheme (93 percent of the NSE in 1999-2000), administered by the Commonwealth, while market milk producers received assistance largely from State government regulatory price and production controls (99 percent of the NSE in 1999-2000).

The effective rate of assistance for dairy increased from 49 percent in 1998-99 to 52 percent in 1999-2000. The rate for manufacturing milk rose slightly, from 18 to 19 percent, while the rate for market milk remained above 200 percent.

The assistance provided to the dairy industry dominates the estimates for the agriculture sector. If the dairy industry were excluded, the 1999-2000 effective rate of assistance for agriculture would fall from 6 percent to 2 percent.

The post-deregulation adjustment package

The dairy industry was (largely) deregulated on 1 July 2000. This involved the removal of all pre-1 July 2000 Commonwealth and State Government marketing regulations covering the industry. The deregulation of the dairy industry also removed the artificial distinction between market and manufacturing milk at the farm-gate level.

As part of the deregulation process, in September 1999 the Commonwealth announced, at the request of the dairy industry, that it would provide a Dairy Industry Adjustment Package (DIAP). The DIAP, totalling $1.78 billion, is funded by a Commonwealth levy of 11 cents per litre on retail sales of all liquid milk. The levy commenced on 8 July 2000 and, when announced, was expected to operate for around eight years.

The DIAP initially comprised three main sub-programs:

- the Dairy Structural Adjustment Program (DSAP), which provides $1.63 billion in equal quarterly payments to eligible farmers (and ex-farmers) over the 8 year life of the package;
- the Dairy Exit Program (DEP), providing an optional tax-free exit payment of up to $45,000 for eligible dairy producers wishing to leave the industry. The DEP runs until June 2002 and is expected to cost around $30 million; and

- the Dairy Regional Assistance Program (DRAP), providing $45 million to assist regional communities to adjust to dairy deregulation. The DRAP will run for three years until June 2003.

In November 2000, five months after the commencement of the new arrangements, the Commonwealth asked ABARE to report on the impact of deregulation on the Australian dairy industry. ABARE completed its report in January 2001. Among other things, ABARE projected that average farm gate milk prices would fall by around 25 percent in the year after deregulation in New South Wales, Queensland and Western Australia — the States in which dairy farmers had previously held market milk quotas (ABARE 2001).

In May 2001, the Commonwealth Government announced that it would provide additional assistance for the dairy industry. The additional measures comprised two main parts:

- a Supplementary Dairy Assistance Program (SDAP), providing an additional $139 million in payments to the dairy industry. SDAP payments are due to commence in the 2001-02 financial year; and
- a $20 million expansion of the DRAP.

The SDAP and expansion of the DRAP are also funded by the 11 cents per litre levy on retail sales of liquid milk. The Dairy Adjustment Authority (DAA) has advised that the Commonwealth Government has decided to extend the levy in order to fund these additional programs. The DAA now expects the levy to last for around 10 years.

The largest program in the DIAP, including the additional measures, is the DSAP, accounting for around 90 percent of total funding. To qualify for an entitlement to payments under the program, dairy farmers must demonstrate that they had an interest in a dairy farm enterprise on 29 September 1999, that also delivered milk during 1998-99. Entitlements are payable at a rate of 46.23 cents per litre for market milk and 8.96 cents per litre for manufacturing milk. The volume of market and manufacturing milk supplied by individual dairy farmers in 1998-99 is used to estimate total dollar payments from the program. These payments are then averaged over the 8 year life of the program and delivered in 32 equal quarterly instalments.

In 2000-01, the first year of the DIAP, payments from the DSAP are estimated to have been approximately $110 million and $90 million for market and manufacturing milk, respectively. This represents a significant reduction in support for the dairy industry compared with the previous arrangements. The DSAP delivered around $200 million in funding in 2000-01, while the previous

Commonwealth and State assistance arrangements are estimated to have provided around $450 million in assistance to the dairy industry in 1999-2000.

In addition to the Commonwealth support measures for the dairy industry, State governments have also provided support to compensate farmers for the removal of statutory marketing arrangements for market milk. The Western Australian Government has provided a dairy industry adjustment package worth $27 million, while other States have waived stamp duty relating to DSAP payments and some waived producer levies in 2000-01. State government support to dairy farmers, however, has not been in the form of direct or explicit compensation for the reduction in the value of milk quotas or the fall in the capital value of dairy farms following the removal of statutory price and production controls for market milk (ABARE 2001).

In April 2000, the Commonwealth Government directed the Australian Competition and Consumer Commission (ACCC) to monitor prices, costs and profits of businesses dealing with market milk product sales. The ACCC was required to monitor prices over a nine month period commencing three months before the introduction of the 11 cents per litre Dairy Industry Adjustment Levy in July 2000 and concluding six months later in early 2001. Among other things, the ACCC found that, across all categories of milk stocked by Australian supermarkets, the average retail price of drinking milk decreased by 12 cents per litre in the six months to December 2000. Despite these price falls, the ACCC also found that the total volume of drinking milk sold in Australia had remained relatively stable following deregulation (ACCC 2001).

Lamb

In July 1999, the United States imposed a tariff-rate quota on imports of fresh, chilled or frozen lamb, indicating that it was taking the action under the World Trade Organization (WTO) Agreement on Safeguards. Around 99 percent of US lamb imports are from Australia and New Zealand.

In response, the Commonwealth Government put in place a mechanism to allocate the US quota to lamb producers and announced an $18 million assistance package for lamb producers (see the *Trade & Assistance Review 1999-2000*). In October 1999, the Government lodged a complaint with the WTO, contending that the United States' measure is inconsistent with various articles of the WTO Safeguard Agreement.

The WTO final report, delivered in December 2000, found that the US should lift restrictions on imported Australian and New Zealand lamb. The US Government in turn appealed against this decision. In May 2001, however, the WTO Appellate Body rejected the US appeal (Truss 2001b).

In response, the US Government announced that it would remove tariffs on exports of Australian lamb, effective from 15 November 2001. The Commonwealth Government also announced that it would continue to provide levy relief for lamb producers until that date (Truss 2001e).

Wheat

In early 2000, the Commonwealth Government commissioned a three member committee to conduct a National Competition Policy review of the *Wheat Marketing Act 1989*. The review examined the arrangements which, among other things, give the Australian Wheat Board International (AWBI) Limited a 'single desk' monopoly over export sales of wheat. In particular, the committee was required to assess whether the legislation provides a net benefit to the Australian community compared with open competition in wheat marketing.

In a submission to the review, the Commission (PC 2000b) argued that the single desk is unlikely to generate net benefits for Australia or, indeed, for wheat producers themselves, because:

- a lack of marketing choice for wheat growers is likely to impair efficiency and innovation within the industry; and
- most if not all of any potential benefits of the AWBI's single desk could be achieved under competitive selling arrangements combined with, if necessary, targeted mechanisms that could promote industry-wide activities and exploitation of export premiums in identified markets.

The Commission considered that a desirable outcome of the review would be to limit compulsory arrangements to those markets or activities where benefits of compulsion demonstrably outweigh the costs, and to allow competition in all other markets and activities.

The Committee delivered its final report on 22 December 2000. Among other things, the Committee recommended that the 'single desk' be retained until 2004 when a review of the AWBI's operation of the 'single desk' by the Wheat Export Authority (WEA) is scheduled to take place. While the Committee did not find clear evidence that the 'single desk' provides a net benefit to the Australian community, it gave two main reasons for its recommendation to maintain the single desk. Firstly, the Committee considered that there were sufficient uncertainties surrounding the estimation of the costs and benefits of the single desk arrangements, hence giving rise to some uncertainty as to whether there are, or are not, net benefits to Australian wheat growers and to the Australian community from the 'single desk'. Secondly, the Committee argued that, by continuing the 'single desk' until the 2004 review, better evidence could be provided to determine if the 'single desk' delivered a net benefit to the Australian community. The Committee recommended that if no compelling case can be made in 2004 that there is a net public benefit, then the 'single desk' should be discontinued.

However, the Committee felt that the introduction of more competition into export wheat marketing in the future would be more likely to deliver net benefits to growers and to the wider community than would maintaining the current arrangements without modification. Accordingly, the Committee made the following additional recommendations:

- a three year trial liberalisation of the export trade, with the WEA issuing annual licenses to approved exporters rather than approving each sale as currently is required;
- a three year liberalisation of non-bulk (containers and bags) export trade; and
- a three year trial allowing bulk exports of durum wheat by exporters other than the AWBI Ltd.

In response, the Commonwealth Government announced that the AWBI's single desk arrangements for exporting wheat would remain, and that improvements will be made to the consent system operated by the WEA. The Government, however, decided not to proceed with the Committee's recommendation to deregulate the exports of durum wheat "as it would have meant amending the Wheat Marketing Act" (Truss 2001a).

Wool

In 1993, the Commonwealth Parliament passed the *Wool International Act*. Wool International was responsible for the disposal of the wool stockpile and for repaying the Commonwealth Government guaranteed debt accumulated under the Reserve Price Scheme. The reserve price scheme was established in the early 1970s with the objective of providing price stability to the wool industry by setting a 'floor price' for wool. The scheme collapsed in 1991 as wool production substantially exceeded demand, leading to the creation of the wool stockpile. The stockpile peaked in 1991 at 4.7 million bales with an associated debt of $2.8 billion.

In October 1998, the Commonwealth Government announced its intention to privatise Wool International, a statutory corporation, and to pass ownership and control of the wool stockpile to shareholders (or wool growers). In July 1999, Woolstock Australia Ltd was created from Wool International with the responsibility to continue the disposal of the remaining wool stockpile and its associated debt, while at the same time maximising the net return to shareholders. At the time, the wool stockpile comprised the equivalent of around 1.1 million bales of wool and net debt of $196 million.

In August 2001, Woolstock Australia Ltd announced that all of the wool stockpile had been sold, with its associated debt being retired in the 2000-01 financial year. Subsequently, the Commonwealth Government has introduced legislation into Parliament to enable Woolstock Australia to wind-up its operations (Truss 2001d).

In the short term, the end of the wool stockpile is expected by the Government to have a positive impact on wool prices, as wool will now be traded without the influence of a large stockpile on prices (Truss 2001c).

Citrus

The citrus industry receives assistance through tax concessions, research and development funding and tariffs. Tariffs provide the largest single source of assistance for the industry. While tariffs on imported raw citrus fruit are zero, tariff assistance is provided through the tariff on imports of Brazilian frozen orange juice.

In 1999-2000, tariff assistance for the citrus industry was estimated at $1.4 million, while the NSE was estimated at $3.2 million. Overall, the nominal and effective rates of assistance for the citrus industry were relatively low in 2000-01, at 0.6 percent and 2.2 percent, respectively.

In September 2001, the Commonwealth Government asked the Productivity Commission to undertake an inquiry into the citrus industry. The Commission is to report (by 27 March 2002) on the competitive situation and outlook for citrus growing and processing. The Commission is to examine whether any measures are necessary to enhance the industry's competitiveness, and whether a formal safeguards investigation is warranted (Truss 2001f).

Table 2.5 **Nominal and effective rates of assistance by agricultural activity, 1995-96 to 1999-2000**

percent

	Nominal rate of assistance[a]					*Effective rate of assistance*[b]				
Activity/commodity	*95-96*	*96-97*	*97-98*	*98-99*	*99-00*	*95-96*	*96-97*	*97-98*	*98-99*	*99-00*
Horticulture										
Apples and pears	..	..	..	..	..	..	1	1	..	..
Dried vine fruits[c]	5	6	6	4	4	11	18	15	9	9
Wine grapes	7	4	4	4	4	15	10	9	9	9
Citrus	1	1	..	1	1	4	3	3	3	2
Deciduous canning fruits	..	..	..	..	..	2	7	6	3	2
Bananas	..	..	..	..	..	1	1	1	..	..
Tobacco[d]	40	30	20	10	..	160	98	56	25	1
Vegetables	..	..	..	..	..	1	..	..	1	1
Average	**2**	**1**	**1**	**1**	**1**	**6**	**4**	**4**	**4**	**3**
Extensive cropping										
Wheat	1	1	1	1	..	4	5	5	5	1
Barley	..	..	..	..	..	1	2	2	2	2
Oats	..	..	..	..	..	1	1	3	3	3
Maize	..	..	..	..	..	1	2	4	2	2
Sorghum	..	..	..	..	..	1	2	3	2	2
Oilseeds	..	..	..	..	..	4	2	1	1	1
Average	**1**	**1**	**1**	**1**	**..**	**3**	**4**	**4**	**4**	**1**
Extensive irrigation and high-rainfall crops										
Sugar[e]	4	4	..	..	..	15	15	3	4	6
Cotton	..	..	..	..	..	3	..	..	2	2
Rice[f]	2	3	2	2	2	8	10	8	8	6
Average	**2**	**2**	**..**	**..**	**..**	**10**	**8**	**2**	**3**	**4**
Extensive grazing										
Beef	..	..	..	..	..	5	5	3	2	1
Wool	2	1	1	..	..	9	6	4	4	3
Sheepmeat	..	..	..	..	..	3	3	2	1	1
Average	**1**	**..**	**..**	**..**	**..**	**6**	**5**	**3**	**2**	**2**
Intensive livestock										
Pigs	..	..	..	..	..	5	4	3	3	2
Poultry	..	..	..	..	..	11	3	..	1	1
Eggs[g]	2	..	..	..	..	8	4	2	1	1
Milk production	19	22	21	17	18	56	70	62	49	52
Manufacturing milk	8	8	7	7	7	21	23	18	18	19
Fresh milk[h]	53	67	64	50	55	>200	>200	>200	>200	>200
Average	**11**	**13**	**11**	**10**	**10**	**42**	**47**	**41**	**34**	**35**
Total agriculture										
Average	**3**	**3**	**3**	**2**	**2**	**10**	**10**	**9**	**7**	**6**
Standard deviation[i]	**(9)**	**(11)**	**(10)**	**(8)**	**(8)**	**(33)**	**(55)**	**(50)**	**(29)**	**(32)**

Table 2.5 **continued**

.. between -0.5 and 0.5 percent. **a** Average nominal rates on outputs are weighted by the unassisted value of output of each activity. **b** Average effective rates are weighted by the unassisted value added of each activity. **c** The estimates of assistance to sultanas are based on a comparison of the lower of either domestic or constructed import parity returns with the export returns. **d** Based on transfers derived by applying the price differential between Australian green leaf and comparable imported green leaf to the domestic sales of Australian leaf. Following the removal of the local leaf content scheme in January 1995, the methodology used for calculating producer transfers was revised for the 1995-96 estimates. **e** Producer transfers were estimated in accordance with the industry formula used for dividing raw sugar returns between millers and growers. **f** Estimated by comparing domestic and export prices for medium and long-grain rice. **g** Estimates are derived using a weighted average of retail prices for eggs in the deregulated States to determine a benchmark retail price. This benchmark price is compared with the average retail prices in the regulated States in order to make an estimate of assistance provided to retailers. Finally, this retail-level assistance is estimated on a pro-rata basis from the value of retail prices to provide an estimate of assistance at the farm gate-level. **h** The producer transfer was estimated by multiplying the difference between the fresh milk price and the local manufacturing milk price plus an allowance of 20 percent of the average Australian manufacturing milk price to represent the cost of assurance of out-of–season supply. **i** The standard deviation measures the extent of variation (or dispersion) in a distribution. The larger the variability among individual activities' nominal and effective rates, the larger the standard deviation.

Source: PC estimates.

Table 2.6 **Average nominal and effective rates of assistance, by 3-digit ANZSIC[a], 1995-96 to 1999-2000**

percent

		Nominal rate of assistance on output[b]					*Effective rate of assistance*[c]				
	Activity/commodity description	*95-96*	*96-97*	*97-98*	*98-99*	*99-00*	*95-96*	*96-97*	*97-98*	*98-99*	*99-00*
Code											
011	Horticulture and Fruit Growing	2	1	1	1	1	5	3	3	3	4
012	Grain, Sheep and Grain Beef Cattle Farming	1	1	1	..	..	5	5	4	3	2
013	Dairy Cattle Farming	19	22	21	17	18	56	70	62	49	52
014	Poultry Farming	..	..	..	..	..	10	3	1	1	1
015	Other Livestock Farming	..	..	..	..	..	5	4	3	3	2
016	Other Crop Growing	3	2	..	..	..	12	9	2	3	3
01	**Agriculture**	**3**	**3**	**3**	**2**	**2**	**10**	**10**	**9**	**7**	**6**

.. Between 0 and 0.5 percent. **a** Industry subdivision and group from the Australian and New Zealand Standard Industrial Classification (ANZSIC). **b** Average nominal rates on outputs are weighted by the unassisted value of output of each activity. **c** Average effective rates are weighted by the unassisted value added of each activity.

Source: PC estimates.

Table 2.7 **Net subsidy equivalents[a] by agricultural activity, 1995-96 to 1999-2000**

$ million

Activity/commodity	*95-96*	*96-97*	*97-98*	*98-99*	*99-00*
Horticulture					
Apples and pears	..	1	1	..	..
Dried vine fruits[b]	6	4	5	3	3
Wine grapes	38	28	36	41	40
Citrus	6	5	4	4	3
Deciduous canning fruits	..	2	1	1	..
Bananas	1	1	1	..	..
Tobacco[c]	13	11	7	4	..
Vegetables	7	..	1	6	6
Total	**71**	**52**	**56**	**58**	**53**
Extensive cropping					
Wheat	75	97	84	72	22
Barley	5	9	10	7	6
Oats	2	2	3	2	1
Maize	..	1	1	1	..
Sorghum	2	2	2	2	2
Oilseeds	4	3	2	4	3
Total	**89**	**113**	**102**	**87**	**35**
Extensive irrigation and high-rainfall crops					
Sugar[d]	67	66	14	17	20
Cotton	11	..	1	6	7
Rice[e]	7	12	10	10	7
Total	**85**	**78**	**24**	**33**	**34**
Extensive grazing					
Beef	81	74	54	38	32
Wool	99	77	54	36	26
Sheepmeat	15	14	10	7	6
Total	**195**	**165**	**118**	**81**	**64**
Intensive livestock					
Pigs	9	8	6	5	5
Poultry	12	3	1	1	1
Eggs[f]	6	3	2	1	1
Milk production	490	554	514	453	463
Manufacturing milk	167	170	140	143	152
Fresh milk[g]	323	384	374	310	311
Total	**518**	**569**	**522**	**460**	**470**
Total agriculture					
Total	**958**	**977**	**823**	**719**	**657**

.. Less than $0.5 million. **a** The net subsidy equivalent is the dollar value of the net assistance to the land, labour and capital resources used in a particular industry or activity. **b** The estimates of assistance to sultanas are based on a comparison of the lower of either domestic or constructed import parity returns with the export returns. **c** Based on transfers derived by applying the price differential between Australian green leaf and comparable imported green leaf to the domestic sales of Australian leaf. Following the removal of the local leaf content scheme in January 1995, the methodology used for calculating producer transfers was revised for the 1995-96 estimates. **d** Producer transfers were estimated in accordance with the industry formula used for dividing raw sugar returns between millers and growers. **e** Estimated by comparing domestic and export prices for medium and long-grain rice. **f** Estimates are derived using a weighted average of retail prices for eggs in the deregulated States to determine a benchmark retail price. This benchmark price is compared with the average retail prices in the regulated States in order to make an estimate of assistance provided to retailers. Finally, this retail-level assistance is estimated on a pro-rata basis from the value of retail prices to provide an estimate of assistance at the farm gate-level. **g** The producer transfer was estimated by multiplying the difference between the fresh milk price and the local manufacturing milk price plus an allowance of 20 percent of the average Australian manufacturing milk price to represent the cost of assurance of out-of-season supply.

Source: PC estimates.

Table 2.8 **Assistance to agriculture by form, 1995-96 to 1999-2000**

$ million

	1995-96	*1996-97*	*1997-98*	*1998-99*	*1999-00*
Assistance to outputs					
Domestic pricing arrangements[a]	504	571	509	449	453
Tariffs	66	55	36	42	38
Local content schemes	0	0	0	0	0
Export incentives	3	3	2	2	2
Export inspection services[b]	0	9	0	1	1
Marketing support	1	1	0	0	0
Government guarantees	85	80	57	52	0
Total[c]	**659**	**718**	**604**	**545**	**494**
Assistance to value-adding factors					
Adjustment assistance[d]	115	105	86	49	40
Agricultural research	155	161	161	164	165
Income taxation concessions	163	97	73	63	55
Natural disaster relief	1	1	0	0	0
Sugar industry program	2	4	3	4	6
Total	**436**	**368**	**323**	**279**	**265**
Assistance to inputs					
Disease control[e]	3	2	2	1	1
Tariffs on inputs[f]	-80	-61	-56	-57	-52
Tariffs on plant and machinery[f]	-61	-50	-50	-50	-52
Total	**-138**	**-109**	**-104**	**-106**	**-102**
Net Subsidy Equivalent	**958**	**977**	**823**	**719**	**657**

.. Between – 0.5 and 0.5 million. Figures may not add due to rounding. **a** For 1995-96 to 1998-99, estimates include transitional assistance to tobacco following the removal of the local content scheme in January 1995. **b** Based on shortfalls from 100 percent cost recovery. **c** Equal to the Gross Subsidy Equivalent. **d** Figures reflect actual Commonwealth interest subsidies and grants provided to producers. **e** Covers assistance provided by the bovine brucellosis and tuberculosis eradication campaign, and the tuberculosis freedom assurance program. **f** The additional costs incurred due to assistance raising the prices of inputs. The current series includes the effect of tariffs on materials used in non-traded inputs.

Source: PC estimates.

2.5 Assistance to mining

A number of government policies have significant impacts on the mining industry. These include native title legislation which may affect land tenure and land access, environmental regulation, and prescribed royalty levels which vary between firms. By contrast, tariffs and budgetary assistance do not effect mining substantially.

As reported in chapter 4, budgetary assistance for the mining sector is low — $284 million, which is equivalent to around 1 percent of mining gross value added, in 2000-01. The mining industry is assisted mainly through the development allowance and the R&D tax concession.

As a capital-intensive industry, tariffs on imported capital inputs have a negative effect on mining. The industry receives limited assistance from import tariffs. Chalk, slate, marble, granite, sandstone, mica, steatite and other monumental and building stones are subject to a 5 percent import tariff.

The mining industry's net subsidy equivalent from tariff assistance (NSE) for 2000-01 was negative, at -$153 million. This means that the overall effect of tariffs represented a tax on the industry, rather than a subsidy. Based on the tariff schedules outlining future reductions in tariffs, the Commission estimates that, by 2005-06, the NSE will remain negative at -$146 million. This would represent a modest $7 million gain to the mining industry compared with its situation in 2000-01. The effective rate of assistance for mining was marginally negative between 1996-97 and 2000-01 and is expected to remain so up until 2005-06 (table 2.9).

Table 2.9 **Tariff and budgetary assistance to the mining industry[a], 1996-97 to 2005-06, selected years**

$ million

	1996-97	*1997-98*	*1998-99*	*1999-2000*	*2000-01*	*2005-06[b]*
Gross subsidy equivalent (tariffs)	1.5	1.7	1.8	1.9	2.0	2.0
Tax equivalent on materials (tariffs)	123.1	132.0	135.3	148.8	155.4	148.0
Net subsidy equivalent (tariffs)	-121.6	-130.2	-133.5	-146.8	-153.4	-146.0
Net subsidy equivalent (budgetary)	455.4	302.7	266.0	260.9	284.1	na
Total net subsidy equivalent[c] (tariff and budgetary assistance)	333.8	172.4	132.5	114.1	130.6	na
Effective rate of tariff assistance[d]	-0.6	-0.6	-0.6	-0.6	-0.6	-0.5

a 2000-01 and 2005-06 figures are estimates based on tariff schedules. **b** 2005-06 figures are in 2000-01 dollars. **c** The total net subsidy equivalent has been adjusted to take account of programs included in both tariff and budgetary assistance. **d** The effective rate of assistance is measured as a percentage change in returns per unit of output to an activity's value-added factors due to the assistance structure.

Source: PC estimates.

2.6 Anti-dumping and countervailing activity

Dumping is said to occur when a foreign supplier exports goods at a price below the ‘normal value’ of the goods in the supplier’s home market. There is no single definition of normal value. The price of the good in the exporter’s home market is generally used to determine the normal value, but alternatives such as the good’s price in another export market or a constructed price are sometimes used.

Under WTO rules, a country can apply anti-dumping measures on dumped imports if they cause or threaten to cause material injury to a competing domestic industry.

Countries may also apply countervailing duties where imports — benefiting from certain forms of subsidies in the country of origin — cause, or threaten to cause, material injury to a domestic industry.

Like other measures that raise the price of imports, anti-dumping and countervailing measures can assist particular industries but can also impose higher costs on other domestic industries and consumers.

Australia’s current anti-dumping and countervailing system, which took effect on 24 July 1998, was described in the *Trade & Assistance Review 1997-98* (PC 1998). The system is scheduled to be reviewed under National Competition Policy prior to June 2002.

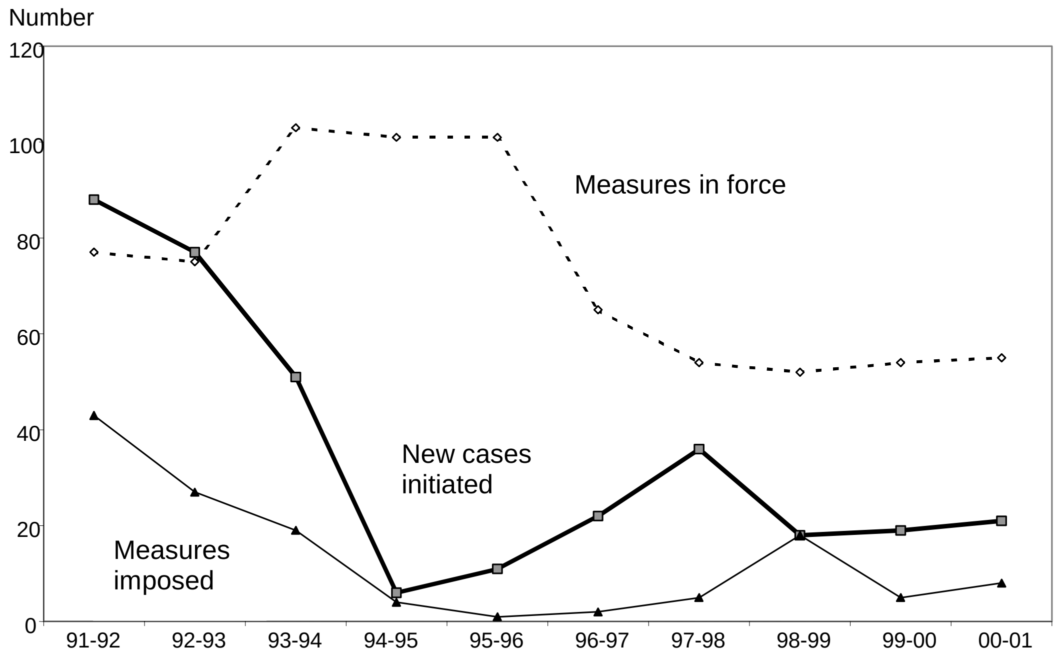
Recent anti-dumping and countervailing activity

Anti-dumping and countervailing activity is shown by three statistics: *initiations*, measures *imposed* and measures *in force* (figure 2.6). A case is *initiated* when a complaint of dumping or subsidisation is first made. If after investigation the case is found to have substance, the Customs Minister may *impose* measures to remedy the situation. These measures generally last for five years (though it is possible that measures may be extended at the end of this period) and the stock of these measures at any point is reported as measures *in force*.

The number of Australian *initiations* of anti-dumping and countervailing cases has been relatively stable over the past three years: 18 in 1998-99, 19 in 1999-2000 and 21 in 2000-01. The number of cases reported in 2000-01 is around three times that of 1994-95, but only around a quarter of the 1991-92 level. Only 1 of the 21 cases was a countervailing case. Table 2.10 lists the cases initiated in 2000-01.

The number of new measures *imposed* increased from 5 in 1999-2000 to 8 in 2000-01.

Figure 2.6 **Anti-dumping and countervailing activity[a], 1991-92 to 2000-01**



[a] A measure or case is counted as an action applying to one commodity from one economy. If multiple economies are involved, they are counted as separate actions.

Data sources: ACS and PC estimates.

Table 2.10 **New Australian anti-dumping and countervailing initiations, 2000-01**

Commodity	*Exporting economy*
Air-conditioners for caravans	Italy
Bottled brandy	France
Copper tube	Korea
Disk brake rotors	China, Italy, Taiwan
Glyphosate	China
Heaters, gas water	Japan
Pineapple juice	Indonesia, Thailand
Pineapple, canned	Indonesia, Thailand
Polyols, flexible slabstock	Japan, Korea, Singapore, USA
Shelving kits	China, Thailand
Ring binders	Malaysia
Road sweeper units	United Kingdom
Wound skin closure strips	Germany

[a] Complaints formally initiated by industry. Initiations are defined as actions applying to one commodity from one economy.

Source: ACS.

The total number of measures *in force* have been relatively static over the last four years. As of 30 June 2001, there were 55 measures in force – one more than in 2000. This is around half of the roughly 100 measures that were in force between 1994 and 1997.

Industry incidence

The *Food & beverages, Chemical & petroleum products* and *Machinery & equipment* industries accounted for 17 of the 21 initiations in 2000-01 (table 2.11). In the case of the *Food & beverages* and *Chemical & petroleum products* industries, multiple initiations by one firm accounted for four of the five initiations. Three particular initiations — pineapple products, polyols flexible slabstock and disk brake rotors — accounted for over half of the initiations in 2000-01.

Table 2.11 **Anti-dumping and countervailing cases[a], by industry, 1995-96 to 2000-01**

							Six-year period	
Industry[b]	*1995 -96*	*1996 –97*	*1997 –98*	*1998 -99*	*1999 -2000*	*2000 -01*	*Total*	*Percent of total[c]*
Food and beverages	–	–	–	–	–	5	5	4
Textiles	–	–	1	5	–	–	6	5
Paper, paper products	–	–	14	2	5	1	22	17
Metallic minerals	–	–	–	–	–	–	–	–
Chemical and petroleum products	5	11	13	10	5	5	49	39
Non-metallic mineral products	–	2	1	–	5	–	8	6
Metal products manufacturing	2	–	3	1	4	1	11	9
Transport equipment	–	–	–	–	–	–	–	–
Machinery and equipment	3	1	–	–	–	7	11	9
Miscellaneous manufacturing	1	8	4	–	–	2	15	12
Total	**11**	**22**	**36**	**18**	**19**	**21**	**127**	**100**

– Nil. [a] Complaints formally initiated by industry. Cases are defined as actions applying to one commodity from one economy. Cases where dumping and subsidisation are alleged for the same economy and commodity are counted as two distinct initiations. [b] Based on Australian and New Zealand Standard Industry Classification subdivisions. [c] The sum of percentages for individual industries may not equal total due to rounding.

Source: ACS.

The pattern of initiations in 2000-01 is somewhat different from that in previous years. The 5 initiations in the *food & beverages* industry are the first in that industry since 1994-95, and the 7 initiations in the *machinery & equipment* industry are its first since 1997-98. Conversely there was only one case in the *paper & paper products* industry in 2000-01, in contrast with the 21 initiations in the previous three years. The *chemical & petroleum products* subgroup has had only 5 initiations in the past two years, but had more than 10 in each of the previous three years.

Country incidence

During 2000-01, Australian firms initiated anti-dumping complaints against firms from 13 economies (table 2.12). Of the 21 initiated complaints, 15 were against firms from Asia and a further five were against firms from the European Union.

Relative to import shares, the number of initiations against Australia's trading partners in North America and the European Union have been much lower than against economies in the Asian region. This trend continued in 2000-01, with the Asian region accounting for nearly three-quarters of total initiations, but approximately one-third of Australia's merchandise imports.

There have been no Australian initiations against imports from New Zealand since July 1990 when the two countries agreed to eliminate anti-dumping and countervailing actions in trans-Tasman trade under changes arising from the Closer Economic Relations Agreement. Since then, competition laws under the *Australian Trade Practices Act 1974* and the *New Zealand Commerce Act 1986* have covered anti-competitive conduct in trans-Tasman trade.

International trends

In 1999-2000, Australia accounted for 19 (or 7 percent) of the 257 anti-dumping and countervailing cases initiated internationally (table 2.13). This is an increase from the 13 (or 5 percent of cases) in 1998. This made Australia the fifth largest user of anti-dumping and countervailing duties in 1999-2000 (as opposed to sixth in 1998). The largest users of anti-dumping and countervailing duties in 1999-2000 were the European Union, the United States, India and Argentina. These countries accounted for more than half of the initiations in 1999-2000.

Australia had 53 measures in force in 1999-2000. This was 4 percent of the 1216 measures in force around the world. This left Australia as the sixth largest user of anti-dumping and countervailing duties in terms of the number of measures in force. The United States, the European Union, Canada, India and Mexico accounted for over two thirds of anti-dumping and countervailing measures in force in 1999-2000.

Table 2.12 **Australian initiations of anti-dumping and countervailing cases, by trading region and economy[a], 1995-96 to 2000-01**

Region/economy	*1995 -96*	*1996 -97*	*1997 -98*	*1998 -99*	*1999 -2000*	*2000 -01*	*Six-year period Total*	*Six-year period Percent b*
North America	**1**	**1**	***2***	***1***	***–***	***1***	***6***	***5***
Canada	–	–	1	–	–	–	1	1
United States	1	1	1	1	–	1	5	4
European Union	***3***	***7***	***13***	***3***	***3***	***5***	***34***	***27***
Austria	–	–	1	–	1	–	2	2
Belgium/Lux	1	–	1	1	–	–	3	2
Finland	–	–	1	1	1	–	3	2
France	–	–	2	–	–	1	3	2
Germany	–	3	3	–	–	1	7	5
Italy	–	–	1	–	–	2	3	2
Netherlands	–	1	2	–	–	–	3	2
Sweden	–	2	1	–	–	–	3	3
UK	2	–	1	1	1	1	6	5
Other EU	–	1	–	–	–	–	1	1
Asia	***5***	***9***	***13***	***9***	***15***	***15***	***66***	***52***
China	1	3	2	–	1	3	10	8
Hong Kong	–	–	1	–	–	–	1	1
India	–	1	1	–	1	–	3	2
Indonesia	–	1	3	2	5	2	13	10
Japan	–	–	1	–	1	2	4	3
South Korea	2	–	2	1	2	2	9	7
Malaysia	1	1	–	2	1	1	6	5
Singapore	–	–	1	1	1	1	4	3
Thailand	1	1	–	2	1	3	8	6
Taiwan	–	2	2	1	2	1	8	6
Other	***2***	***5***	***8***	***5***	***1***	***–***	***21***	***16***
Saudi Arabia	–	–	–	2	–	–	2	2
South Africa	2	–	3	–	–	–	5	4
Other	–	5	5	3	1	–	14	11
Total	**11**	**22**	**36**	**18**	**19**	**21**	**127**	**100**

– Nil. **a** Cases are defined as actions applying to one commodity from one economy. Cases where dumping and subsidisation are alleged for the same economy and commodity are counted as two distinct initiations. **b** The sum of the percentages for the individual economies may not add to the regional totals due to rounding.

Source: ACS.

Table 2.13 **International anti-dumping and countervailing actions, 1998 and 1999-2000**

Country	*Initiation*		*Provisional measures*		*Definitive duties*		*Price undertakings*		*Measures in force*		*Percent of total measures in force*[c]	
	1998[a]	*99-00*[b]	*1998*[a]	*99-00*[b]	*1998*[a]	*99-00*[b]	*1998*[a]	*99-00*[b]	*1998*[a]	*99-00*[b]	*1998*[a]	*99-00*[b]
US	34	30	34	45	17	43	1	4	386	346	35	28
EU	29	57	30	32	23	24	10	14	164	203	15	17
Mexico	12	7	7	6	5	5	1	–	95	90	9	7
Canada	9	16	9	17	10	21	1	–	82	95	7	8
Australia	13	19	16	4	15	5	2	–	63	53	6	4
Turkey	1	2	–	–	–	8	–	–	34	13	3	1
Argentina	8	23	4	7	15	10	–	10	42	48	4	4
Brazil	17	17	2	6	14	12	–	–	34	48	3	4
South Africa	42	13	33	9	12	16	–	–	57	43	5	4
New Zealand	1	6	–	–	2	–	–	–	29	15	3	1
India	33	27	22	44	–	32	–	–	49	91	4	7
South Korea	3	4	4	4	6	–	2	2	28	27	3	2
12 WTO Members	**202**	**221**	**161**	**174**	**119**	**176**	**17**	**30**	**1063**	**1072**	**96**	**88**
All WTO Members	**249**	**257**	**184**	**206**	**127**	**204**	**19**	**21**	**1111**	**1216**	**100**	**100**

– Nil. [a] The reporting period covers 1 January to 31 December 1998. [b] The reporting period covers 1 July 1999 to the 30 June 2000. Due to a change in WTO reporting standards, comparable data for the six months from 1 January 1999 and 30 June 1999 is not available. [c] The sum of the percentages for individual countries may not equal the total due to rounding

Source: WTO (1999 and 2001a).

3 Services

While services are not amenable to assistance through tariffs, several services industries receive assistance in the form of occupational licensing and regulatory restrictions on trade. Services industries can also benefit from forms of budgetary assistance — as, for example, in government funding of tourism promotion.

The liberalisation of service sectors remains a topical issue in international fora. WTO negotiations on trade in services recommenced as scheduled last year, and will be given additional impetus by the decision of the recent WTO Ministerial Conference in Doha to conduct a new round of multilateral trade negotiations across a range of other sectors and issues too (chapter 5). The services negotiations will provide an opportunity for Australia to negotiate with its trading partners to build on the gains that can be achieved through unilateral liberalisation of trade in services. Australia's negotiating position can be strengthened where it is aware of barriers in other countries' services sectors and can draw attention to the effects of these barriers — on trading partners as well as on Australia.

The regulation of services is also important from a domestic perspective. Expenditure on services is significant and service sectors are large users of resources within the economy

In this chapter, the Commission:

- provides data on services output and trade;
- presents data on regulatory restrictions to trade in selected services for a range of countries, and estimates the impact of those countries' regulations on prices in their own economies; and
- sets out estimates of budgetary assistance to Australian services industries.

Its budgetary assistance estimates aside, the Commission's estimates of assistance to services are not as comprehensive or as robust as its estimates of assistance to other sectors. This reflects data limitations and methodological difficulties in measuring the effects of regulatory restrictions of the type that predominate in the services sector. Nevertheless, the estimates can help in building a picture of the effects of government intervention in the services sector.

3.1 Production and trade: a snapshot

The services sector's share of domestic economic activity has grown considerably over recent decades. Today it accounts for around 80 percent gross product and employment. *Property & business*, *finance & insurance*, *health & community services*, *transport & storage*, and *wholesale & retail trade* are some of the largest service industries in Australia (see table 3.1).

Services are recorded as accounting for around 22 percent of Australia's total trade (ABARE 2000), and account for around 1.2 percent of total world trade in services. World exports of services increased by 6 percent in the year 2000 to US$1435 billion (WTO 2001b). In 2000, Australia's exports of services increased by 5 percent.

Table 3.1 **Services sectors' value of production and employment, 2000-01**[a]

Services sector	*Gross product*[b]		*Employment*	
	$m	*Percentage share*	*'000 persons employed*	*Percentage share*
Electricity, gas and water supply	15 988	3.4	66	0.9
Construction	29 534	6.3	683	9.2
Wholesale trade	32 332	6.9	439	5.9
Retail trade	32 901	7.0	1335	17.9
Accommodation, cafes and restaurants	14 679	3.1	471	6.3
Transport and storage	31 432	6.7	422	5.7
Communication	20 362	4.4	183	2.5
Finance and insurance	40 417	8.7	338	4.5
Property and business	73 829	15.8	1083	14.5
Government administration and defence	24 829	5.3	366	4.9
Education	27 540	5.9	622	8.3
Health and community	35 191	7.5	877	11.8
Cultural and recreation	12 105	2.6	226	3.0
Personal and other	15 415	3.3	343	4.6
Ownership of dwellings	60 478	12.9	na	na
Total services	**467 032**	**100.0**	**7452**	**100.0**
Total services as a percentage of total gross product and total employment		**79.1**		**82.0**

a Figures may not add to totals due to rounding. **b** Gross product data are the industry gross value added at basic prices using 1999-2000 chain volume measures. The total output is the total gross value added.

Sources: ABS (2001b) and ABS (2001c).

3.2 Estimates of regulatory restrictions and their effects on selected services

In a collaborative project, researchers from the Commission and the Australian National University are estimating the size and effect of restrictions on trade in selected services, not just for Australia but also for a range of our trading partners. Over the last two years, studies have been completed on restrictions to trade in banking, maritime, telecommunications, the professions and distribution services. This year, Commission researchers explored the extent and price effects of regulatory restrictions in international air passenger transport, telecommunications and electricity supply.

Methodology

Measuring restrictions on trade in services is more difficult than measuring restrictions on trade in goods. International trade in goods involves an exchange of a product between a producer and a user or consumer, and restrictions on such trade usually take the form of a tariff. The effect of trade restrictions on the price of goods can be measured relatively easily by the amount of the tariff. In contrast, trade in services involves a less tangible exchange between the producer and the user or consumer, and restrictions on such trade are often difficult to identify and quantify.

To gauge the impact of restrictions on trade in services, a methodology has been developed which: classifies the different types of restrictions on trade in services; assesses the nature and extent of these restrictions; and estimates the effect of the restrictions on the profit margin or price of services. While the methodology aims to capture the economic significance of various restrictive measures across countries, it inevitably involves a degree of subjective judgment as to the relative importance of different restrictions. Estimates of the price effects of the restrictions also need to be interpreted with caution (box 3.1).

Table 3.2 **An example of classifying restrictions on professional services**

	Establishment	*Ongoing operations*
Restrictions on market access	Non-professionals may not be allowed to own and invest in professional firms.	Professionals may not be allowed to set fees freely or to advertise, and hence compete on price.
Restrictions on national treatment	Foreign professionals may not be allowed to partner with local professionals.	Foreign professional firms may be restricted in hiring local professionals or using international business names.

Box 3.1 **The index-based methodology**

Listing and classifying restrictions

Drawing on various international data sources, researchers compile lists of trade restrictions in different countries, and then classify the restrictions in two ways. Both align closely with the classification of restrictions under the WTO General Agreement on Trade in Services.

- Restrictions on trade in services are first classified by whether they apply to a business's *establishment*, or the *ongoing operations* of a service provider after it has entered the market.
- Restrictions are also classified according to whether they limit *market access* for new entrants (whether foreign or domestic), or whether they violate *national treatment* by treating foreigners less favourably than domestic service providers.

Table 3.2 provides an example of the resulting 2x2 classification matrix.

Trade restrictiveness indexes

The researchers then develop trade restrictiveness indexes (TRI) to measure the extent to which comparable economies have more or less restrictive trading regimes for services. A score is assigned to particular restrictions applied in an economy and an overall score is calculated for each economy. The greater the number of restrictions and/or the more these restrictions impede trade, the higher the index score for an economy. The scores aim to capture the relative economic significance of various restrictive measures, although in most cases the assignment is subjective.

An overall economy score is calculated for all restrictions on market access (a domestic score) and for restrictions on market access plus restrictions on national treatment (a foreign score). A domestic score measures the restrictions on local service providers entering and operating in a services market. A foreign score measures all the restrictions governing foreigners' entry and operation in the domestic market. These include requirements that apply to local service providers as well as those additional requirements that apply only to foreigners.

While trade restrictions can reduce competition or inflate costs in a services market, sometimes such regulation may be imposed to deal with 'market failure' and to meet particular social objectives. However, in arriving at an overall economy score, the TRI studies generally do not seek to determine which restrictions, if any, that contribute to the score might be justified to enhance the efficiency of a service sector.

Price–cost measures

In some of the studies, researchers proceed to estimate a price impact or price-cost impact measure to gauge the effect of trade restrictions on the price of services. The impact measure is normally estimated by taking a direct measure of price or profit across the various economies and statistically regressing that on a number of determinants, including a TRI. The determinants of price or profit can be decomposed to reveal the effect of trade restrictions, although conceptual, methodological and data issues mean that the resultant measures need to be interpreted with care.

Results for selected services industries

International passenger air transport

Air travel between economies has long been governed by a complex system of bilateral arrangements. Bilateral agreements typically specify the designated airlines, capacity and airfares, as well as regulating a wide range of airline activities, including safety and technical aspects of aviation.

A recent OECD study (Gonenc and Nicoletti 2000) modelled the influence of designation requirements (limits on the number of airlines that can provide services), capacity constraints, price controls, and restrictions on charter services on a number of international air routes linking OECD member economies. The study used econometric techniques to estimate the effects of *individual* regulations in the economies on price, taking into account certain relevant industry and economy-specific characteristics. The OECD results showed that, with some limitations, the bilateral restrictions have significant price-raising effects on airfares.

Drawing on the OECD work and additional data, Commission researchers (Doove et. al. 2001) developed a 'bilateral restriction index' for 35 OECD and non-OECD economies. The index results (table 3.3) indicate substantial variation in the application of measured restrictions across economies. The uneven pattern of bilateral restrictions is a direct consequence of the bilateral system, which has generally permitted the use of agreement-specific barriers while limiting the scope for wider multilateral reform.

- Most Asia-Pacific economies maintain a high level of bilateral restrictions. Australia also currently maintains a high level of restrictions, although the Australian Government has committed to reducing Australia's restrictions on a bilateral and multilateral basis (Costello and Anderson 1999).
- Most American economies also have highly restrictive bilateral arrangements, with the United States being a notable exception.
- Economies in the European Union (EU) have the lowest index scores, reflecting the substantial liberalisation achieved in establishing a single aviation market from April 1997.

Doove et. al. (2001) also provided *tentative* estimates of the price impacts of restrictions in these economies on discount airfares (table 3.3). The price impacts of restrictions in international passenger transport vary between economies — ranging from 3 to 22 percent for discount fares. The estimates indicate that price effects of restrictions are significant in several economies. Australia's bilateral restrictions are tentatively estimated to increase discount international fares by 15 percent.[1] (page 46)

Table 3.3 International aviation restrictions and price impacts

	No. of routes / agreements	*Bilateral restrictions index*[a]	*Price impacts*[b] *(%)*
Asia Pacific economies			
Australia	24	0.62	14.6
India	20	0.77	21.8
Indonesia	16	0.73	20.4
Japan	29	0.73	18.1
Korea	18	0.72	20.4
Malaysia	22	0.71	18.4
New Zealand	15	0.39	11.7
Philippines	20	0.79	20.9
Singapore	30	0.70	16.8
Thailand	25	0.68	16.2
American economies			
Argentina	12	0.74	17.5
Brazil	19	0.70	15.5
Canada	29	0.60	11.4
Chile	17	0.61	12.9
Mexico	19	0.82	18.4
Uruguay	32	0.52	12.3
USA	32	0.40	8.9
European economies			
Austria	28	0.32	6.1
Belgium	31	0.36	6.9
Denmark	30	0.34	7.0
Finland	22	0.23	3.8
France	32	0.35	8.3
Germany	32	0.37	8.1
Greece	26	0.31	7.2
Ireland	23	0.21	4.5
Italy	25	0.29	6.4
Luxembourg	23	0.24	4.2
Netherlands	31	0.39	10.0
Norway	28	0.32	4.4
Portugal	21	0.14	6.1
Spain	31	0.36	8.9
Sweden	29	0.32	6.1
Switzerland	32	0.75	13.8
Turkey	20	0.56	10.7
United Kingdom	32	0.30	7.6

a Unweighted average of the route-level bilateral restriction indexes for each economy based on the number of agreements/routes shown in the preceding column. Ranges from 0 to 0.97, with a higher score indicating more restrictions. Separate foreign/domestic indexes not calculated. **b** Percentage increase in discount international airfares.

Source: Doove, Gabbitas, Nguyen-Hong and Owen 2001.

Other services

Results from the index-based studies of restrictions in banking, distribution, the professions, telecommunications and maritime were summarised in chapter 3 of *Trade & Assistance Review 1999-2000* (PC 2000e). Among other things, the studies suggest that trade restrictions in service industries can increase prices substantially — by as much as 60 percent in the case of banking services in Malaysia, and over 100 percent for telecommunications services in Indonesia. Summary statistics are provided in table 3.4.

Table 3.4 **Trade restrictiveness indexes and their price effects for selected services**

	Domestic[a]		*Foreign*[a]		*Price effect*[b]	
	Maximum (country)	*Australia (rank*[c]*)*	*Maximum (country)*	*Australia (rank)*	*Maximum (country)*	*Australia (rank)*
Legal	0.33 (Austria, Japan)	0.27 (24/29)	0.58 (France, Turkey)	0.42 (10/29)	ne	ne
Accountancy	0.31 (India)	0.16 (12/34)	0.63 (Philippines)	0.41 (18/34)	ne	ne
Architectural	0.25 (Canada)	0.03 (12/34)	0.44 (Austria)	0.15 (12/34)	ne	ne
Engineering	0.2 (Austria, Germany)	0.04 (15/34)	0.39 (Austria)	0.08 (6/34)	14.5 (Austria)	2.8 (6/20)
Distribution	0.26 (Korea)	0.03 (5/38)	0.40 (Malaysia)	0.10 (7/38)	ne	ne
Banking	0.27 (Malaysia)	- (1/38)	0.65 (Malaysia)	0.12 (22/38)	60.6 (Malaysia)	9.3 (21/38)
Telecommunications	0.47 (Turkey)	0.04 (7/38)	0.80 (Turkey)	0.04 (7/38)	138.4 (Indonesia)	0.3 (8/37)
Maritime	0.28 (Korea)	0.13 (14/35)	0.64 (Philippines)	0.42 (21/35)	ne	ne

a The restrictiveness index scores range from 0 to 1. The higher the score, the greater are the restrictions for an economy. **b** The price effect of restrictions is measured as a percentage. **c** Rank refers to the position of Australia relative to other countries in the study, where 1 is the least restrictive economy. For example, 24/29 means Australia is the 24th least restrictive economy of the 29 economies included in the study — that is, there are five economies more restrictive than Australia. **ne** Not estimated. - Nil.

Sources: Kalirajan (2000); Nguyen-Hong (2000); Kalirajan et. al. (2000); McGuire and Schuele (2000); McGuire, Schuele and Smith (2000); Warren (2000a); Warren (2000b).

3.3 Budgetary assistance to Australian services

Budgetary assistance to Australian services industries in 2000-01 is set out in table 3.5. The methodology underlying these estimates is outlined in chapter 4. The services sector received $970 million in total, or one quarter of total budgetary assistance to Australian industries, in 2000-01. This represents just 0.2 percent of total sectoral output, which is far less on a proportional basis than the budgetary assistance afforded to other sectors (see chapter 4). At the industry grouping level, *cultural & recreational services*, *communication services*, *transport & storage* and *property & business services* received most budgetary assistance within the sector in absolute terms. *Cultural & recreational services* and *communications services* received the most assistance as a proportion of industry output (table 3.5).

Table 3.5 Budgetary assistance to services, by industry grouping, 2000-01

Industry grouping	*$m*	*% of gross value added*
Electricity, gas & water supply	97	0.6
Construction	63	0.2
Wholesale trade	51	0.2
Retail trade	39	0.1
Accommodation, cafes & restaurants	37	0.3
Transport & storage	102	0.3
Communication services	140	0.8
Finance & insurance	76	0.2
Property & business services	126	0.2
Government administration & defence	3	<0.1
Education	28	0.1
Health & community services	35	0.1
Cultural & recreational services	127	1.2
Personal & other services	6	<0.1
Unallocated services[a]	42	na
Total	**970**	**0.2**

a Unallocated includes general programs where details of claimants and/or beneficiaries is unknown. **b** Totals may not add due to rounding. *Sources:* ABS (2001b) and Commission estimates.

1 Doove et. al. (2001) also attempted to quantify the price effects of domestic regulatory regimes in telecommunications and electricity supply, by extending recent econometric research undertaken by the Organisation for Economic Co-operation and Development (OECD) into the effects of domestic regulation in these network industries. As one of the first attempts to assess the effects of domestic regulation across service industries and across economies, the study also examined various methodological issues. The authors noted that limitations associated with the original econometric modelling, the data used, and the way in which the impact measures are derived mean that the resulting price measures for telecommunications and electricity supply should be treated with some caution, and they are not published here. The estimates for (discount) international airfares, while also subject to qualification, are considered to be more robust.

4 Budgetary assistance

Budgetary assistance to industry comprises government spending and tax concessions that selectively benefit industries or firms. In the past, the major forms of assistance in Australia have been border protection measures, such as tariffs and quotas, and statutory marketing arrangements. While many of these measures are being unwound, the Government continues to provide a wide range of budgetary assistance measures and, in some cases, is providing budgetary assistance in place of other forms of assistance.

Like other forms of assistance (such as tariffs on imports), budgetary assistance favours recipients at the expense of others, and their combined impact can result in high levels of assistance to particular industries or firms. A feature of budgetary assistance is the frequent changes of individual schemes from year to year as funding levels vary and new schemes are created, and as existing programs are modified by the Government. Many of the budgetary assistance schemes are not transparent, making it difficult to monitor their benefits and costs, and their net effect on the direction of economic development in Australia.

In this chapter, the Commission:

- outlines the scope of the Commission's budgetary assistance estimates;
- presents the main trends in budgetary assistance; and
- discusses recent policy developments affecting budgetary assistance.

4.1 Scope of the Commission's estimates

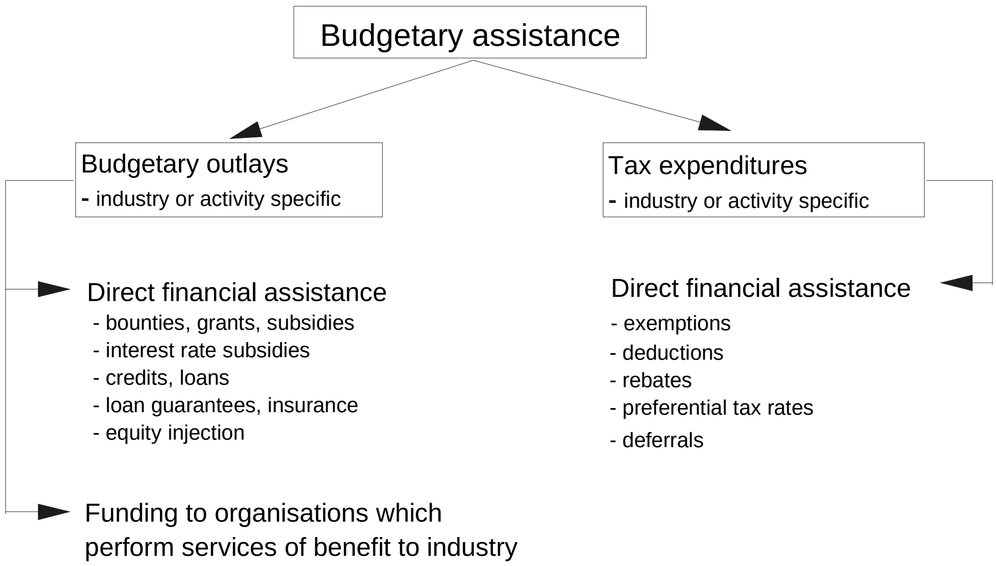
Budgetary assistance comprises:

- outlays, which include funding to organisations which perform activities and services of benefit to industry (such as CSIRO research), as well as grants, bounties, interest rate subsidies, subsidised loans, loan guarantees and equity injections which afford direct financial assistance to businesses; and
- tax expenditures, which are provisions of the tax system that reduce the tax burden of businesses. Tax 'expenditures' include tax exemptions, deductions, rebates, preferential tax rates and tax deferrals which involve the Commonwealth forgoing revenue it would otherwise collect (see figure 4.1).

Recipients can be individual firms, including those undertaking or utilising particular activities such as R&D, as well as particular industries or sectors. As well as reporting budgetary assistance by form, this year's *Trade & Assistance Review* also reports on:

- the activities — R&D, export, industry-specific support etc — to which budgetary assistance is directed; and
- the incidence of assistance across different sectors and industry groupings within the economy.

Figure 4.1 **Forms of budgetary assistance**



The Commission's estimates of budgetary assistance cover those budgetary measures that can be quantified given practical constraints in measurement and data availability. They cover the budgetary assistance provided by the Commonwealth Government, but not that provided by State, Territory and local governments (although where information is available, recent developments in State, Territory and local government assistance are also outlined (section 4.3)).[1] The estimates exclude outlays on defence, health, education and the labour market. They also exclude measures which are generally available to all firms, such as changes in road funding.

1 In a previous inquiry (IC 1996a), the Commission estimated that budgetary assistance afforded by State and Territory governments totalled $5.7 billion in 1994-95. This consisted of $2.5 billion in budgetary outlays and $3.2 billion in payroll tax exemptions.

Assistance estimates in this chapter are derived from a number of information sources, including Commonwealth Budget Papers and Treasury's Tax Expenditure Statement. This year, the Commission has provided data on budgetary assistance for the four years up to 2001-02. The outlay figures for 2000-01 are estimates, and those for 2001-02 are projections (based on budget appropriations). The tax expenditure figures for 1997-98 are estimates, and the figures for 1998-99 to 2001-02 are projections. The estimates also incorporate the Government's revisions of outlays and tax expenditures for previous years.

The Commission's approach to measuring budgetary assistance was explained in more detail in appendix A of the *Trade & Assistance Review 1998-99* (PC 1999).

4.2 Commonwealth budgetary assistance

The Commission's estimates of budgetary assistance are set out in tables 4.1 and 4.3 to 4.8 which, apart from table 4.1 (below), appear at the end of the chapter. The key estimates, together with the allocation of assistance across industries, are described and discussed below.

Aggregate estimates

Estimates and projections of budgetary assistance and its main components for the ten years to 2001-02 are shown in figure 4.2.

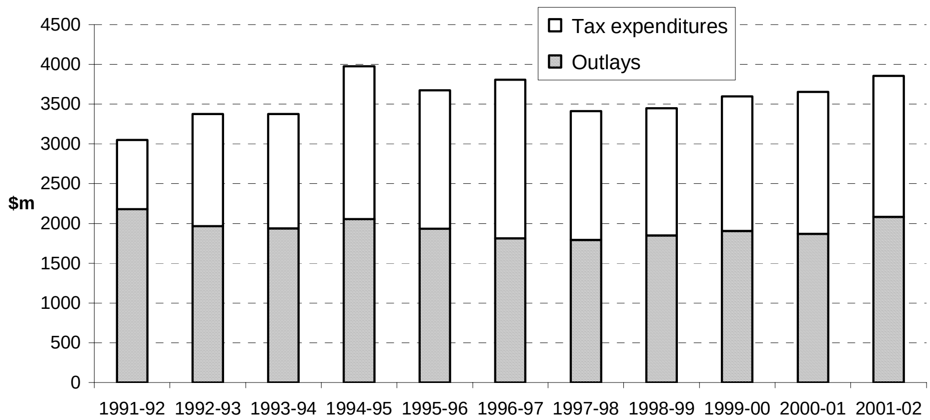
Despite some fluctuations, budgetary assistance in recent years has remained broadly at the level of the early 1990s. There was some increase in budgetary assistance in the early 1990s to a peak of $4 billion in 1994-95. It then declined slightly in the following three years and, since 1998-99, has risen slightly. The broad stability in budgetary assistance contrasts with the general trend to lower assistance through border protection measures and marketing arrangements (see chapter 2).

Total budgetary assistance was around $3.7 billion in 2000-01. This comprised $1.9 billion in program outlays and $1.8 billion in tax expenditures.

The main determinant of year-to-year changes in budgetary assistance is the impact of major tax expenditures. A feature of tax concessions is that they can be open-ended, involving no cap on revenue forgone, and thereby lead to a rise in revenue forgone in response to growth in applications for assistance. The relatively high levels of budgetary assistance between 1994-95 and 1996-97 reflect the changes in revenue forgone from the R&D tax concession, and the investment and development allowances.

While the assistance impact of major tax concessions has been reduced in recent years, this has been offset by the increase in tariff concessions for passenger motor vehicles (PMV) under the Automotive Competitiveness Investment Scheme and Tradex. Estimates and projections provided by the Department of Industry, Science and Resources indicate that these PMV arrangements provided over $500 million in tariff duty forgone in 2000-01 and 2001-02.

Figure 4.2 **Commonwealth budgetary assistance to industry, 1991-92 to 2001-02**



Data sources: Commonwealth Budget Papers; Treasury (2001); ACS (2001); PC estimates.

In contrast to the fluctuations in tax expenditures, the outlay category has been more stable. This was particularly so between 1992-93 and 1995-96, and between 1996-97 and 2000-01. The projected rise in outlays in 2001-02 reflects the introduction of new measures and expansion of existing programs foreshadowed recently (see section 4.3).

Major assistance schemes

Total budgetary assistance was provided through around 100 separate government programs and tax expenditures in 2000-01. However, the bulk of total budgetary assistance (77 percent) was accounted for by 20 programs and tax expenditures, as shown in figure 4.3.

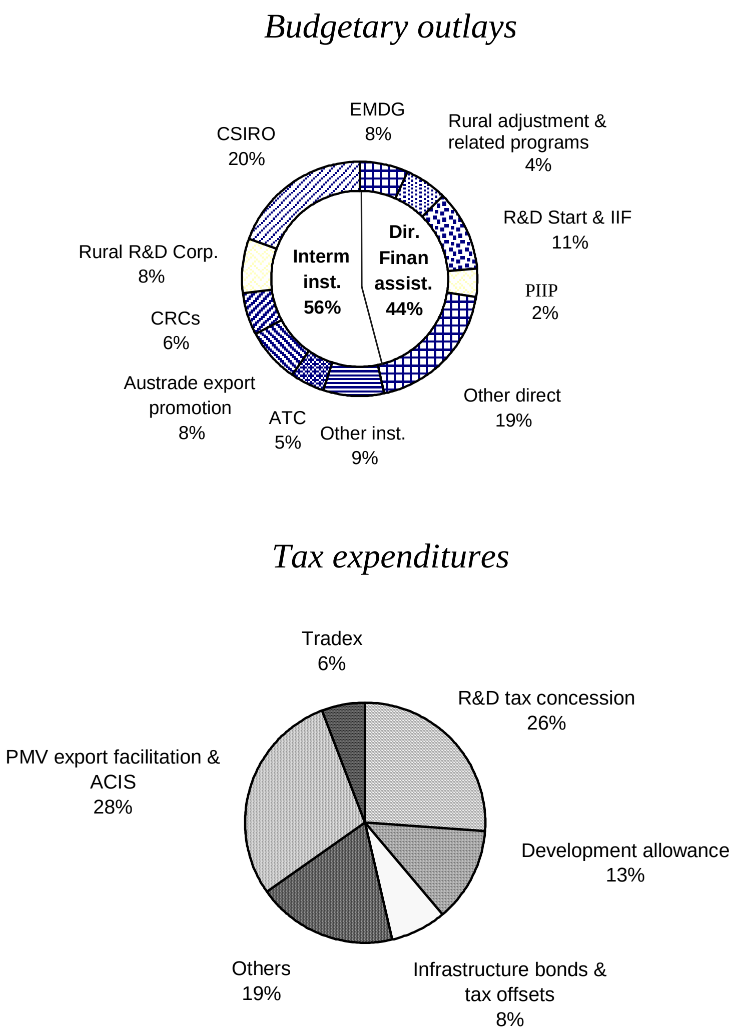
Of total budgetary outlays, 44 percent was provided as direct financial assistance. The remaining share is accounted for by the funding of institutions, such as the

Australian Tourist Commission (ATC), which perform activities and provide services of benefit to producers.

As shown in figure 4.3, important outlay schemes include Austrade's programs, R&D Start and the Innovation Investment Fund (IIF), and research by CSIRO, rural R&D corporations and cooperative research centres (CRCs).

The major tax expenditures are the PMV Export Facilitation Scheme and its successor, the Automotive Competitiveness Investment Scheme (ACIS), the R&D tax concession and the development allowance (figure 4.3).

Figure 4.3 **Major programs and tax expenditures, 2000-01**



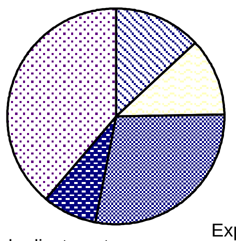
Data source: PC estimates.

Activities targeted

Budgetary assistance is often designed to encourage particular activities undertaken by firms across various industries and/or sectors. To provide an indication of distribution of assistance amongst activities, the Commission further classifies budgetary assistance into R&D, export, investment, and sectoral and adjustment measures (figure 4.4).

Caution is required in interpreting these estimates because, firstly, particular programs may be designed to encourage more than one type of activity. In such cases, the Commission has allocated the program's total funding to the activity deemed to be the main target of the assistance. A further qualification is that the extent to which an activity that appears to be targeted by a program actually benefits from the assistance is not always clear. This is because there is often a lack of information on the operation of certain schemes and their economic effects.

Figure 4.4 **Budgetary assistance, by activities, 2000-01**
percent



Note: The assistance categories include general as well as specific schemes targeting an activity within an industry. For example, the *export assistance* category includes broad-based export measures (such as the Export Market Development Grants scheme) as well as industry-specific measures (such as the TCF Import Credits Scheme) which also facilitate export. The *sectoral and adjustment assistance* category covers programs specifically benefiting producers in a sector or facilitating adjustment. The other industry-specific assistance category covers measures (such as bounties) not already included in the above categories.

Data source: Commission estimates.

As shown in figure 4.4, the largest shares of budgetary assistance involve R&D support (38 percent), followed by export assistance (29 percent) and investment measures (13 percent). Sectoral and adjustment assistance and other industry-specific measures accounted for 7 percent and 13 percent, respectively.

While there is considerable change over time in the particular budgetary assistance measures, the above forms of support have long been a feature of the assistance provided to Australian industries. Section 4.3 discusses recent developments affecting budgetary assistance in those areas.

Sectoral and industry distribution of budgetary assistance

As well as reporting assistance by program, the Commission also estimates the incidence of budgetary assistance by benefiting industries. The incidence of assistance is reported using a four sector classification of the Australian economy and a more detailed 27 industry classification. Under this system, the primary production and mining sectors remain as single categories. However, the manufacturing and services sectors are subdivided into 11 and 14 ‘industry groupings’, respectively.

The methodology for allocating budgetary assistance among the 27 industry groupings is discussed in appendix B of the *Trade & Assistance Review 1999-2000* (PC 2000e). While the Commission has used detailed information to allocate assistance among the industry groupings, the need for judgment means that there remains some scope for imprecision.

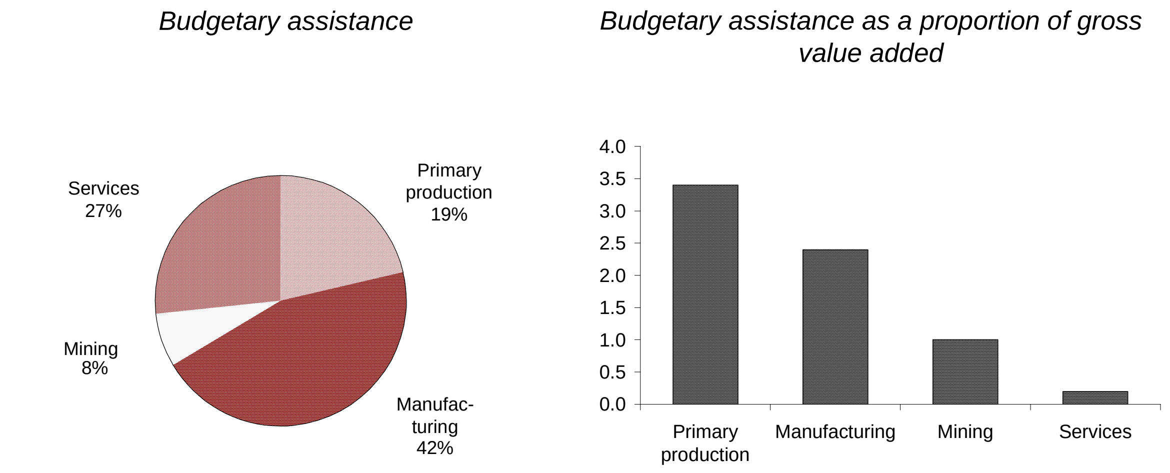
This allocation method provides significantly more detail on the incidence of assistance than the four sector split. That said, although the reporting of budgetary assistance by broad sectors and industries facilitates data collection and measurement, it may conceal significant variations in assistance between firms and industries, and within industry groupings. Indeed, many firms do not make any use of government programs. A recent paper by Commission staff (Revesz and Lattimore 2001) revealed that use of R&D and certain export programs between 1994 and 1998 ranged from 2 to 23 percent of firms in the targeted activities. Similarly, a previous survey of 6000 firms found that around 90 percent of them used no government programs in 1993-94 and 1994-95 (IC/DIST 1997).

Sectors

Budgetary assistance varies markedly between sectors. The largest proportion of budgetary assistance goes to the manufacturing sector (42 percent). Services account for 27 percent, and primary production 19 percent. The mining sector receives the smallest share (figure 4.5).

As a proportion of gross value added — that is, relative to industry size — budgetary assistance was highest for the primary production sector (3.4 percent), followed by the manufacturing sector (2.3 percent). The proportion was 1.1 percent for the mining sector and 0.2 percent for the services sector.

Figure 4.5 **Budgetary assistance by sector, 2000-01**



Data source: Commission estimates.

Industry groupings

Table 4.1 below details the incidence of budgetary assistance by industry grouping.

There is significant variation in budgetary assistance at this level. The four industry groupings that accounted for the largest shares of total budgetary assistance in 2000-01 were:

- *primary production* — assisted mainly through R&D support (CSIRO research and rural R&D corporations), adjustment assistance and income tax averaging provisions;
- *motor vehicles & parts* — assisted almost entirely through the PMV Export Facilitation Scheme and its successor, the Automotive Competitiveness Investment Scheme;
- *petroleum, coal, chemical & associated products* — assisted mainly through R&D support and specific assistance to the pharmaceutical industry through the Pharmaceutical Industry Investment Program; and
- *mining* — assisted mainly through the development allowance and the R&D tax concession.

These four industry groupings each separately accounted for at least 6 percent of total budgetary assistance in 2000-01. In contrast, around half of the remaining groupings each received 1 percent or less of total budgetary assistance.

Table 4.1 **Budgetary assistance by industry grouping, 2000-01**

ANZSIC Industry	*$m*	*% of total*	*% of gross value added*
Primary production	**690**	**19**	**3.4**
Mining	**284**	**8**	**1.1**
Manufacturing	**1 552**	**42**	**2.3**
Food, beverages & tobacco	79	2	0.6
Textiles, clothing, footwear & leather	113	3	3.7
Wood & paper products	27	1	0.6
Printing, publishing & media	22	1	0.3
Petroleum, coal, chemical & associated products	203	6	2.1
Non-metallic mineral products	16	<1	0.4
Metal product manufacturing	95	3	0.9
Motor vehicles & parts	640	18	16.5
Other transport equipment	52	1	2.6
Other machinery & equipment	155	4	2.2
Other manufacturing	45	1	2.0
Unallocated manufacturing[a]	106	3	na
Services	**970**	**27**	**0.2**
Electricity, gas & water supply	97	3	0.6
Construction	63	2	0.2
Wholesale trade	51	1	0.2
Retail trade	39	1	0.1
Accommodation, cafes & restaurants	37	1	0.3
Transport & storage	102	3	0.3
Communication services	140	4	0.8
Finance & insurance	76	2	0.2
Property & business services	126	3	0.2
Government administration & defence	3	<1	<0.1
Education	28	1	0.1
Health & community services	35	1	0.1
Cultural & recreational services	127	3	1.2
Personal & other services	6	<1	<0.1
Unallocated services[a]	42	1	na
Unallocated other[a]	158	4	na
TOTAL[b]	**3 655**	**100**	**0.6**

a Unallocated includes general programs where details of claimants and/or beneficiaries is unknown. **b** Totals may not add due to rounding.

Sources: ABS (2001b) and Commission estimates.

The industry incidence of budgetary assistance becomes more concentrated when it is measured as a percentage of industry gross value added (GVA). Of all industry groupings, *motor vehicles & parts* is by far the most assisted (16.5 percent). The *textile, clothing, footwear & leather* and the *primary production* industry groupings also receive high rates of budgetary assistance, both at around 3.5 percent. In contrast, most other industries recorded budgetary assistance well below 2.5 percent, with many less 1 percent.

The two manufacturing groupings which receive high budgetary assistance — *motor vehicles & parts* and *textiles, clothing, footwear & leather* — also rank highly in terms of tariff assistance (although, in the case of motor vehicles & parts, a substantial proportion of budgetary assistance to the industry is also counted in the Commission's estimates of tariff assistance (see chapter 2).)

4.3 Recent developments

During 2000-01, a number of significant budgetary schemes were introduced or modified by the Commonwealth and State Governments.

Budgetary assistance which provides benefits to the firms and industries that receive it comes at a cost to other sections of the community or economy. For example, direct business subsidies increase returns to recipient firms and industries, but come at a cost to the public purse. To meet this cost, governments must increase taxes and charges, cut back on other spending, or borrow additional funds. This adversely affects other parts of the economy.

While certain forms of budgetary support for industry — most notably some forms of R&D funding — can deliver net community benefits, others are likely to entail net costs and the efficacy of any particular budgetary assistance program is often unclear. It is beyond the scope of *Trade & Assistance Review* to assess the merits of changes in budgetary assistance schemes. Rather, this section restricts itself to documenting recent developments.

The assistance schemes reported in this section are:

- research and development (R&D) schemes, provided recently in the Commonwealth's Innovation Plan;
- industry-specific assistance to films and food products; and
- firm-specific assistance, including Commonwealth and State investment incentives.

Recent developments in relation to budgetary assistance for the *passenger motor vehicles* industry and the *textiles, clothing & footwear* industry are documented in chapter 2. More recent developments, including the rescue support of the Ansett airline and related industries, are not reported in this year's *Trade & Assistance*

Review. Similarly, assistance measures foreshadowed by the Government during the Federal Election campaign are not covered.

Research and development

In January 2001, the Government announced an Innovation Plan, *Backing Australia's Ability*, which committed significant support for R&D in Australia. Total funding and revenue forgone under the Plan is $2.9 billion over the five years to 2005-06, consisting of new incentives and additional funding for existing schemes in three areas: business R&D, commercialisation, and university research and education (table 4.2).

Of these measures, R&D support of direct benefit to industry (schemes assisting business R&D and commercialisation) accounts for $1.4 billion.

The Innovation Plan was a response to recent proposals, including the reports of the National Innovation Summit (Miles 2000) and the Chief Scientist (Batterham 2000). These reports generally advocated increased funding to:

- foster an 'innovation culture', via funding on education, awareness and entrepreneurship relating to science and technology;
- support business and public sector research, including raising the 125 percent R&D tax concession (Miles 2000) and doubling of funding for the Australian Research Council (Batterham 2000); and
- assist the commercialisation of R&D.

The Commission examined R&D policy in a public inquiry in 1995 and, in last year's *Trade & Assistance Review*, commented on the debate, including the arguments for extra funding, that preceded the introduction of the Innovation Plan. The following sections outline key features and the early operation of measures assisting business R&D and commercialisation.

Business R&D

The principal arrangements to support business R&D in Australia include the 125 percent R&D tax concession and the R&D Start grant scheme. The 125 percent tax concession is the most significant measure ($440 million in 1999) and has a broad-based design. The R&D Start program provides firm-specific R&D assistance based on a competitive and discretionary assessment process. In its 1995 inquiry (IC 1995), the Commission found a clear economic rationale for certain government support of R&D. It endorsed some of the existing arrangements at that time, and recommended several proposals to improve the design of R&D policy. In particular, the Commission recommended retention of the (then) 150 percent tax concession, but also identified several detailed deficiencies which warranted attention.

Table 4.2 ***Backing Australia's Ability*** **initiatives**
$ million

	2001-02	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*Total (5 years)*
Business research						
- Streamlining the 125 percent R&D tax concession[a]	-5	-45	-85	-115	-95	-345
- Premium R&D tax concession [b]	30	90	105	110	125	460
- Rebate for small companies [b]	0	6	3	2	2	13
- R&D Start[c]	0	42	118	175	201	535
- Major Research Facilities program[c]	5	20	30	50	50	155
Commercialisation						
- Cooperative Research Centres[c]	0	0	55	57	115	227
- Pre-seed Fund [b]	6	17	22	22	12	79
- Innovation Access program[b]	1	22	24	26	27	100
- Commercialising Emerging Technologies program[c]	10	10	10	10	0	40
- Centres of Excellence for Biotechnology, Information & Communications Technology [b]	6	13	17	24	32	91
- Biotechnology Innovation Fund [c]	5	5	10	0	0	20
- New Industries Development program[c]	5	5	5	5	1	22
Total funding for business R&D and commercialisation	**64**	**185**	**314**	**366**	**469**	**1396**
University research and education						
- Australian Research Council Competitive Grants[c]	19	93	143	205	277	736
- Research Infrastructure Block Grants[c]	27	48	69	89	105	337
- University infrastructure[c]	26	53	54	56	57	246
- Additional 2000 University Places[c]	14	25	33	40	40	151
- Postgraduate Education Loans[c]	1	-2	-8	-12	-16	-37
- Online Curriculum Content	5	7	7	8	8	34
- National innovation Awareness	5	7	7	7	9	35
- Attracting IT&T Workers	-1	-1	-1	-1	-1	-3
Total funding for university research and eduction	**96**	**230**	**305**	**392**	**478**	**1500**
Total Backing Australia's Ability	**159**	**414**	**619**	**758**	**947**	**2896**

a Revenue gain from the proposed changes to the 125 percent concession **b** New measure. **c** Additional funding for existing programs.

Source: Costello and Fahey (2001) and Howard (2001a).

First, while the R&D tax concession avoids the problem of selective assistance to particular projects, most of the funds go to R&D expenditure that would have gone ahead anyway. These subsidies generate budget costs and often represent an economic loss to Australia, since much eligible R&D in Australia is undertaken by foreign multinational businesses. Further, since making a sufficient taxable profit is required to claim the concession, the scheme is of little benefit to companies in a tax loss position, which usually are ‘high-tech’ start-up firms.

Second, while competitive grants schemes (such as the R&D Start program) are a partial response to the problems of the R&D tax concession, their discretionary and selective provision of support involves significant risks.

In the *Telecommunications Equipment, Systems and Services* report (IC 1998), the Commission examined ways to improve the design of the scheme, including a proposal to provide an incremental tax concession to target additional R&D.

The Innovation Plan contains measures which address some problems under existing arrangements (including those raised by the Commission), by:

- proposing changes to the design of the existing 125 percent R&D tax concession to improve the integrity of the scheme;
- introducing the new 175 percent tax concession to target additional or incremental R&D; and
- introducing a new tax rebate for tax loss companies.

These measures (except some aspects of the proposed changes to streamline the 125 percent R&D tax concession (see below)) were given effect with the passage of the *Taxation Laws Amendment Bill 2001* in Parliament in September 2001.

Streamlining the 125 percent R&D tax concession

For several years, there have been a number of concerns about the eligibility criteria of the R&D tax concession. Among other things, the scheme has allowed tax claims on expenditure that go beyond normal R&D activities, such as interest payments on debts to finance R&D, expenditure on feedstock in pilot plants and a range of other expense items. The previous syndicated arrangements, which allowed structured finance deals on ‘core technology’, led to concerns about possible abuses of the concession and their subsequent closure (Costello and Moore 1996).

The Innovation Plan retained the existing 125 percent R&D tax concession for business R&D, but proposed several changes to the design of the scheme.

First, the definition of R&D activities was to be tightened to include both innovation (novelty) *and* high levels of technical risks (uncertainty of the research outcome). The Government noted that past court interpretations of the R&D definition have created low thresholds for these criteria and that the scheme may give assistance beyond the original policy intent of supporting only R&D activities.

Second, the list of excluded activities was to be extended from 'core activities' to also include 'supporting activities'. Various activities, such as market research, quality control, and making of donations, would no longer be eligible R&D activities.

Third, companies were to be required to have a 'business plan' for the R&D activities claimed under the R&D tax concession.

Fourth, the scheme's 'exclusive use' test was to be removed to allow plant not used exclusively for R&D purposes (ie also used for normal production activities) to qualify for the R&D tax concession (on a pro rata basis). The Government considered that the 'exclusive use' test has penalised small companies, which do not have plant used solely for R&D purposes.

Fifth, 'effective life' depreciation deductions (at 125 percent) were to apply to plant used for R&D, in order to be consistent with the Uniform Capital Allowances regime proposed by the Business Tax Reforms.

Sixth, changes to the treatment of feedstock and trading stock were proposed to prevent claims of the concession in situations where the plant is already generating commercial returns and, hence, does not have a strong justification for government support. The Government has noted its concerns about situations where the eligible plants are generating saleable outputs and large commercial returns, and the full production costs have been claimed as R&D expenses (DISR 2001a, p. 8).

Only some of the above proposed changes were finally adopted. In September 2001, the passage of the *Taxation Laws Amendment Bill 2001* introduced only the requirement for a business plan, the removal of the 'exclusive use' test and effective life depreciation for R&D plant (ie the third, fourth and fifth provisions). The limited changes adopted to improve the integrity of the R&D concession reflected concerns raised by industry and a Senate inquiry into the proposed changes (Senate Economics Legislation Committee 2001).

Premium 175 percent R&D tax concession

The premium concession has features similar to overseas incremental tax schemes which are designed to encourage additional R&D. While overseas countries have adopted only an incremental scheme, Australia now has both broad-based (125 percent concession) and incremental R&D tax arrangements.

The scheme applies to increases in, rather than all types of, R&D expenditure. Eligible R&D activities must be those in excess of a base — defined to be the (moving) average of R&D expenditure in the previous three years. When the Innovation Plan was first announced, the base was defined as R&D intensity (the ratio of R&D expenditure to turnover) — similar to that of the US tax credit scheme. This change was announced in April 2001, following representations from industry.

A much higher rate of assistance is available under the premium concession. Its nominal subsidy is 22.5 cents in the dollar — triple the subsidy of 7.5 cents in the dollar currently provided under the 125 percent R&D tax concession.[2] Indeed, the premium subsidy approaches the level when the R&D tax concession was first introduced in 1985-86.

The revenue forgone under the premium concession is estimated to be $460 million over five years.

The premium scheme has other features:

- only current and labour-related R&D expenditures are eligible for the concession.[3] The Government considered that those expenditure have the greatest (spillover) benefits to the economy. However, the excluded expenditures can be claimed under the existing 125 percent tax concession if they satisfy the latter's requirements.[4]
- companies must have a three-year registration history of eligible expenditure to determine the base. An 'adjustment' mechanism operates to reduce the scope for companies to understate previous R&D expenditure to influence current claims.
- the scheme applies to expenditure commencing after 30 June 2001.
- grouping and anti-manipulation rules apply to prevent abuses of the scheme.

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[2] The Government estimated the concessional elements of the R&D tax concession as the extra 25 percent, not the total 125 percent (Treasury 2001). On this basis, the subsidy under the 125 percent tax concession can be calculated as 7.5 cents in the dollar (that is, 25 percent of the 30 cents 'normal' deduction under the existing company tax rate). The subsidy of the 175 percent concession operates in the same way. While this calculation method may be appropriate for current expenditure, it tends to underestimate the true subsidy in the case of capital expenditure, since the bringing forward of R&D plant (rather than effective life depreciations) provides another subsidy in the form of accelerated depreciation.

[3] Excluded expenditures are those on plant, pilot plant, plant leasing, contracted plant, core technology and R&D related interest.

[4] Interest and core technologies are exceptions, which are claimable at 100 percent.

The R&D tax concession legislation has introduced changes to the registration requirement. R&D Start recipients (see below), who are not registered for the R&D tax concession, can now have their R&D expenditure under R&D Start counted for the three-year history of the premium.

The premium concession is in its early stage of operation. Its effectiveness in targeting additional R&D would need to be reviewed and evaluated. Overseas experience suggests that the efficacy of incremental R&D tax arrangements (including its ability to generate additional R&D) is unclear (Hall 1995).

R&D tax rebate

The R&D tax rebate (also called the tax offset) is intended to provide support to R&D undertaken by small companies, particularly those that are in the start-up phase or in a tax loss position. According to the Explanatory Memorandum:

> The tax offset gives eligible small companies, in cases where the company is not yet profitable, the benefit of the R&D tax concession earlier. It could provide a cash flow when they most need it (Costello 2001b).

The rebate is a cash equivalent of the R&D tax concessions. In addition, a company can claim both the premium concession and the tax rebate, if the requirements of both schemes are met.

Among other things, the eligibility conditions require that the company must have an annual R&D expenditure of over $20 000, a company group turnover of less than $5 million, and a group R&D expenditure of less than $1 million.

Grouping rules will also apply to prevent large companies from dividing their operation (into smaller units) to receive the tax rebate.

The Government estimated that the scheme will have a revenue cost of $13 million and that up to 1500 companies will get access to $30 million.

R&D Start

The R&D Start program provides grants and loans to Australian companies for undertaking R&D and commercialisation. Assessment of program eligibility is determined on a competitive basis by the Industrial Research and Development (IR&D) Board.

The assistance under R&D Start is discretionary and firm-specific. Eligible projects can receive subsidies of up to 50 percent of the project’s costs. Around 300 companies are eligible for R&D Start per year.

Last year, the Department of Industry, Sciences and Resources and the Allen Consulting Group jointly conducted an evaluation of the effectiveness of the R&D Start program. The evaluation was conducted on the basis of a survey of R&D Start recipients, rather than through a public inquiry process. In November 2000, the evaluation report concluded that:

> While appreciating that the survey responses may be biased, the evidence is that the R&D *Start* program is meeting its objectives of fostering R&D activity and commercialisation (Allen Consulting Group 2000, p. 5).

The Innovation Plan provides a further $535 million over five years, in addition to the existing funding of $419 million already committed over that period. Consequently, R&D Start subsidies will reach $180 million per year.

Apart from the increase in funding, the Government further noted that it will redesign the R&D Start program so that it is administered flexibly to meet the needs of innovative firms:

> This includes the ability to apply at any time, streamlined decision making which will result in reduced turnover times, simplified processes to ensure rapid payment and a simplified agreement which minimises reporting and obligations for companies (Howard 2001a).

Major National Research Facilities program

'Major National Research Facilities' (MNRF) refer to large equipment items and highly specialised laboratories that are used to conduct major research projects. Examples of facilities supported under the MNRF program include the Bandwidth Foundry for the provision of Photonic Integrated Circuits, and the Australian Synchrotron Research Program.

The Innovation Plan committed $155 million over five years to continue the MNRF program and provided for a significant increase in funding.

Under the MNRF program, a committee has been established to assess eligibility on a competitive basis. The MNRF Committee receives assistance from AusIndustry and reports to the Minister for Industry, Science and Resources who will make the final decision on proposals to be supported.

The eligibility criteria include:

- the proposal provides access to a new or existing resource for research in the 'national interest'.
- total eligible costs of a facility must be greater than $5 million and the capital costs must not be greater than $60 million; and

- the Government grant can be up to 50 percent of the costs of the facility with matching contributions from industry, State governments and/or research institutions. The Minister may consider funding of up to 75 percent in exceptional circumstances.

Of the 86 applications for the MNRF program, 15 proposals have been selected for assistance. The successful proposals cover research facilities on biotechnology, information technology, manufacturing, agriculture, mining, medicine, marine research and astronomy.

Commercialisation

Commercialisation refers broadly to the process of taking a new product or process beyond the R&D phase and introducing it into the market place. While it can be a risky and expensive process, commercialisation activities are also similar to other aspects of the firm's operation and production. Unlike R&D, virtually all of the benefits arising from commercialisation activities are captured by the firms which undertake it.

In reviewing the economic rationale for support of R&D, the Commission's *Research and Development* report (IC 1995) considered that the arguments for supporting commercialisation activities are not well-justified. In the *Telecommunications Equipment, Systems and Services* report (IC 1998), the Commission proposed examining regulatory and taxation arrangements that may directly affect capital markets' financing of risky projects, rather than providing subsidies to support commercialisation activities.

Cooperative Research Centres

Cooperative Research Centres (CRCs) undertake collaborative research projects with joint participation of universities, public sector agencies and industry.

The Innovation Plan expands the CRC program by an additional funding of $227 million over the next five years — an increase of 80 percent over existing level. Total CRC funding over five years will amount to $947 million.

The additional funding will be used to develop larger CRCs and lift funding for existing centres. The selection guidelines have been revised so that existing CRCs can receive supplementary funding for new research programs and commercialisation.

World Class Centres of Excellence

The Innovation Plan provides $91 million over five years to establish Centres of Excellence for biotechnology, and information and communications technology. Industry funding of the centres will vary, but is expected to be around 25 percent of total funding.

The centres will be established as stand alone institutes (separate from universities) to undertake research activities and commercialisation of new technologies. The centres are to be managed by a Board of Directors, which comprises both academic industry representatives. The operator of the centre will be selected through a competitive assessment process.

Pre-seed Fund program

The Pre-seed Fund program makes available venture capital finance for university and public sector research companies that are seeking to commercialise their technologies. The scheme is modelled on existing venture capital programs, such as the Innovation Investment Fund (see PC 2000e). Under the scheme:

- $72 million in funding over five years will be used to establish 'fund companies', which invests in university and public sector agencies to commercialise research;
- fund companies are to make a maximum investment of $1 million per project and/or research company;
- institutions eligible for support include universities and Commonwealth public sector research agencies;
- the government equity contribution into fund companies is 75 percent of total equity (on a 3:1 basis with private capital contribution);
- if a fund company makes a profit from its investments, the Government will retrieve only its original capital contribution, and not the profit; and
- the capital retrieved by the Government will be kept in a 'revolving fund' to continue the Pre-seed Fund program, instead of being returned to the Consolidated Revenue Fund (AusIndustry 2001);

The IR&D Board undertakes the selection of fund companies under ministerial guidelines and a competitive tender process.

Commercialising Emerging Technologies

In last year's *Trade & Assistance Review* (PC 2000e), the Commission reported on the Commercialising Emerging Technologies (COMET) program, which has been allocated $30 million over three years to 2002. COMET funds individuals and small firms for the costs of acquiring commercialisation skills, such as developing a business plan, undertaking market research or going to management educational courses.

In response to the high number of applications for COMET, the Innovation Plan provides an additional funding of $40 million to meet the 'demand'.

Information Technology Online (ITOL) program

The ITOL program is aimed at encouraging firms, especially small and medium-sized businesses, to adopt 'electronic commercial solutions'. A grant of up to $150 000 (50 percent of project costs) is made available to consortia of firms, industry associations and universities. The types of project undertaken so far relate to aspects of supply chain management, data warehousing, security solutions and industry networks.

The Government noted that the demand for the program is strong and requests for assistance have exceeded the existing funding allocation. In response, the Innovation Plan extends the ITOL program to 2005-06, with additional funding of $13 million.

Innovation Access program

The Innovation Access program has the objective of increasing the access of Australian researchers and firms to overseas research and technology:

> By gaining increased and faster access to technologies developed offshore, a large number of Australian firms, particularly small and medium firms, will be able to innovate more readily (Howard 2001a).

Total funding under the program will be $100 million over five years. While the forms and the assistance will vary, the subsidy rate can be up to 50 percent of the costs of eligible projects. Assessment of eligibility is on a competitive basis.

The support covers research projects involving collaboration with overseas researchers, funding to Australian firms to bring overseas specialists to Australia or to go overseas research 'missions'. Demonstrations of Australian science and technologies overseas are also eligible.

Biotechnology

Last year, the Government announced funding of $20 million to establish a Biotechnology Innovation Fund, as part of the National Biotechnology Strategy to support the development and commercialisation of biotechnology. It has also noted that the biotechnology industry currently receives some $250 million a year from various research institutions and a range of programs (DISR 1999).

Under the Innovation Plan, the Biotechnology Innovation Fund is to receive an additional funding of $20 million, over three years to 2003-04.

New Industries Development program

Under the Innovation Plan, the Government has expanded the existing New Industries Development program to assist the commercialisation of technologies specific to agribusiness products. The program will receive new funding of $22 million over five years to fund 'pilot commercialisation' ventures and provide skills in business management to agribusiness firms.

Industry-specific assistance

Films

Film and television program production has long been assisted by a range of Commonwealth and State government arrangements.

Commonwealth budgetary assistance to the film industry involves the provision of direct production subsidies (delivered via the Australian Film Finance Corporation), the funding of film development and promotion activities (delivered via the Australian Film Commission) and the granting of tax incentives to encourage investment in films (under division 10B and 10BA of the *Income Tax Assessment Act 1936*). The cost of these measures — in terms of funding and revenue forgone — is in the order of $90 million per year.

In its recent inquiry into broadcasting services (PC 2000a), the Commission noted that the Australian content quotas for commercial broadcasting also have production and industry assistance effects on the film industry. The *Broadcasting* report also documented various financial and non-financial assistance schemes provided by State governments to film production. At times, investment incentives have also been granted. For example, in 1995, the Commonwealth and NSW Governments provided an estimated $70 million incentive to Fox Studios to locate its film studios in Sydney (IC 1996, p. 18).

In the *Broadcasting* report, the Commission noted concerns about the efficiency (including administration costs) and effectiveness of subsidies in bringing about cultural and social benefits of Australian programming. While efficiency and effectiveness vary, incorrectly targeted subsidies or those not tied to broadcasting requirements may result in the production of films that audiences do not demand. Alternatively, the subsidies could go to films which businesses would have provided anyway.

The Gonski (1997) review of Commonwealth assistance to the film industry recommended several changes to the design of government programs. Among other things, the review expressed concerns on the effectiveness of the existing tax concessions (division 10B and 10BA), as 'a number of films are never released while others appear to have inflated budgets' (AFC 1998, p. 87). It recommended replacing both schemes with an alternative scheme.[5] Division 10B and 10BA have also been used as 'mass marketed' tax shelter schemes and have attracted attention from the Australian Taxation Office.

In September 2001, the Government announced a film industry package of increased funding of $93 million, including:

- additional funding to the Australian Film Finance Corporation, increasing from $8 million in 2002-03 to $11 million in future years, to support 'quality' Australian television drama;
- additional funding to the Australian Film Commission, increasing from $3 million in 2002-03 to $5 million in future years, to support the development of, and partnership between script writers, directors and producers;
- around $3 million per year of additional funding to Film Australia;
- additional funding for SBS Independent, increasing from $2 million in 2002-03 to $4 million in future years; and
- $2 million funding of a Broadband Content Fund, which is to provide grants to producers with high Australian digital content and broadband applications.

The Government also decided to retain the existing tax concessions for film production, stating:

[5] Under this scheme, Film Licensed Investment Companies (FLICs) were established to invest in eligible firms, and the purchase of FLICs shares receives a 100 percent tax deduction. A pilot scheme operated from 1998-99 to 1999-2000.

> Division 10B has been of significant value to local producers and will continue to offer a generous concession to film investors using legitimate financial arrangements consistent with Australian tax law (Alston 2001).

The Government also announced a new 'tax offset' to attract foreign film makers to locate their productions in Australia. The tax offset will provide a subsidy at the rate of 12.5 percent for eligible expenditure on a film project. To be eligible, the expenditure must exceed $15 million and the Australian expenditure constitutes at least 70 percent of the total expenditure. This condition is waived for Australian expenditure of $50 million or more. The elements which will make up 'Australian expenditure' are to be determined after consultations with the industry.

The tax offset provides an alternative assistance arrangement to existing tax concessions and funding. Companies eligible for the tax offset are not able to use division 10B and 10BA or seek funding from Australian Film Finance Corporation. However, this requirement does not apply to film production which is not completed before 4 September 2001.

Food processing

Food processing industries are the largest industry grouping in the Australian manufacturing sector and are also a substantial net exporter. Over the last decade or so, Government initiatives to improve the efficiency and competitiveness of the industry have placed an emphasis on microeconomic reform, such as improving food regulations, rather than the use of assistance measures.

In September 2001, the Government announced the National Food Industry Strategy with funding of $102 million over five years. The assistance package forms a five year plan to sustain the competitiveness and profitability of the food processing industries, as a response to perceived changes in the global supply market:

> The industry is faced with major change as the effects of trade liberalisation, e-commerce, [the emergence of] global supply chains …, changing consumer demand and growing environmental concerns impact on the international food chain (Truss and Minchin 2001).

The new assistance package comprises several measures assisting commercialisation of research, development of export markets and supply management issues specific to food products.

- $12 million will be used to establish centres of excellence to conduct research of benefit to Australian food products.

- $35 million will be used to fund a Food Innovation Grants program. The scheme provides matching funds for R&D projects undertaken in collaboration with the new centres of excellence.
- $25 million of funding will be allocated to develop new export markets for Australian food products, such as China.
- $16 million will be used to fund business networks and training to improve the efficiency of supply chain management and to reduce the costs associated with the food safety and quality assurance system.
- $15 million has been allocated to establish the National Food Industry Council, which replaces the Supermarket to Asia Council and, with a broader role, oversees the implementation of the National Food Industry Strategy.

Firm-specific assistance

As well as providing broad-based assistance for industries and activities, Australian governments also assist specific projects or specific firms. This assistance is generally provided on an ad hoc basis and is often aimed at attracting foreign multinationals to locate facilities locally. At the Commonwealth level, the Strategic Investment Incentives Program (SIIP) provides an administrative umbrella and guidelines under which such funding is distributed. State governments also provide firm- and project-specific assistance, often in competition against other State governments to attract a target firm to invest or locate in their particular State.

The Commission has examined issues surrounding the provision of firm- and project-specific assistance in several inquiries, including *State and Local Government Assistance to Industry* (IC 1996a) and *Telecommunications Equipment, Systems and Services* (IC 1998). It has also commented on some aspects of this assistance in the last two years' *Trade & Assistance Review* (PC 1999, 2000e).

The Commission has noted that, if new investment can be induced through selective incentives, certain benefits to the local economy can in theory arise through the capture of 'externalities' from new technology and skill transfer, from agglomeration economies, or from the use of unemployed resources.

It is not clear, however, that selective assistance is a particularly important factor in firms' locational decisions — at least in terms of the country in which they locate. The economic literature suggests that other factors, such as the size and growth of market, are the main drivers of investment.

Further, the provision of selective incentives entails several economic risks. In particular:

- there is a risk that incentives will be provided to firms which would have chosen to locate where they do anyway — hence, Australia as a whole, or the particular State offering incentives, may incur economic costs for no additional benefits;
- where incentives do attract new projects from elsewhere, these projects may still draw resources, such as skilled labour, away from more productive uses in other local industries and firms — with little or no net impact of net investment and employment;
- similarly, competition from firms, which have been attracted or sustained by government incentives, may render other firms or projects in the same industry less viable (or unviable), and can potentially prompt 'me too' claims for assistance; and
- even if incentives successfully attract 'footloose' firms in the short term, without ongoing assistance a State faces the risk of adjustment costs if these firms choose to relocate at a later date.

Unless applications for selective assistance are vetted carefully and transparently, a proportion of assistance provided under such programs could entail net costs to the community. Indeed, the Commission considers that it is better to fund specific improvements of Australian facilities (such as economically warranted transport infrastructure and R&D) that are also of benefit to Australian firms and consumers generally, than to provide subsidies directly to shareholders of specific firms, including foreign companies.

Where governments nevertheless decide to provide firm- and project-specific assistance, several design features can reduce the risks. Among other things, the Commission has argued that government provision of incentives should be subject to rigorous assessment criteria and cost-benefit analyses to ensure that the benefits outweigh the costs. Governments should also use a transparent decision-making process. The Commission has also advocated an agreement between Australian governments to deal with problems caused by competition between state governments for particular projects.

Several developments over the last year have highlighted these issues and concerns.

- Incentives provided to firms and projects such as Motorola in South Australia have raised concerns about transparency and the robustness of the assessment process. A recent Tasmanian Auditor General's report (TAG 2000) also emphasised the desirability of transparency and robust analysis in the delivery of industry assistance in that State.

- In the case of Motorola, the firm relocated away from the State after earlier receiving assistance, highlighting one of the problems of providing assistance to footloose firms.
- Issues of competition between State governments have been highlighted by the debate about the location of a Holden engine plant (discussed in chapter 2).
- State and Commonwealth Government assistance for a magnesium project in Queensland has drawn criticism from a rival project in South Australia, and a subsequent application for funding under the Commonwealth's SIIP (discussed below).
- A decision of the Victorian Government to fund a Synchrotron research facility, in parallel with a Commonwealth Government investigation of the same issue, also raised questions about the coordination of such assistance.
- In response to such matters, the NSW and Victorian Governments have called for an intergovernmental agreement, sponsored by the Commonwealth, to constrain competition between State governments (see below).

In the following sections, the Commission documents key developments in firm- and project-specific assistance, particularly over the last year. While cognisant of the risks inherent in such assistance generally (noted below), the evaluation of individual developments it is beyond the scope of the *Trade & Assistance Review*.

The Commonwealth Strategic Investment Incentive Program

The Commonwealth Government's Strategic Investment Incentive Program (SIIP) is designed to attract direct investment to Australia by providing assistance to selected projects. While the SIIP is a separate scheme designed to attract additional investment to Australia, it has origins in the Government's long-term industry policy of developing certain industries, such as passenger motor vehicles, information technology, space launch and light metals.

Under the program, applications for investment incentives are assessed on a case-by-case basis against 'indicative' selection criteria. However, details of the assessments of selected projects have not been made publicly released. The Commission examined aspects of the early operation of the SIIP and the program's design in the *Trade & Assistance Review 1998-99* (PC 1999).

Projects assisted under the SIIP

To date, several projects have been awarded incentives or received an offer for assistance under the SIIP. These are:

- a $40 million package for Visy Industries to establish a pulp and paper mill in Tumut, New South Wales (Minchin 1998);
- an offer of assistance exceeding $100 million to Comalco to expand an alumina refinery in Gladstone (Howard 1999);
- a $70 million package for the US based Syntroleum Corporation for access to, and development of, gas-to-liquid (GTL) technology in Australia (Minchin 2000a).[6]
- a $3.2 million grant to the IBM e-Business Centre for Innovation in Sydney (Alston 2000);
- $100 million of funding to develop a space launch facility on Christmas Island (Minchin and MacDonald 2001);
- $50 million of CSIRO funding to develop a Queensland magnesium project (Minchin 2001i); and
- a $12.5 million SIIP grant to Holden to complement the other assistance it has attracted to establish an engine plant in Victoria (Minchin 2001a).

The Commission discussed aspects of the first three incentives in previous *Trade & Assistance Reviews* (PC 1999, 2000e). Assistance for the Holden engine plant was discussed in chapter 2. The other SIIP and related grants, and recent developments with the Comalco project, are discussed below.

IBM e-Business Centre

In the *Industry 2000* statement on industry policy priorities, the Government indicated that it is evaluating a range of measures to attract investment in R&D activities and knowledge-based industries:

[6] In addition to Commonwealth investment incentives and other program funding, the SIIP's selected projects also receive assistance from State governments, usually in the form of infrastructure funding. For example, Syntroleum has stated that a $30 million funding package is to be provided by the Western Australian Government for construction of a desalinisation plant, access roads and site improvements where its plant is located (Syntroleum 2000).

> Strategic initiatives are also being developed to attract investment into the information technology, telecommunication and biotechnology sectors … As part of this work, Invest Australia is developing an R&D investment strategy that will contribute to the proposed Innovation Action Plan. (Minchin 2000d)

In December 2000, the Government provided a $3.2 million grant to IBM Global Services Australia to establish a $30 million IBM e-business Centre for Innovation, in Sydney. The grant is used to fund training on information and communications technology.

While the SIIP is a separate assistance scheme, other policy measures have also been used to attract investment in the information technology sector. For example, under the existing the Commonwealth Government's IT Outsourcing Initiative, industry development plans are considered to have attracted several foreign investments in information technology, including the establishment of e-business centres (DCITA 2001).

Space launch

In recent years, the Government has introduced several measures designed to facilitate the development of a commercial space industry in Australia.

In June 1998, it announced a sales tax exemption, estimated at $60 million in revenue forgone, for space and satellites to be launched in Australia. At the time, the Government also entered an agreement with the Kistler Aerospace Corporation to develop space launch facilities at Woomera. The (then) sales tax exemption was intended to:

- facilitate the establishment of a viable commercial space industry; and
- establish access to the expanding world demand for satellite launch facilities (Costello 1998).

However, Kistler's proposal to launch rockets from Woomera has not proceeded because of the company's problems in raising finance (Minchin 2001f).

In June 2001, the Government announced that it will provide an investment incentive of $100 million to the Asia Pacific Space Centre (APSC) to establish commercial space launch facilities on Christmas Island. In return, APSC agreed to establish a space research centre in Australia (Minchin and MacDonald 2001). Around $60 million of this funding will be used to develop infrastructure benefiting the development of the project, such as weather bureaus, telemetry and a space research centre (Macdonald 2001).

The Government took the view that the incentive was necessary to outbid Brazil, which was also seeking to attract the APSC investment (Minchin 2001g).

In addition to the $100 million incentive, the Government has also entered a bilateral treaty with the Russian Government. The bilateral arrangement, which will be in effect for ten years, provides for duty free imports of space-related goods and equipment. The Government expected that the duty-free exemption will benefit all companies currently proposing to establish space launch facilities in Australia, including APSC.

Alumina

Alumina refining involves the processing of bauxite to produce alumina, the key ingredient used in the production of aluminium metal. Since 1985, alumina refining capacity in Australia has increased significantly (by 50 percent) as a number of projects has been expanded and new ones added. Further projects are under consideration (ABARE 1999).

In January 1999, the Commonwealth Government made an offer of over $100 million in SIIP funding to Comalco for establishment of an alumina refinery in Gladstone (Howard 1999). The Government considered that its incentive package was necessary to ensure that Comalco located its investment in Australia:

> For some time now we have been competing with an alternative site at Bintulu in Malaysia … (Minchin 2000b).

The Government also stated that the Gladstone alumina refinery project will bring benefits to Australia, in terms of a capital investment of $1.4 billion and the creation of up to 1300 jobs in the first stage (Minchin 2000b). However, details of the cost-benefit analysis which underpins the grant of the Comalco incentives have not been released publicly.

In October 2001, Rio Tinto (Comalco's parent company) announced that it would proceed with the refinery, stating:

> The Comalco Aluminium Refinery continues Rio Tinto's substantial investment in Australia. This includes Comalco's purchase of the Gladstone Power Station in 1994, the addition of a new potline to the Boyne Island smelter in 1997, and Comalco's increased holding in Queensland Alumina Limited…earlier this year (Rio Tinto 2001).

At the same time, the Commonwealth Government announced that its incentive package will be provided as a $137 million interest-free loan. The package will be used primarily to develop Comalco's energy facility ($102 million). The remainder ($35 million) will fund a R&D partnership between the Commonwealth Government and Rio Tinto. The partnership will undertake research on energy efficiency and greenhouse gas abatement. In addition, the Queensland Government is to provide $150 million to assist the Gladstone alumina refinery. Construction of the refinery commences in late 2001 (Schwarten 2001).

Magnesium

The Commonwealth and Queensland Governments have long been involved in the funding of research and the development of magnesium and downstream processing technology.

In the early 1990s, these Governments agreed to provide $25 million to a consortium including the Queensland Metals Corporation and CSIRO. The consortium was to attract funds to develop the Kunwarra magnesite deposit in central Queensland. The Commonwealth funding formed part of the Light Metals Industry Development Strategy formulated at the time with the stated aim of ensuring that local producers are equipped to meet any increased demand for light weight automotive components.

The Australian Magnesium Corporation (AMC — previously Queensland Metals Corporation) is now seeking to develop a $1.2 billion magnesium smelter in Queensland. The new smelter is to use a new process developed jointly by AMC and the CSIRO and would be capable of producing 92 000 tons of magnesium per year, or one quarter of present world demand.

In November 2000, the Commonwealth and Queensland Governments announced that they would assist the project. The Commonwealth Government granted $50 million under the SIIP to the CSIRO for further research into the magnesium smelting process. This grant is to be paid back by AMC in the form of higher royalties to the CSIRO. The Queensland Government committed $50 million for ‘multi-user infrastructure’ at the Stanwell Industrial Estate, where the smelter would be located. The infrastructure includes a $9 million railway siding and a pipeline to transport gas from PNG.

However, in July 2001, AMC announced that it had been unable to raise sufficient funds from investors to develop the project, and that the company was pursuing ‘other financing options’ (AMC 2001).

The Commonwealth and Queensland Governments subsequently offered further support to allow the project to continue. The Commonwealth Government announced that it would act as a guarantor for a $100 million loan. The State Government announced that it would ‘fund an attractive yield enhancement on new shares for the first three years at a cost of around $100 million. That $100 million will be acknowledged by AMC as a subordinated debt obligation[7] to the Queensland Government' (Beattie 2001). At present, a revised share offer is being offered to potential investors.

In August 2001, SAMAG — a South Australian Company which was also considering building a magnesium smelter — expressed concern about the government assistance to AMC. SAMAG said that it expects the Commonwealth Government to support its project too, and has applied for $100 million of assistance under the SIIP (AFR 2001). The money is required for upgrading infrastructure to facilitate a better supply of gas power to their Port Pirie site. SAMAG's application is still being considered (Minchin 2001i).

In November 2001, the Government announced that the project has secured a contract to supply magnesium to the Ford Motor Company and its equity raising was successful. Production at the magnesium plant is expected to commence in 2004 (Minchin 2001k).

The Tarcoola-Darwin Railway

Construction of the Tarcoola-Darwin Railway began recently. The railway is being built and operated by a private consortium, but its commercial viability was judged to require substantial Commonwealth and State Government assistance.

In November 1996, the South Australian and Northern Territory Governments signed an inter-governmental agreement and committed public funding to the building of an Alice Springs to Darwin Railway. The Commonwealth Government announced in August 1997 that it would be providing $100 million of assistance to the Project. After the announcement of the preferred consortium to construct and run the railway, the Commonwealth Government held detailed discussions with the State and Territory governments. This led to the announcement in October 1999 that the Commonwealth Government had agreed to increase its funding commitment to $165 million. Together with $165 million from the Northern Territory Government and $150 million from the South Australian Government, this brought total government funding to $480 million.

In February 2001, the Commonwealth Government announced that it was contributing a further $26 million in the form a 'stand-by' loan to the consortium. This was part of a $79 million package of additional funding put forward by the three governments, which followed the withdrawal of backing for the railway by a major US institutional investor. The Northern Territory Chief Minister stated that

[7] This is essentially a loan to AMC. Subordination means that, in the case of the company failing, all other creditors (loans) are paid out by the company before this loan.

the funding was necessary to provide certainty and to allow the project to begin on time, and that “It has been emphasised to the consortium that all commercial options must be exhausted before the Governments provide the stand-by funding” (AustraliAsia 2001a).

Governments have identified several benefits from backing this project. The AustraliAsia Railway Corporation[8] includes as benefits the increased commercial opportunities from reduced transport costs and reduced transportation times, increased job opportunities, road maintenance cost savings, reduced traffic congestion and environmental and defence benefits. The Prime Minister stated that it is a ‘nation building’ project (Howard 2001b). A cost-benefit analysis conducted in 1999 (Booz Allan & Hamilton 1999) concluded that the project would confer net significant benefits, in contrast to earlier assessments.[9]

8 The AustraliAsia Railway Corporation is a statutory corporation jointly established by the Northern Territory and South Australian Governments and is charged with facilitating the Tarcoola-Darwin railway project (AustraliAsia 2001b).

9 Several studies have assessed the project’s economic viability. An inquiry in the mid-1980s (Hill 1984) found that the line would not be economically viable: it had a benefit-cost ratio of between 0.28 and 0.31 (ie, each dollar invested would return 28 to 31 cents). A mid-1990s study (Wran 1995) reported that the project had a benefit-cost ratio of 0.88 and was not viable at that time, but that it may become viable in the future. In 1999, a consultant’s report to the Northern Territory Government (Booz Allan & Hamilton 1999) found that the line would be economically viable, with a benefit-cost ratio of 1.88.

The Hill report differs from the Wran and Booz-Allan reports for two main reasons. Firstly, the latter reports contain lower estimates for construction costs and significantly lower estimates for the operating costs for the railway. Secondly, they assume markedly greater benefits from reduced road maintenance and accident costs. In the Booz-Allan report, reductions in road maintenance costs account for one third of the total benefits from the railway and reductions in accident costs account for a further 10 percent. The Booz-Allan report also uses a lower discount rate than the earlier reports. (A discount rate is used in economic analysis to estimate the current value of expected future cash flows.) The Booz-Allan report’s benefit-cost ratio of 1.88 was obtained by using a discount rate of 5 percent. Sensitivity analysis revealed that, with a discount rate of 7 percent, the benefit-cost ratio would fall to 1.35. This reflects the long-term nature of the benefits from the project (Booz-Allan & Hamilton 1999). In obtaining its benefit-cost ratio of 0.88, the Wran report used a discount rate of 8 percent (Wran 1995)). This accounts for much of the difference between the benefit-cost ratios recorded in the Booz-Allan and Wran reports.

Commonwealth, State and Territory cooperation

In its inquiry on *State, Territory and Local Government Assistance to Industry* (IC 1996), the Commission examined several options to develop an intergovernmental agreement on industry assistance provided by the States. Such an agreement could involve a transparency and monitoring mechanism, limits on some assistance, or a comprehensive arrangement to limit all assistance. The Commission also saw a legitimate role for the Commonwealth to encourage the states to limit their selective industry assistance.

In February 2000, the Commonwealth Government indicated that it has reached a non-prescriptive agreement with State and Territory governments to cooperate on investment attraction activities (Minchin 2000d). The Commonwealth, State and Territory governments are signatories to the *Operating Guidelines for Commonwealth, States and Territories on Investment Promotion, Attraction and Facilitation*. Under this agreement, all governments will meet annually to review the efficiency and effectiveness of investment incentives (Costello 2001a).

In March 2001, the NSW and Victorian Governments announced that they had established a joint working party on investment. The governments aim to 'eliminate unnecessary bidding wars and will work to contain fiscal incentives'. This follows increasing pressure on State governments to give incentives to attract events and investment away from other States.

Through the working party, the NSW and Victorian Governments will:

- establish protocols to share information on investor approaches (having regard to commercially sensitive information) on a case-by-case basis;
- share information on investment evaluation methodologies; and
- examine opportunities to co-locate their overseas business offices and share resources to attract new international investment to Australia.

The NSW and Victorian Governments have called on other State governments to join the agreement and on the Commonwealth Government to establish more effective investment attraction procedures (NSW and Victorian Ministries 2001).

Table 4.3 Budgetary assistance to industry, 1998-99 to 2001-02

$ million

	1998-99	*1999-00*	*2000-01*	*2001-02*
Total budgetary assistance[a]	3 450	3 598	3 655	3 856
Budgetary outlays	1 851	1 906	1 868	2 082
Tax expenditures	1 600	1 693	1 786	1 774
Assistance categories[b]				
Research and development	1 221	1 360	1 357	1 464
Export	1 074	1 059	1 075	875
Investment	487	462	406	345
Sectoral and adjustment assistance	271	251	258	241
Other industry-specific assistance	397	467	559	932

a Figures may not add to total due to rounding. **b** The assistance categories include general as well as specific schemes targeting an activity within an industry. For example, the *export assistance* category would include broad-based export measures (such as the Export Market Development Grants scheme) as well as industry measures (such as the TCF Import Credits Scheme) which also facilitate export. The *sectoral and adjustment assistance* category covers programs specifically benefiting producers in a sector or facilitating adjustment. The other industry-assistance category covers measures (such as bounties) not already included in the above categories.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury (2001); ACS (2001); PC estimates.

Table 4.4 Commonwealth budgetary outlays on primary production, 1998-99 to 2001-02

$ million

	Type[a]	*1998-99*	*1999-00*	*2000-01[b]*	*2001-02[b]*
Industry-specific programs					
Horticulture, crops etc					
Australian Plaque Locust Commission	FI	1	-	-	-
Citrus industry market diversification subsidy	DFA	1	2	<1	<1
Deduction of capital expenditure on establishing horticultural plantations	TE	4	5	5	5
Deduction of expenditures over four years on acquiring and establishing grape vines	TE	4	4	4	4
Sugar Industries Package	FI	3	5	30	34
Sugar Industry Program	FI	1	1	2	-
Forestry					
Forest Industry Structural Adjustment	DFA	24	4	3	5
Commonwealth-NSW Forest Industry	FI	3	<1	3	<1
National Forest Policy Program	FI	9	5	2	-

Table 4.4 (continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
Livestock, poultry etc					
Australian Animal Health Laboratory	FI	6	6	6	6
Exotic Disease Prepared Program	FI	5	16	4	1
Lamb Industry Development Program	DFA	-	9	2	4
Pigmeat Processing Grants Program	DFA	2	4	3	1
Pork Producer Exit Program	DFA	-	5	-	-
Pork Industry Development Group Grant	FI	5	4	<1	-
Total		*68*	*69*	*65*	*61*
Research and development[c]					
General R&D measures					
Cooperative Research Centres	FI	27	24	25	28
CSIRO plant and animal research	FI	133	141	114	115
Farm Innovation	DFA	-	-	4	11
New Industries Development Program	FI	-	1	1	6
R&D Start & related programs	DFA	2	5	7	7
R&D tax concession	TE	6	8	8	8
Rural R&D Corporations					
Fishing industry research	FI	12	13	13	13
Grains (wheat and other[d])	FI	34	32	34	32
Horticulture	FI	15	16	16	16
Land and Water Resources R&D Corporation	FI	11	11	11	12
Meat & livestock research	FI	21	20	20	20
Other rural research[e]	FI	36	33	33	33
Rural Industries R&D Corporation	FI	11	4	4	4
Wool	FI	10	9	9	8
Total		*319*	*316*	*300*	*312*
Sectoral and adjustment programs					
Adjustment and income support					
Agribusiness programs	FI	<1	<1	<1	-
Farm Assistance Program	FI	-	-	1	1
Farm Business Programs	FI	6	12	17	-
Farm Help	DFA	-	-	39	40
Farm Family Restart Program					
- Re-establishment	DFA	14	17	-	-
- Income support	DFA	20	18	-	-
Food and Fibre Supply Chain Program	FI	-	7	6	-
Rural Adjustment Scheme	DFA	43	29	18	8
Skilling farmers for the future	FI	-	-	9	26
Supermarket to Asia Strategy	FI	-	4	-	-

Table 4.4 (continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
Other sectoral measures					
Income Equalisation Deposits Scheme	TE	25	9	-	-
Farms Management Deposits Scheme	TE	-	23	40	30
Income tax averaging provisions	TE	75	65	60	70
National Landcare Program	FI	56	37	37	38
Tax deduction for conveying water & conservation measures	TE	20	20	20	20
Tax rebate for landcare expenditures	TE	-	1	1	1
Tax allowance on drought-prepared assets	TE	15	10	10	6
Total		*271*	*251*	*258*	*241*
General export measures					
Austrade					
- Export Market Development Grants scheme	DFA	4	5	4	4
- Austrade export promotion[f]	FI	32	36	40	40
EFIC National Interest Business[g]	DFA	17	17	20	16
Total		*53*	*58*	*63*	*59*
Unallocated primary production					
Agricultural Development Partnership	DFA	-	-	-	3
Biotechnology Innovation Fund	DFA	-	-	-	2
Rural Financial Counselling Service	FI	-	-	-	5
Tasmanian Freight Equalisation Scheme	DFA	3	4	5	4
Total outlays		**568**	**550**	**542**	**544**
Total tax expenditures		**146**	**147**	**148**	**144**
Total budgetary assistance		**714**	**697**	**690**	**689**

- Nil. **ne** Not estimated. Figures may not add to total due to rounding. **a** DFA: direct financial assistance; FI: funding to institutions; TE: tax expenditures. **b** 2000-01 data are Budget estimates and 2001-02 data are Budget appropriations. **c** Estimates are derived in part from the Science and Technology Budget Statement 2000-01. **d** Other includes barley, grain, legumes and oilseeds. **e** Other industries include dairy, chicken meat, pig meat, eggs, cotton, dried vine fruits, grapes and wine, honey, sugar and tobacco. **f** Data for 1999-2000, 2000-01 and 2001-02 are based on the industry allocations for 1998-99, which is the only year Austrade has resembled data on the industries benefiting from its export promotion activities. **g** The estimates reported in this section are net National Interest Business outlays. These payments are insurance pay-outs. Because any difference between the National Interest Business scheme's borrowing and lending rates is underwritten by the Commonwealth, the scheme may provide assistance to agricultural exporters. However, net National Interest Business outlays provide only a weak indication of any assistance provided.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2001; PC estimates.

Table 4.5 **Commonwealth budgetary assistance to the manufacturing sector, 1998-99 to 2001-02**

$ million

	Type[a]	*1998-99*	*1999-00*	*2000-01*[b]	*2001-02*[b]
Food, beverages & tobacco					
Industry-specific measures					
Brandy excise preferential rate	TE	5	5	3	3
General investment measures					
Development allowance	TE	6	6	2	2
General export measures					
Export Market Development Grants scheme	DFA	8	8	9	9
General R&D measures					
Cooperative Research Centres	FI	8	6	8	9
CSIRO research	FI	18	18	20	18
R&D Start and related programs	DFA	2	2	2	2
R&D tax concession	TE	16	25	26	27
Other measures					
Tasmanian Freight Equalisation scheme	DFA	1	8	9	9
Total		*65*	*79*	*79*	*79*
Textiles, clothing, footwear & leather					
Industry-specific measures					
Assistance to Howe Leather					
- Grant	DFA	13	-	-	-
- Loan	DFA	-	14	-	-
TCF Import Credit Scheme	TE	106	83	49	7
TCF Strategic Investment Program and related schemes	DFA		4	12	145
Other TCF programs		8	-	-	-
General export measures					
Austrade export promotion[c]	FI	1	1	1	1
Export Market Development Grants scheme	DFA	6	5	6	6
Tariff Export Concession (TEXCO)	TE	9	9	-	-
TRADEX	TE	-	-	10	10
General R&D measures					
Cooperative Research Centres	FI	3	3	-	-
CSIRO research	FI	15	11	31	31
R&D Start and related programs	DFA	<1	<1	<1	<1
R&D tax concession	TE	1	1	1	1
Total		*161*	*131*	*113*	*204*

Table 4.5 (continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
Wood & paper products					
Industry-specific programs					
Investment incentives to Visy Industries	DFA	-	3	3	3
General export measures					
Export Market Development Grants scheme	DFA	1	1	2	2
Tariff Export Concession (TEXCO)	TE	2	2	-	-
TRADEX	TE	-	-	<1	<1
General R&D measures					
Cooperative Research Centres	FI	1	<1	<1	1
CSIRO research	FI	4	5	5	5
R&D Start and related programs	DFA	<1	<1	<1	<1
R&D tax concession	TE	2	1	1	1
Other programs					
Tasmanian Freight Equalisation scheme	DFA	10	18	16	15
Total		*21*	*31*	*27*	*28*
Printing, publishing & recorded media					
Industry-specific programs					
Book bounty	DFA	<1	-	-	-
Printing Industry Competitiveness scheme	DFA	-	6	4	4
Extended Printing Industry Competitiveness	DFA	-	-	14	12
General investment measures					
Development allowance	TE	<1	<1	<1	<1
General export measures					
Export Market Development Grants scheme	DFA	3	3	3	3
General R&D measures					
R&D Start and related programs	DFA	2	2	1	1
R&D tax concession	TE	1	1	1	1
Total		*6*	*11*	*22*	*21*
Petroleum, coal, chemical & associated products					
Industry-specific programs					
Investment incentives to Syntroleum	DFA	-	42	50	20
Factor f program	DFA	159	79	-	-
Pharmaceutical Industry Development program	DFA	-	34	38	63
General investment measures					
Development allowance	TE	10	13	1	1

Table 4.5 (continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
General export measures					
Austrade export promotion[c]	FI	2	3	3	3
Export Market Development Grant scheme	DFA	6	5	6	6
Tariff Export Concession (TEXCO)	TE	2	2	-	-
TRADEX	TE	-	-	2	2
General R&D measures					
Biotechnology Innovation Fund	DFA	-	-	-	6
Cooperative Research Centres	FI	17	19	18	15
CSIRO research	FI	39	40	41	41
R&D Start and related programs	DFA	8	12	9	9
Innovation Investment Fund	DFA	5	8	10	14
R&D tax concession	TE	16	25	26	26
Total		*267*	*281*	*203*	*205*
Non-metallic mineral products					
General investment measures					
Development allowance	TE	18	17	1	1
General export measures					
Export Market Development Grants scheme	DFA	1	1	1	1
Tariff Export Concession (TEXCO)	TE	1	1	-	-
TRADEX	TE	-	-	<1	<1
General R&D measures					
Innovation Investment Fund	DFA	-	-	1	1
R&D Start and related programs	DFA	3	<1	7	7
R&D tax concession	TE	8	5	5	6
Total		*31*	*24*	*16*	*16*
Metal product manufacturing					
General investment measures					
Development allowance	TE	71	68	20	18
General export measures					
Export Market Development Grants scheme	DFA	4	4	4	4
Tariff Export Concession (TEXCO)	TE	4	5	-	-
TRADEX	TE	-	-	2	2
General R&D measures					
Cooperative Research Centres	FI	8	9	11	9
CSIRO research	FI	27	28	28	28
R&D Start and related programs	DFA	3	6	5	5
R&D tax concession	TE	44	24	25	25
Total		*162*	*143*	*95*	*91*

Table 4.5 (continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
Motor vehicles & parts					
Industry-specific measures					
PMV Export Facilitation Scheme	TE	288	348	363	-
Automotive Competitiveness & Investment Scheme	TE	-	-	148	560
Automotive Market Access & Development	FI	8	5	5	1
Investment incentive to Holden	DFA	-	-	5	4
General investment measures					
Development allowance	TE	25	24	16	15
General export measures					
Austrade export promotion[c]	FI	5	5	6	6
Export Market Development Grants scheme	DFA	-	-	2	2
Tariff Export Concession (TEXCO)	TE	13	14	-	-
TRADEX	TE	-	-	62	62
General R&D measures					
Innovation Investment Fund	DFA	-	-	2	3
R&D Start and related programs	DFA	1	<1	<1	<1
R&D tax concession	TE	25	29	30	31
Total		*365*	*424*	*640*	*684*
Other transport equipment					
Industry-specific measures					
Shipbuilding bounty	DFA	24	18	13	12
Shipbuilding Innovation Scheme	DFA	-	6	9	10
General R&D measures					
Cooperative Research Centres	FI	2	1	-	1
R&D Start and related programs	DFA	3	4	5	5
R&D tax concession	TE	6	23	24	24
Total		*35*	*51*	*52*	*53*
Other machinery & equipment					
Industry-specific measures					
Computer bounty	DFA	59	-	-	-
Machine tools and robots bounty	DFA	<1	-	-	-
General investment measures					
Development allowance	TE	1	1	<1	<1
General export measures					
Export Market Development Grant scheme	DFA	18	17	15	15
Tariff Export Concession (TEXCO)	TE	14	14	-	-

Table 4.5 (continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
TRADEX	TE	-	-	5	5
General R&D measures					
Cooperative Research Centres	FI	21	20	24	21
CSIRO	FI	33	35	35	35
Innovation Investment Fund	DFA	1	2	<1	<1
R&D Start and related programs	DFA	40	37	36	36
R&D tax concession	TE	35	39	41	42
Total		*222*	*164*	*155*	*153*
Other manufacturing					
General investment measures					
Development allowance	TE	2	1	<1	<1
General export measures					
Export Market Development Grant scheme	DFA	4	5	9	9
Tariff Export Concession (TEXCO)	TE	9	9	-	-
TRADEX	TE	-	-	12	12
General R&D measures					
R&D Start and related programs	DFA	11	11	14	14
R&D tax concession	TE	6	7	8	8
Other programs					
Tasmanian Freight Equalisation scheme	DFA	5	2	3	3
Total		*37*	*37*	*45*	*45*
Unallocated manufacturing					
General export measures					
Duty drawback	TE	95	87	50	70
General R&D measures					
Technology Diffusion Program	DFA	15	18	20	17
Other programs					
Enterprise Development Program	FI	14	6	1	1
Tasmanian Freight Equalisation Scheme	DFA	21	28	35	34
Total		*145*	*139*	*106*	*122*
Total outlays		**673**	**627**	**617**	**739**
Total tax expenditures		**843**	**887**	**934**	**962**
Total budgetary assistance		**1 516**	**1 514**	**1 552**	**1 701**

- Nil. Figures may not add to total due to rounding. [a] DFA: direct financial assistance; FI: funding to institutions; TE: tax expenditures. [b] 2000-01 data are Budget estimates and 2001-02 data are Budget appropriations. [c] Data for 1999-2000, 2000-01 and 2001-02 are based on the industry allocations for 1998-99, the only year Austrade has resembled data on the industries benefiting from its export promotion activities.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2001; PC estimates.

Table 4.6 **Commonwealth budgetary assistance to service sectors, 1998-99 to 2001-02**

$ million

	Type[a]	*1998-99*	*1999-00*	*2000-01*[b]	*2001-02*[b]
Electricity, gas & water supply					
Industry-specific measures					
Renewable Energy Commercialisation[c]	DFA	2	3	7	12
Renewable Energy Equity Fund[c]	DFA	-	<1	3	3
General investment measures					
Development allowance	TE	2	2	4	4
Infrastructure Bonds	TE	55	44	31	13
Infrastructure Borrowing tax offset scheme	TE	25	25	43	43
General export measures					
Export Market Development Grant scheme	DFA	<1	<1	<1	<1
General R&D measures					
Cooperative Research Centres	FI	4	5	5	3
R&D Start and related programs	DFA	1	1	2	2
R&D tax concession	TE	1	1	1	1
Total		*91*	*81*	*97*	*82*
Construction					
General export measures					
Austrade export promotion[d]	FI	22	25	27	27
Export Market Development Grant scheme	DFA	2	2	2	2
TRADEX	TE	-	-	1	1
General R&D measures					
Cooperative Research Centres	FI	-	-	-	2
CSIRO research	FI	25	25	22	22
Innovation Investment Fund	DFA	-	-	2	3
R&D Start and related programs	DFA	<1	<1	1	1
R&D tax concession	TE	15	8	8	8
Total		*64*	*60*	*63*	*65*
Wholesale trade					
General investment measures					
Development allowance		-	-	12	11
General export measures					
Export Market Development Grant scheme	DFA	15	12	13	13
TRADEX	TE	-	-	4	4
General R&D measures					
R&D Start and related programs	DFA	<1	2	1	1
R&D tax concession	TE	13	20	21	22

Table 4.6 continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
Total		*28*	*35*	*51*	*51*
Retail trade					
Industry-specific programs					
Pharmacy Restructuring grants	DFA	11	13	10	-
General investment measures					
Development allowance	TE	<1	<1	<1	<1
General export measures					
Australian Tourist Commission	FI	21	21	21	21
Export Market Development Grants scheme	DFA	4	3	2	2
General R&D measures					
R&D tax concession	TE	3	5	5	5
Total		*38*	*41*	*39*	*29*
Accommodation, cafes & restaurants					
General investment measures					
Development allowance	TE	1	1	-	-
General export measures					
Australian Tourist Commission	FI	27	28	28	28
Export Market Development Grants Scheme	DFA	5	5	9	9
Total		*33*	*34*	*37*	*37*
Transport & storage					
Industry-specific measures					
Investment incentive to Asia Pacific Space Centre	DFA	-	-	-	6
General investment measures					
Development allowance	TE	<1	<1	6	5
Infrastructure Bonds	TE	50	41	29	12
Infrastructure Borrowing tax offset scheme	TE	31	31	13	13
General export measures					
Australian Tourist Commission	FI	34	34	35	35
Export Market Development Grant scheme	DFA	18	15	11	11
TRADEX	TE	-	-	2	2
General R&D measures					
R&D Start and related programs	DFA	1	5	2	2
R&D tax concession	TE	12	5	5	6
Total		*147*	*132*	*102*	*91*

Table 4.6 continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
Communication services					
Industry-specific measures					
Investment incentive to IBM	DFA	-	-	2	1
Software Engineering Centres	FI	2	6	6	6
General investment measures					
Development allowance	TE	18	-	33	30
General export measures					
Export Market Development Grant scheme	DFA	1	1	2	2
Austrade export promotion[d]	FI	18	20	22	22
Australian Tourist Commission	FI	1	1	1	1
General R&D measures					
Cooperative Research Centres	FI	2	2	3	6
CSIRO research	FI	21	21	21	21
Innovation Investment Fund	DFA	12	20	5	6
R&D Start program	DFA	10	12	14	14
R&D tax concession	TE	7	30	31	32
Total		*93*	*114*	*140*	*141*
Finance & insurance					
General investment measures					
Development allowance	TE	6	6	1	1
Offshore Banking Unit	TE	30	35	35	30
Infrastructure Borrowing tax offset scheme	TE	19	19	19	19
General export measures					
Export Market Development Grant scheme	DFA	<1	<1	<1	<1
General R&D measures					
R&D Start program	DFA	<1	<1	1	1
Innovation Investment Fund	DFA	5	5	<1	<1
R&D tax concession	TE	26	18	19	20
Total		*86*	*83*	*76*	*71*
Property & business services					
General investment measures					
Development allowance	TE	-	18	2	2
General export measures					
Export Market Development Grants scheme	DFA	23	22	24	24
General R&D measures					
Biotechnology Innovation Fund	DFA	-	-	-	1
Cooperative Research Centres	FI	4	3	4	5

Table 4.6 (continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
R&D Start & related programs	DFA	14	22	28	28
Innovation Investment Fund	DFA	1	1	<1	<1
R&D tax concession	TE	48	65	68	70
Total		*89*	*131*	*126*	*129*
Government administration & defence					
General investment measures					
Development allowance	TE	3	3	-	-
General export measures					
Austrade export promotion[d]	FI	2	2	3	3
General R&D measures					
R&D Start & related programs	DFA	<1	<1	<1	<1
Total		*6*	*6*	*3*	*3*
Education					
General investment measures					
Development allowance	TE	1	1	<1	<1
General export measures					
Australian Tourist Commission	FI	1	1	1	1
Export Market Development Grant scheme	DFA	11	8	9	9
Austrade export promotion[d]	FI	8	9	10	10
General R&D measures					
R&D Start & related programs	DFA	5	7	4	4
R&D tax concession	TE	1	3	3	3
Total		*26*	*29*	*27*	*27*
Health & community services					
General export measures					
Export Market Development Grants scheme	DFA	<1	<1	<1	<1
General R&D measures					
Cooperative Research Centres	FI	12	13	13	13
R&D Start program	DFA	10	12	18	18
R&D tax concession	TE	2	3	3	3
Total		*25*	*29*	*35*	*38*
Cultural & recreational services					
Industry-specific measures					
Australian Film Commission	DFA	16	17	17	17
Australian Film Finance Corporation	DFA	48	48	48	48
Film industry division 10B & 10BA	TE	21	21	21	19

Table 4.6 (continued)

	Type[a]	1998-99	1999-00	2000-01[b]	2001-02[b]
General export measures					
Australian Tourist Commission	FI	4	4	4	4
Austrade export promotion[d]	FI	17	19	21	21
Export Market Development Grants scheme	DFA	7	6	8	8
General R&D measures					
Biotechnology Innovation Fund	DFA	-	-	-	1
Cooperative Research Centres	FI	2	2	2	2
R&D Start & related programs	DFA	<1	<1	<1	<1
R&D Tax Concession	TE	-	4	4	4
Total		*115*	*122*	*127*	*126*
Personal & other services					
General export measures					
Export Market Development Grant scheme	DFA	1	1	1	1
General R&D measures					
R&D Start & related programs	DFA	2	2	4	4
R&D tax concession	TE	<1	<1	<1	<1
Total		*4*	*4*	*6*	*6*
Unallocated services					
General export measures					
Austrade export promotion[d]	FI	20	23	25	25
Australian Tourist Commission	FI	1	1	1	1
General R&D measures					
CSIRO research	FI	9	9	10	10
R&D Start & related programs	DFA	<1	2	<1	<1
Other programs					
Building IT Strengths	DFA	-	42	6	55
Total		*31*	*75*	*42*	*91*
Total outlays		**484**	**563**	**544**	**605**
Total tax expenditures		**391**	**409**	**426**	**383**
Total budgetary assistance		**875**	**973**	**970**	**988**

- Nil. Figures may not add to total due to rounding. **a** DFA: direct financial assistance; FI: funding to institutions; TE: tax expenditures. **b** 2000-01 data are Budget estimates and 2001-02 data are Budget appropriations. **c** The above industry allocations reflect the availability of recently supplied data. In the *Trade & Assistance Review 1999-2000*, these programs were classified under the unallocated category due to a lack of information. Consequently, the previous classification is no longer appropriate. **d** Estimates for 1999-2000, 2000-01 and 2001-02 are based on Austrade industry allocations for 1998-99. Austrade has not assembled data on the industries benefiting from its export promotion activities for subsequent years.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2001; PC estimates.

Table 4.7 Commonwealth budgetary outlays on the mining sector, 1998-99 to 2001-02

$ million

	Type[a]	*1998-99*	*1999-00*	*2000-01*[b]	*2001-02*[b]
Industry-specific measures					
Exemption of income from sale, transfer or assignment of rights to mine gold	TE	18	5	-	-
Regional Minerals Program	FI	-	1	1	1
General investment measures					
Development allowance	TE	92	88	121	110
General export measures					
Austrade export promotion[c]	FI	7	8	9	9
Export Market Development Grants scheme	DFA	2	2	2	2
General R&D measures					
Cooperative Research Centres	FI	10	9	6	7
CSIRO minerals research	FI	47	47	53	52
R&D Start and related programs	DFA	8	23	12	12
R&D tax concession	TE	83	77	81	82
Total outlays		**74**	**91**	**83**	**83**
Total tax expenditures		**192**	**170**	**202**	**192**
Total budgetary assistance to mining		**266**	**261**	**284**	**275**

- Nil. Figures may not add to total due to rounding. **a** DFA: direct financial assistance; FI: funding to institutions; TE: tax expenditures. **b** 2000-01 data are Budget estimates and 2001-02 data are Budget appropriations. **c** Estimates for 1999-2000, 2000-01 and 2001-02 are based on Austrade industry allocations for 1998-99. Austrade has not assembled data on the industries benefiting from its export promotion activities for subsequent years.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2001; PC estimates.

Table 4.8 **Commonwealth budgetary assistance, unallocated other[a] 1998-99 to 2001-02**

$ million

	Type[b]	*1998-99*	*1999-00*	*2000-01[c]*	*2001-02[b]*
Energy programs					
Energy R&D Corporation	FI	2	-	-	-
National Energy Efficiency Program	FI	4	-	-	-
General investment measures					
Development allowance	TE	1	1	<1	<1
Invest Australia	FI	15	15	14	14
Regional Headquarters Program	TE	2	2	2	1
General export measures					
Export Access	FI	4	4	3	3
Tourism programs	FI	3	7	-	2
R&D measures					
Biotechnology Australia	FI	-	4	1	1
Biotechnology Centre of Excellence	FI	-	-	-	1
Commonwealth Technology Park	FI	-	3	8	12
Innovation Investment Fund	DFA	3	5	-	-
ICT Centre of Excellence	FI	-	-	-	3
Preseed Fund	FI	-	-	-	6
Major National Research Facilities	FI	-	-	5	4
R&D tax concession	TE	24	13	13	14
Premium R&D tax concession	TE	-	-	-	30
Other measures					
Enterprise Networking Program	FI	4	-	-	-
Funding for small business during tourism downturn	DFA	-	-	-	15
Pooled Development Funds	TE	1	3	5	8
Regional Assistance Program	DFA	20	42	47	43
Clean Food Production Program	FI	1	1	1	1
Small business capital gains tax exemption	TE	-	60	55	40
Small business participation in major projects	FI	-	-	-	3
Total outlays		**52**	**74**	**82**	**110**
Total tax expenditures		**28**	**79**	**76**	**93**
Total budgetary assistance		**80**	**153**	**158**	**203**

- Nil. Figures may not add to total due to rounding. **na** not available. **a** Include programs or amounts of funding where the industry is not stated or recipients are unknown. **b** DFA: direct financial assistance; FI: funding to institutions; TE: tax expenditures. **c** 1999-2000 data are Budget estimates and 2000-01 data are Budget appropriations.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2001; PC estimates.

5 Trade policy developments

Although not a major trading nation in global terms, Australia has a strong economic interest in the rules and arrangements that govern international trade. Australia's approach to trade reform over recent decades has focussed mainly on unilateral trade liberalisation, supported by its participation in the multilateral trading system. Australia also has regional trade arrangements with some neighbouring countries in the South Pacific, and pursues regional initiatives to encourage trade liberalisation though the Asia Pacific Economic Cooperation (APEC) forum.

This chapter reports on two recent developments in the trade policy area:

- the outcomes of the WTO Ministerial Conference held recently in Doha; and
- recent efforts by the Australian Government to establish regional trading agreements with particular APEC members.

5.1 Multilateral trade negotiations

The Fourth WTO Ministerial Conference, held in Doha during November 2001, successfully launched a new round of multilateral trade negotiations. WTO member governments agreed to negotiations covering a broad range of issues (box 5.1) with significant implications for the development of world trade. As a WTO member, Australia is a participant in the new round.

The WTO provides a stable, rules-based system for the conduct of international trade, and has provided significant benefits and legal protections for small to medium-sized trading nations such as Australia (PC 2000d, 2001a). Successive rounds of trade negotiations under the WTO and its predecessor (the General Agreement on Trade and Tariffs — GATT) have facilitated substantial reductions in many trade barriers over more than 50 years, and underpinned strong expansion of international trade and rising living standards. Significant barriers to trade are still present, however, particularly in areas such as agriculture, textiles and clothing.

Most of the economic gains from trade liberalisation accrue to countries from reducing their own trade barriers, *irrespective of whether other countries reduce their barriers or not.* Australia has benefited from its unilateral liberalisation over recent decades (PC 2001a). Nevertheless, Australia gains additional benefits from

Box 5.1 **The key Doha outcomes at a glance**

At the Fourth WTO Ministerial Conference, trade ministers from the 142 WTO member governments agreed to launch a new round of multilateral trade negotiations. The negotiations, to be conducted over three years, will cover the following areas.

- *Agriculture* — comprehensive negotiations will aim to increase market access and reduce long standing export subsidies and domestic support.
- *Non-agricultural* goods — negotiations will aim to increase market access through reductions in tariffs and increased disciplines on non-tariff barriers.
- Services — existing negotiations will continue to achieve the goals of the GATS.
- *Environment* — negotiations will look at the relationship between WTO rules and the Multilateral Environmental Agreements and aim to reduce trade barriers on environmental goods and services.
- *Intellectual property rights* — existing negotiations to establish a multilateral system for registration and notification of geographical indications for wines are to be completed and the system extended to spirit geographical indications.
- *Foreign investment, competition policy, government procurement* and *trade facilitation* — negotiations on these issues are scheduled to take place after the next WTO Ministerial Conference in 2003, subject to a consensus on modalities.
- *Subsidies and countervailing measures* and the *dispute settlement understanding* — negotiations will seek to clarify and improve existing WTO rules.
- *Regional trading arrangements* — negotiations will seek to clarify and improve existing WTO disciplines.

In addition, the Doha conference agreed to several measures to assist developing countries, and clarified contentious aspects of the TRIPS agreement (see box 5.2).

Source: WTO 2001c.

the growth in world trade and enhanced access to export markets that multilateral liberalisation brings.

In recent years, there has been increasing public debate about the role and merits of the WTO. (The Commission commented on these matters in last year's Annual Report (PC 2000d).) Against a backdrop of 'anti-globalisation' protests, misgivings among WTO member governments about what issues should be dealt with in future multilateral trade negotiations scuttled attempts to launch a new round of negotiations at the Seattle Ministerial Conference in 1999.

The Doha conference overcame many of the difficulties encountered in Seattle, and agreed to negotiations on a wide range of trade issues, including:

- traditional sectors, such as agriculture and textiles, in which protection remains high and negotiation has been difficult;
- services and industrial goods; and
- new areas, such as the relationship between trade and the environment, investment and competition policy.

Measures were also agreed upon to provide special assistance for developing countries, and the conference clarified the relationship between the TRIPS Agreement and public health issues (box 5.2). The conference also agreed to the accession of China and Taiwan into the WTO.

The negotiations are to be completed by January 2005, in the form of a 'single undertaking'. That is, member governments will be required to 'take all or leave all' of the trade commitments bargained during the round. At this stage, details of the actual negotiations are still to be developed.

The Commission commented on various aspects of the (then prospective) negotiating agenda in a submission to the Department of Foreign Affairs and Trade (DFAT), prior to the Doha Conference (PC 2001a). Aspects of the Doha declaration are discussed below.

Agriculture

During the Uruguay Round, WTO member governments agreed to some disciplines on market access barriers and the level of domestic support and export subsidies. However, overall levels of support and protection for agriculture continue to be extremely high, particularly in OECD countries, as means of circumventing the Uruguay disciplines have evolved.

Effective multilateral trade reform in agriculture could generate significant gains to Australia and other countries that export agricultural products, including many developing countries. Australia has a particular interest in encouraging multilateral reductions in protection in those areas of agriculture in which Australia is a major exporter or potential exporter, including beef, wheat, sugar, dairy products and rice.

The Doha Conference involved intense discussions on agricultural protection. Australia, together with other members of the Cairns Group, advocated a strong negotiating mandate aimed at securing substantial improvements in market access, reductions in domestic support and reductions, leading to elimination, of export subsidies. The United States also supported an ambitious negotiating mandate, despite recent decisions in that country to maintain or increase large-scale domestic support programs. The European Union, against almost universal opposition, sought to retain the right to export subsidies. Japan, which has been strongly opposed to agricultural trade reform and maintains extremely high levels of support and protection in agriculture, adopted a flexible approach at Doha in agreeing to accept the negotiating text on agriculture. The final declaration states:

> …without prejudging the outcome of the negotiations we commit ourselves to comprehensive negotiations aimed at: substantial improvements in market access; reductions of, with a view to phasing out, all forms of export subsidies; and substantial reductions in trade-distorting domestic support.

Although this negotiating mandate appears promising, there inevitably remains some uncertainty about the extent to which it will translate into substantive reform. Among other things, the European Union, which is the main user of export subsidies, has sought to interpret the words “without prejudging the outcome of the negotiations” as an assurance that it will not be driven by the WTO agenda in reforming its use of export subsidies. According to DFAT, however, the declaration anticipates that export subsidies will be phased out or eliminated, and the question to be negotiated is purely one of timing.

Draft schedules of commitments are to be submitted to the WTO by the date of the next Ministerial Conference, which is due to be held in late 2003.

Non-agricultural goods and services

WTO member governments have agreed to further negotiations aimed at increasing market access for non-agricultural products. The negotiations will cover all products and seek to:

> … reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs and tariff escalation, as well as non-tariff barriers.

The process for negotiating on non-agricultural goods is yet to be decided.

In relation to services, negotiations are already under way as part of the built-in agenda[1] of the GATS following the Uruguay Round of negotiations. At the Doha conference, WTO member governments agreed to further negotiations aimed at liberalising trade in services. The first round of liberalisation demands is to be submitted by 30 June 2002, with initial reform offers due by 31 March 2003.

[1] As part of the Uruguay round agreements, member economies agreed that in cases of services and agriculture, negotiations would continue beyond the initial undertakings of that round.

Box 5.2 **Developing countries issues in the WTO**

At the Doha conference, WTO member countries agreed to several measures to assist developing countries. The WTO will:

- continue to provide 'capacity building' and technical assistance to developing countries with priorities for "small, vulnerable and transition economies as well as members and observers without representation in Geneva";
- set up working groups to look at the relationships between trade debt and finance, and trade and the transfer of technology to developing countries;
- undertake negotiations with the objective of providing "duty free, quota free market access for products originating from least developed countries" (although no mechanism has been set for this to occur);
- review special and differential treatment provisions with a view to "strengthening them and making them more precise, effective and operational".
- work towards facilitating and accelerating the accession of Least Developed Countries and other small economies into the WTO.

In addition, the Doha conference clarifies the rights of individual governments to address public health issues under the Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement. While the TRIPS agreement provides protection for intellectual property rights to encourage investment in R&D, there were uncertainties about the ability of countries to take measures to combat public health problems, such as AIDS or tuberculosis epidemics. This was highlighted recently in the disputes between the South African Government and pharmaceutical companies.[a]

The resulting Ministerial Declaration agreed that 'the TRIPS agreement does not and should not prevent Members from taking measures to protect public health':

- under 'compulsory licences' provisions, countries can produce patented products without the consent of (and without giving compensation to) the patent holder in cases of 'national emergency or other circumstances of extreme urgency'; and
- each country has 'the right to determine what constitutes a national emergency or other circumstances of extreme urgency' and that public health crises (including disease epidemics) can represent such occasions.

[a] In 1997, the South African Government passed legislation allowing the importation and manufacture of generic versions of patented pharmaceuticals to assist in combating the AIDS epidemic in the country. Several pharmaceutical companies then initiated a legal challenge claiming that the legislation violated South Africa's TRIPS obligation. Against a background of public concern, the pharmaceutical companies withdrew their challenge.

Source: WTO 2001c.

Geographical indicators

Potential extensions to the protections for ‘geographical indicators’ under the WTO TRIPS agreement are an area of potential concern for Australia that was considered at Doha.

‘Geographical indicators’ are names — like Champagne and Beaujolais (or Coonawarra) in the case of wine, and Camembert in the case of cheese — which identify a good as originating in a particular locality, region or territory, where “a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin” (TRIPS Article 22). The TRIPS Agreement currently requires WTO member governments to disallow the use of geographical indicators in ways that are misleading or that amount to unfair competition (Article 23), and confers a higher level of protection of wine and spirits-related geographical indicators (Article 24).

The European Union negotiated a bilateral agreement with Australia in 1994, under which Australia surrendered the right to use many wine names claimed by the European Union as geographical indicators. Concerns could arise for Australian producers in some other industries if these principles were extended to other goods.

The Doha conference agreed that the multilateral notification and registration system for wine-related geographical indicators, that is currently being negotiated by WTO members, will be extended to cover spirits. However, the Doha declaration stopped short of mandating negotiations on whether the TRIPS protections for wine and spirits should be extended to other products, notwithstanding the push by some WTO members (most notably the European Union) for such a mandate. Rather, this issue is to be “addressed in the Council on TRIPS”.

While stronger protections for geographical indicators may not unduly harm, or may even benefit, some Australian products and industries, the economic rationales for some mooted extensions in protection for geographic indicators are at best ambiguous, and their merits and effects on trade require further study.

The environment

For the first time, the WTO Ministerial Conference agreed to negotiations on certain elements of the trade and environment agenda. The European Union strongly advocated the inclusion of environmental issues in a new round, but was resisted by many developing countries and a number of developed nations including Australia. The Doha declaration has set a negotiating agenda which will cover:

- the relationship between existing WTO rules and specific trade obligations set out in Multilateral Environmental Agreements (MEAs);
- procedures for regular information exchange between MEA secretariats and relevant WTO committees;
- the reduction or, as appropriate, elimination of tariff and non-tariff barriers to trade on environmental goods and services; and
- the clarification/improvement of WTO rules on fisheries subsidies.

The Doha declaration also calls for the WTO Committee on Trade and Environment to report back to the Fifth WTO Ministerial Conference on whether there is a case for formal negotiations on other matters, including the use of product labelling requirements for environmental purposes.

The Commission notes that, while reducing trade barriers on environmental goods and services and reducing fisheries subsidies would bring benefits from both an environmental and a trade perspective, there would be risks in attempting to further link environmental policies to WTO agreements. Among other things, trade restrictions are generally poor means of addressing environmental problems: direct environmental protection measures — such as environmental standards, subsidies or charges that address *the source* of the environmental problem — will normally offer more effective solutions and tend to have fewer economic costs and side effects.

WTO rules are about trade relations, and it is not clear that relaxing the rules on environmental grounds would, on balance, be beneficial for overall community welfare (PC 2001a). In examining whether there is a case for modifying the WTO rules to allow trade sanctions in MEAs, WTO member governments will need to consider which of the existing MEAs use trade restrictions and, moreover, whether those measures are the most appropriate means of addressing environmental problems.

Other issues

The Doha ministerial declaration also sets out directions on other important issues. Subject to an explicit consensus on modalities, negotiations will take place after the next ministerial conference in relation to:

- multilateral frameworks on investment and competition policy; and
- transparency aspects of government procurement and trade facilitation.

The Doha conference also agreed to negotiations aimed at clarifying and improving existing WTO disciplines in relation to Subsidies and Countervailing Measures, the implementation of anti-dumping provisions (Article XI of GATT), Dispute Settlement Understanding (the rules governing disputes in the WTO) and Regional Trading Arrangements (RTAs).

Implications

The Doha declaration signals a renewed commitment to multilateral trade liberalisation and an acknowledgment by member governments of the benefits it can bring. It is, however, an agreement to negotiate, not an outcome. Given the ambitious scope of the agenda, uncertainties surrounding some of the language in the declaration and the political considerations that can influence trade negotiations, the final outcome cannot readily be foreseen.

From the viewpoint of Australia and many developing countries, the negotiating mandate in relation to agriculture may appear particularly promising.

However, achieving an outcome that delivers meaningful liberalisation in agricultural trade has proven difficult in the past, largely because of the political sensitivities in the sector in a number of countries. Progress on agriculture in this round of negotiations will be further complicated because of the tactical and substantive linkages with a number of other issues on the negotiating agenda. For example, the European Union is advancing an ambitious agenda in several problematic areas, including geographical indications and environmental labelling. The European Union is also likely to continue its efforts to codify in the WTO its version of the precautionary principle, which could be used to (unduly) restrict market access (PC 2001a). More generally, the European Union appears keen to further link environmental policies to WTO agreements, and to negotiate on contentious areas such as trade-related aspects of investment and competition policy.

Importantly, in relation to agriculture, the Doha declaration re-affirmed the clear hierarchy among the ‘three pillars’ of market access, domestic support and export subsidies, and ‘non-trade concerns’. WTO member governments committed themselves to comprehensive negotiations under the three pillars. Non-trade concerns, on the other hand, are only to be ‘taken into account’ in the negotiations. On the contentious environment and food safety issues, the European Union failed at Doha to muster broad support for its bid to commence negotiations across the breadth of its agenda. While the European Union has an opportunity to revisit these issues at the next WTO Ministerial Conference in 2003, it is likely to face substantial resistance to any attempts it might make to add new items to the environment negotiating agenda.

Australia also stands to gain if the new round can bring further reductions in tariffs on manufacturing goods and a further liberalisation of trade in services. It would also benefit if substantive and appropriate progress is made on some other matters on the agenda, including in relation to WTO disciplines on regional trading arrangements and on the use of anti-dumping measures.

Overall, while covering some contentious areas, a number of aspects of the declaration proffer benefits for Australia. However, the extent to which these are realised will depend on the course of the detailed negotiations that lie ahead, and ultimately on an acceptance of the gains from each country's own liberalisation efforts.

5.2 Regional trading agreements

Many countries, including Australia, have sought recently to negotiate RTAs with one or more trading partners. Several RTAs were developed between the mid-1950s and the 1970s. After a subsequent period of relative inactivity, the past decade has seen a revival of interest in RTAs. Since 1995, more than 100 agreements covering trade in goods or services, or both, have been notified to the WTO (WTO 2001d). However, whereas many of the RTAs in the post-war decades were plurilateral regional agreements, most of the recent agreements have been bilateral.

As noted earlier, Australia's approach to trade reform has focused mostly on unilateral liberalisation, supported and reinforced by its participation in the multilateral trading system under the GATT/WTO. Australia's main bilateral RTA is the Australia-New Zealand 'Closer Economic Relations' Agreement, established in 1983. Through the APEC forum, Australia has also pursued regional initiatives to encourage trade liberalisation.

In recent years, Australia has expressed interest in bilateral agreements with several Asia Pacific countries, including Singapore, Thailand and the United States. This move coincides with the creation of recent agreements, such as the New Zealand-Singapore agreement, and the general surge of interest in RTAs within the region.

Australia and Singapore entered into negotiations to establish a bilateral trade agreement in November 2000. According to the Australian Government, the negotiations are intended to reach a 'cutting edge agreement which will advance market access and lead to a higher level of integration between the economies of Australia and Singapore' (Vaile 2001a). The negotiations are covering goods, services and investment with a particular focus on domestic regulatory barriers, mutual recognition and harmonisation of standards and competition policy.

Australia is also in the preliminary stages of negotiating an agreement with Thailand. In July 2001, the Government announced that Australia and Thailand were undertaking a joint scoping study on a bilateral free trade agreement (Vaile 2001b). The study will explore the feasibility of a 'Free Trade Agreement' and how to maximise its potential benefits.

During the last year, the Australian Government expressed interest in negotiating an RTA with the United States. A study commissioned by DFAT estimated that a bilateral agreement that liberalised all barriers to trade could expand the Australian economy by as much as $4 billion per annum by 2015, and would generate a slight increase in total world exports (CIE 2001). The Government considered that, for an RTA with the United States to be worthwhile from Australia's viewpoint, the agreement would need to cover agriculture — an area in which that the United States has traditionally been resistant to substantial liberalisation.

The Commission commented on the merits of Australia entering into RTAs in its recent submission to DFAT on multilateral trading negotiations (PC 2001a).

It noted that RTAs that involve the preferential reduction of tariffs among members may create beneficial or adverse effects for members and for third parties. The exchange of tariff preferences may generate new trade, to the benefit of members and their trading partners. However, such an agreement may also divert trade from more efficient third-party producers to less efficient RTA members, to the detriment of both members and third parties. In general, which of these effects dominates is an empirical question, and several matters would need to be considered, including whether Australia's new partners would be able to 'price up' to appropriate what used to be tariff revenue.

The Commission also noted that Australia needs to guard against entering RTAs that contain extensive exclusions for sensitive sectors, such as agriculture, for three reasons:

- such agreements would probably not be in our economic interests;
- by dealing with the 'easy' trade issues and thus leaving only difficult issues to bargain on, they could undermine the chances of a successful conclusion to the multilateral trade round; and
- they would violate existing WTO rules.

In light of these and other concerns, the merits of entering into a new RTA need to be assessed carefully. The economics of RTAs suggest that, for Australia to gain substantial benefits from joining one, its coverage would have to be comprehensive, and include agricultural products. While it may be possible to obtain some net benefits from a more limited RTA, continuing unilateral reform and multilateral liberalisation offer the greatest gains.

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