REDUCING THE REGULATORY BURDEN : DOES FIRM SIZE MATTER?

Ian Bickerdyke
Ralph Lattimore

STAFF RESEARCH PAPER

INDUSTRY COMMISSION

December 1997

The views expressed in this paper are those of the staff involved and do not necessarily reflect those of the Industry Commission. Appropriate citation is indicated overleaf.

© Commonwealth of Australia 1997

ISBN 0 646 33537 5

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, the work may be reproduced in whole or in part for study or training purposes, subject to the inclusion of an acknowledgment of the source. Reproduction for commercial usage or sale requires prior written permission from the Australian Government Publishing Service. Requests and inquiries concerning reproduction and rights should be addressed to the Manager, Commonwealth Information Services, Australian Government Publishing Services, GPO Box 84, Canberra, ACT, 2601.

Inquiries:

Publications Officer
Industry Commission
Locked Bag 2
Collins Street East Post Office
Melbourne Vic 8003

Telephone: (03) 9653 2244
Facsimile: (03) 9653 2303
Internet: clair_angel@indcom.gov.au

An appropriate citation for this paper is:

Bickerdyke, I., Lattimore, R., (1997) *, Reducing the Regulatory Burden : Does Firm Size Matter?*, Industry Commission Staff Research Paper, AGPS, Canberra, December.

FOREWORD

We would like to thank officers from the Australian Bureau of Statistics for analysis of ABS data relating to the Survey of Business Growth and Performance. We would also like to thank the Australian Chamber of Commerce and Industry for providing unpublished survey data.

This report, one of a series of reports focusing on small business issues, was written by Ian Bickerdyke and Ralph Lattimore. Andrew Bradly provided short term research assistance. Garth Pitkethly and Alan Madge of the Industry Commission and Paul Coghlan of the Office of Regulation Review provided useful comments. Other recent reports in the series include: *A Portrait of Australian Business: Results of the 1995 Business Longitudinal Study* (IC & DIST, 1997), *Informal Equity Investment* (IC 1997), *Small Business Employment* (Revesz and Lattimore 1997) and *Innovation and Firm Performance in Australian Manufacturing* (Phillips 1997).

December 1997

CONTENTS

			page
Foreword			**iii**
Abbreviations			**ix**
Glossary			**xi**
Overview			**xiii**
1	**Introduction**		**1**
	1.1	The regulatory burden	1
	1.2	Scope of the report	4
	1.3	Structure of the report	5
2	**Benefits and costs of regulations**		**7**
	2.1	The need for government intervention	7
	2.2	Regulatory costs imposed on businesses	9
	2.3	Concluding remarks	12
3	**Recent policies for reducing the regulatory burden**		**15**
	3.1	General policies for easing regulatory requirements and reducing tax compliance costs	15
	3.2	Government approaches to reducing the small business regulatory burden	17
	3.3	Interpreting the focus on small business	19
	3.4	Concluding remarks	22
4	**Differential regulations for small businesses — an economic framework**		**25**
	4.1	An economic framework for regulatory impacts	25
	4.2	Tiering of regulatory requirements	34
	4.3	Flexibility of regulatory delivery	45
	4.4	Distributional and fairness issues	52
	4.5	Concluding remarks	56
5	**Regulatory compliance costs across firm sizes — the evidence**		**59**
	5.1	How significant are economies of scale in regulatory compliance?	59

page

5.2 Do regulatory compliance costs significantly increase unit costs in small businesses? 66
5.3 Are there cases where there is little substitution between large and small scale modes of production? 69
5.4 Data problems and non–compliance 69
5.5 Concluding remarks 72

6 Perceptions of the regulatory burden across firm sizes 73
6.1 Overview 73
6.2 Which aspects of the regulatory burden are the most important? 75
6.3 The overall regulatory burden 85
6.4 Concluding remarks 89

7 Policy issues and regulatory design 91
7.1 Policy issues 91
7.2 Regulatory design guidelines 94
7.3 Areas for further research 98

APPENDICES
A The economic significance of small business 99
B The theory of regulatory tiering 109
C US federal legislation relating to small business regulation 119
D Surveys of firms' perceptions 127
E Principles of regulation design 133

REFERENCES 143

Boxes

1.1 Defining the regulatory burden on business 1
1.2 Business views on the increasing regulatory burden 2
2.1 The need for regulations 8
3.1 Key characteristics of the RIS approach 17
4.1 The net benefits of regulations 28
4.2 Business views on the delivery of regulations 46
4.3 Business views on the 'unfairness' of the regulatory burden 55
6.1 Firm size data available from surveys 75
7.1 Snapshot of key policy issues 92

page

7.2 Varying regulations to favour small business — a checklist for government agencies/regulatory authorities 95

E.1 OECD regulation checklist 133
E.2 OECD regulatory reform — policy recommendations 134
E.3 Bell Report — improving the regulatory system 135
E.4 Commonwealth Government response to the Bell Report — government action on regulatory quality 136
E.5 Victorian ORR's principles of regulatory design 137
E.6 1996 Small Business Summit — Charter of Principles 138
E.7 Mortimer Review of Business Programs — Design Criteria 140
E.8 Industry Commission checklist for assessing proposed or existing business programs 141

Figures

1.1 Average annual number of pages of Commonwealth legislation enacted, 1960 to 1994 3
4.1 Compliance costs of regulations and firm size 30
4.2 Benefits of regulations by firm size 32
4.3 Regulatory gains and compliance costs by firm size 33
4.4 The benefits of flexible delivery 47
4.5 The criteria for regulatory tiering 58
6.1 ACCI survey — average degree of concern over leading regulatory problems 87
6.2 Chamber of Manufactures of NSW survey — average degree of concern over leading regulatory problems 87
6.3 ABS survey — average degree of concern over leading regulatory problems 88
A.1 Small business contribution to key economic indicators, Australia, 1994–95 102
B.1 The components of the benefit curve 111
B.2 A uniform regulation 111
B.3 A tiered regulation 112
B.4 How tiering can change the size distribution 112
B.5 The impact of a regulatory burden on demand 114

Tables

4.1 The impact of tiering when uniform regulation is inimical to competition 38

page

4.2 The impact of tiering under a high cross price elasticity of demand between large and small business 38
4.3 The impact of tiering under a low cross price elasticity of demand between large and small business 39

4.4	Payroll tax revenue forgone for firms at the tax–free threshold, by state (as at July 1997)	40
5.1	Internal compliance costs for Employers' PAYE, FBT, Payroll Tax, Prescribed Payments System (PPS) and Companies' Income Tax, by firm size, Australia, 1989–90	62
5.2	Employers' total compliance costs: Western Australian firms, 1993–94	62
5.3	Estimated cost of corporate income tax compliance, by firm size, United States	64
5.4	Estimated average costs of regulation, paperwork and taxation requirements, by firm size, United States	65
5.5	Compliance costs by industry, Western Australia	68
6.1	ACCI survey — extent of firms' concern over different aspects of the regulatory burden	77
6.2	Chamber of Manufactures of NSW survey — extent of firms' concern over different aspects of the regulatory burden	79
6.3	Chamber of Manufactures of NSW survey — firms' main difficulties with regulations	80
6.4	ABS survey — extent of firms' concern over different aspects of the regulatory burden	82
A.1	Role in the Australian economy of different–sized firms, 1994–95 (per cent shares)	101
A.2	Dynamic economic contributions of different–sized firms, Australia, 1994–95	104
A.3	Innovation (R&D person years) in Australian manufacturing, by enterprise size	105
A.4	Innovation (R&D person years) in Aus tralian non–manufacturing industries, by enterprise size	106

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACCI	Australian Chamber of Commerce and Industry
ATO	Australian Taxation Office
BIE	Bureau of Industry Economics
BLS	Business Longitudinal Study
DIST	Department of Industry, Science and Tourism
IC	Industry Commission
OECD	Organisation for Co-operation and Development
ORR	Office of Regulation Review
RIS	Regulation Impact Statement
SBA	Small Business Administration

GLOSSARY

Compliance costs	Costs incurred by firms to meet the requirements imposed on them by regulations or taxes. These requirements are over and above normal commercial practices.
Cross price elasticity of demand	A measurement of the degree of responsiveness of the demand for one good or service to a change in the price of another.
Elasticity of demand	The relative change in the demand for a good or service when its price changes by a small proportion.
Market–based regulatory mechanisms	Measures which use market signals, such as prices, to provide an incentive to interested parties to integrate the relevant regulatory concern into their everyday decisions.
Optimal regulation	An optimal regulation is one where no change in its specifications (method of administration, stipulated standards of performance, or eligibility of firms) can produce any additional net benefit.
Regulatory burden	The costs imposed on businesses by the regulatory framework (which includes legislative, regulatory and taxation measures).
Regulatory delivery	The administrative processes associated with achieving the requirements of a regulation or tax.
Regulatory tiering	The differential application of regulatory requirements according to firm size. Tiering may be applied to any aspects of a regulation or tax: the substantive requirements, the monitoring efforts, the record keeping requirements and so on.
Small business	A business that is independently owned and operated, with most capital contributed by owners and managers. The typical Australian definition is a business which has a turnover of less than $10 million per annum and less than 20 employees, in the case of non–manufacturing businesses, or less than 100 employees for manufacturing businesses.
Tiering mechanisms	The means by which differential regulatory

	requirements for certain businesses are applied. These can be grouped under two broad headings: exemptions from regulations or lighter regulatory requirements.
Uniform regulation	A regulation that imposes the same requirements on all businesses, regardless of their size or other attributes.

OVERVIEW

Background

Many countries, including Australia, are experiencing problems with their regulatory systems. This study focuses on two aspects — the nature and extent of the regulatory costs imposed on business and the rationale underlying initiatives to vary regulatory requirements according to firm size.

Government regulations (and taxes) are needed to achieve a range of economic and social objectives which are of benefit to the community generally. However, they invariably impose costs on business. This ‘regulatory burden’ includes compliance and administration costs, disincentives and other factors that may adversely influence firms’ productivity and frustrate their overall business performance.

A regulation which generates very small or no benefits should be eliminated or not introduced in the first place. However, the benefits derived from regulating industry (or imposing taxes) will often rule out simple solutions to meet business concerns about the regulatory burden. The policy challenge is to minimise the costs of regulation in a way that does not jeopardise governments’ economic and social goals.

Against this background, Australian and overseas governments have developed various policy initiatives aimed at cutting the costs of business regulation:

- broad–based approaches aimed at easing compliance, cutting red tape and generally reducing the regulatory burden for all businesses;
- policy approaches favouring small businesses in the application of regulations (known as ‘regulatory tiering’); and
- initiatives that attempt to reduce compliance and other regulatory costs by changing the way regulations are delivered (known as ‘flexible delivery’).

This report focuses on the latter two policy approaches, measures the differential impacts of regulations on small and larger businesses and develops guidelines for appropriate regulatory reform.

A rationale for differential regulatory treatment of small businesses

Varying regulatory requirements according to firm size (tiering) is relatively infrequent in Australia. However, tiering forms part of the Commonwealth Government’s response to the Small Business Deregulation Task Force report.

There are two broad ways by which tiering can be applied:

- *Exemptions* — for example, small business may be exempted from the substantive requirements of a regulation (or tax), or from associated regulatory requirements such as record keeping or inspection programs.
- *Lighter regulatory requirements* — small business may, for example, be required to comply with less stringent standards, or meet less onerous reporting and record keeping requirements.

The differential application of regulations can ease the regulatory burden of small businesses and reduce their compliance costs. However, governments have many factors to take into account when considering tiering as a means of cutting small businesses' regulatory costs. The central question we pose is: *under what circumstances* is it appropriate to treat small businesses more leniently than other firms? Two rationales are sometimes advanced:

- such treatment is more 'equitable'; and
- efficiency is improved.

Equity considerations

One argument for tiering is that regulations and the tax system place unfair or regressive burdens on small businesses relative to larger ones. For example, larger firms typically have more resources to deal with regulatory requirements and are in a better financial position to bear compliance costs. Moreover, regulations tend to tie up key decision makers in smaller firms, while they can be delegated to specialists in larger enterprises.

How strong is the case for regulatory tiering on equity grounds? We found that:

- disproportionate costs of *new* regulations or compliance requirements can lower the returns of owners and managers of small businesses;
- entrepreneurs must typically work longer hours in complying with the regulations; and
- compliance costs may be considered 'unfair' in the sense that smaller businesses face higher proportionate compliance costs (measured against turnover) than larger firms.

While these factors suggest the regulatory framework sometimes treats smaller businesses inequitably, other factors need to be considered. For example, while some business people may suffer losses in income after the introduction of a regulation, some of the *ultimate* income burden of compliance costs is likely to be borne by consumers — all businesses, both big and small, typically shift at least some of their regulatory compliance costs to consumers by raising their prices. And tiering can have its own re-distributional effects which, in itself, may not be viewed as equitable (for example, lower tax revenue).

Accordingly, when deciding whether there is a case for regulatory tiering on equity grounds, the relevant factors need to be weighed up on a case–by–case basis. But

even then, more direct methods of achieving equity objectives through the tax or social welfare system may be more appropriate.

Efficiency considerations

In principle, regulatory compliance costs per unit of output are likely to be significantly higher for small businesses because of high 'fixed' compliance costs that do not vary appreciably with firm size (such as the time to fill out paperwork, reading and understanding regulatory requirements, and consulting with regulators). Such variation in compliance costs per unit of output would confer a competitive advantage on larger firms that may reduce the viability of small firms. In turn, this could reduce competitive pressures and lead to less efficient outcomes.

In these circumstances, it is possible that regulatory exemptions or lighter regulatory requirements for small businesses would enhance efficiency. This is more likely if:

- cost differences between small and large firms in complying with a uniform regulation substantially reduce the competitiveness (and market share) of small business, *and* this leads to the dominance of a few large firms that are able to exercise market power; *or*
- regulatory costs per unit of output vary significantly with firm size, and large firms do not provide close substitutes for the goods or services of small firms in a particular industry (for example, service activities — such as hairdressing — which are most economically produced by small businesses).

The case for tiering is stronger (under either scenario) if market demand is relatively unresponsive to price changes, and if the application of tiering does not excessively reduce the benefits derived from the regulation of small firms (tiering is only justified when its application can produce net social gains).

Empirical evidence

The case for regulatory tiering depends upon there being significant differences in regulatory costs across firm sizes — and that these are big enough to have economic effects. We examined empirical evidence to test this proposition:

- *quantitative* evidence relating to compliance costs per unit of output; and
- *qualitative* evidence relating to different–sized firms' perceptions of the regulatory burden.

The quantitative empirical evidence — from both Australia and overseas — suggests that small firms *do* face significantly higher compliance costs per unit of turnover than larger firms (because the fixed costs of compliance fall on a smaller income base). For example, one Australian study found that compliance costs for

collecting PAYE income taxes were equal to around 0.64 per cent of turnover for the smallest firms (with a turnover up to $0.2 million), compared to only 0.01 per cent for firms with turnover of $20 million or more.

While the evidence for Australia is sketchy, it suggests that the *average* small firm's overall compliance cost disadvantage relative to large firms could be around 1 per cent or so of its turnover — though this could disguise more pronounced variations for some industries.

Qualitative data pertaining to what firms *say* about the regulatory burden suggest that small, medium and large businesses face similar problems. According to several Australian industry surveys:

- small firms do not articulate *unique* regulatory problems or impediments. The same issues tend to bother small, medium and large firms — and to a similar degree; and
- evidence on the *perceptions* of business people about the overall regulatory burden (which includes more than just compliance costs) suggests that, if anything, medium to large firms (but not the largest) have the greatest overall regulatory concerns.

In summary, the empirical evidence implies that regulatory costs are unlikely to have a significant impact on the competitive position of the typical small firm compared to its larger rivals — which suggests across-the-board regulatory reform as the policy norm.

Bottom line on regulatory tiering

In most cases, regulatory reform should apply to businesses of all sizes — to maximise the scope for efficiency in the economy. This approach also avoids some of the pragmatic hurdles of regulatory tiering — for example, difficulties in deciding which size of firm should be exempt or face lower standards.

However, where government and regulatory agencies have sufficient information and believe the required pre–conditions have been met, it would be sensible to consider the tiering of regulations or taxes on a case–by–case basis.

Small businesses can benefit from flexible delivery of regulations

The most clear-cut justification for easing the regulatory burden faced by small business can be found not in the differential application of regulatory requirements, but in the area of regulatory delivery.

Concerns expressed by firms of all sizes often focus on the *administrative processes* (or lack of them) that exist *to achieve* the requirements of regulations or taxes — that is, on the way regulations are 'delivered' to firms. Business concerns over these processes include the paperwork, uncertainty about what is required and when, and

the costs of dealing with a variety of jurisdictions. Variations in the delivery of regulatory requirements according to firm size, can sometimes address these concerns. And, unlike tiering, flexible delivery does not weaken the standard or objective of a particular regulation or tax. In these circumstances, helping smaller firms find their way through the administrative maze can reduce regulatory costs — without offsetting impacts on the regulatory benefits.

Improved delivery of regulations can be achieved through a variety of means. For example:

- Contact services could be provided to help some smaller businesses comply effectively with a particular regulation, rather than simply indicating to them their obligation under a regulation or piece of complex legislation.
- One stop shops could be provided to assist smaller businesses in meeting various regulations associated with a particular business activity.
- There may also be gains in providing information to smaller firms about ways in which they can minimise regulatory breaches.

Australian governments are already addressing these sorts of issues. For example, the Australian Taxation Office has developed a number of publications to make it easier for small business to understand and access relevant tax information. It is also developing better ways for disseminating tax information to them. In addition, the Commonwealth Government has accepted the Small Business Deregulation Task Force recommendation to develop a comprehensive national business information service. This service will give priority to tax information and employer obligations such as superannuation, industrial relations, workers' compensation and occupational health and safety.

In some cases, flexible delivery can be aimed at *larger* firms — as happens with enforced self-regulatory arrangements between firms and regulators. Under these arrangements, firms are permitted to write a set of rules (subject to government approval) aimed at achieving regulatory standards at a lower cost to the firm.

Flexibility in the delivery of regulations can achieve more than just a reduction in compliance costs. It can also lead to higher levels of compliance and improve the likely social benefits of a regulation.

Broad and firm–specific regulatory reform

The fundamental goal of regulatory reform should be to remove all unnecessary, inefficient and ineffectual regulation — irrespective of whether this affects small or large businesses. In this context it should be noted that much of what is interpreted as being small business regulatory reform actually benefits all businesses. While an 'all of business' approach to regulatory reform is appropriate in most cases, there are circumstances in which differential regulatory treatment of small business is

justified. This report develops guidelines to assist regulatory authorities in defining these special circumstances (and in applying appropriate mechanisms).

1 INTRODUCTION

1.1 The regulatory burden

Many countries, including Australia, are experiencing common problems with their regulatory systems, such as:

- overuse of inflexible regulations;
- rapid growth in regulation; and
- a sense of being 'overregulated', while still recognising the need for regulations to achieve desirable economic and social outcomes (PC 1996).

In this study we focus on one aspect of these problems — the nature and extent of the *costs imposed on businesses* by Australia's regulatory systems. We call these costs — which may be financial, economic and non–economic — the 'regulatory burden' on businesses (box 1.1). [1] This burden has the potential to adversely influence productivity and frustrate overall business performance.

Box 1.1: Defining the regulatory burden on business

We define the regulatory burden as the costs imposed on businesses by the regulatory framework — which consists of legislative, regulatory and taxation measures. These costs or burdens include:

- the costs involved in meeting the substantive requirements of the regulatory framework;
- the administration and paperwork costs involved in complying with the regulatory framework;
- the costs arising from the disincentives, distortions and duplication attributable to the regulatory framework; and
- other costs (such as psychological stress) associated with compliance.

Businesses have become increasingly vocal about the regulatory requirements imposed on them by governments (box 1.2) — and there is evidence this burden

[1] The 'regulatory burden', in this context, does not include other costs of regulations associated with reductions in consumer welfare (for example, limitations placed on consumer choices and the creation of artificial barriers to entry). However, the wider allocative efficiency costs associated with regulations are considered as part of the economic framework for differential regulations discussed in chapter 4.

has increased significantly in recent times. The Small Business Deregulation Task Force (Bell 1996) suggested that regulation and paperwork might have increased threefold over the last 10–15 years — and considered that the Commonwealth had been largely responsible for the increase in burden over the past decade.

Box 1. 2: Business views on the increasing regulatory burden

'The single major problem...over the past eleven years is the enormous increase in bureaucratic and legal administration. I estimate that the time spent on non–productive work has increased at least 5 times over the past 11 years. In addition, legal and other direct payments have increased by about $6,000 pa. Requirements that were not present eleven years ago include, FBT, ISC requirements, increased complexity and variation, corporate affairs commission/ASC, D&O liability insurance, and greater complications with articles of association. The individual bureaucrats are unaware of the total burden.'

'The amount of information by way of substantial and financial returns has probably tripled over the last five years, when all governments are taken into account. Legislation has also changed extensively, meaning additional hours of work to stay informed.'

'We have found increasing burdens on our working time and cost due primarily to reporting and necessary paperwork and records, relating to staff superannuation payroll tax, fringe benefits tax, gathering information on the business growth survey, other economic surveys, occupational health and safety issues, training etc. It has come to the stage where approx. 25% of my working year is devoted to government controlled issues of one type or another....I need to spend more time, devoted to developing and promoting my business, creating jobs, creating export potential and/or reducing imports. Not being a bookkeeper for bureaucracy.'

Source: Survey addendum responses to the ABS *Business Growth and Performance Survey, 1994–95*.

The Office of Regulation Review has reported (IC 1996) that the continuing growth of Commonwealth regulation and legislation suggests an increasing regulatory burden:

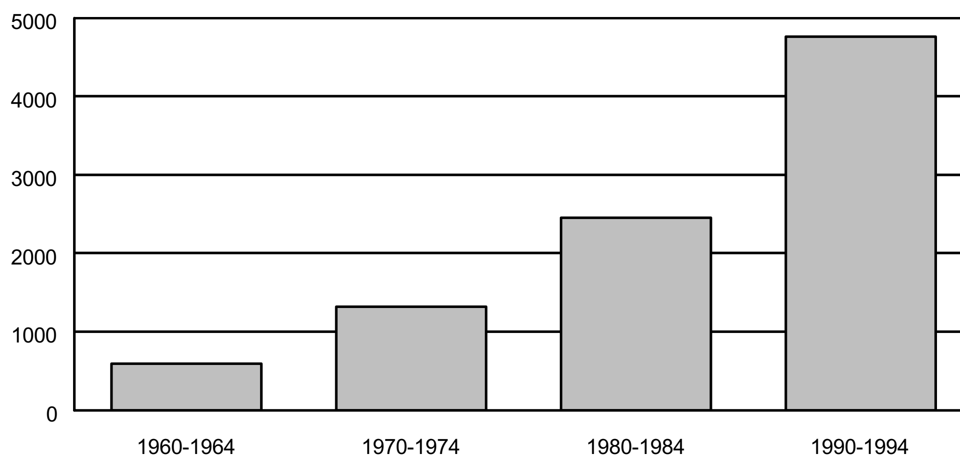
- Over the past three decades there has been a considerable increase in the amount of Commonwealth primary and subordinate legislation — including growth in new areas of regulation. Associated with this has been an increase in their length and complexity.
- Increased regulatory activity has been reflected in greater expenditure by the Commonwealth and national regulatory agencies.

A clear pattern of the increasing stock of Commonwealth legislation is demonstrated by the expansion in the total number of pages of legislation promulgated each year (figure 1.1). The ORR observes that:

> If the number of pages per Act is an indicator of the complexity of legislation, then there was a substantial rise in complexity and consequent compliance costs during the last decade. A comparison between the 1960s and the 1990s shows an even more dramatic increase. (IC 1996, p. 5)

While some of this new legislation will have simplified and reduced procedures for business, much of it will also have added to the compliance costs faced by business.

Figure 1.1: Average annual number of pages of Commonwealth legislation enacted, 1960 to 1994



Source: IC 1996.

Of course most legislation, regulations and taxes is likely to have positive overall social welfare effects — when the benefits are offset against the costs (an issue we explore further in chapter 2). But this still leaves plenty of scope for governments to explore ways of making the regulatory framework operate more effectively and more efficiently.

1.2 Scope of the report

Against this background of continuing growth in regulatory activity, this report discusses the regulatory costs facing Australian firms and appropriate policy responses to reduce these costs. Because the effects of regulation are so pervasive, the potential gains from governments implementing regulatory

reform — in higher productivity and increased economic growth — are substantial.

There have been numerous policy initiatives over the years aimed at cutting the costs of business regulation, with governments adopting a variety of policy approaches to reform:

- A broad–based approach aimed at easing compliance, cutting red tape and generally reducing the regulatory burden for all businesses in a host of areas — legislation, regulations and taxation.
- Some state governments have undertaken studies and implemented regulatory reforms for particular sectors.
- Governments have developed policy approaches favouring small businesses[2] in the application of regulations (known as 'regulatory tiering').
- Governments have also attempted to change the way regulations are delivered in order to reduce compliance and other regulatory costs (known as 'flexible delivery').

The main interest in this report is in the latter two policy approaches. In particular, the central question we pose is whether it is appropriate — and if so, under what circumstances and by what mechanisms — for governments to favour small businesses in efforts to cut red tape and reduce the regulatory burden on business.

We examine the economic rationale for the policy approaches favouring differential application of regulations — that is, an assessment of the appropriateness of more lenient regulatory requirements for small businesses, from economic efficiency and equity perspectives. We also examine the empirical evidence — to test the extent to which possible theoretical justifications for the differential regulatory treatment of small businesses are backed up by findings from both Australian and overseas studies.

[2] The definition of 'small business' is not alwa ys clear. However, the usual ABS definition is now widely accepted (including in the Bell Report and the Commonwealth Government response). Accordingly, a small business is defined as being independently owned and operated, with most capital contributed by owners and managers. It has a turnover of less than $10 million per annum and less than 20 employees, in the case of non–manufacturing businesses, or less than 100 employees for manufacturing businesses.

1.3 Structure of the report

The outline of this report is as follows. In chapter 2 we provide an overview of the potential benefits and costs of regulations and taxes, including the means by which they might impede firm performance. Chapter 3 discusses government policies towards reducing the regulatory burden and interprets the rationale for recent policy approaches favouring small business. In chapter 4 we critically assess any economic rationale for differential regulations for small businesses. We also consider types of differential regulatory mechanisms and some of their problems. The following two chapters examine the empirical evidence surrounding the regulatory burden and firm size. In chapter 5 we consider quantitative evidence from both Australian and overseas studies to test some of the propositions developed in the previous chapter. Then, in chapter 6, we examine qualitative evidence from several Australian industry surveys about the regulatory burden across firm sizes. Finally, in chapter 7, we consider some policy issues, outline regulatory design guidelines flowing from the report's findings, and mention some areas for further research.

2 BENEFITS AND COSTS OF REGULATIONS

The essence of this report is how aspects of regulatory requirements and taxation compliance serve as impediments to business performance (and how this varies across different firm sizes). But while it would be tempting to assume that almost everything associated with regulations and taxes is bad — the reality is they also have positive aspects which counterbalance the negatives.

This chapter briefly considers these issues. In section 2.1 we discuss the justification for government intervention in industry and the requirement to impose regulations and taxes. Section 2.2 outlines the broad means by which regulation and taxes can negatively impact on firms — these costs comprise the 'regulatory burden' on business. Finally, section 2.3 summarises the key points relating to the benefits and costs of regulations and sets the scene for the policy discussion of recent policies in the following chapter.

2.1 The need for government intervention

From a national perspective, governments impose regulations and taxes for a variety of reasons — but their underlying purpose is to benefit society as a whole by serving and balancing economic and social goals.[1] Economic regulations are principally intended to improve the efficiency of markets, while social regulations are intended to protect social values and rights. A third type of regulation — administrative — controls how governments collect, manage and allocate funds and property.

Most firms are likely to face more state–based than commonwealth industry regulations. But while the focus of individual regulations may often be quite different, the underlying purposes remain the same. The purposes of regulation from a state perspective have been summarised by the Victorian Office of Regulation Reform (box 2.1). These show the reasons for government

---

[1] However, regulations and taxes do not necessarily only provide benefits on a society–wide basis — they may also directly benefit the affected firms themselves. For example, there are benefits from voluntary compliance — the need to comply with requirements imposed by government agencies may necessitate good accounting and record keeping systems. Hence, compliance requirements may provide firms with an additional incentive to introduce more efficient and possibly sophisticated financial information systems than might otherwise have been the case.

intervention can be grouped under market failures (externalities and inefficient markets) and various social objectives.

Taxes often serve the same purposes as regulations, but also have other aims. Governments are involved in a wide range of resource–using activities and taxation is the principal mechanism through which the transfer of resources from the private to the public sector occurs. Reducing the number of taxes, or their reach, could affect the ability of governments to raise sufficient revenue to carry out their responsibilities — or require a heavier load on a narrower base of activities.

Box 2.1: The need for regulations

Externalities

The problem with externalities is that the persons giving rise to the external effects do not take them into account. The role for government in such cases is to make the parties to the externality–creating activity take these effects into account in their decision making, thus forcing them to adjust their activities or behaviour to reflect optimal or socially acceptable levels. Regulation is a tool by which the externality can be made a direct concern of the relevant party.

Inefficient markets

If markets are not competitive, they will not operate efficiently. Some of the factors that can lead to uncompetitive and efficient markets include:

– barriers to entry

– small number of suppliers or a sole supplier

– information constraints.

Therefore the role for government is to take steps to create more efficient markets or to regulate so as to approximate efficient outcomes.

Social objectives : equity and consumer protection

There are many situations where governments intervene in a market in the pursuit of social objectives. These include redistribution of income, consumer protection, public health and safety, law and order, cultural objectives and the preservation and protection of environmental resources. In many instances governments will choose to pursue a particular social goal at some cost to economic efficiency.

Source: Victorian ORR, 1995.

2.2 Regulatory costs imposed on businesses

Our concern in this paper is with the cost *to businesses* of meeting the requirements of regulations and taxes. How exactly do regulations and taxes hinder businesses? What are the costs involved? There are three broad areas that comprise the 'regulatory burden' on business:

- First, there is the time, effort and financial costs involved in *complying* with government regulatory or taxation requirements. A central part of firms' dissatisfaction has been increased irritation with the paperwork and compliance burden associated with the taxes and regulations.
- Second, there are the negative impacts on *firms' productivity* arising from any disincentives, distortions and duplication caused by these government requirements; and
- Third, there may be various other *non–economic costs* involved.

Compliance and administration costs

These are the costs of compliance and paperwork activities undertaken by firms to meet the requirements imposed on them by specific taxes or regulations.[2] These requirements are over and above normal commercial practices.

Compliance costs can be categorised in a variety of ways. In *A Guide to Regulation* (ORR 1997), the Office of Regulation Review states that compliance costs can usually be divided into two broad categories:

- one–off costs, such as businesses acquiring sufficient knowledge to meet their regulatory obligations, purchasing/leasing additional equipment and buildings, legal/consultancy fees and training expenses; and
- recurring and ongoing costs, such as staff costs or time, consumable materials, inspection fees/licences and enforcement costs (ie costs arising from the need to devote additional time and resources to satisfying regulatory requirements.

Another method of categorising compliance costs is to distinguish between compliance costs associated with the substantive aspects of regulations and the costs imposed by the administrative burden. As an example of the former, businesses may be obliged to buy and install certain equipment to protect the safety of their workers and comply with an OH&S regulation. Or they may have to purchase a variety of safety manuals. Similarly, food outlets may have to install special air extraction equipment to meet OH&S standards. Compliance

[2] There can also be compliance costs associated with utilisation of government assistance measures.

costs arising from the administrative burden can be measured by both the time and expense outlaid. Rimmer and Wilson (1996) summarised the two components of these compliance costs as:

- the time costs of internal staff on: collecting, maintaining and understanding tax/regulatory information; completing forms and necessary disclosures or in preparing information for professional advisers to enable them to do this; and dealing with relevant government bodies (such as the Australian Taxation Office); and
- the external financial costs of professional fees of tax–agents, accountants, lawyers and other professionals in relation to tax or regulation issues. Some of these costs are incurred by firms because of the requirements of the tax/regulatory system, while other costs are incurred voluntarily.

Whichever way compliance costs are categorised, their measurement is far from straightforward — as there are many conceptual and methodological problems. Rimmer and Wilson (1996) noted that taxpayers asked to provide information about compliance costs can have difficulty determining and identifying these costs. They can have difficulty disentangling compliance costs from the business, accounting and tax activities that are a necessary part of running a business. Even where compliance costs can be accurately identified by firms, they are likely to vary over time according to the type of business, market characteristics and management structure.

The Small Business Deregulation Task Force (Bell 1996) also recognised there will be a degree of overlap between the administrative activities a business would normally do and regulatory requirements. In this context, the task force noted that compliance costs might be reduced by bringing compliance requirements closer to best business practice:

> Those firms that are not at best practice will often find the burden larger because their internal procedures make compliance activities more difficult. The more clearly aligned current business practices are to best practice and to regulatory requirements, the lesser the burden a business is likely to face. (Bell 1996, p. 15)

Productivity costs

Productivity growth is the key to economic growth and higher living standards. And, as the Industry Commission observed in its report *Stocktake of Progress in Microeconomic Reform*, a basic requirement for productivity growth — along with technological improvements and the quality (and quantity) of human and physical capital — is:

> ...to have the right incentives in place for people to work harder and smarter, to acquire new skills and to seek new opportunities. This is where microeconomic reform comes in. (PC 1996, p. 24)

A significant aspect of creating the right incentives for businesses — and removing disincentives — involves governments maintaining effective laws, regulations and institutional settings. Government regulations and taxes that weaken or distort incentives will impede Australian businesses from using resources more productively and innovatively:

- Taxes or regulations can distort resource allocation within firms, restrict flexibility and provide disincentives to acquiring inputs and increasing output. These negative effects on business performance may be even more telling in a dynamic sense — frequent changes to regulations (or the prospect of changes) might also adversely affect productivity and business performance.
- The effort put into handling (or avoiding) the regulatory regime might in itself act as a disincentive to best practice and distract businesses from their main performance goals. A reduced regulatory burden would allow owners/managers to spend more time on running their businesses.

The Small Business Deregulation Task Force (Bell 1996) took up this theme by noting that the burden on firms included not only the paperwork but also lost opportunities and disincentives to expand their business. These 'other aspects of burden' identified by the task force included:

- disincentives stifling innovation and acting as a barrier to expansion and employment;
- problems arising from regulatory duplication between the various tiers of government; and
- inefficient and ineffective processes (for example, for licences or applications), resulting in lost time, extra costs and duplication.

These opportunity costs and disincentives are very hard to quantify. Usually, firms can only say that specific taxes or regulations have had a negative influence on their overall performance. Moreover, some impacts will not necessarily be noticed by firms. And, even where negative aspects of regulation are apparently visible to businesses, they may still fail to characterise the costs and the likely impacts of regulations. [3]

---

[3] In particular, businesses can misjudge the impact of regulations because they neglect *dynamic responses* by markets. That is, in making their assessments of the costs and benefits of regulations (or taxes), most firms will probably do so on the basis that their industry and market will remain unchanged — but, in reality, these may well change if

Nevertheless, although difficult to measure accurately (and possibly overstated), perceived disincentives and opportunity costs still represent a valid cost of regulation — to be added to the more accepted compliance and administration costs.

Other regulatory costs

Apart from the more obvious financial and economic costs that regulations and taxes impose on firms, there will often be other, non–monetary aspects of the regulatory burden. These might include the effects of stress and anxiety due to uncertainty about a firm's obligations, or the psychological effects of trying to cope with a mass of different regulations.

The Small Business Deregulation Task Force (Bell 1996) argued that the emotional impact of being 'regulated' cannot be underestimated. A government regulation may be easy to administer, but be considered 'burdensome' purely because it is imposed on a business.

The task force also reported the view of small business owners that complying with regulation is considered to be a one–way relationship with the government. Small business owners feel they get nothing in return for all the work they do for the government.

2.3 Concluding remarks

The regulation of industries, and the numerous taxes and charges faced by business, impose a variety of economic, financial and other costs. And these costs are not just a problem for the businesses themselves. Some — such as adverse effects on productivity — are matters that have implications for the broader community.

However, while the bulk of this report focuses on the costs imposed on business by regulations — and government policy towards reducing them — it is important to recognise that government regulations and taxes also have their benefits in addressing market failures or social objectives.

---

regulations are introduced or amended. For example, an easing of an industry regulation may not benefit incumbent firms to the extent they anticipate because *new* firms are attracted to the industry (which checks the profitability growth of existing firms).

The benefits derived from regulating industry or imposing taxes will often rule out simple solutions to meet firms' concerns about the 'regulatory burden'. For example, the wishes of business to reduce the burden need to be traded off against the requirement that regulations and taxes continue to be effective in meeting their objectives. In addition, attempts to reduce the administrative burden have to be balanced against administrative feasibility and the requirement that public accountability is maintained.

All of these factors limit the extent to which the regulatory burden can be reduced. Governments also have to weigh the measures at their disposal in the knowledge that altering regulatory instruments for the benefit of one sector of society may incur a cost on other sectors. In other circumstances, governments have to trade off reducing regulatory costs against the need to raise sufficient revenues or the need to regulate the economy (and businesses) effectively and efficiently.

The policy challenge, therefore, is to minimise all the costs of regulation (including the regulatory burden on business) in a way that is still consistent with meeting government economic and social goals.

3 RECENT POLICIES FOR REDUCING THE REGULATORY BURDEN

In the previous chapter we concluded that an important policy challenge for governments was to try to minimise the cost to businesses of complying with the regulatory regime — but without undermining broader economic and social objectives.

This chapter looks at the role of governments in tackling this issue, but with an emphasis on the relevance of different-sized firms. Recent government policy approaches to regulatory reform have been a mixture of broad–based, sectoral and firm–specific. In the following pages we briefly outline recent major developments in these areas and discuss the commonly–stated rationale for the current policy focus on small business.

The chapter commences with a brief discussion of broad policy approaches to regulatory reform (section 3.1), followed by details of recent government policies targeting small businesses (section 3.2). We interpret the apparently special role afforded small business in the regulatory reform process in section 3.3, before concluding (section 3.4).

3.1 General policies for easing regulatory requirements and reducing tax compliance costs

In line with world trends, there has been a growing recognition in Australia of the costs of business regulation. Australian governments have been trying to ensure that new regulations are kept to a minimum — and there is a nation–wide commitment to apply specific tests to new regulation and to review existing regulations.

In its *Working Nation* White Paper (Keating 1994), the then Commonwealth Government announced a business regulation reform package. This included various proposals aimed at reducing the complexity of legislation and regulations, improving the quality of regulations and easing the burden of excessive paperwork relating to business licences.

In 1996 the current Commonwealth Government announced details of almost 100 legislative reviews to be undertaken over the following four years. Each review is required to identify the costs and benefits of the legislation and the likely consequences of any reform measures proposed. This will be the most

comprehensive and systematic review of regulation ever undertaken by the Commonwealth.[1]

Regulation impact analysis is part of the Commonwealth Government's regulation review procedures, administered by the ORR.[2] The process is designed to contribute to better quality regulations by providing a framework for adopting good practice in regulation making and review. This involves a consistent, systematic and transparent process of assessing alternative approaches to problems which may give rise to government intervention.

Regulation Impact Statements (RIS) have been required since 1986 for all submissions to Cabinet involving new or amended regulation that would affect business. Regulation affecting business is taken to be all government actions which directly confer costs or benefits on business (with the exception of specific purchases by government). The proposed regulation or program is tested against specific criteria (box 3.1).[3]

The Commonwealth Government has implemented a number of initiatives in recent years aimed specifically at reducing tax compliance costs:

- In response to an inquiry into the tax system by the Joint Public Accounts Committee (JCPA 1993), the Government announced that Tax Impact Statements (TIS) would be prepared for new or amended tax legislation.
- In 1993, the Government announced a three year Tax Law Improvement Project (TLIP) aimed principally at restructuring and rewriting the income tax law so that it could be more easily understood, but also at reducing compliance costs.
- The Australian Taxation Office (ATO) has introduced — on an ongoing basis — a number of initiatives which focus in part on reducing

[1] Regulation review and reform have also been features of state governments for some years. All states have now established some form of regulatory review unit that coordinates regulation review activities and performs functions related to the operation of subordinate legislation. In addition, most are involved in coordinating or conducting reviews of particular sets of regulations — in some cases, these have been done on a sectoral basis.

[2] The Office of Regulation Review (ORR) is part of the Industry Commission, which itself has a prescribed regulatory role. The general policy guidelines in the *Industry Commission Act 1989* require the Commission to seek 'to reduce regulation of industry (including regulation by the States and Territories) where this is consistent with the social and economic goals of the Commonwealth Government.'

[3] These criteria have much in common with regulation decision–making 'checklists' put forward by some other organisations, including the OECD. See appendix E.

compliance costs. These have included consultative arrangements with professional and business associations, and business taxpayer forums.

- The ATO has also examined specific sectors of the economy with a view to reducing compliance costs. Rimmer and Wilson (1996) refer to a 1994 report by the ATO on small businesses that made a number of recommendations to reduce compliance costs — including easier record keeping requirements, fewer tax forms and other issues. Most of the recommendations of this report have been implemented by the ATO.

Box 3.1: Key characteristics of the RIS approach

A Regulation Impact Statement (RIS) should include:

- a clear statement of the objectives of the government regulation, based on the nature and magnitude of the problem;
- alternative approaches for dealing with the problem;
- assessment of the expected benefits and costs to the community of each alternative approach;
- analysis of the impact of the proposal on business, consumers, government and the community as a whole. Ideally, the RIS process should lead to selection of the option that maximises the community's net benefit;
- public consultation; and
- the establishment of future review mechanisms.

3.2 Government approaches to reducing the small business regulatory burden

In conjunction with ongoing general efforts to assist all businesses in reducing regulatory burdens, recent Commonwealth Governments have — at least notionally — adopted a policy of *targeting* small businesses for special consideration. This development has occurred in conjunction with governments devoting more attention to small business issues in general (the first Commonwealth Minister for Small Business was appointed as recently as 1987).

In the 1990s there have been two significant Commonwealth reports [4] dealing with the regulatory burden on small businesses:

- the House of Representatives Standing Committee on Industry issued the report *Small Business in Australia — Challenges, Problems and Opportunities*, which became known as the Beddall Report (Beddall 1990); and
- the Small Business Deregulation Task Force — established by the current government — produced the report *Time for Business*, or the Bell Report (Bell 1996).

Beddall Report

The Beddall Report contained 66 recommendations. In its response to the report, the then Commonwealth Government stated that it was:

> ...committed to examining and implementing policies which strengthen the performance of small firms by improving the business environment, instituting regulatory and microeconomic reform and encouraging efficient business practices within industries and at the enterprise level. (Government response to Beddall Report 1990)

The Bell Report observed that the Beddall Report generated policy momentum and ‘introduced changes in the culture which underlies the Commonwealth’s approach to limiting red tape.’ It added that the majority of the Beddall Report’s recommendations had been addressed in some measure by Commonwealth departments and agencies, and that it had also been instrumental in prompting some regulatory reform at the state and territory level.

Bell Report

Early in its term of office, the current Commonwealth Government established a Small Business Deregulation Task Force to advise on ‘revenue–neutral ways to halve the paperwork and compliance burden on small business.’ The task

[4] Another significant report favours *increased* regulation to guarantee small businesses some protection against unconscionable business conduct. In its report, *Finding a balance: towards fair trading in Australia* (Reid 1997), published in May 1997, the House of Representatives Standing Committee on Industry, Science and Technology committee found that concerns about unfair business conduct towards small business are justified and should be addressed urgently. The committee made a number of general recommendations and also specific ones designed to ‘induce behavioural change on the part of big business towards smaller business, and to provide unfairly treated small businesses with adequate means of redress.’

force report (Bell 1996) made 62 recommendations on the paperwork and compliance burden facing small business. These covered issues relating to taxation, employment, streamlining government processes and regulation, changing the regulatory culture, dealing with regulatory government, statistical collections and making business easier.

The Commonwealth Government responded to the Bell Report in March 1997 in the statement *More Time for Business* (Howard 1997). The statement noted that 'the great majority of the [Task Force] recommendations had been adopted, either in full or in part.' At the same time, the government announced other measures and initiatives to assist small business.

More generally, the current Commonwealth Government has announced the goal of reducing the paperwork and regulation compliance cost burden — particularly in small businesses — through a number of initiatives including:

- a Small Business Deregulation Task Force (see above);
- an annual National Small Business Summit [5] to discuss a wide range of issues relevant to small business and to progress regulation reform initiatives to reduce the small business regulatory burden. The first of these was held in June 1996 and agreed, *inter alia*, to a Charter of Principles on good regulatory practice (see appendix E). The second summit was held in June 1997;
- a Micro Business Consultative Group. Established in June 1996, the group comprises operators of 21 micro businesses and assesses the impact of government policies on micro businesses (including the impact of regulation);
- the development of a three year action plan for small business; and
- the introduction of a five year sunset clause for all new regulation.

3.3 Interpreting the focus on small business

Three major questions are useful for interpreting the stance on regulatory reform taken by recent governments:

- What is the stated rationale for a focus on small business, and is the rationale a persuasive one?
- Has the focus on small business actually generated selective regulations?

[5] Progress by each of the States and Territories in recent years in reducing the regulatory burden on small business is summarised in the Communique of the National Small Business Summit, Melbourne, June 1997.

- Are there other rationale for selective regulations by firm size or type?

The rationale for a small business focus

Much of the focus on small business is apparently premised on the sector's role in contributing to economic welfare. This view has enjoyed popular currency with many commentators and governments of all persuasions around the world — especially after Birch's (1979) findings about the job generating significance of small business.

In Australia, evidence on jobs (and in other areas) indicates the clear economic significance of the small business sector. For example:

- Revesz and Lattimore (1997) found that firms employing under 20 persons (representing around one–third of employment in 1995) accounted for about one–half of the new jobs generated in Australia from 1983–84 to 1994–95; and
- data on innovation show that small business is playing an increasingly important role over time. For example, in 1984–85, firms employing under 100 persons in manufacturing accounted for under 18 per cent of manufacturing R&D (measured in person years). By 1995–96, they accounted for close to 30 per cent of R&D.

Notwithstanding evidence of this nature, the contention that small business is the 'key' to the economy — and that this justifies a selective approach — faces some limitations for policy formulation. [6]

First, medium and large firms still account for the greatest shares of economic output and employment, and are also fundamental to economic growth, innovation and productivity increases.

Second, it is probably hazardous to pigeonhole small (or large) business as categorically innovative, dynamic or growth oriented, when there is such diversity in the types of businesses in either group. Small business encompasses firms across all sorts of sectors — and data on average earnings of workers, the qualifications of firm decision-makers, innovation tendencies, and a host of other variables suggest large variations between small firms. This heterogeneity presents problems for policymakers wishing to gear policies for small business as a whole group.

Third, while ascertaining the overall (actual or potential) role of a sector is a first step in determining whether policy formulation is warranted, it is not sufficient. A significant sector does not necessarily represent a ripe opportunity

---

[6] These issues are drawn out in greater detail in appendix A.

for successful policy formulation. The basis for special policies for a sector must rely on the identification of 'failures' — whether in markets, firms comprising the sector, or in the way governments interact. [7]

Are there selective regulations?

Much of what might be taken to be evidence of a 'selective' focus on small business (such as the Small Business Deregulation Task Force) can also be seen as a way of picking up information from smaller firms about the impediments they face with the regulatory environment. It is a corrective for information deficiencies that have always been less profound for governments' understanding of big business concerns. Obtaining better information for policy making is, by itself, not a manifestation of selective policy making — and indeed will usually produce better policies.

In fact, *most* moves on regulatory reform, even if justified on the basis of concerns for small business, have actually benefited all businesses. This tradition is set to continue with the Small Business Deregulation Task Force reforms accepted by government and which apply regardless of business size, including:

- enhancement of Australian Taxation Office efforts to reduce compliance costs for business through administrative simplification and the use of Regulation Impact Statements ;
- the establishment of a single entry point for government information collection;
- the development of a comprehensive national business information service (BIS) — to be achieved by building on the existing Business Licence Information Service (BLIS) and BizLink services;
- nationally consistent workers' compensation framework principles to be mirrored in all jurisdictions ; and
- greater consideration being given by governments to industry self-regulation as one of the first regulatory options .

Nevertheless, there are several regulatory measures which do discriminate between different firm sizes. Notable examples in Australia are Payroll Tax (small business exemptions), Sales Tax (small business exemptions), and Company Tax (payment by instalments for small and medium companies).

[7] The theoretical basis for special regulatory treatment of the small business sector is the subject of the next chapter.

Furthermore, the current Commonwealth Government indicated in its response (Howard 1997) to the report of the Small Business Deregulation Task Force that new selective measures to assist small businesses will be introduced (or have already been implemented). These include:

- an exemption from Fringe Benefits Tax record keeping, where an employer submits an FBT return in a base year with $5000 or less in taxable benefits, and thereafter does not significantly alter the amount of benefits provided;
- a legislative change to extend the amount of time in which small companies can lodge their returns and pay liabilities;
- eligibility for Capital Gains Tax rollover relief either where taxpayers sell their business assets, or shares in the company operating the business, and the proceeds are reinvested in upgrading the existing business or in another small business; and
- the exclusion from Federal unfair dismissal laws of new employees of small businesses with fifteen or fewer employees, until they have one year's continuous service.

So, to answer the questions posed above, the policy focus on small business *has* generated some selective regulations. And even if the *stated* rationale for selective policies has some limitations, there may still be credible rationales for some selective regulatory reform. This is the major thrust of the next chapter.

3.4 Concluding remarks

Commonwealth governments past and present have demonstrated their awareness of the costs of regulation and compliance. Recent government policy aimed at reducing the burden of regulation has ostensibly focussed on the small business sector. In fact though, many deregulatory moves prompted under the banner of small business regulatory reform have actually benefited all businesses.

Even so, there has been growing recognition that the small business sector comprises a significant part of the economy. And any *unique* problems affecting the small business sector could impose high penalties for economic efficiency in Australia — which potentially require policy redress. The challenge is to establish the economic rationale for such selective policies. That is the subject of the next chapter.

4 DIFFERENTIAL REGULATIONS FOR SMALL BUSINESSES : AN ECONOMIC FRAMEWORK

In the general case of government intervention and market failures it is likely to be inefficient for a government policy to be aimed only at specific firm sizes. Favourable treatment, or ‘selectivity’, may undermine competitive processes by disadvantaging an assisted firm’s competitors. This typically results in less efficient outcomes.

However, there are other *possible* rationales for differential regulatory requirements for small businesses (that will have the effect of easing their regulatory burden and reducing their compliance costs). This chapter critically assesses the economic rationale for such lenient regulatory treatment and how this may affect the design and implementation of regulations.

In the first section (4.1) we put forward an economic framework to explain the possible disparate impact of regulatory requirements across firm sizes. In section 4.2 we examine the circumstances when different regulatory targets may be appropriate for different sized firms (regulatory tiering). We also contrast tiering with alternative economic instruments. We then consider how a given regulatory target could be delivered in different ways to businesses of varying sizes (section 4.3). We turn then to any distributional and fairness impacts of regulation, and the extent to which these provide any additional rationale for selective regulation (section 4.4), before summing up (section 4.5).

4.1 An economic framework for regulatory impacts

Optimal regulations and tiering

An optimal regulation is one where no change in its specifications (such as method of administration, stipulated standards of performance, or eligibility of firms) can produce any additional net benefit.

When appraising the impact of regulations by firm size, this test is narrowed:

- Is there any way in which the differential *application* of regulations by firm size can produce net gains, taking into account the costs of isolating the information necessary for such a variable approach, and the costs of administration?

The differential application of regulatory requirements by firm size is generally known as 'tiering'. Such tiering is relatively commonplace in the US, but infrequent in Australia — although the Commonwealth Government's response to the Small Business Deregulation Task Force includes a raft of new measures to be applied selectively to small businesses (see chapter 3).

Tiering may be applied to any aspects of a regulation or tax: the substantive requirements, the monitoring efforts, the record keeping requirements and so on. There is a variety of tiering mechanisms available to policy makers but these can be usefully grouped under two broad headings:

- *Exemptions*. For example, smaller businesses may be exempted from the substantive requirements of a regulation or tax. Or they may be exempted from record keeping requirements or inspection programs.
- *Lighter regulatory requirements*. For example, these may involve a higher permissible rate of contamination in effluent, or lower safety standards. Or they may involve simpler or less onerous reporting/record keeping requirements, or reduced enforcement/monitoring efforts for smaller businesses.

The circumstances in which the differential application of regulations by firm size are justified are rather special and more restricted than might initially be supposed. The answer depends upon not just the relative costs imposed by a regulation on small and large businesses, but also several other important factors (box 4.1).[1]

The critical aspect — from an efficiency perspective — is whether any change in a regulation to take account of firm size differences can produce net gains (increase net social benefits).

Reducing the compliance costs of the regulation[2] for small businesses ($COMPLY_S$ in box 4.1), taken by itself, would appear to increase the net benefits of the regulation. However, the 'bottom line' will clearly also depend upon the balance of any changes in the other components listed in box 4.1:

---

[1] The derivation of the net social benefits shown in box 4.1 should be regarded as an illustrative tool — and not a definitive framework — to assist our understanding of how the differential application of regulations to small and large businesses might impact on economic efficiency.

[2] The regulatory burden imposed on small and large businesses is essentially captured by the $COMPLY_S$ and $COMPLY_L$ terms respectively. COMPLY would certainly include the cost to businesses of meeting regulatory requirements, and the costs of paperwork and administration. For the purposes of this illustrative exercise, the productivity costs (disincentive costs) aspect of the regulatory burden — discussed in chapter 2 — may also be considered to be part of the compliance costs component.

- how relative benefits and government administration costs vary by different–sized firms;
- the risks of rent seeking;
- the costs of incorrect calibration of any differential approach;
- the extent to which tiering distorts pricing and output as resources shift between small and large producers; and
- the up front costs of discovering where regulatory thresholds for tiering should be positioned.

In sum, the optimal regulatory setting requires considerable knowledge about the likely impact on the size distribution of firms and the costs and benefits of regulations in different enterprises. We now turn to examine these components in greater detail.

Regulatory compliance costs and scale economies

'One size fits all' regulations that impose uniform regulatory requirements across all firm types typically generate artificial economies of scale. This is because:

- Some compliance costs are likely to be costs that do not vary appreciably with firm size — so called 'fixed' costs (eg the time to fill out paperwork, reading and understanding regulatory requirements, consultation with regulators). This produces economies of scale as larger firms have the advantage of being able to spread these fixed regulatory costs over greater sales.
- Other compliance costs, while increasing with output, do so at a decreasing rate, so that there are economies of scale. For example, there may be gains from specialisation in certain aspects of regulatory compliance. As an illustration, a large firm can hire one or more expert staff whose only responsibility is regulatory compliance.

Box 4.1: The net benefits of regulations

Let us suppose for the sake of exposition that there are just two sizes of firms: small (S) and large (L). Prior to any regulation say that there is some externality produced per unit of output (pollution, industrial hazards for workers, safety hazards to consumers and so on) so that social benefits (in this case with a negative value) are:

$$B = -\hat{\alpha}\hat{E}_S - (1-\hat{\alpha})\hat{E}_L$$

where $\hat{E}_i$ is the externality per unit of output in the ith size of firm, and $\hat{\alpha}$ is the share of output in small firms.

Government then introduces a regulation intended to palliate this externality. The social benefits per unit of output (B*) are then:

$$B^* = \alpha Z_S + (1-\alpha)Z_L - \text{RENT} - \text{ERROR} - \text{REALLOC} \text{ where}$$

$$Z_S = \{\text{GAIN}_S - \hat{E}_S\} - \text{ADMIN}_S - \text{COMPLY}_S \text{ and } Z_L = \{\text{GAIN}_L - \hat{E}_L\} - \text{ADMIN}_L - \text{COMPLY}_L$$

where α is the share of output produced by small firms after enactment of the regulation and the other variables are explained in the table below. The gain from the regulation over the pre-regulatory state (NSB) is:

$$\text{NSB} = B^* - B = \alpha Z_S + (1-\alpha)Z_L - \text{RENT} - \text{ERROR} - \text{REALLOC} + \hat{\alpha}\hat{E}_S + (1-\hat{\alpha})\hat{E}_L$$

We can then note how NSB changes as we make marginal changes in the nature of the regulation affecting the two sizes of businesses:

$$d\text{NSB} = (Z_S - Z_L)d\alpha + \alpha(\text{dGAIN}_S - d\text{ADMIN}_S - d\text{COMPLY}_S) +$$
$$(1-\alpha)(d\text{GAIN}_L - d\text{ADMIN}_L - d\text{COMPLY}_L)$$
$$-d\text{RENT} - d\text{ERROR} - d\text{REALLOC}$$

noting that by construction $\hat{\alpha}$, $\hat{E}_L$ and $\hat{E}_S$ do not respond to the regulatory changes.

The insight of this characterisation is that regulatory re-design, including tiering, has effects on net social benefits through two distinct channels. First, the share of small business alters as regulations are re-designed (because regulations may affect relative prices and profitability between small and large firms) — and that can produce social benefits or costs, depending on the relative magnitudes of $Z_S - Z_L$. Second, regulatory re-design, by definition, directly affects all the other aspects of the impact of the regulation on firms, such as lowering compliance costs in small firms ($d\text{COMPLY}_L$), changing rent seeking behaviour ($d\text{RENT}$), and so on.

This framework can clearly be applied to externalities. But how is it relevant to taxes, which comprise the bulk of measures where small business perceives costly compliance? The answer is that the framework is still useful but that $E_L=E_S=0$ in that setting.

Box 4.1: cont'd

Definition of terms

GAIN is the benefit per unit of output from the regulation (eg reductions in costly effluent, noise pollution or unsafe work practices; gains from government tax expenditure etc);

REGAIN is the net externality after the regulation ($GAIN_i - E_i$) plus a constant ($\hat{\alpha}_i\hat{E}_i$). See Appendix B for the rationale for this form;
ADMIN is the government cost of regulation per unit of output;

COMPLY is firms' costs per unit of output of meeting the regulatory requirements (such as time spent in filling in forms, reading manuals, altering or installing new capital equipment, increasing manning levels, additional training and so on);

RENT is rent seeking activity by firms per unit of output (which we assume increases the more open to discretion and differential treatment are different sorts of firms or contexts);

ERROR is the costs per unit of output from incorrectly calibrating the regulation (for example, incorrect thresholds for exemption of certain firms may encourage other firms to mimic the characteristics of the exempt firms);

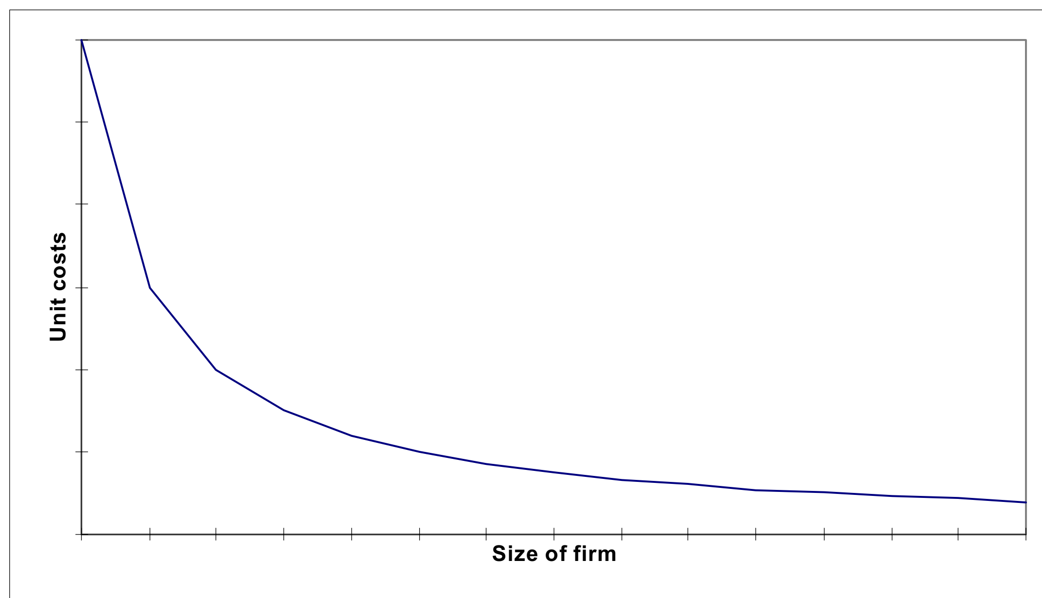
REALLOC are the costs per unit of output from those changes in the size distribution of firms which lead to higher prices and lowered output in the regulated industries. REALLOC is a positive function of the extent to which α changes as a result of a regulation, as well as other factors, such as the cost differential of production in small versus large enterprises, and the extent to which market power is increased as small firms exit an industry; and

S and L subscripts indicate whether a cost/benefit is in the small or large business sector.

The outcome is that the relative compliance burden on firms will decline in proportion to the quantity of goods and services produced (figure 4.1). [3] The slope of the compliance costs curve depends upon the importance of fixed relative to variable costs, and the extent to which variable costs per unit of output decline with firm size.

[3] The cost curve in figure 4.1 could theoretically also be adapted to include differential impacts on incentives posed by regulations. Regulations may stifle or distort incentives in firms to profit maximise, innovate or grow — but there is little evidence that regulations affect incentives in bigger firms differently from smaller ones. Another potentially important aspect, which we discuss later in more detail, is the possibility of regulatory non-compliance. To the extent that smaller firms are more likely to avoid compliance with some regulations, because of low probabilities of detection or through ignorance, this offsets the economies of scale effects of regulation.

Figure 4.1: Compliance costs of regulations and firm size



The existence of such economies confers competitive advantages on larger businesses as their relative costs decline, and this in turn may hinder the growth, birth and survival of small firms. At least in the short run, the introduction of a regulation with fixed compliance costs will tend to reduce rates of return on small business assets relative to larger firms. In the longer run this will typically deter entry by new small firms and/or encourage exits. This will occur until required rates of return are restored, but at an equilibrium in which the size distribution of firms has tilted somewhat towards larger enterprises.

The extent to which the size distribution of firms will change depends on a number of factors:

- The importance of compliance costs in total costs. If compliance costs matter little relative to overall costs, it is unlikely that they can have much bearing on the size distribution.
- The extent to which compliance unit costs vary with scale. If fixed costs of compliance are relatively small, and there are few scale economies in any variable component of compliance burden, then the curve in figure 4.1 would fall only slightly with scale — and it is unlikely that there would be any substantial shift in the size distribution of firms.
- The extent to which the share of production of goods and services in larger versus smaller firms responds to price variations between different sized firms. For example, a 2 per cent increase in the price of hairdressing services induced by regulation is unlikely to substantially alter the size

distribution of hairdressers. This is because there are quite marked diseconomies of scale — small increases in scale have large impacts on the competitiveness of an enterprise, as consumer convenience and preference for ambience is adversely affected. Therefore the regulation is unlikely to generate much, if any, substitution towards larger more centralised hairdressers. On the other hand, a 2 per cent increase in the price of a small cleaning contractor's costs may indeed prompt substitution to larger cleaning agencies.

- The extent to which overall industry demand responds to price changes induced by regulatory change. For example, suppose, as in the above example, that regulatory compliance increases the costs of hairdressing services, but that there are few options for substitution to larger enterprises which can effectively spread such compliance costs over more services. Suppose also that demand is highly price elastic. In this case, the impact of the regulation is a very significant cut in the output of hairdressing services. While this does not alter the size distribution of hairdressers much, because they are all small anyway, it may well alter the size distribution of firms in the economy as a whole, simply because one class of small firms have reduced output.

Benefit and net benefit considerations

But has figure 4.1 any policy significance? After all, fixed costs and other sources of economies of scale are natural parts of many technologies — and do not typically invite government intervention to offset them, even if they produce big shifts in the size distribution of firms. What then, makes regulatory induced economies of scale any different? To look at that question we have to examine how the benefits of regulations (REGAIN [4]), administrative costs (ADMIN) and deadweight costs (REALLOC) may vary across firm sizes. We now turn to the first two of these factors.

As discussed in chapter 2, regulations have benefits as well as costs. The extent to which these vary across firm size is relevant to regulatory tiering. The shape of the social benefit curve over firm size is much less certain than the compliance cost curve (figure 4.2):

- There are fixed costs in auditing and monitoring companies. It may make sense for the regulator to over-sample large enterprises in any monitoring activity, because they can then cover more of the overall output of an industry at lower cost. That is, the value of ADMIN required to achieve a

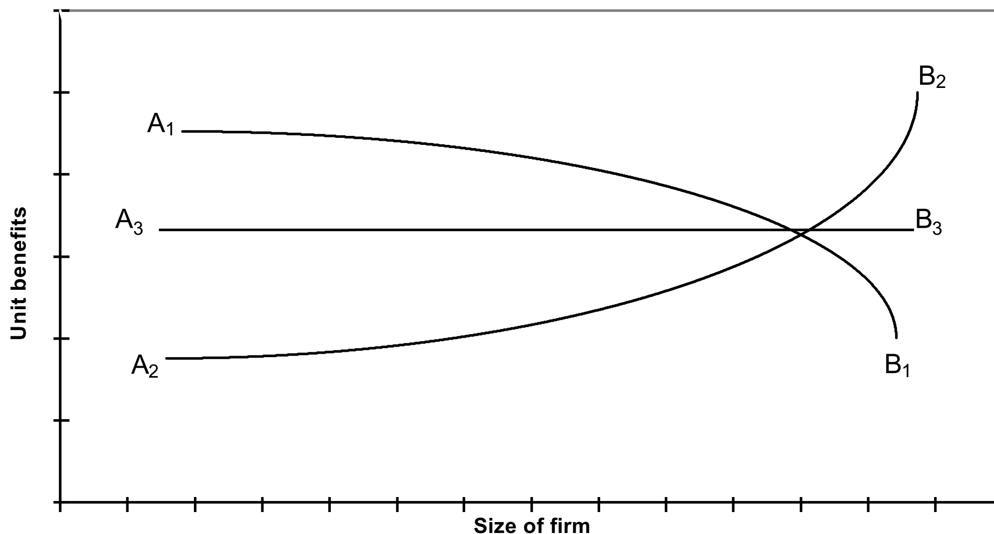
[4] See appendix B and box 4.1 to in terpret properly.

certain level of monitoring intensity may be much lower in a large firm than a small firm. To the extent that monitoring (and any associated penalties) increases compliance with a regulation, there are two effects: it somewhat offsets the scale economies of regulation and it increases the benefits derived from regulation of larger businesses (*assuming* that the regulation is justified).

- Large firms may generate larger or smaller externalities than smaller firms. This is essentially an empirical issue (see appendix B).
- Gross benefits may simply be equivalent across all size units (as in revenue collection).

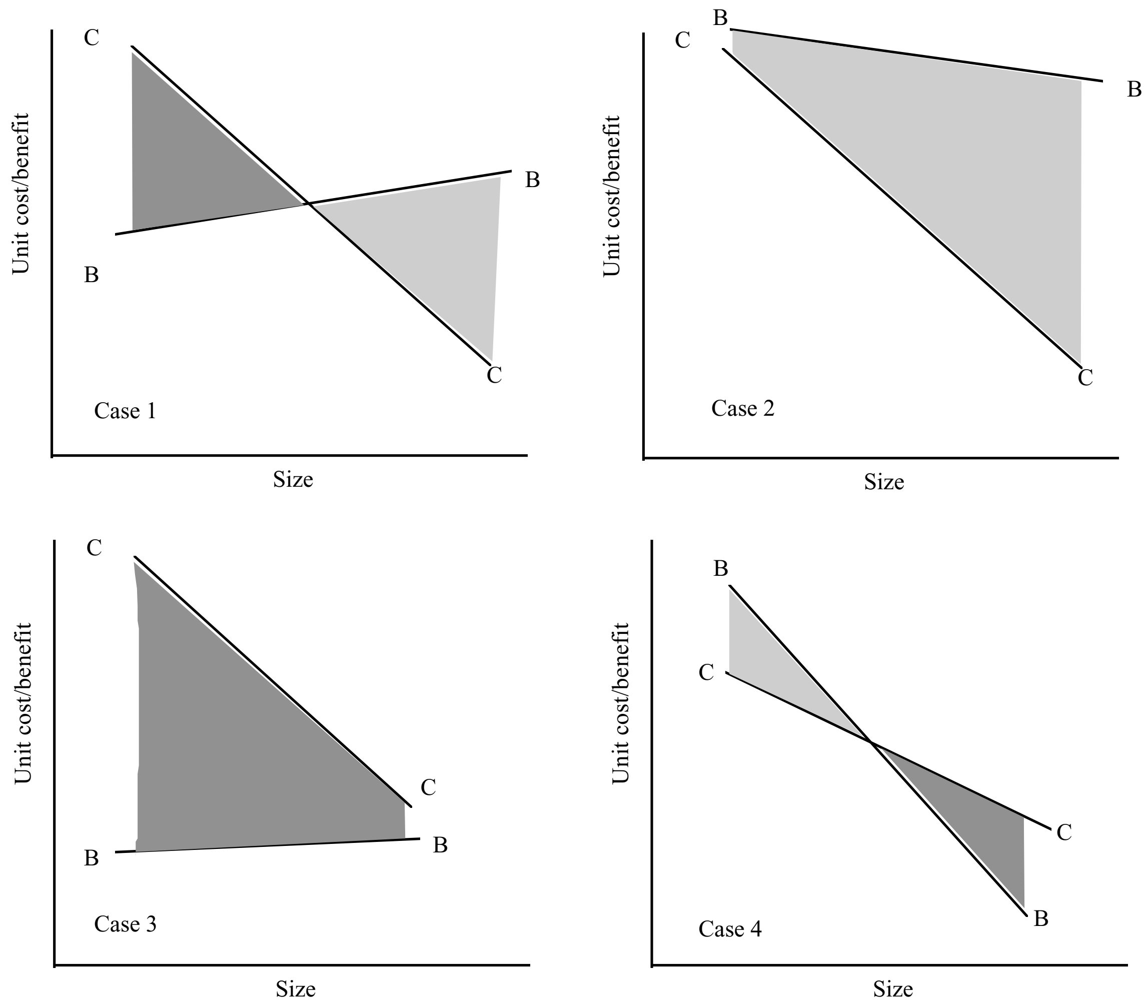
Thus it seems likely that for some regulations or industries, the benefit curve will slope up with size (A_2B_2 in figure 4.2), in others it will slope downwards (A_1B_1), and in others it will be flat. As well, the steepness of its slope will obviously vary depending on the industry and type of regulation.

Figure 4.2: Benefits of regulations by firm size



The characteristics of the social benefit curve may have an important influence on any decision by governments to vary regulatory requirements by firm size (figure 4.3).

Figure 4.3 Regulatory gains and compliance costs by firm size [a]



a The CC curve is the compliance burden per unit of output, while the BB curve is the regulatory gain per unit of output. The darker shading represents net costs, while the lighter shading represents net benefits.

If, for example, regulatory gains are less than costs for some firm sizes (as they are for small firms in case 1, and for large firms in case 4), there is a case for variable treatment of differently sized firms. If the gains are always less than the costs, then there is a strong case for either regulatory re-design or deregulation. If the gains are always positive (case 2) then this suggests retention of the regulation, but does not rule out variable treatment of differently sized firms. [5]

[5] For example, tiering of the regulation may lower the CC curve for small firms without substantial reductions in the BB curve (figure 4.3), so that bigger net gains from regulation may be realised.

4.2 Tiering of regulatory requirements

The gains from tiering

The value of regulatory benefits less compliance costs (or REGAIN less COMPLY in box 4.1) is not all that needs to be estimated when making judgements about the optimality of tiering regulatory requirements. In particular, a key issue is the extent to which a regulation affects the size distribution of firms (α) and engenders any efficiency costs (REALLOC in box 4.1). All other things being equal, regulatory tiering, in the form of weaker regulations for smaller business, is more likely to be beneficial under three conditions:

- when a uniform regulation decreases effective competition so that one or a few large survivors can extract monopoly rents from consumers (and there is a generally low price elasticity of demand for industry output); *or*
- where there is a low cross price elasticity of demand between small and large firms (and a generally low price elasticity of demand for industry output)[6]; and
- where the benefits of regulation are preserved.

We describe these three conditions in greater detail in the following sections.

A decrease in competitive pressures from a uniform regulation

Competition in an industry may be reduced, not only because of higher costs per unit for small firms remaining in the industry, but also because there may be fewer small firms around.[7] *If* competitive pressures are undermined then this can lead to reduced outputs, higher prices and to undesirable dynamic effects —

---

[6] We say *generally*, because, there are circumstances (not regarded as realistic), when the tiering is recommended regardless of the cross price elasticity — and is in fact most beneficial when the cross elasticity is highest! For example, say that the benefit curve (as defined in appendix B) sloped down severely with size. Say that tiering effected a substantial drop in compliance costs in small firms, but made almost zero impact on benefits. In cases like this, the higher the cross elasticity the greater the welfare gain from tiering (because we obtain the bigger benefits from regulation of smaller enterprises).

[7] Theoretically, the impact on competition could be in another industry. For example, say one industry was dominated by small firms, and another by a single large firm. If goods sold in one industry were close substitutes for those sold in the other (eg. butter, margarine), then the decline in the small business-dominated industry could generate some rents in the other industry.

such as reduced innovation and to higher unemployment through an increase in wage pressure in large firms (that is, increase REALLOC).

However, it should not be assumed that if the small firm share of a market falls that this always, or even typically, constitutes a decrease in effective competition. In many markets, it may well be enough to have a few large players to ensure effective competition. The crucial question is what constitutes that market. In some industries, markets are highly local — a particular region or even district of a city or town. In these contexts, while there may be many players across an aggregation of markets, there may be too few players to ensure effective competition in the micro-markets.

Moreover, even if competition is weakened, policy makers need to make an assessment of the appropriate instrument for dealing with this. Regulatory tiering may be one option. But so too may be recourse to legislative provisions against anti-competitive behaviour.

Low cross price elasticity of demand between small and large firms

In industries where small firms are the sole mode of organisation, or where small and large firms are not substantially competing with each other, regulatory tiering, by lowering compliance costs relative to benefits, may improve economic welfare (see the elasticity section of appendix B for details). Why is this so, and when will this situation arise?

- *Why?*: Where small and large firms are non-rivalrous modes of production, then the introduction of a regulation with high compliance costs per unit of output for the small firms will not result in any significant shift in the size distribution in *that* industry.[8] This means that we can more effectively undertake a cost-benefit analysis and re-calibration of regulation in this small business market alone, without having to worry unduly about what is happening to benefits and costs in the large business market. As the size distribution is effectively invariant to compliance costs, there are no external feedbacks (the potential offsetting losses in benefits as resources shift across firm sizes) we have to include in our cost-benefit analysis. The point to emphasise is that (as in box 4.1) the aspiration of regulatory design is to maximise the social benefits of a regulation across a *whole* economy. Where production in large and small firms is non-rivalrous, it is legitimate to conduct 'local' cost-benefit studies of a regulation for each size grouping of firms, and to draw lessons about regulatory settings from each study. Where they are rivalrous, this is

[8] Although it may affect the economy–wide size distribution, if many small firms exit as a result of the regulation.

no longer true. Another way of thinking about this is to imagine the situation where small and large firms are highly rivalrous. In this case, when a costly regulation occurs, there is a natural mechanism which reduces the economic impact of the regulation. Activity shifts from costly compliers (small firms) to those who can more cheaply meet regulatory requirements (bigger firms). In this scenario, the introduction of tiering can work against this natural mechanism. In the absence of the market structures and demand characteristics that produce these rivalries, there is no such mechanism, and therefore less concern over the use of tiering.

- *When?*: Costs and consumer preferences (for proximity, flexibility, variety, charm or ambience for example) can mean that small firms have a substantial competitive advantage over any potentially larger firms in a particular industry or market segment. Effectively the cross price elasticity of demand between goods produced by bigger firms and those by smaller firms is very small, or not even defined. In these markets, there may be no large firms at all (for example, in many personal services there are few large enterprises). The higher the degree of service (or good) differentiation, the less rivalrous are alternative modes of production.

There may be grounds for tiering where these market circumstances arise, so long as the impact of the reduction in the regulatory standard decreases regulatory costs by more than any decrease in regulatory benefits.

As an extended illustration of when these circumstances might arise, say that all sorts of service providers, across all sorts of sectors, faced an ‘encyclopedic’ set of occupational, health and safety requirements. This may involve relatively large compliance burdens for the small enterprises in some sectors (say, hairdressers), but manageable ones for the large service providers in other sectors (say banking). The compliance burdens raise the relative price of the services provided by the smaller enterprises.

In some industries, that is not a problem. Consumers see larger enterprises as close substitutes to small ones, and so long as their increase in market share does not reduce effective competition, then there are few allocative inefficiencies.

But in other industries, it is not feasible to produce these goods or services in large enterprises at costs which consumers would bear — and so there is no route for minimising the compliance costs. In these industries, regulatory tiering, by lowering compliance costs relative to benefits, may improve

welfare.[9] Note, however, that such tiering is effectively not on the basis of size, but rather on the basis of an industry.

Preservation of benefits

The process of tiering regulatory requirements has to be such that it does not excessively reduce the benefits derived from regulation of small firms. Under some circumstances, a regulation may be sufficiently emasculated that low compliance burdens in small business may also be associated with near zero social benefits from the regulation.

Some examples

For illustrative purposes, tables 4.1 to 4.3 provide some theoretical numerical examples where tiering is appropriate and inappropriate. While the examples illustrate the possibility of gains from tiering, they also provide some more subtle lessons on the impact on net social welfare of tiered versus uniform regulations:

- tiering can tilt the compliance cost curve until it is always below the regulatory benefit curve, yet it can still reduce net social welfare. This can happen if small and large firms are close enough substitutes that tiering shifts the size distribution of firms significantly towards smaller enterprises. In turn, this means that, where bigger firms generate bigger net benefits from a regulation than smaller firms, the overall weighted average of net benefit per unit of output actually falls (for example, under assumption B2). This 'anomaly' is more likely to occur when the justification for tiering is the impact of uniform regulation on competition, than when the justification is the low substitutability of small and big business; [10]

---

[9] So far we have referred to the size of the *enterprise* as the relevant concern. This is probably true for some forms of compliance costs such as those associated with taxation. It is less clear that the size of the establishment may be relevant for other regulatory compliance issues.

[10] Note, for example, that the relative benefits of tiering under assumption A1 is less than under C1. This is because some of the benefits of tiering are whittled away under A1 because the small business sector expands so much.

Table 4.1: The impact of tiering when uniform regulation is inimical to competition [a]

	Uniform regulation	*Regulatory tiering*	
		Assumption A1	*Assumption A2* [b]
	$ per unit	$ per unit	$ per unit
α	0.3	0.4	0.6
$REGAIN_S$	10	7	1
$ADMIN_S$	0.5	0.3	0.3
$COMPLY_S$	11	6	3
$REGAIN_L$	12	12	12
$ADMIN_L$	0.25	0.25	0.25
$COMPLY_L$	4	4	4
RENT	0	0.25	0.35
REALLOC	1	0.35	0.15
NSB	3.975	4.33	1.22

a The term ERROR from Box 4.1 is ignored in this analysis, because we assume that it is zero throughout.
b This scenario assumes that, as compliance burdens increase, they initially extract increasing returns in terms of regulatory benefits, and then declining returns. Thus, as compliance burdens on small business are decreased from some high level, benefits initially fall at a slower rate than the costs. But at some point, it is possible that a drop in compliance costs, while helping the small firm, almost eliminates the benefits from regulation too.

Table 4.2: The impact of tiering under a high cross price elasticity of demand between large and small business [a]

	Uniform regulation	*Regulatory tiering*		
		Assumption B1	*Assumption B2* [b]	*Assumption B3* [c]
	$ per unit	$ per unit	$ per unit	$ per unit
α	0.3	0.35	0.4	0.37
$REGAIN_S$	10	7	7	1
$ADMIN_S$	0.5	0.3	0.3	0.3
$COMPLY_S$	11	6	6	3
$REGAIN_L$	12	12	12	12
$ADMIN_L$	0.25	0.25	0.25	0.25
$COMPLY_L$	4	4	4	4
RENT	0	0.25	0.25	0.35
REALLOC	0.5	0.35	0.25	0.15
NSB	4.48	4.68	4.43	3.53

a The term ERROR from Box 4.1 is ignored in this analysis, because we assume that it is zero throughout.
b This scenario is based on even higher degrees of cross price elasticity between large and small companies. This implies that tiering will have a big impact on the small business share of output (α). It also implies the resource allocation costs (REALLOC) of regulation — while already low — will be lower again.
c As in Assumption A2 above.

Table 4.3: The impact of tiering under a low cross price elasticity of demand between large and small business [a]

	Uniform regulation	*Regulatory tiering*	
		Assumption C1	*Assumption C2[b]*
	$ per unit	$ per unit	$ per unit
α	0.3	0.305	0.31
$REGAIN_S$	10	7	1
$ADMIN_S$	0.5	0.3	0.3
$COMPLY_S$	11	6	3
$REGAIN_L$	12	12	12
$ADMIN_L$	0.25	0.25	0.25
$COMPLY_L$	4	4	4
RENT	0	0.25	0.35
REALLOC	1	0.35	0.15
NSB	3.98	5.00	4.13

a The term ERROR from Box 4.1 is ignored in this analysis, because we assume that it is zero throughout.
b As in Assumption A2 above.

- the existence of large economies of scale in unit compliance costs or of increasing unit social benefits is not, *by itself*, a basis for tiering. To the contrary, if large and small businesses are close substitutes and competition is not adversely affected by tilting the size distribution of firms towards larger enterprises, then the greater the scale economies in compliance and the greater are unit social benefits with firm size, the *less* should tiering be entertained; [11] and
- while tiering may reduce small firms' compliance burdens, it may also sufficiently reduce the benefit of a regulation that it reduces overall welfare (assumption A2, B3 and C2).

Potential problems with tiering

The discussion above has focused on benefits, compliance costs and allocative efficiency costs (the REGAIN, COMPLY and REALLOC terms) in the net social benefit equation (see box 4.1). Other tiering problems may arise as a result of difficulties with the remaining equation components.

[11] This can be appreciated by simply seeing what happens to the net social benefit of a tiered regulation under assumption B2 when $COMPLY_L$ falls and $REGAIN_L$ rises.

Susceptibility to error

The economic benefits and costs of tiering should be robust to small errors in the thresholds set for tiers (ie ERROR is small in the context of the framework set out in box 4.1). This is because governments may not have precise enough information to determine policy settings in a way akin to engineering problems. Errors have to be expected, and the costs of those errors should not be too large.

However, it is not clear that the benefits and costs would be robust to mistakes in setting thresholds. Care is required in reaching conclusions on changes in the net benefits when tiering thresholds are introduced, as the overall result depends upon the reaction of several variables.

Some of the practical problems of setting thresholds can be illustrated by an example comparing compliance costs and the tax revenue forgone in payroll taxes. The tax–free threshold for payroll tax ranges from $456 000 in South Australia to $800 000 in Queensland (table 4.4). For a small business operating just below the threshold, the tax revenue forgone is calculated by reference to the payroll tax rate at the margin. This shows that the states are forgoing between around $25 000 per firm (Western Australia) and $41 000 per firm (NSW) in tax revenue per year.

Table 4.4: Payroll tax revenue forgone for firms at the tax–free threshold, by state (as at July 1997)

State	*Tax–free threshold*	*Tax rate at margin*	*Revenue forgone from firms at the margin*
	$	per cent	$
New South Wales	600 000	6.85	41 100
Victoria	515 000	6.25	32 188
Queensland	800 000	5.00	40 000
South Australia	456 000	6.00	27 360
Western Australia	675 000	3.65	24 638
Tasmania	565 000	7.00	39 550

Sources: NSW Treasury 1996. State of Victoria 1997. Government of Western Australia 1997.

But this does not necessarily mean that the exemption is incorrectly set, even though it does not maximise government revenue. The factors important to making an assessment of any exemption, if appropriate at all, are:

- the distorting impact of the taxes on incentives (such as reduced incentives to work) — the so-called ‘marginal excess burden’ of taxation (MEB).

Payroll taxes are largely seen by economists as taxes on labour income, even though they are levied on business. This suggests that standard estimates of the MEB — of around 30 cents in the dollar — are likely to be relevant;

- the costs of administration (ADMIN), which are likely to be very low — several cents in the dollar;
- compliance burdens on firms (COMPLY). Empirical evidence presented in chapter 5 suggests that the compliance costs for payroll tax for firms of this size would probably be around $2600; [12] and
- the social return (SR) to government expenditures. This is the extent to which government expenditure yields social benefits as a percentage above the amount of revenue raised. [13]

What is the level of SR required at the margin for government expenditure to go ahead? It is:

$$SR = \frac{(ADMIN + COMPLY + REVENUE + MEB)}{REVENUE} - 1$$

If the government does not get at least SR then the deadweight losses associated with tax collection outweigh the social benefits.

Assume for the moment that governments set payroll tax exemptions at that point at which the social return from tax revenue no longer is sufficient to meet the deadweight costs. In the case of NSW this implies a SR of:

$SR_{exemption} = (822 + 2600 + 41100 + 12330)/41100 - 1 = 38.33\%$

Now consider a firm which has a lower payroll of $500 000. If this firm were subject to payroll tax (with the same level of absolute compliance burden) then the implied social return is:

$SR_{extramarginal} = (685 + 2600 + 34250 + 10275)/34250 - 1 = 39.59\%$

---

[12] Based on the assumption t hat wages and salaries represent around 14% of turnover (IC and DIST, 1997) and using the compliance cost data from table 5.1.

[13] The methodology outlined here is appropriate for taxes whose purpose is revenue collection, but not some other taxes. Some taxes are (at least in part) designed to change a particular type of behaviour or activity (such as the tax on tobacco, the Fringe Benefits Tax and the Health Insurance Levy). In these cases, the social benefits associated with the tax will not be some mark up on the revenue raised (indeed, from a social welfare point of view, the less revenue raised the better the outcome).

or a 1.26 percentage points difference. This suggests that a very small deviation in the rate of social return achieved by governments has a quite dramatic effect on the optimal exemption threshold. [14]

But decisions to set exemption levels suffer from other, subtle, problems. Exemption setting needs to take account of the dynamic adjustments that may occur as firms close to the threshold reduce output in order to gain tax (or regulatory) exemptions. This introduces two additional problems. First, it is a source of a second tier of distortions beyond those captured in the usual measures of the MEB — as smaller firms with higher unit costs displace bigger firms with lower unit costs. Second, it undermines the revenue base of the tax itself as firms shrink in size (or hover beneath the threshold, unwilling to grow).

The setting of thresholds on the basis of relative compliance costs between firms is clearly susceptible to error. Uncertainty over the 'correct' threshold for exemptions may make it appropriate for governments to focus more on other forms of tiering instruments which lighten regulatory requirements, but do not provide a total exemption.

Rent seeking

Tiering may encourage rent seeking as different lobby groups try to have thresholds in any tiered regulation calibrated in their favour. From the firms' perspective, it is worth lobbying for additional profits up to the point where the marginal cost from more lobbying equals the expected marginal gain. As noted by Ayres and Braithwaite (1992), the more complex are regulations, the greater the likelihood that (larger) firms or interest groups will seek to exploit that complexity by finding loopholes and otherwise evading the spirit of the regulation.

In the absence of reliable data on the social benefits of regulations, governments are susceptible to being unduly influenced by lobby groups in their decisions relating to tiering instruments — including exemption threshold levels. Moreover, the lobbying efforts themselves represent a use of resources which could be diverted to more productive uses.

Administrative costs of complexity

'One size fits all' regulations have the administrative benefit of being applicable to all firms covered by the regulation. But in cases where tiering is applicable — for example, in the form of exemptions or reduced compliance requirements

[14] This exercise can be repeated for other states — and the results imply quite divergent estimates of the threshold rate of SR.

— it immediately introduces a degree of administrative complexity. The regulatory authorities have to devote resources to defining thresholds, checking the eligibility of firms, monitoring the efficiency and effectiveness of the tiered regulation and so on. These government administration costs resulting from tiering ought to be taken into account when firms' compliance costs are being compared with the benefits of regulations.

We note, however, that administrative costs associated with regulations appear to be much smaller than firms' compliance costs (Rimmer and Wilson 1996), and that there may be scope for some trade–offs between the two.

Inadequacies in information

In theory, the extent of tiering should take account of how the parameters identified in box 4.1 varied across firm sizes. But, to set appropriate thresholds for (say) exemptions or lower regulatory standards, sufficiently rich information has to be available. This may involve onerous information collection costs. In fact, the ready availability of accurate data may be a forlorn hope in many circumstances — and particularly in relation to social benefits. It is extremely difficult either to estimate total benefits or to allocate those benefits amongst firms and others affected by regulations — with the consequence that benefits are commonly ignored by advocates of regulatory tiering. As the US Small Business Administration (SBA 1995) puts it:

> The burdens of regulation, like taxes, fall specifically on the persons or businesses that pay, whereas the benefits tend to be more general distributed. Therefore the complaints of the regulated will be more focused than the appreciation of those benefiting from the regulation. Thus ...it is common to focus on the more obvious costs of regulation...

A focus on compliance costs brings its own problems. First, if these are alone used as the basis for tiering, they could produce quite inappropriate thresholds for regulations. Second, these can also be difficult to measure accurately — as we show in the next chapter.

In the absence of reliable information, there is a real risk that regulators may get things wrong — not only on the appropriateness of some form of tiering, but also on the types of instruments and their operations. Assisting smaller firms in these circumstances is just as likely to lead to efficiency losses as efficiency gains.

Inadequate information may be less of a problem in cases where market–based instruments are employed (see below), as the price mechanism will encourage firms to identify the true costs and benefits of a particular regulation. However, inadequate information may still present problems to regulatory authorities

when defining and monitoring appropriate indicators of the regulated activity (for example, environmental damage in the case of tradeable permits).

Market–based mechanisms : an alternative to regulatory tiering?

Market–based mechanisms — sometimes known as economic instruments — work by using market signals, such as prices, to provide an incentive to interested parties to integrate the relevant regulatory concern into their everyday decisions. [15]

Economic instruments have obvious potential applicability to regulations where some parties outside the firm face costs from the firm's actions (for example, workers in OH&S and the general public and other industries in the case of pollution externalities).

Such economic instruments may allow optimal tiering. For example, say that it is cheap to monitor water quality of factory effluent, and that a government agency taxes a firm at different rates depending on the different levels of contamination of the sampled water (with the tax rates set so that the revenue raised equals the estimated environmental cost). Each affected firm can decide how best to deal with these taxes. A large firm may find it economic to train its workers, appoint specialist water quality assessment staff, research new ways of dealing with water pollution, and install new equipment. A smaller firm may find that some of these methods are too costly and choose a different trade off between costly taxes and costly methods of lowering effluent contamination. In theory, each firm will choose the optimal trade off, and social welfare is maximised. The market outcome, notably, is not one in which emissions are identical for all firms in similar circumstances — as would be the case under a uniform regulation.

These sort of economic instruments have a range of advantages over bureaucratically managed tiering:

- Probable informational advantages. With economic instruments firms make trades between the costs of the externality and ways of reducing that cost. That sort of decision making requires abundant context-dependent information. It is likely that firms are better able to make the optimal judgements than government because they have cheaper access to the information required. On the other hand, if regulation is used,

[15] For a description of various economic instruments and how they are used in practice, see Industry Commission (1997a), *Role of Economic Instruments in Managing the Environment*.

governments must try to get firms to honestly disclose all the relevant information in order to design an optimal regulation.

- Incentive compatibility. Firms have incentives to use the right information and to find new low cost ways of reducing pollution. If a firm or group of firms make a wrong decision, it will tend to be self-correcting. This is because, over the longer run, sub-optimal decision makers face strong incentives to learn how to improve, or they run the risk of being displaced by other firms. Regulatory solutions are, arguably, open to greater rent seeking and lack the strength of the feedbacks inherent in market instruments.

On the other hand, such economic instruments cannot be applied to all regulatory areas and suffer from some other limitations (IC, 1997a, pp. 35–36; Grabosky and Braithwaite, 1986, pp. 184–85).

4.3 Flexibility of regulatory delivery

Many of the concerns of small business — or, indeed, any sized business — do not relate to the *application* of regulatory requirements, as discussed in the previous two sections. Rather, they relate to the *administrative processes* (or lack of them) that exist to *achieve* the requirements of regulations or taxes — that is, in the way regulations are 'delivered' to businesses (box 4.2).

Business concerns over these processes include:

- the paperwork;
- the way in which enforcement is achieved;
- the level of prescription (excessive or not enough);
- uncertainty about regulatory requirements (the purpose?; what is required?; when it is required?);
- how long it takes regulators to make judgements;
- the confusion between legislative requirements and voluntary 'guidelines';
- the costs of dealing with a large number of regulators (and variety of jurisdictions) and confusion about who the relevant regulator/administrators are for any given piece of regulation; and
- complaint and feedback mechanisms.

Box 4.2: Business views on the delivery of regulations

'The amount of paper work all the different government bodies are placing on small business is too much. The problem being they all want the same or similar things.'

'When laws change it would be nice to be informed in "Plain English" instead of having to read a leaflet for one hour to decipher what our obligations are. We are now reluctant to employ staff full time because of the paperwork and obligations involved.'

'An enormous amount of administration work is put towards administering the numerous different taxes. If this administrative work could be directed to productivity and efficiency of manufacturing we would all be much more competitive. (*Why not have*) a one stop shop for setting up a new business — which deals with all government departments and other approval processes required, and with a time limit to complete approval or rejection.'

'This problem is often exacerbated by bureaucratic red tape...The plethora of reporting and conformance requirements is time consuming and demanding. This can divert us from our primary objectives of producing and marketing quality products competitively.'

'I carry a letter in my wallet stating that in the event of my incapacitation through illness or misadventure, and if the position attains that my continued vitality is in doubt, the overruling criterion for the decision to disconnect life-support systems shall be the non-appearance of any form of government sourced paper-work referring directly to me or my personal or business affairs. I believe that if the paper-work has stopped I can safely be declared dead. If by that time I have in fact become desiccated and shrunken, then I should be buried by being filed away in a Government hanging file marked "Returned to Sender".'

Source: Survey addendum responses to the ABS *Business Growth and Performance Survey, 1994–95*.

Regulatory reform should clearly be aimed at reducing any arbitrary, ineffective, or other badly designed features of a regulation — poorly designed and over complex forms, excessively frequent reporting, unnecessary overlap, unclear requirements etc — *regardless of where the burden is felt*. But there may be circumstances where improved regulatory outcomes can be achieved by varying some aspects of the delivery of regulations by firm type (such as by their size). For example, rather than simply indicating to small businesses their obligation under a regulation or piece of complex legislation, governments can adopt a more flexible approach by introducing procedures to help small businesses understand and deal with the administrative complexities.

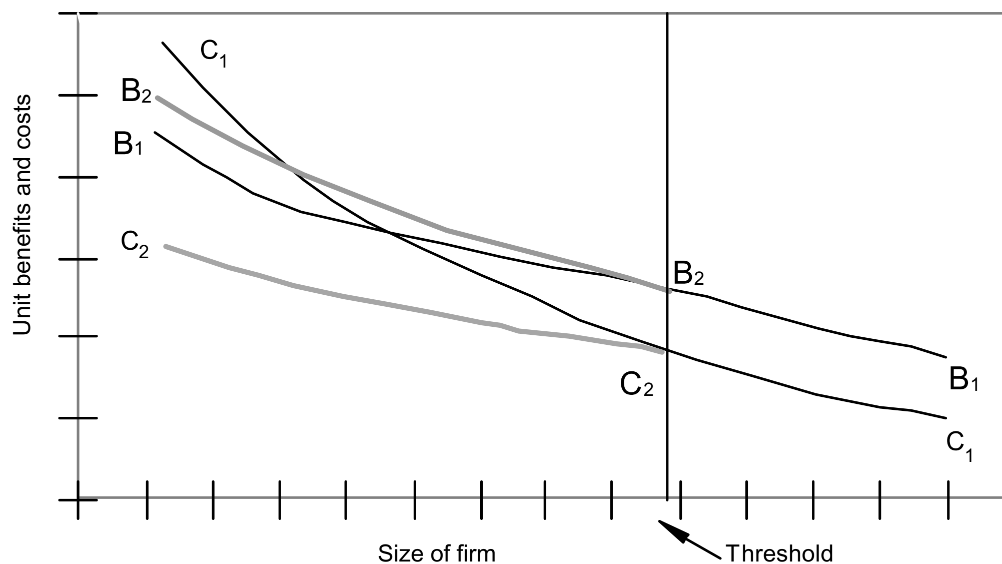
Variations in the delivery of regulatory requirements according to firm size can be provided by governments through a variety of means, such as:

- providing information and advice to certain businesses;
- designing different forms and paper work for different sized businesses or different industries;
- developing software to ease compliance; and
- writing flexible regulatory contracts.

Regulatory flexibility has the scope to decrease regulatory costs, by easing compliance and providing better information to those firms having the greatest difficulty with regulation. And unlike tiering, flexibility in the way regulations are delivered to businesses does not weaken the standard or objective of a particular regulation or tax — safety, emissions, tax rates etc — and so cannot plausibly lower the benefits of a regulation. In fact, by lowering compliance costs, it may increase actual compliance and increase social benefits.

Where the unit benefits of a regulation are non-increasing with firm size, then better delivery of a regulation which lowers compliance costs without reducing benefit levels *must* be welfare improving (figure 4.4). [16]

Figure 4.4: The benefits of flexible delivery



a The initial cost curve is C_1C_1 and this drops to $C_2C_2C_1$ (meeting the old cost curve at the firm size where flexibility is unchanged or has no impact). The initial benefit curve is B_1B_1 and then increases to $B_2B_2B_1$.

This is true for three reasons:

- any existing output from smaller firms is now produced with less compliance cost;

---

[16] This assumes the administrative costs involved are not significant. Also, it shoul d be noted that regulatory flexibility may not be welfare enhancing where benefits per unit of output are *higher* in large firms than small ones. This is because as compliance costs are lowered in small firms, consumers switch demand from larger to smaller firms, forgoing some of the benefits of the regulation.

- any shift in demand to smaller firms must involve, at worst, equal external regulatory benefits (because the benefit curve is either flat or slopes downward); and
- the revealed preferences of consumers. It may be thought that there is an economic inefficiency as consumers switch at the margin from bigger firms (who still have a compliance cost advantage) to smaller firms. However, to the extent that any such switch takes place, consumers are revealing the higher valuation they place on the distinctive attributes of small business (proximity etc) relative to the small price premium occasioned by higher compliance costs.

An example where it may be worthwhile to vary the method of delivering or casting a regulation is the provision of Internet, telephone and other contact services to help relatively unsophisticated, typically smaller, firms comply effectively with a regulation. These may include one stop shops to assist firms in meeting an array of regulations associated with a particular business activity.

Australian governments are already addressing such issues. [17] For example:

- The ATO has developed a number of publications — in consultation with small business groups — to make it easier for small business to understand and access relevant tax information. [18] The ATO is also developing better ways of disseminating tax information to small business — it has made information available via the Internet and is expanding its fax information service to allow low cost, readily available access to certain tax information.
- In addition, the Commonwealth Government has accepted the Bell Report recommendation for the development of a comprehensive national business information service (BIS) — to build upon the existing Business Licence Information Service (BLIS) and BizLink services. According to *More Time for Business* (Howard 1997), the development of the BIS will involve the amalgamation and integration of information that currently is available from separate and uncoordinated sources. Priority is to be given to tax information and employer obligations such as superannuation, industrial relations, workers' compensation and occupational health and safety, although information covering codes of practice and other quasi-regulatory requirements will also be included. A national phone hotline for

[17] The United States has also introduced a number of measures to assist with the delivery of regulations to small business. See appendix C.

[18] For example, *A Tax Guide for New Small Businesses* and *A Guide to Keeping Your Business Records.*

information on how to resolve regulatory difficulties and problems will also be established.

In other cases, improved regulatory outcomes may be achieved by providing information to certain classes of firms about ways in which they can minimise breaches. For example, different sorts of firms in different industries have varying health and occupational safety risks (such as exposure to toxic substances in a chemical or paint manufacturing plant, and lifting and slippage injuries in a motor repair outlet). Importantly, *it may improve the likely benefits of a regulation* if selective information is provided to these different classes of firms, depending on the likelihood of firms actually using it (and the administrative costs of providing the information). There would be little point in providing massive and detailed documentation of any given OH&S risk to a small retailer — the risks most pertinent to them would be concealed in the mass of detail. A higher degree of effective compliance may be achieved by tailoring information flows appropriately. [19]

One counter to this suggestion is that markets could perform this function anyway — consultants could collect data on risks (effluent, OH&S, unfair dismissals, etc) and, once appropriately packaged to the class of client, sell it. However, it should be noted that the regulator may have large advantages in performing this informational task over other agents because their regulatory role requires them to systematically collect information on breaches. [20]

Moreover, there may be grounds for a negotiated rule making process between firms and the regulator (Ayres and Braithwaite, 1992, pp. 106 ff):

> Under enforced self-regulation, the government would compel each company to write a set of rules tailored to the unique set of contingencies facing that firm. A regulatory agency would either approve these rules or send them back for revision if they were insufficiently stringent.

The Law Reform Committee of the Victorian Parliament (LRC 1997) recently suggested that a negotiated rule making approach could be adopted with respect

[19] The Bell report recommended that ‘a ll jurisdictions and Worksafe Australia should provide simple and practical guidance for small business on implementing OH&S standards and codes of practice. ’ The Commonwealth Government has agreed in principle to this recommendation (see Howard 1997).

[20] It may be appropriate for the regulator to simply provide the detailed statistical information to any private agent for free (this is close to the right price since the regulator would have to collect the information anyway, and the marginal cost of providing information is close to zero). Such private agents would have incentives to find significant differences in the patterns of risk of different classes of firms and could in turn sell this processed information to the firms themselves or to other parties (such as insurers or back to the regulator).

to state regulations. A key recommendation of the committee's final report into regulatory efficiency legislation was the introduction of an 'alternative compliance mechanism' that would allow a business (small or large) to propose its own set of regulations in any area. Such proposals would be published, opened to public debate and vetted by the authorities to ascertain they met the objectives of the regulation(s) it was replacing.

Negotiated rule making arrangements of this nature share some of the features of market–based instruments — such as trade offs between compliance costs and benefits, adaptability to changing business environments and providing incentives for cheaper compliance methods. On the other hand, such flexible arrangements have some problems:

- the costs of negotiating (and periodically re-negotiating) specific rules across many firms, including delays for the firms;
- the risk of capture of regulators by firms may be higher; and
- small firms would face high costs in writing and enforcing their own rules.

However, such a flexible approach may be feasible for some larger firms in certain industries (or for industry associations acting on behalf of many small firms). For example, the Canadian Railway Safety Act 1989 allows railways to devise their own safety rules under certain circumstances, and this has apparently lowered compliance costs without any impact on safety (BIE, 1996a, p. 69). Cooperative agreements by large firms to achieve greenhouse gas abatement (BIE, 1996b) and the Altona Chemical Complex regulatory agreement (BIE, 1996a, p. 72) represent Australian examples of a flexible approach. These examples illustrate that, in some cases, delivery tiering will be aimed at increasing flexibility and lowering compliance costs in the largest firms, rather than the smallest.

Regulators' perspectives

What about the regulators' perspectives? Regulators have the task of achieving some regulatory objective subject to political and budget constraints. Regulators have to deal with a huge diversity of firms, and face varying costs:

- in providing information to firms;
- from failures by firms to meet a given regulation (for example, the costs stemming from a chemical spill in a populated setting compared to a remote setting); and
- in monitoring.

The response by regulators to these costs may not always be appropriate. For example, there is probably some substitution possible between administrative

costs borne by the regulator and compliance costs faced by the firm. Where this is the case, regulators may design a regulation which is administratively cheaper to run, but which imposes high compliance costs on firms (especially smaller ones).

Regulators also observe different responses by different classes of firm to any given policy measure. Some classes of firm have very high average compliance rates. Others do not. Some types of firm will increase their compliance appreciably after a warning or minor penalty; others require bigger penalties.

Given fixed budgets and other constraints, and the real world behaviour of regulated firms, how *should* regulators optimally behave? They should:

- Deliver a regulation (such as providing information and advice to firms, designing different forms and paper work for different sized firms or different industries, developing software to ease compliance and writing flexible regulatory contracts) in a way that maximises compliance benefits per dollar of 'adcom' costs [21] (where adcom is the sum of the regulator's administrative costs and an estimate of the compliance costs of the firm).
- Allocate monitoring among different industries and firm types until the marginal benefits of monitoring are equalised. We can scarcely conjecture what the exact pattern of monitoring among different types of firms would be, but it is very unlikely that all firm types and sizes should be equally monitored. For example, the ATO selects certain business activities for special scrutiny on the basis of past auditing evidence. This is a form of tiering.

Summary

Arguably, 'delivery flexibility' more appropriately allows for the heterogeneity of firms than varying regulatory requirements — and would be a more fruitful area for regulatory re-design.

It should be noted that such flexibility does involve some risks, for example:

- differential provision of information and auditing practices might be perceived as 'unfair' by some stakeholders. On the other hand, under the 'flexible delivery' model, all stakeholders have to observe the same regulation — they are 'equal before the law'; and

[21] This condition would be the same as equating the marginal compliance benefits of the regulation with its marginal 'adcom' costs in the absence of a budgetary constraint. However, with such a constraint present, maximising compliance benefits per dollar of 'adcom' costs may well occur at a point where marginal benefits are greater than marginal costs.

- there are administrative costs in tailoring information or other attributes of the delivery of a regulation, and it is important that the resources expended can be justified on a cost-benefit basis.

Overall, flexible delivery offers some scope for maximising the benefits of regulations and taxes, and for lowering compliance burdens and nuisance to business.

4.4 Distributional and fairness issues

Governments have an important role to play in pursuing social and equity objectives, such as modifying the distribution of income to make it more 'fair' (see chapter 2). Furthermore, governments may choose to pursue redistributive goals at some cost to economic efficiency. In the case of the regulatory burden, this might involve trading off cuts in compliance costs for small businesses against reductions in overall social benefits. But how strong is the case for regulatory tiering on distributional and fairness grounds? As the first step in reviewing this question we assess the re-distributional consequences of regulation.

The re-distributional consequences of regulation

In chapter 5 we show that small businesses face higher costs of regulation per employee or unit of output than larger enterprises. It is as if the effective rate of taxation is higher for small businesses than larger businesses.

When gauging the distributional impacts of regulatory costs on small business we should distinguish the owners of the financial capital (the equity holder) of a business, and the entrepreneurial talent (the manager). While one person typically exercises both functions, it is important to distinguish them, because there may be differential impacts of regulations on the returns of each group. In the short run:

- Disproportionate regulatory costs can re-distribute income away from existing incumbents. When *new* regulations or compliance requirements are introduced there may be a costly transition to equilibrium. Existing equity holders face windfall losses on any capital specific to small business and also have to meet any adjustment costs (which can be devastatingly large for some marginal businesses — such as bankruptcy, loss of personal assets including the home, and severe trauma costs such

as divorce and suicide).[22] The impacts of new regulations on rates of return are likely to be higher per shareholder in small firms than larger firms, not only because the fixed costs of compliance are spread over greater output and profit in larger firms, but because larger firms have far more diversified ownership. The income distributional effects for owners of incumbent small businesses will vary depending on the characteristics of their business. The impacts will be greater if there are higher sunk investments, high costs of exit, and the likelihood that new regulations or compliance costs were unanticipated at the time of entry into the business.

- Such costs can also lower the implicit wage rate of the entrepreneur, for example, as they work longer hours in complying with the regulations. The costs for currently employed owner-managers will be higher to the extent that the supply of entrepreneurs is price inelastic [23] and demand for entrepreneurial services are elastic.

In summary, regulation can generate income redistribution away from existing incumbents, though it does not do so for firms who enter after the introduction of the regulation, or those entrepreneurs who face negligible costs of entry and exit (and similar wages and conditions in alternative employment).

However, this does not *necessarily* imply that there is any significant redistribution of income in the long run . This is because some of the *ultimate* income burden of compliance costs is likely to be borne by consumers. Businesses will typically attempt to shift their regulatory compliance costs to consumers through higher prices. [24] To the extent that profit rates are adversely affected, then the value of any assets whose uses are sector specific will decline, some businesses will exit, and other incipient businesses will not enter. In theory, a reduced number of firms — and a reduction in the prices of sector specific factors, such as rents in local shopping centres — will result in an increased rate of return for equity holders (which would compensate for the relatively high compliance costs). If this were to occur, there are unlikely to be any long run impacts on returns to the equity holder of a small business (other than the sunk, windfall losses imposed at the time of the introduction of the regulation). However, there *may* be more enduring impacts on implicit wage

[22] There may also be some slight distributional impacts on labour employed in small businesses adversely affected by regulatory costs — either in the form of lower wages or, where there are labour market rigidities, unemployment).

[23] Supply will tend to be inelastic to the extent that there are special attributes that allow an owner to earn higher labour returns from entrepreneurship, than in alternative jobs.

[24] Depending on the elasticity conditions being faced by the firm.

rates for owner-managers (to the extent that they have attributes specifically valuable to small business).

It is notable that the imposition of disproportionate compliance costs elicits an adjustment feedback that is quite lacking in many other taxation scenarios — for example, the imposition of differential taxes on household income. Say, for example, that tax rates were raised for people on lower incomes. The affected group cannot simply reallocate their efforts in order to escape this burden — and it has genuine and enduring redistributive effects.

It is far from clear what implications such potential redistribution has for regulatory design. For example, the introduction of tiering for a *pre-existing* regulation, based on redistributive rather than economic efficiency grounds, can have quite perverse redistributive impacts. Many entrepreneurs would, in the short run at least, enjoy windfall profits at the expense, presumably, of some other party whom the regulation was intended to benefit (such as workers or consumers).

It is possible that the best grounds for considering (and palliating) the redistributive impacts of regulatory compliance costs arise when a regulation is being introduced for the first time. But even then, some form of regulatory tiering is not necessarily the means of achieving redistributive goals. Other, direct methods of meeting social objectives through the tax or social welfare system may be more appropriate. [25]

The question of fairness

We now turn away from the issue of redistribution to fairness. Small businesses often argue that regulations and the tax system involve 'unfair' burdens on small businesses relative to larger ones. By this they often mean they lack the resources of larger businesses, but are still expected to undertake similar types and amounts of paperwork to comply with uniform regulations (box 4.3).

On the surface, it would appear that compliance costs are unfair in the sense that the effective rate is higher for firms with a smaller income base. And certainly, the literature providing the evidence on this issue (see chapter 5) freely employs the notion that regulatory compliance costs are 'regressive'.

[25] In all cases, governments would also have to weigh any redistribution benefits against any adverse efficiency implications.

Box 4.3: Business views on the 'unfairness' of the regulatory burden

'What is an employer? An employer is ... is an unpaid tax collector, is responsible for his employees illnesses, is responsible for his employees accidents, is responsible for his employees pregnancies, who provides 4 weeks annual leave, who provides 17.5% loading on annual leave....who has nearly no rights with the tax department, who is vulnerable to government whims and changes of policy, who pays full pay for 2 weeks public holiday, who trains apprentices, who gets hardly any government support, who carries all bad debts, and if anything is left makes a profit which is then taxed again.'

'If you want to destroy my business keep up the difficulties — legislation, taxation and no fair go.'

Source: Survey addendum responses to the ABS *Business Growth and Performance Survey, 1994–95*.

But the use of this household taxation terminology has limitations when applied to businesses. This is because it ignores:

- The issue of the ultimate incidence of the compliance costs as discussed above. While some business people will suffer genuine losses in income after the introduction of a regulation, the long run process of adjustment — described in the previous section — suggests that many businesses are likely to pass on at least some compliance costs to consumers.
- The fact that the ultimate concern of redistributive policy is some notion of an equitable distribution of income among *all* individuals, not only those with interests in *institutions* (like corporations). When a new regulation is imposed it is likely to more adversely affect the income of small firm owner-managers (and possibly their employees) than it will shareholders of large enterprises. So comparing these individuals with each other, the measures appear to be genuinely 'regressive'. But distributional issues concern all people in the economy. Regulatory tiering cannot effectively shift income from shareholders of large enterprises to small business owner managers. What it does do is lower standards in order to lower the costs of compliance for owner-managers. And it is other people (workers and consumers in the broader community) who bear the costs of such lowered standards. So any attempt to alleviate the apparently unfair burden on small business owner-managers occasions other re-distributions, which may also be regarded as unfair. Ultimately issues of fairness — in the sense of a fair distribution of income — must include all members of society, not just selected groups.

4.5 Concluding remarks

While several factors suggest that regulations and the tax system might sometimes treat small businesses inequitably, it is unclear whether differential regulatory treatment of small businesses would be an appropriate response. This is because the income burden of compliance costs is unlikely to be fully borne by business owners (that is, a proportion is passed on to customers) and because across-the-board tiering can generate adverse efficiency and distributional impacts. And, in any case, some form of regulatory tiering is not necessarily the means of achieving redistributive goals. Other, direct methods of meeting social objectives through the tax or social welfare system may be more appropriate.

A more fruitful justification for imposing lighter regulatory requirements on small businesses may be that, in *some* cases, this might result in possible efficiency improvements. For example, in the absence of tiering, compliance cost disadvantages to small businesses (relative to larger businesses) might contribute to the domination of an industry by large firms (who undermine competitive processes and extract monopoly rents from consumers). The critical aspect is whether any change in a regulation to take account of firm size differences can produce net gains (increase net social benefits). [26]

It should be emphasised that nothing suggests that firm size is the only appropriate dimension along which tiering should be organised. In some applications, the appropriate dimension would be some other firm characteristic — such as the industry to which the firm belongs or the nature of the owner.

However, tiering, in whatever form, faces some pragmatic hurdles which limit its feasibility. These are its stringent requirements for information, potential lack of robustness, administrative complexity and a tendency to elicit rent seeking.

Thus the application of tiering as a way of improving the efficiency of regulations needs to pass two acid tests (summarised in figure 4.5):

- it needs to meet the positive criteria set out in the section above on gains from tiering; while
- demonstrating that in any application it is possible to avoid the pitfalls identified in the section above on tiering problems.

---

[26] The tiering of the requirements of a regulation that is justified on efficiency grounds, might also be perceived by some as ‘unfair’ in another way. That is, to the extent that the tiering is applied to small businesses *only* in industries where there are no close substitutes in production (see section 4.2), small businesses in other industries — still facing the same untiered regulation — may believe they are being treated unjustly.

The difficulties likely to be experienced in the application of tiering led Brock and Evans (1985a) — in one of the few rigorous assessments of tiering — to conclude:

> Although in theory some form of tiering is desirable when regulations impose fixed costs, in practice it is a delicate question whether tiered regulations are better than untiered regulations. (p. 406)

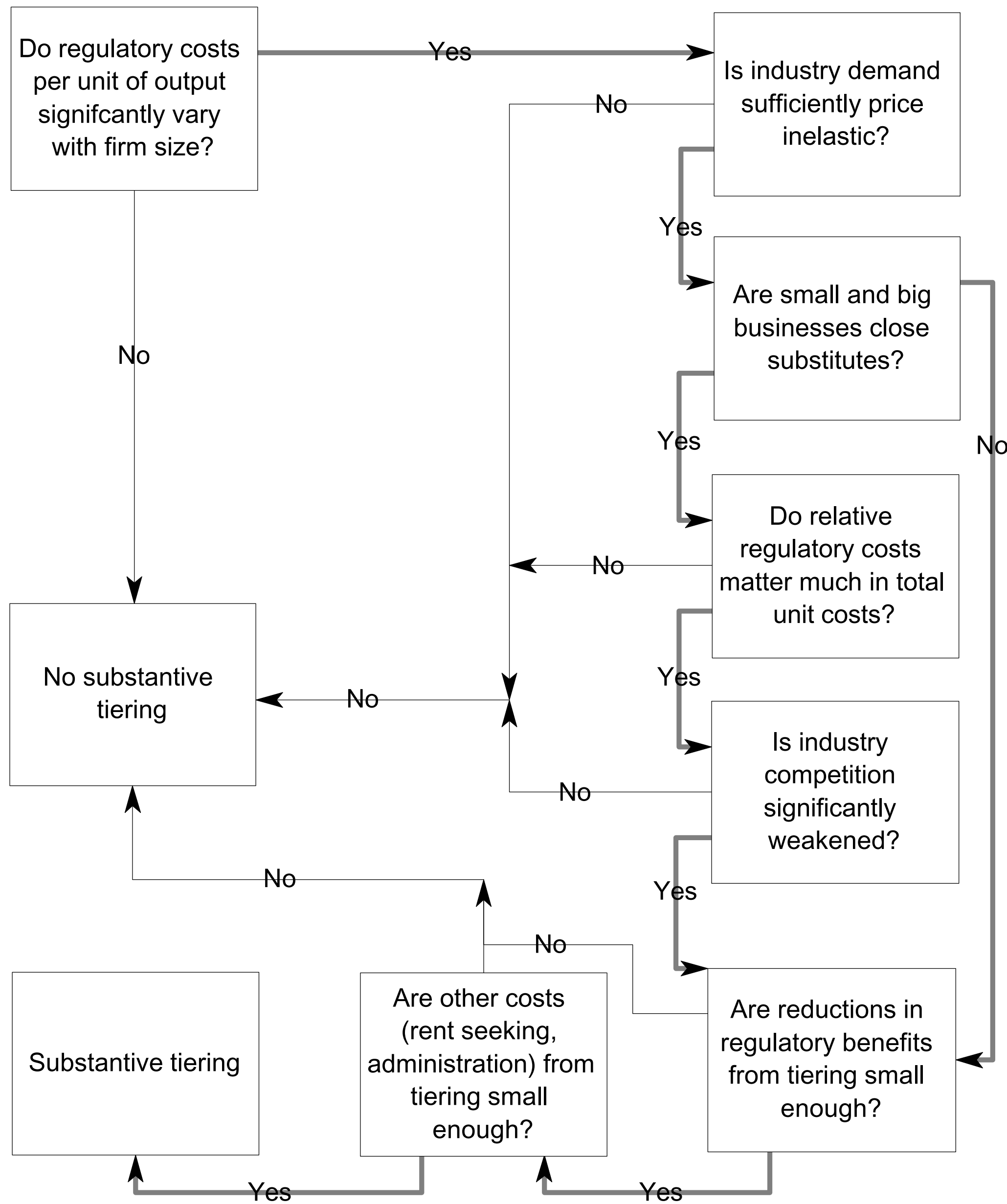
Economic instruments aimed at ameliorating externalities have several design advantages over either uniform or tiered regulations. On the other hand, such instruments are not applicable to many regulatory and other situations where small business compliance burdens are raised.

Arguably though, the *delivery* of regulations is an area where there appears to be considerable scope for differential treatment of small businesses. While a more flexible approach by governments to the administrative processes that exist to achieve the requirements of regulations involves some risks — the size of administrative costs and a need to satisfy cost–benefit criteria — it offers a potential ‘win–win’ scenario. That is, flexible delivery provides the scope for lowering the regulatory burden of businesses, while attracting higher rates of compliance and maximising the benefits of regulations.

Regulatory reform — either in a broad sense or through tiering or flexible delivery — requires better data and information. Governments can try to assist these processes by obtaining (and publishing) high quality information on both the costs and the benefits of regulations, including:

- compliance costs and rates of compliance;
- government administration costs; and
- estimated benefits from reductions in accidents, environmental damage and so on.

Figure 4.5: The criteria for regulatory tiering



Importantly, a major objective of improving the quality of regulatory information should be to achieve some consistency in the way common variables are measured. There are risks of governments making incorrect regulatory decisions if a variety of methodologies for measuring compliance or administrative costs, for example, are in use. Similarly, estimating the benefits of some regulations (such as OH&S, transport) will often involve placing a value on human life — but we would lack confidence in the results if these valuations in fact differ to a significant degree between regulations.

5 REGULATORY COMPLIANCE COSTS ACROSS FIRM SIZES : THE EVIDENCE

In the previous chapter we observed that, in some circumstances, scale economies in regulatory compliance might have adverse impacts on economic efficiency. For example, they may undermine the degree of competition in an industry.

A number of preconditions need to be satisfied before a strong economic efficiency argument can be advanced for regulatory tiering (see figure 4.5). The purpose of this chapter is to use empirical evidence from both Australian and overseas studies to test a few of the branches in the decision tree in figure 4.5:

- In section 5.1 we ask whether there is evidence of differences in regulatory compliance costs across firm sizes due to economies of scale?
- In section 5.2 we explore the extent to which regulatory compliance costs significantly increase unit costs in small businesses. And if so, to what extent this decreases effective competition in an industry?
- We briefly consider whether there are cases where there is low substitution in production between large and small firms (section 5.3).
- And, in section 5.4, we discuss the problems of determining whether tiering is a good strategy when there are so many substantial data limitations, including the assessment of non-compliance.

5.1 How significant are economies of scale in regulatory compliance?

Because many of the costs of regulatory (and tax) compliance are similar — regardless of firm size — they will be proportionately greater for small firms. But by how much?

As we saw in the previous chapter, this is an important element in the assessment of regulatory tiering. A necessary, but far from sufficient, condition for regulatory tiering is that the compliance cost curve (as depicted in figure 4.1) slopes down steeply (that is, compliance costs decrease significantly with larger firm sizes). If, on the other hand, the compliance cost curve has only a gentle slope, the transactions and other costs involved in regulatory tiering make it hard to justify.

What is the empirical evidence? While only a modest amount of research has been undertaken on this issue, it is probably sufficient to draw some fairly general conclusions about the significance of economies of scale in regulatory compliance. While estimates of the absolute compliance costs faced by different sized firms can vary considerably between studies (largely depending on what is and what is not counted as compliance), this is not our chief concern. Our interest is in compliance cost relativities between firm sizes rather than absolute dollar amounts.

For comparative analysis, the disproportionate impacts of regulatory compliance costs can be measured in a variety of ways. The most common include compliance costs:

- as a proportion of a firm's turnover;
- as a proportion of a firm's wages and salaries;
- per employee; and
- as a proportion of tax paid by a firm.

Of the available measures,[1] the first is most relevant to the economic framework developed in the last chapter, and avoids some of the misleading implications of other measures.[2]

Australian evidence

The report of the Small Business Deregulation Task Force (Bell 1996) included survey results showing that small businesses with up to 20 employees spend an average 4 hours a week on government paperwork and compliance activities. The total financial costs associated with this compliance were estimated to be $7 000 per annum (with around $3 000 spent on external advice).

[1] Value added would probably be the most appropriate base for compliance costs as it would provide the best estimate of the resource costs involved. However, it is often difficult to obtain information on this measure at the firm level. Turnover is the next best base widely available — a view shared by Pope (Pope 1994, p. 2). One measure not widely used is compliance costs in relation to profits. Theoretically, such a measure might provide an attractive indicator of the differential impact of compliance across firm sizes. However, there are some major problems in measuring profits appropriately in small businesses.

[2] For example, very high compliance costs can be recorded relative to tax revenue collected — but in some areas of tax the purpose of the tax is not to collect revenue but to deter a particular activity (for example, some environmental levies, and possibly fringe benefits tax). In this case, a high ratio of compliance cost to revenue collected might be an indicator of success, not failure.

The Bell Report did not express these compliance costs as a proportion of turnover. However, data obtained from the 1995 Business Longitudinal Survey (IC and DIST 1997) show that the average turnover for firms with less than 20 employees was around $620 000 in 1994–95. On this basis, Bell's compliance costs of $7 000 represent around 1.1 per cent of small firms' average turnover. [3]

Do other studies support this result? And, more importantly, how does it compare with the compliance costs of medium and large firms?

The most detailed perspective on business taxation compliance costs in recent years is provided by Pope et al in various studies of major Commonwealth taxes (Pope, Fayle and Chen 1991, 1993a, 1993b and 1994; Pope 1994). These studies included comparisons of internal compliance costs — which make up the bulk of total compliance costs — by turnover across firm sizes. The results for five of the major taxes are shown in table 5.1. [4]

All the taxes were found to be 'regressive' — compliance costs as a proportion of turnover steadily decline as firm size increases. At the extremes, the differences are quite marked. For example, the smallest businesses incurred internal compliance costs of around 64 cents (for every $100 of turnover) in dealing with employers' PAYE, and around 13 cents for FBT, Payroll Tax and PPS. The largest businesses, on the other hand, incurred internal compliance costs of only 1 cent or less for each of the four taxes. Commenting on the results, Pope et al concluded that the largest businesses had a clear advantage in terms of the economies of scale in dealing with tax paperwork.

Cabalu, Doss and Dawkins (1996) undertook a study of employers' compliance costs in Western Australia — these included both taxation compliance and compliance with the regulatory framework in general. The authors noted that their results (table 5.2) reinforce the finding in the literature of 'regressiveness' in compliance costs — that they fall with disproportionate severity on small firms. The average compliance cost (measured against turnover) for small firms with up to 20 employees is around twice that of the larger firms. The smallest firms (turnover of up to $300 000) are clearly even more disadvantaged.

---

[3] For firms with up to 4 employees — which represent the majority of small firms — compliance costs of around $7 000 would represent about 2.5 per cent of their turnover.

[4] The absolute compliance cost/turnover results should be interpreted with caution. Rimmer and Wilson (1996) made some cautionary points on the Pope et al studies and concluded it was not possible to be confident about their results. This was because of methodological and conceptual complexities in measuring compliance costs, low response rates and possible sampling errors. They thought compliance costs might be overstated rather than understated. However, these concerns have less relevance to *relativities* across firm sizes.

Table 5.1: Internal compliance costs for Employers' PAYE, FBT, Payroll Tax, Prescribed Payments System (PPS) and Companies' Income Tax, by firm size, Australia, 1989–90 [a]

Firm size (Turnover)	*Compliance costs as a proportion of turnover*				
	Employers' PAYE	*FBT*	*Payroll Tax*	*PPS*	*Companies' income tax*
$	%	%	%	%	%
0–200 000	0.64	0.12[b]	0.13[b]	0.13[b]	na
200 000 – 500 000	0.26	0.04[b]	0.17[b]	0.10[b]	3.0[c]
500 000 – 1 000 000	0.28	0.06[b]	0.10[b]	0.10[b]	0.8
1 000 000 – 2 000 000	0.10	0.04	0.10	0.09[b]	0.8
2 000 000 – 5 000 000	0.07	0.01	0.06	0.04	0.2
5 000 000 – 20 000 000	0.02	0.01	0.06	0.01	0.1[d]
Over 20 000 000	0.01	<0.01	0.01	<0.01	0.01[e]

a. Companies' income tax data are from a separate survey and are for the year 1990–91.
b. Indicates the estimate is based on less than 20 cases.
c. Figure is for firms with a turnover of less than $500 000.
d. Figure is for firms with turnover between $5–10m. The proportion for firms with a turnover between $10–20m is 0.02.
e. Figure is for firms with a turnover of $20–50m.
Sources: Pope, Fayle and Chen (1993a). Pope, Fayle and Chen (1994).

Table 5.2: Employers' total compliance costs: Western Australian firms, 1993–94

Firm size	*Compliance costs per firm ($)*	*Compliance costs as a proportion of turnover (%)*
By turnover		
– less than $300 000	2 513	1.90
– $300 000 to $1.5m	6 431	0.75
– more than $1.5m	14 118	0.30
By employment size		
– up to 20 emps (100 for manf)	4 937	1.10
– 20+ emps (100+ for manf)	17 215	0.60

Source: Cabalu, Doss and Dawkins 1996.

Haralambopoulos, Johnson and Ha (1996) undertook a study in Victoria that paralleled the Western Australia study. Interestingly, their results indicated economies of scale with compliance costs when measured on a per employee basis — but not when compliance costs are expressed in relation to turnover. In the latter case compliance costs are more proportional to firm size — that is, there does not appear to be a disproportionate burden on smaller firms. [5]

Rimmer and Wilson (1996) concluded — on the basis of a review of Australian and overseas studies — that small firms face higher proportionate taxation compliance costs than larger companies, and that compliance costs of business taxes are strongly regressive.

Overseas evidence

There has been a number of overseas studies into compliance costs across firm sizes, but particularly in the United States. [6] The relatively stronger US research interest in the topic is, no doubt, partially explained by the attention also paid to it by policy makers since the late 1970s. [7] While the relevance of overseas studies to the Australian scene is limited — because of differences, for example, in the delivery of regulations and the size distribution of firms — the results are helpful to the extent they can confirm the existence of scale economies in regulatory compliance.

Several US reports are available on the relative cost of regulations for large versus small businesses. Brock and Evans (1985b) drew some 'tentative

[5] It should be noted that the study collected data fr om a very small sample of firms — only 45 responses to the survey were collated (28 firms with up to 20 employees, and 17 other firms).

[6] Notable studies outside the US have included a study of private sector compliance costs in the United Kingdom by Sandford, Godwin and Hardwick (1989), and a similar study of business taxes' compliance costs in New Zealand by Sandford and Hasseldine (1992). Both studies found compliance costs to be 'highly regressive'.

[7] US policy has included the implementation of two significant pieces of legislation — the Regulatory Flexibility Act (1980) and the Small Business Regulatory Enforcement Fairness Act (1996). The key aspects of these acts are summarised in appendix C. In addition, a large number of statutes enacted throughout the 1980s and 1990s required tiering of regulations for small businesses, including the Immigration Reform and Control Act of 1986, the Worker Adjustment and Retraining Act of 1988, the Americans with Disabilities Act of 1990, the Clean Air Act Amendments of 1990, and the Family and Medical Leave Act of 1993.

conclusions' from a review of literature on the differential impact of regulations across business sizes in the United States:

- There is reliable evidence that paperwork-intensive regulations lead to substantial scale economies in regulatory compliance.
- Regulations may sometimes have a disparate impact on smaller businesses because such businesses are more likely to engage in the behaviour prescribed by the regulation. In these cases the regulation itself — rather than scale economies in regulatory compliance — had a disparate impact on small business.

More recently, a Tax Foundation study (Hall 1993) shows the impact of tax–related paperwork on all firms by firm size in the United States. The Small Business Administration (SBA) has noted that it is the only study available in the USA on the impact of tax–related paperwork on all firms by firm size. The results, shown in table 5.3, indicate that compliance costs as a proportion of sales are very stable for the four smallest groups of firms — but the ratio then falls away rapidly as economies of scale start to really bite. The very smallest firms have compliance costs (measured against turnover) at around 10 times that of the largest firms.

Table 5.3: Estimated cost of corporate income tax compliance, by firm size, United States

Firm size ($'000 sales)	*Estimated compliance costs ($'000)*	*Compliance costs as proportion of sales (%)*
1 000	5	0.50
25 000	126	0.50
50 000	251	0.50
100 000	470	0.47
250 000	325	0.13
500 000	650	0.13
1 250 000	875	0.07
5 000 000	3 500	0.07
10 000 000	5 000	0.05

Source: Hall 1993.

Hopkins (1995) found that one–third of firms faced only minor regulatory burdens, while two–thirds faced moderate to substantial burdens. The study found that total burdens increased with firm size, but that burdens per unit of sales or per employee decreased with firm size.

In a follow–up study for the SBA, Hopkins updated his earlier estimates of burden by firm size. However, the SBA believes that Hopkins slightly overestimates the allocation of burdens on small firms due to his treatment of small firms reporting only minor regulatory burdens. Both Hopkins and the SBA estimates are shown in table 5.4. These results again suggest relatively minor regulatory cost differences between small and medium sized firms, but a cost advantage to the largest firms as a result of economies of scale. However, the finding that the smallest firms have compliance costs (measured against turnover) at around twice that of the largest firms, suggests a much lesser disproportionate impact than most other studies.

Table 5.4: Estimated average costs of regulation, paperwork and taxation requirements, by firm size, United States

Firm size (employees)	*Regulatory costs per employee ($)*		*Regulatory costs as a proportion of sales (%)*	
	Hopkins	*SBA*	*Hopkins*	*SBA*
1–19	5 532	5 106	4.4	4.0
20–499	5 298	4 950	4.0	3.8
500 +	2 979	3 404	1.8	2.1

Source: SBA 1995.

Drawing together both the Australian and US evidence discussed above inevitably leads to the conclusion that economies of scale *are* a significant factor in regulatory compliance. However, given substantial variations in the results it is impossible to depict a ‘typical’ compliance cost per turnover curve.

There is some evidence to suggest that the curve may be a stepped function for some regulations — compliance costs (measured against turnover) may be relatively flat for small and medium sized firms, but then drop sharply as economies of scale make their impact (and then stabilise again at high levels of turnover). This suggests immediately that any call for tiering should take account of the points at which unit compliance costs change significantly, rather than any adherence to pre-defined size classes as a basis for regulatory design.

5.2 Do regulatory compliance costs significantly increase unit costs in small businesses?

Scale economies in regulatory compliance appear to be significant — with smaller businesses facing disproportionate compliance costs. To this extent, one condition for regulatory tiering seems to be satisfied. However, this is not the

full story. As shown in figure 4.5, even if we have confirmed that regulatory compliance costs are disproportionately borne by smaller businesses, there are many further steps required before a cogent economic argument can be mounted for regulatory tiering.

Arguably the most important rationale for tiering exists where small business compliance costs significantly weaken effective competition in an industry. But before gauging whether a change in the size distribution of firms is likely to generate anti-competitive outcomes, there is a prerequisite question — are small business unit costs significantly inflated by regulatory compliance? If they are not, it seems unlikely that the competitive advantage of smaller players could be sufficiently eroded to affect competition (see figure 4.5 for the appropriate sequencing of questions).

The literature relating to the disproportionate impact of regulatory compliance costs commonly seeks to portray 'regressiveness' by comparing the costs facing the largest and smallest businesses. For example, it might be stated that the very smallest firms have compliance costs (measured against turnover) at around 5 or 10 times that of the largest firms. Expressed in these terms, the compliance cost disadvantage for small businesses sounds disproportionate and unfair.

But comparing the ratios of compliance costs to turnover in this way is misleading. The evidence discussed in the previous section suggests that overall regulatory compliance costs are likely to be equivalent to a low proportion of turnover, even for the smallest of firms. More importantly — in the context of cost disadvantage — the Australian evidence suggests that the overall compliance cost *differential* between small and large firms may only average around one per cent of turnover. It seems implausible that such small cost differentials will have significant impacts on the size distribution of firms — and therefore will have little scope to weaken effective competition. [8]

Nevertheless, at the margin, the existence of such compliance costs could drive out two classes of firm:

- the smallest firms whose compliance costs per unit of output are sufficiently high that they cannot offer their services at prices consumers are willing to pay. The exit of these marginal firms is unlikely to affect

[8] In the US context, Brock and Evans (1985b) suggest three key reasons why regulations may not have placed small businesses at a competitive disadvantage. First, many regulations have traditionally imposed lighter regulatory burdens on smaller than on larger businesses. Second, regulators have strong incentives to skew enforcement efforts towards larger businesses (and compliance rates are probably lower among smaller than larger businesses). Finally, regulators will avoid imposing or enforcing regulations that bankrupt businesses so as to minimise political opposition.

competition in an industry, but could conceivably have some adverse economic effects to the extent that there is not perfect substitution of production between larger and smaller firms. However, it should be emphasised that under the counterfactual of tiering, unit compliance costs are not zero, and that the benefits of regulation may also decline; and [9]

- firms which are inefficient at coping with regulation, and which therefore have far higher unit compliance costs than otherwise equivalent firms. [10] Theoretically, their exit could actually improve long run economic efficiency by leaving a group of firms which are the most efficient at compliance.

While the average differential of compliance unit costs across firm sizes across *all industries* is sufficiently modest that it is unlikely to elicit substantial allocative inefficiencies, this average may conceal more pronounced differentials for some industries. Unfortunately, there is little information about how unit compliance costs vary by industry. A US study provides some evidence of significant variations in unit compliance costs by industry. A study of 360 firms undertaken for the SBA by Hopkins (1995), found average compliance costs (measured against turnover) of 3.7 per cent in manufacturing, 1.4 per cent in 'trade', 4.8 per cent in services and 2.7 per cent in other.

Cabalu, Doss and Dawkins (1996) and Haralambopoulos, Johnson and Ha (1996) record some data by industry for Victoria and Western Australia, but the results are based on surveys with very low sample sizes (45 and 85 respectively) and poor response rates (9.4 per cent and 8.6 per cent respectively). The differences apparent between industries (table 5.5) *could* be quite spurious — both because of sampling variability and non-response bias.

[9] One method for rigorously assessing the overall efficiency impacts of differential compliance costs is with a computable general equilibrium model which included firm size — but to be useful for policy, such modelling would also have to include the benefits of regulation. Thompson's (1989) exploratory assessment of the impacts of regulatory compliance by industry may be a useful starting point, although this modelling ignores both the benefits of regulations, and firm size differences.

[10] Certainly there is strong evidence that much of the variation in compliance unit costs are not explained by firm size (Cabalu, Doss and Dawkins, 1996) — and presumably some of this unexplained variation simply represents inefficiency by firms in complying. For example, 54 per cent of the variation of compliance unit costs is left unexplained in a regression of compliance unit costs against turnover and employment (p. 29).

Table 5.5: Compliance costs by industry, Western Australia [a]

	Sample size	*Compliance costs to turnover*
	Number	%
Manufacturing	10	0.48
Building & Construction	16	0.87
Retail trade	16	0.42
Finance, insurance, real estate and business services	8	1.71
Entertainment, recreation, restaurants & personal services	12	2.73
Other[b]	23	0.80

a Unfortunately, standard errors of the estimates were not reported by the authors of the study. Unless the sample standard deviation for estimates were very low, standard errors will be high relative to the estimates, and the results unreliable.

b 'Other' is a composite of the agricultural, mining, wholesale trade, transport and storage, and other industries, each of which had a sample size which would provide utterly imprecise estimates of compliance costs.

Source: Cabalu, Doss and Dawkins (1996), tables 4.1 and 4.16.

The industry data point to somewhat larger cost disadvantages across firm sizes than do the highly aggregated data. Conceivably, such differentials might significantly affect the size distribution of firms in some industries. But the justification for regulatory tiering still requires further proofs. In particular, it would have to be shown that the compression of the size distribution was inimical to competition. This is far from obvious. In some cases, as advantage switches to larger producers, competition might intensify, as more large players enter a market, or existing large rivals compete for what is, for them, a bigger market.

Moreover, as noted in chapter 4, there may be better methods for dealing with anti-competitive behaviour when it arises than the pre-emptive application of regulatory tiering.

5.3 Are there cases where there is little substitution between large and small scale modes of production?

The case for tiering is strengthened where there is little substitution between large and small scale modes of production (for example, in services where proximity is highly valued). Some industries are dominated by small firms because of market and product characteristics. In this case, it is immaterial what the impact of compliance costs is on unit costs, because there is no (or limited)

scope for substitution between large and small producers. The issue is whether it is possible to achieve an improvement in economic efficiency by changing the regulation in such a way that compliance costs fall without sufficiently offsetting losses in the benefits derived.

The cases where this is true would have to be assessed on a case–by–case basis — and would also have to deal with the other limitations of tiering identified in chapter 4 and in figure 4.5.

5.4 Data problems and non–compliance

Data inadequacies

Data inadequacies are a broad obstacle to the assessment of tiering. The inadequacies arise for a number of reasons:

- The surveys that are used to collect information on compliance costs impose their own, not inconsiderable, compliance burden on respondents — and sample sizes and response rates are relatively poor. This leaves scope for non–response bias (where the answers of those who fail to return a survey form differ systematically from those who do). For example, in a series of studies of tax compliance costs, the best response rate has been 33.5 per cent (Pope, Fayle and Chen, 1994). Moreover, the small sample sizes mean that estimates of compliance costs have relatively wide margins of error.
- Firms face incentives to distort their answers on compliance costs if they think governments will respond by lowering regulatory burdens.
- Firms may count all sorts of normal business costs (such as the need for an accounting system) as part of their reported compliance burdens. This will lead to an upward bias in compliance cost measures.
- Firms may be unaware of, or unable to enumerate, some of the more subtle costs imposed by regulations (such as the impact on work effort or incentives to grow and innovate).
- The existence of inefficient compliers in any sample of respondents means that empirical measures of compliance cost variations between different sized firms *may* overstate the genuine long–run differential. This is because there may be a gradual tendency, given a fixed regulatory regime, for firms to exit and enter until the incumbents apply optimal compliance practices. Say, for example, that initially, unit compliance costs for small firms are from 5 per cent (bad practice) to 1 per cent (best practice), while compliance costs for large firms are from 0.5 per cent (bad practice) to 0.1

per cent (best practice). Let us say that bad practice represents 40 per cent of firms, and best practice 60 per cent. In this case, average unit compliance costs are from 2.6 to 0.26 per cent, or a range of 2.34 per cent. Say that, in the long run, those firms with bad practices have largely exited or learned how to deal with compliance more effectively. Suppose that now bad practice represents only 10 per cent of firms, and best practice 90 per cent. In this case, the 'steady state' average unit compliance costs are 1.4 to 0.14 per cent, or a range of 1.26 per cent (nearly half that observed initially).

The issue of non-compliance

Appropriate measurement of non-compliance is one area where the existing data on compliance burdens has the greatest potential to mislead. The data cited in section 5.1 are drawn from surveys. It seems plausible that firms which do not comply with a regulation are less likely to openly disclose their non-compliance in a survey, or more likely to fail to respond at all. A bias in the observed numbers will arise if smaller firms tend to comply less with regulations — the actual regulatory burdens of small businesses may be reduced to the extent to which they are not aware of the regulations, or otherwise fail to comply with the rules.

There is no meaningful Australian data on compliance rates by firm size. However, there is some overseas evidence to suggest that small firms' compliance rates *are* lower than larger firms:

- a study undertaken by Hopkins on behalf of the United States SBA (Hopkins 1995) found that about 40 per cent of the 360 small businesses surveyed did not fully comply with most regulations. The small businesses cited ignorance of the rules as the most common cause of this lack of compliance; and
- Bartel and Thomas (1985) found that a larger firm in the US was slightly more likely to face a penalty for a breach of occupational safety and health than a smaller firm. However, this means that the penalty rate *per worker* is much higher in smaller firms. For example, the number of penalties per inspection per worker is 100 times greater in a firm employing 10 persons than one employing 500.

Such evidence of non–compliance may, in part, be a symptom of uniform regulatory requirements and delivery mechanisms — which are perhaps geared more towards the needs of larger firms. Rather than bearing the compliance

costs involved — such as inappropriate installation of equipment — small firms may trade-off non-compliance with detection (and associated penalties). [11]

Where regulations involve policing via inspection, it is typical that large firms face a higher probability of inspection — so that small companies may face fairly low expected penalties from non-compliance. For example, in the OH&S field, Bartel and Thomas (1985) found that in the US the probability of inspection of a firm employing 500 persons is around 5 times that of a small firm employing 10 persons. [12]

The net effect of lack of actual compliance by small businesses is to reduce their potential competitive disadvantage arising from scale economies. Thus, not only is the compliance cost differential between small and large businesses relatively small assuming full compliance, it is likely to be smaller still in practice (assuming that the data in section 5.1 largely misses non-compliance effects).

While non–compliance reduces the compliance costs borne by smaller businesses, such circumvention is also a basis for regulatory re-design.

Implications of data problems

In section 5.1 we found that there is no unanimity about the exact relationship that describes how compliance costs per unit of output fall with scale — reflecting differences in the methodology, scope and statistical reliability of the studies concerned. This variability, combined with concern about probable biases in the data, poses a problem for the pragmatic implementation of tiering. Unless alternative methods for reliably inferring compliance costs across different industries, firm sizes and other firm characteristics can be devised,

[11] As an aside, we note that non-compliance may not necessarily mean that the objective of the regulation is compromised. For example, Bartel and Thomas (1985) found that the relationship between injury rates per worker and firm size follows an inverted U, with the highest accident rate for firms employing around 160 persons. Accordingly, while the smallest firms may have had the lowest compliance rate with the letter of the law, their observation of the ‘spirit of the law’ was better than some higher complying bigger firms. On the other hand, the IC (1995) found for Australia that work related health problems per worker were highest in firms employing less than 5 employees, and 10-19 employees, compared to other size categories. However, that study did not control for all the other influences which may be partly correlated with size.

[12] Of course, this means that in terms of inspections per worker, the probability of inspection declines with firm size. But given that an inspection of a large enterprise can cover OH&S conditions and systems for many workers simultaneously, it is probably inappropriate to normalise by workers.

there may be insufficiently rich and reliable data on which to even consider the application of tiering.

5.5 Concluding remarks

The empirical evidence from both Australia and overseas provides a fairly consistent story — economies of scale *are* a significant factor in regulatory compliance and result in smaller businesses facing disproportionate compliance costs. However, this is by no means a sufficient condition for regulatory tiering.

The major criterion for tiering is that, given the higher regulatory compliance unit costs borne by small business, competitive advantage is sufficiently tilted against smaller players that larger enterprises are able to exercise market power. This undesirable outcome is unlikely in Australia in view of the (albeit sketchy) evidence that the average small firm's overall compliance cost disadvantage — relative to large firms — could represent around 1 per cent or so of its turnover. In most instances this is unlikely to have a significant impact on competitive processes or lead to inefficient outcomes.

In addition, there is some evidence to suggest that a significant proportion of small businesses do not in any case fully comply with regulations (thus reducing their cost disadvantage with larger firms).

Nonetheless, although the average differential of compliance unit costs across firm sizes across *all industries* is sufficiently modest that it is unlikely to elicit substantial allocative inefficiencies, this average may conceal more pronounced differentials for *some* industries. In addition, a high ratio of compliance costs to profits for small businesses in some industries may affect their incentives and viability — and ability to compete — more profoundly than cost disadvantages measured against turnover.

These kind of factors reaffirm the conclusions of the previous chapter that the rationale for regulatory tiering will vary according to different industry conditions — and that government agencies need to consider the tiering of a regulation (or tax) on a case–by–case basis.

6 PERCEPTIONS OF THE REGULATORY BURDEN ACROSS FIRM SIZES

In the previous chapter we considered the *quantitative* evidence on the extent to which regulatory compliance costs vary across firm sizes — to test against the theory on differential regulatory requirements developed in chapter 4. This chapter examines further *qualitative* empirical evidence on the extent and impact of differential regulatory costs across firm sizes.

6.1 Overview

The quantitative assessment of regulatory impact by firm size in chapter 5 has some limitations, which are, at least partly, overcome by the qualitative approach:

- Firms tend to have a better scope for measuring direct compliance costs, such as time spent in complying, than in quantifying how regulatory requirements stifle or distort incentives. For example, a business may hold back from undertaking some productive or innovative activities because of the regulatory burden — but how is that impact measured in dollars? A qualitative approach can encompass such costs, albeit not in dollar terms. We note too that, unlike the case of scale economies and compliance costs, there is no economic framework to indicate that these 'productivity costs' of regulations are likely to have a disproportionate impact on smaller firms. We are unable to predict with any certainty how the prospect of having to comply with different regulations and taxes affects different-sized firms' decisions on such matters as production and innovation.
- The quantitative data are costly to collect from firms so that inferences on compliance and regulatory burden are based typically on small samples of firms and on surveys with very low response rates — this could bias results. The qualitative surveys in this chapter are based on much bigger samples and better response rates.
- It is not clear to what extent the quantitative data pick up the incidence and impact of non-compliance. It seems likely that non-compliers will be reluctant to reveal their non-compliance. A more qualitative survey, which examines a broad set of regulations, allows firms which do not comply with some regulations to answer honestly, without fear of revealing their non compliance.

On the other hand, qualitative assessments have their own serious deficiencies. Firms' perceptions of their degree of concern over regulatory requirements cannot provide an accurate measure of their regulatory costs. The perception of burden, and the actual burden on firms, may not always be the same. There is no guarantee that quotients based on perceptions of the costs of regulations will suffice as ordinal, let alone cardinal, measures of the differential burden between varying firm types.

Nevertheless, the indicators based on the survey data may provide proxies for the extent of the disincentive effects arising from different regulations and taxes. We can think of these as *implied* performance impacts, as opposed to the generally unavailable *actual* economic impacts.[1]

The data sources for this study are firm surveys undertaken by the Australian Chamber of Commerce and Industry (ACCI), the Australian Bureau of Statistics (ABS) and the Chamber of Manufactures of NSW. Only the latter survey has been previously published with a firm–size breakdown, so the results and comparisons in this chapter are new in this important respect. Details of the surveys are discussed in appendix D.

The firm size classifications available from the surveys are shown in box 6.1. For convenience, we will often categorise firms throughout this chapter as being small, medium or large. Firms with 1–19 employees are 'small', firms with 21–99 employees are 'medium', and firms with 100 or more employees are 'large' (firms with over 500 employees may also be sometimes termed as 'very large').[2]

---

[1] A perception–based approach to measuring the regulatory burden is not unusual. For example, the data on the regulatory burden in the report of the Small Business Deregulation Task Force (Bell 1996) were based mainly on firms' perceptions and a business survey (dollar estimates of compliance were derived by averaging survey results about the hours spent on filling in forms etc).

[2] This definition of small firms is interchangeable with 'small business' in this chapter. The conventional definition of 'small business' covers firms having less than 20 employees for non–manufacturing businesses, but also firms with less than 100 employees for manufacturing businesses. Manufacturing firms with 20–99 employees represent only a relatively small proportion of this whole group and in this chapter are classified with other non–manufacturing firms with 20–99 employees as 'medium' firms.

Box 6.1: Firm size data available from surveys

	Firm sizes (number of employees)			
ACCI	1–19	20–99	100–999	1000 +
Chamber of Manufactures of NSW	1–20	21–99	100–499	500 +
ABS	1–19	20–99		

We approach the issue of firms' perceptions of the regulatory burden from two angles:

- how different-sized firms vary in their degree of concern over various regulatory issues (section 6.2); and
- how firm types vary regarding their degree of concern about the overall regulatory burden (section 6.3).

Sections 6.2 presents detailed survey data that will be of interest to many. However, readers interested in only a summary of the key findings *across the surveys* are referred to the brief assessment at the end of the section. The conclusions to the chapter are presented in section 6.4.

6.2 Which aspects of the regulatory burden are the most important?

The existence of any unique regulatory problems or impediments — of a sufficiently serious nature — facing small business may provide a justification for special treatment (such as tiering) from governments in reducing their regulatory burden. On the other hand if it appears that the nature and extent of the impediments facing small firms are not unique, but similar to medium and large firms, this would enhance the appeal of a broader regulatory approach.

This section has two tasks. First, it compares and contrasts how small, medium and large firms rank different aspects of the regulatory burden and impediments to their performance. Rankings are a good method for looking within firm size groups as they immediately demonstrate the key issues and their order of importance. They also allow a comparison of the significant issues across different firm size groups.

However, while firms of different sizes might generally agree on both the type of issues giving them the greatest concern and even their order of importance, their rankings of regulatory issues of concern are only half the story. This is because they do not indicate the extent of the burden. Accordingly, as the

second task of this section, we also gauge regulatory impact using degree of concern measures. For example, even though small and large firms might rate compliance as one of the most pressing regulatory problems, the degree of concern across the size groups could be quite different.

The relative degree of concern expressed by different–sized firms over various microeconomic impediments is estimated by comparing *the proportions of firms* registering major concerns over individual issues. This approach enables us to say whether different firms are more likely to have problems (face disincentives) over individual issues.

Survey results

ACCI

The ACCI survey is the most comprehensive of the surveys examined and provides the richest source of information for this chapter. The importance different–sized firms place on different regulatory problems, according to the ACCI survey, is shown in table 6.1.

It is interesting to note the common feeling amongst firms that tax complexity is at the top of their regulatory problems. The desire to change *specific* taxes, regulations and other issues are generally lower down the pecking order (although the Fringe Benefits Tax is the number one problem for firms with 20–99 and 100–999 employees).

A striking feature of the results is the uniformity across different–sized firms for the most troublesome issues. The survey covers around 30 issues relating to regulation, compliance and taxation levels — yet five issues are common to the 'top 10' of all firm size groups and three issues are common to the 'top five'.

There is, in fact, only one major issue that appears to demonstrate significant sensitivity to firm size — the Superannuation Guarantee Charge (SGC). Small and medium–sized firms regard this with sufficient concern to make it one of their top ten problems, whereas larger firms place it well down in their list of concerns. The concern of smaller firms is understandable given the probable lack of familiarity of many smaller firms with employee superannuation prior to the introduction of the SGC. Payroll tax is also interesting — it is very highly ranked as a cause of concern for all but the smallest firms, most of which are presumably exempt.

The medium firms (20–99 employees) show a tendency to be relatively more concerned about key impediments. Four issues distinguish the medium firms most from other firms — unfair dismissals, payroll tax, company tax and

workers compensation. Medium firms are more likely to have major/critical concerns with these issues than other firms. Along with firms with 100–999 employees they are also much more concerned about FBT than other firms.

Table 6.1: ACCI survey — extent of firms' concern over different aspects of the regulatory burden [a]

Regulatory burden	*Proportion of firms indicating major/critical concern (%)*			
	1–19 employees	*20–99 employees*	*100–999 employees*	*1000+ employees*
Frequency and complexity of changes to federal tax rules	73 (1)	72 (2)	68 (2)	58 (3)
Tax Compliance	62 (2)	66 (4)	62 (3)	59 (1)
Frequency and complexity of changes to state tax rules	62 (2)	61 (6)	57 (5)	47 (7)
Unfair Dismissals	59 (4)	65 (5)	55 (6)	51 (6)
FBT	58 (5)	73 (1)	71 (1)	55 (5)
Superannuation guarantee	55 (6)	50 (9)	34 (13)	26 (16)
General Regulation	53 (7)	48 (10)	47 (9)	58 (3)
Company Tax	49 (8)	57 (7)	51 (7)	38 (10)
Workers Compensation	48 (9)	53 (8)	48 (8)	45 (8)
Capital Gains Tax	47 (10)	43 (11)	29 (16)	22 (23)
Payroll Tax	34 (19)	69 (3)	61 (4)	58 (2)
OH&S regulations	32 (21)	37 (14)	42 (10)	38 (10)
Penalty Rates	39 (15)	41 (12)	41 (11)	44 (9)

Notes: Figures in brackets indicate rankings.
a. Major/critical need for change.
Source: ACCI, unpublished data.

Some interesting points emerge about the perceptions of the smallest firms with less than 20 employees:

- the issue of most concern — the frequency and complexity of changes to federal tax rules — is a *very clear first*. None of the other firm sizes had anywhere near such a wide gap between first and second, with the 100–999 employee firms coming the closest;
- other than the frequency and complexity of changes to federal tax rules, small firms have a relatively higher degree of concern over only one other issue — superannuation. This shows some very significant differences

with the medium and larger firms, which confirms the large variance in superannuation rankings in table 6.1; and

- the fact that small firms have the greatest degree of concern — along with very large firms — over telecommunication costs, indicates the relative importance of telecommunications to firms at the two ends of the size spectrum.

The highest 'score' of the very large firms (1000+ employees) of only 59 per cent — concerns over compliance with the tax system — compares with the highest scores of small and medium firms (both 73 per cent) and large firms (71 per cent). The very large firms have below average concerns over superannuation, company tax and changes to federal tax rules.

Chamber of Manufactures of NSW survey

The results from the Chamber of Manufactures of NSW survey — which relate to the type of regulatory issue of greatest concern — also suggest (in common with the ACCI survey) a high degree of uniformity amongst different–sized firms (table 6.2).[3]

The four firm sizes share the same top four problems: business taxation, OH&S, superannuation and environment. Business taxation is ranked first and environment ranked fourth for all four groups. Only these four issues concerned more than 20 per cent of firms for each size group.

Roughly the same proportion of firms across different size categories voiced great concern over taxation issues (70 per cent). However, data relating to the other leading impediments demonstrate how similarity in rankings can hide significant variations in the degree of concern across firm size categories:

- superannuation shows *some* tendency to worry smaller firms more than larger firms, but this is nowhere near as clear cut as the ACCI results. Concern over superannuation averages 50 per cent, but only medium firms with 21–99 employees are above this figure (56 per cent). The smallest firms are mid–40s (but so are firms with 100–499 employees). However, the very largest firms are clearly less concerned with superannuation relative to other impediments in the survey (35 per cent);

[3] The fact that the same ten regulatory issues appear for each firm size is explained by the fact that only 13 issues in total were reported by the Chamber of Manufactures of NSW. The issues missing from table 6.2 are workers compensation, quality regulations and 'other'.

- OH&S is more of a concern as firm size increases, excluding the very largest of firms. It averages 51 per cent and is highest for 100–499 firms (60 per cent); and
- according to this survey, environmental regulations are seen as a bigger problem for larger firms. The issue averages 37 per cent, but gradually increases in importance — affecting 27 per cent of small firms, 30 per cent of medium firms, 44 per cent of large firms and a substantial 58 per cent of very large firms.

Table 6.2: Chamber of Manufactures of NSW survey — extent of firms' concern over different aspects of the regulatory burden [a]

Regulatory burden	*Proportion of firms indicating concern (%)*			
	1–20 employees	*21–99 employees*	*100–499 employees*	*500+ employees*
Business Taxation	68 (1)	69 (1)	67 (1)	72 (1)
Superannuation	48 (2)	56 (2)	46 (3)	36 (4)
OH&S	39 (3)	48 (3)	60 (2)	48 (3)
Environment	27 (4)	30 (4)	45 (4)	59 (2)
Planning & Development	11 (5)	16 (5)	11 (8)	10 (8)
Business Licensing	10 (6)	9 (10)	10 (9)	5 (9)
IR (Unfair dismissals)	9 (7)	10 (9)	7 (10)	3 (10)
Product Labelling	8 (8)	13 (6)	21 (5)	15 (7)
Handling and storage of dangerous goods	7 (9)	11 (7)	15 (7)	18 (5)
Corporations Law	3 (10)	11 (7)	18 (6)	18 (5)

Notes: Figures in brackets indicate rankings.
a. Issues of greatest concern.
Source: Chamber of Manufactures of NSW (1995).

Compliance — a highly ranked micro burden in the ACCI survey — does not appear as an issue in table 6.2. This is because it was approached differently in the Chamber of Manufactures of NSW survey. Following on from the question about types of regulations causing concern, firms were asked to state their main difficulty with regulations. The responses to this question (table 6.3) produced the same rankings for all four firm size groups — with compliance as the number one problem. But illuminating the rankings with information on the perceived intensity of concern highlights some differences.

Table 6.3: Chamber of Manufactures of NSW survey — firms' main difficulties with regulations

Nature of difficulty	*Proportion of firms indicating concern as the main difficulty (%)*			
	1–20 employees	*21–99 employees*	*100–499 employees*	*500+ employees*
Compliance burden	64	76	87	84
Finding out which regulations apply	36	40	35	23
Inappropriate standards	15	19	13	23
Regulations not applicable to imported goods	13	14	11	10
Other	13	3	3	5
Lack of enforcement	10	7	4	5
Pace of change	2	2	1	3
Too many and too complex regulations	2	2	2	0

Source: Chamber of Manufactures of NSW (1995).

The compliance burden is the main difficulty for 80 per cent of all firms, but appears to be less of a problem for the smallest firms (65 per cent) and firms with 21–99 employees (77 per cent). Around 85 per cent of large and very large firms believe compliance to be their main problem with regulations.

'Finding out which regulations apply' is the second ranked problem of most concern, a long distance behind compliance problems (and especially for the largest firms). The worst affected are 21–99 employee firms (40 per cent) and the least affected being very large firms (a little over 20 per cent). The third ranked problem — 'inappropriate standards' — is of most concern to the largest firms (22 per cent), followed by 21–99 firms (19 per cent).

Interestingly, the amount and complexity of regulations is not seen as a major problem by any of the firm size groups — it only affects 1–2 per cent of firms (all sizes). This contrasts with the findings of the ACCI surveys which shows tax complexity to be a leading micro impediment.

Additional data from the Chamber of Manufactures of NSW survey — not shown in table 6.3 — reveal firms' perceptions on how compliance costs changed between 1993 and 1995. The results show these costs appear to have increased across all firm sizes, but the more so for the largest enterprises. Thus, 70 per cent of the smallest firms believe compliance costs have increased, compared with 78 per cent of medium firms, 82 per cent of large firms and 90

per cent of the very large firms with over 500 employees. Only 1 per cent of all firms think the time spent on regulatory compliance decreased between 1993 and 1995.

ABS survey

The most common complaints for firms in the ABS survey [4] are shown in table 6.4. Tax compliance and general regulation problems appear in the top three problems for both firm groups and, as with the ACCI and Chamber of Manufactures of NSW surveys, there is fairly good consistency in all the rankings. Three issues, however, show some variance — superannuation, surveys and the FBT:

- superannuation is the second most frequent problem for the smallest firms, but (as with the ACCI survey) appears to be less of a concern for firms with more employees;
- the burden of completing surveys weighs heavily on the minds of both firm groups, but is perceived to be the biggest problem of all for managers in medium–sized firms. ‘Surveys’ were not tested directly in the ACCI survey, but ‘government paperwork’ was well down the list for all firm sizes (with 1000+ employee firms giving it the highest rank at 24th). The open–ended nature of the ABS question — and at the end of a long survey — may well have generated some strong ‘negative bias’ towards surveys in general; and
- the FBT results confirm the ACCI finding for medium firms (top five ranking), but vary somewhat from the ACCI findings for small firms.

Respondents to the ABS survey did not generally indicate whether their concerns over particular regulatory issues were ‘major’ or of the ‘greatest’ concern. However, the fact that these firms took the time to raise concerns on a survey form — and particularly in light of their revealed negative feelings about the burden of completing surveys — suggests they regarded these problems as relatively important.

[4] The data from the ABS survey were confined to small and medium firm sizes — that is, firms up to one hundred employees. Some larger firms also responded to the survey, but the sample size was too small for meaningful analysis. The survey raised around 25 issues of concern.

Table 6.4: ABS survey — extent of firms' concern over different aspects of the regulatory burden [a]

Regulatory burden	*Proportion of firms indicating concern (%)*	
	1–19 employees	*20–99 employees*
General Regulation	26 (1)	27 (3)
Superannuation	23 (2)	21 (7)
Tax Compliance (including timing of payments)	21 (3)	32 (2)
Complexity/variability of taxes	17 (4)	23 (6)
Unfair dismissals	16 (5)	23 (5)
Survey compliance	15 (6)	33 (1)
Sales Tax	14 (7)	14 (10)
Workers Compensation	13 (8)	16 (9)
IR Regulations	12 (9)	12 (11)
FBT	10 (10)	26 (4)
Payroll Tax	7 (11)	21 (8)

Notes: Figures in brackets indicate rankings.
a. General problems.
Source: ABS 1996.

Only in one area — superannuation — is there a greater proportion of small firms more concerned than the medium firms. Although the difference is slight, this finding lends support to the ACCI results which show concerns with superannuation diminishing as firm size grows.

The burden of completing surveys and general tax compliance are significant contributors to the difference in perceptions of the regulatory burden between the two firm size groups. Surveys are the first ranked impediment of medium firms and produce over twice the degree of resentment as small firms.

And although tax compliance is one of the leading regulatory problems facing small firms, it still only concerns around one–fifth of these firms compared with one–third of medium firms (this contrasts with the closeness in the ACCI survey).

Taxation issues are responsible for most of the other notable differences between the two size groups. Interestingly, there is fairly common ground in relation to regulations and non–taxation issues — only 'unfair dismissals' brought a sharper response from the medium firms.

Key findings across the surveys

Ranking of regulatory issues of concern

Overall, the strong message coming from the firm surveys is that the nature of the regulatory burden varies little by firm size — small, medium and large firms tend to be mainly concerned about the same sort of issues. There was a high degree of uniformity across firm sizes in the rankings of regulatory issues.

While issues varied somewhat between surveys, there were some common themes regarding the most troublesome regulatory problems — with a tendency amongst firms of all sizes to perceive taxation issues as the major problem.

For example, in the ACCI survey — the most comprehensive in terms of sample size and the range of regulatory problems — tax issues were rated the first and second most important impediments by all four firm sizes (and ranked 1–4 by all except the smallest firms). Similarly, all four firm sizes in the Chamber of Manufactures of NSW survey placed ‘business taxation’ at the head of their regulatory problems (all of the others were non–tax issues). Only the ABS bucked the trend, with non–tax issues taking up three of the top five problems (including first) for both small and medium firms.

At the more specific level, the two key taxation issues consistently emerging as concerns for all firm types were complexity and compliance (and with the Fringe Benefits Tax the most problematical form of taxation). The complexity and variability of tax laws was rated higher by smaller firms (but only slightly). However, the compliance burden appears more evenly spread between different–sized firms. The Fringe Benefits Tax was of most concern to medium–sized firms — for example, it was rated the most important micro impediment by the two middle firm sizes in the ACCI survey — but was also placed relatively high by the smallest and very largest firms.

For the non–tax issues, the most consistent key micro impediment across firm sizes was undoubtedly ‘unfair dismissals’. At the other end of the spectrum, superannuation was the only major issue — both tax and non–tax — to show a significant variation in importance across firm types (of greater concern for small firms in the ACCI and ABS surveys).

Degree of concern over regulatory issues

There are several ways of assessing the extent of concern within the different firm groups:

- comparing the degree of concern amongst different–sized firms over their most important regulatory problem;

- comparing the concern expressed by different firms over the leading one or two problems with other lower ranked issues; and
- comparing the proportion of firms with concerns over specific (key) issues. Do any issues stand out as being of greater concern to certain firm sizes?

According to both the ACCI and Chamber of Manufactures of NSW surveys, the extent of concern by small, medium and large firms over the most important regulatory problem was very similar. These showed the most troublesome issue affecting around 70 per cent of firms across all sizes up to 1000 employees. In the ABS survey, smaller firms were a little less concerned than medium firms about their most important regulatory problem.

We obtained mixed signals about the extent of concern shown by firms over the first one or two ranked problems relative to lower ranked ones:

- According to the ACCI and Chamber of Manufactures of NSW results, small firms (up to 20 employees) stand out in placing their prime regulatory concern — in both cases, taxation issues — well ahead of the other leading issues.
- Large firms (100–999 employees) in the ACCI survey showed a high degree of concern for the leading two regulatory problems — FBT and frequency and complexity of changes to federal tax rules — but concern then dropped quickly away for the others. A similar phenomenon also occurred for large firms (100–499 employees) in the Chamber of Manufactures of NSW survey.
- The other two firm sizes in the ACCI and Chamber of Manufactures of NSW surveys (medium and very large firms) tended to have a more even distribution of their leading regulatory problems.

Looking at the key regulatory issues, the ACCI results indicated the extent of concern over both the major tax issues — complexity and compliance — was very similar amongst all firms (except for the very largest). These results were replicated in the ABS survey with respect to tax complexity, but not for tax compliance (which was a concern to around one–third of medium firms but only one–fifth of small firms). Business taxation and the compliance burden dominate as the key regulatory problems — while complexity is of least concern — for all firm sizes in the Chamber of Manufactures of NSW survey.

The Fringe Benefits Tax and Unfair Dismissals showed significant differences between firm sizes, with medium–sized firms appearing to be the most likely to see unfair dismissals legislation as a major micro impediment.

Amongst the 'high profile' regulatory problems, the clearest distinction between firm types was superannuation — showing a likelihood to be less of a concern as firm size increases. This is most clear cut in the ACCI survey, but is also a feature of the Chamber of Manufactures of NSW survey. The only other regulatory concerns in the ACCI survey showing some relationship with firm size were all tax issues:

- payroll tax (not seen as a problem with the smallest firms);
- company tax (not seen as a problem with the largest firms); and
- FBT (seen as more of a problem with medium to large firms).

OH&S also showed some variation between firm types in the Chamber of Manufactures of NSW survey, with concern tending to increase along with firm size (at least for firms up to 500 employees). Environmental regulations also followed the OH&S path, but in a much more certain manner — the results clearly showed these to be a greater problem amongst the larger firms. However, neither OH&S or environmental regulations featured prominently in the ACCI or ABS surveys — which indicates some of the difficulties of interpreting and measuring regulatory problems using qualitative survey evidence.

6.3 The overall regulatory burden

Finally, we turn from the degree of concern about specific regulatory issues to comment on the extent of firms' concerns with their overall regulatory burden. Are small/medium/large firms more likely to express relatively greater concerns about the overall regulatory burden on business?

If differences between small business and other firm types concerning the overall extent of the regulatory burden are extreme (that is, a relatively high burden on small business), this may lend support to a piecemeal regulatory approach to assist small firms. The efficiency argument here rests on the perception of a (uniquely) high overall burden for small firms resulting in general disincentives to improve their business performance. However, if the overall degree of concern is similar between small businesses and other firm types, this would add support to a broad–based policy approach.

Previous studies have commented on a sense of small businesses being overwhelmed by their overall regulatory burden. For example, the 1990 report on small business by the House of Representatives Standing Committee on Industry observed:

> Small businesses face particular problems because of their size. They often have more difficulty than big businesses in dealing with the complexities and demands

> of government regulations and requirements ....they have particular needs which are too often overlooked. (Beddall 1990)

The report of the Small Business Deregulation Task Force (Bell 1996) also commented on this aspect of the regulatory burden. While noting that compliance was potentially a problem for all businesses, it argued that large businesses are often better able to cope. This is because they are more likely to have access to systems, technology and expert advice beyond the reach of small business.

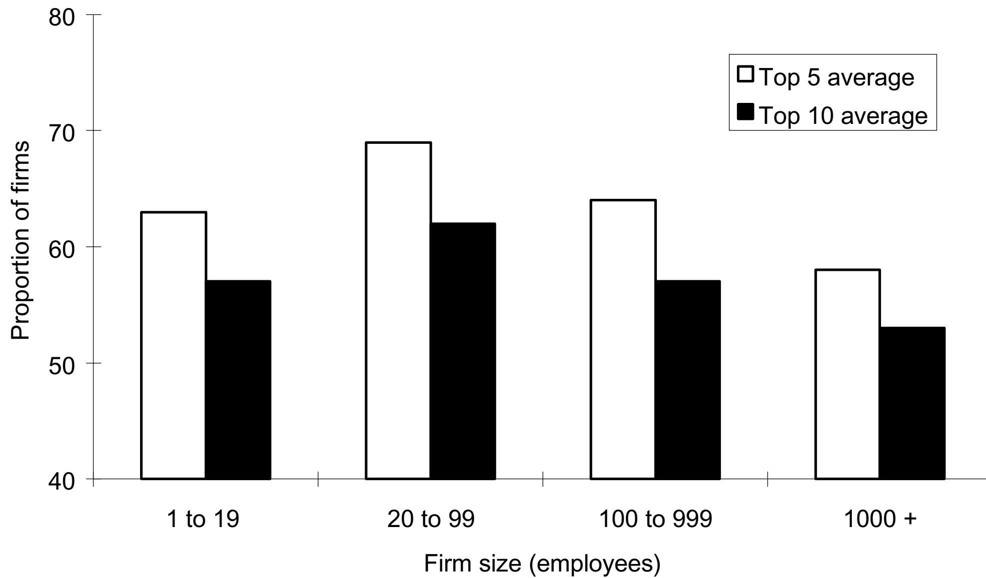
The Bell Report argued further that the tax system appears to be geared to the more complex circumstances of large business — with the result that tax measures appropriate to larger businesses often prove unnecessarily complex and onerous to small business.

By applying averaging techniques to the survey results discussed in the previous section, we can estimate whether the overall regulatory burden is perceived as being greater for smaller or larger firms. Figure 6.1 indicates the ‘average degree of concern’ over the regulatory burden for firms in the ACCI survey. This is calculated by averaging — for each of the four firm sizes — the percentages of firms associated with the top five and top ten impediments in table 6.1.

On average, the medium firms in the ACCI survey (that is, those with 20–99 employees) expressed the greatest concern about the overall regulatory burden (average of 69 per cent of firms concerned over the leading five impediments, and 62 per cent for the leading ten impediments). Interestingly, the firms closest to medium firms — small firms with less than 20 employees and large firms with 100–999 employees — register about the same average degree of concern. The very largest firms (1000+ employees) are less likely to register major/critical concerns about their regulatory impediments than the other groups.

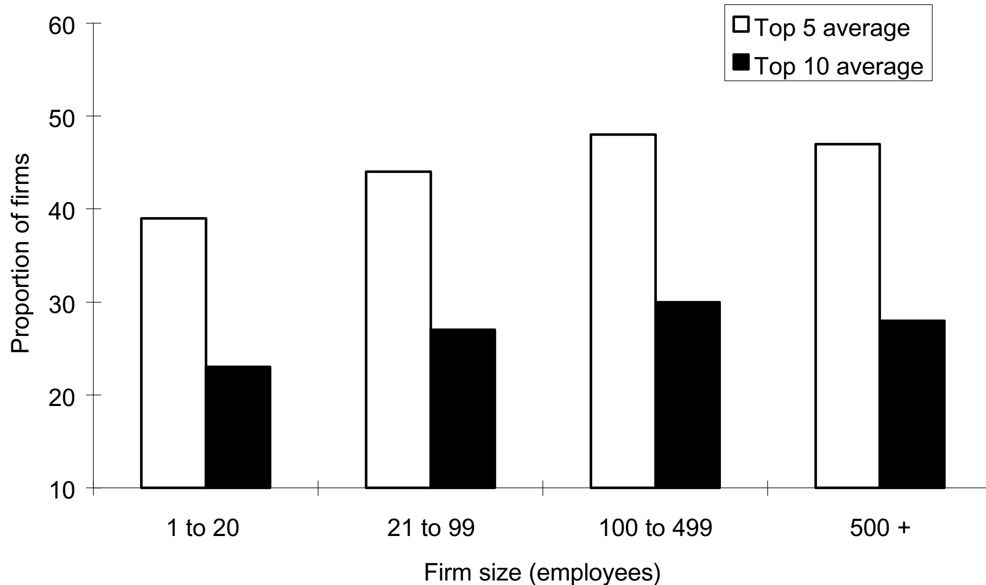
According to the Chamber of Manufactures of NSW survey, the degree of concern over the regulatory burden — again as measured by averaging the leading impediments — is a little higher overall amongst the larger firms, but medium firms with 20–99 employees are not far behind (figure 6.2).

Figure 6.1: ACCI survey — average degree of concern over leading regulatory problems



Source: ACCI, unpublished data.

Figure 6.2: Chamber of Manufactures of NSW survey — average degree of concern over leading regulatory problems

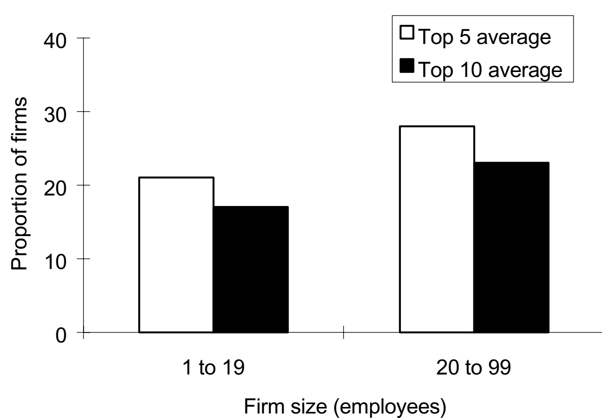


Source: Chamber of Manufactures of NSW (1995).

The results confirm the ACCI findings that small firms with less than 20 employees are less likely than other firms to express concerns about problems with their micro economic environment.

A comparison of the two firm size groups in the ABS survey shows that medium firms are more likely overall to have regulatory problems — the average scores for both the leading five and the leading ten impediments are higher for medium firms (figure 6.3).

Figure 6.3: ABS survey — average degree of concern over leading regulatory problems



Source: ABS 1996.

According to the results across the surveys, we do *not* have a smooth increasing 'resentment line', whereby agitation with micro economic inefficiencies has an inverse relationship with firm size. Although there is evidence that larger firms have less negative perceptions about regulatory problems overall, this only occurs when the very largest firms are taken into account.

Indeed a significant point to emerge across the surveys is that the *smallest firms were often the least likely to have major/critical concerns* over the principal regulatory problems. The Chamber of Manufactures of NSW, ACCI and ABS surveys all showed other firm size groups recording a higher 'average' level of concern than the smallest firms. According to both the ACCI and ABS surveys, the smallest firms had the *least* concerns overall, while the medium firms with 20–99 employees were the ones *worst* affected — although the latter did not provide any data on the larger firm groups.

Why should medium firms possibly be the worst affected? Perhaps it is because medium firms do not possess the organisational structure or abilities of the

largest firms, but fail to obtain the regulatory exemptions granted to the smallest firms. Also, as medium firms are more likely to be involved with a greater array of regulations and tax matters than small firms, they may therefore be more inclined to see the key issues as *major/critical* concerns.

6.4 Concluding remarks

The analysis of firms' perceptions in this chapter has told us something about the extent of their concern over the regulatory burden and how this varies across different firm sizes. We can use this evidence to assist with the assessment of whether there may be economic efficiency grounds for special regulatory assistance to small businesses.

This might be the case if there were:

- *unique regulatory problems or impediments* — of a sufficiently serious nature — facing small business; or
- *extreme* differences between small business and other firm types concerning the *overall extent of the regulatory burden*.

While we found *some* differences in the depth of feeling about specific issues amongst different–sized firms, none of the regulatory problems could be described as *unique* impediments (of a sufficiently serious nature) for small business. All in all, small, medium and large firms tend to be mainly concerned about the same sort of issues and to a similar degree (only superannuation comes close to being firm–size specific). Importantly, there is no evidence that small business concerns are exceptional in any way in the important areas of compliance and complexity of regulations and taxes.

Nor were we able to identify any marked differences between firm types regarding the degree of concern about the overall regulatory burden on business. There is no evidence of a smooth increasing 'resentment line', whereby agitation with the regulatory burden has an inverse relationship with firm size. On the contrary, to the extent differences exist between firm types, it seems the smallest firms may be likely to have the least concerns with their overall regulatory burden.

The bottom line is that firms' own assessment of their regulatory problems fails to demonstrate anything *unique* about small business concerns. If anything, the surveys show medium and large businesses having a greater degree of dissatisfaction with the regulatory framework than small businesses. This

supports the view that moves for regulatory reform should generally be broad and encompass all firm types. [5]

[5] The findings in this chapter on the shared regulatory concerns of different–sized firms in Australia are backed up by the findings of a major survey of European firms. The 'regulatory reform' survey, undertaken by the Union of Industrial and Employers' Confederations of Europe (UNICE) was completed by general managers in 2 100 companies in 14 countries, 80 per cent of which were SMEs. The survey found a high degree of consistency in the views of SMEs and larger firms regarding (a) the regulations which have the greatest adverse impact on competitiveness (b) problems with regulation design, implementation and enforcement (c) the relationship between regulations and successful innovation and (d) the ways in which regulations create obstacles to improving operating efficiency. Only in two areas were there notable differences in the views of SMEs and large firms. The first related to the extent to which regulations create barriers to entry — while there was broad agreement, larger firms are more inclined than SMEs to believe that regulations create more problems with respect to plant closures. The second was about the changes required to improve competitiveness in regulatory areas — large companies emphasised better harmonisation of regulations across Europe, while SMEs emphasised better enforcement of regulations. See UNICE (1995).

7 POLICY ISSUES AND REGULATORY DESIGN

The central question we have posed in this report is: under what circumstances and by what mechanisms is it appropriate to apply more lenient regulatory and tax treatment to small businesses compared to other firms?

To answer this question we have examined the appropriateness of differential regulatory treatment from economic efficiency and equity perspectives. We have also examined the empirical evidence — to test the extent to which possible theoretical justifications for the differential regulatory treatment of small businesses are backed up by findings from both Australian and overseas studies.

On the basis of the findings outlined in the body of the report, we can draw some policy implications and specify some regulatory design guidelines. We can also note some areas where further research is warranted.

7.1 Policy issues

There is evidence that the regulatory burden on business has increased significantly in recent times. In general, there should be a clear aim on the part of governments to minimise this burden — provided this does not compromise the social benefits of the regulations.

Accordingly, in contemplating changes to the design of a regulation (or tax), governments need to consider all the benefits and costs (including compliance costs) of the regulation. Taking these into account there are, in some cases, rationales for regulatory policy approaches favouring selective treatment of small businesses (regulatory tiering). These rationales are equity and economic efficiency.

The regulatory framework may sometimes treat small businesses inequitably — for example, by lowering the returns of owners and managers of small businesses. However, tiering may be an inappropriate remedy for equity concerns because we may forgo some of the broader community benefits that underlie the regulation in the first place — as well as generating other distortions in the economy. Accordingly, possible efficiency improvements are likely to be the main justification for governments contemplating the tiering of regulations or taxes.

Whether efficiency or equity concerns are to the fore, tiering has to be approached on a case–by–case basis. A number of preconditions need to be satisfied and all relevant factors — including any supporting empirical evidence — have to be weighed before a strong economic argument can be advanced for its introduction. Nonetheless, where regulatory agencies believe all the pre–conditions have been met, it would be sensible to consider the tiering of a regulation (or tax).

Box 7.1: Snapshot of key policy issues

- There is evidence that the regulatory burden has significantly increased for all firms and this is having a variety of negative business impacts.
- In many cases the social benefits of a regulation (or tax) are likely to outweigh the social costs and this limits the extent to which the regulatory burden on business can be reduced. However, governments should always be looking for ways to reduce regulatory costs while maintaining a regulation's effectiveness in meeting its objectives.
- By and large, measures to ease the regulatory burden should be broad-based and aimed at eliminating arbitrary, ineffective and badly designed features of regulations — irrespective of whether this affects small or large businesses.
- However, there are some circumstances where measures should be targeted at reducing the regulatory costs of small businesses:
  - reduced regulatory requirements for small businesses may be justified on economic efficiency or equity grounds. But this has to be assessed on a regulation-by-regulation basis and a number of pre-conditions have to be met.
  - government action to vary the administ rative processes that exist to achieve regulatory requirements can lower small business compliance costs and improve the likely social benefits of a regulation.
- Regulatory reform — either in a broad sense or through measures designed to assist small business — requires better data and information. Governments can assist these processes by obtaining, and publishing, better information on both the costs and benefits of regulations.

Assessing the suitability of regulations for tiering on a case–by–case approach is likely to result in some *industries* appearing more 'worthy' than others for some form of differential treatment for small business. For example, there is a stronger case for tiering in industries with relatively inelastic demand. But in all

cases, governments contemplating the tiering of a particular regulation have to first establish that the regulatory costs per unit of output vary significantly with firm size.

Clearly, the required conditions for regulatory tiering do not generally favour its application to *all* small businesses (that is, regardless of industry or type). However, governments may choose to adopt tiering for all small businesses for a particular regulation (or tax) for pragmatic reasons. For example, it may be considered politically unacceptable to provide relief from a specific regulation to some small businesses (in some industries) but not others. To the extent that such all inclusive tiering occurs, a policy of lighter regulatory requirements is likely to be superior (on efficiency grounds) to exemptions. This is because exemptions are more likely to elicit resource shifts and behavioural changes by firms which wish to acquire eligibility for the exemption.

There are considerable risks involved in introducing differential regulations that are not based on sound data:

- thresholds may be set at wrong levels;
- regulations may have incorrect standards set; and
- the decision to tier in the first place may be welfare reducing.

Without hard data on costs and benefits, there can be little confidence that tiered regulations will produce more efficient outcomes than untiered ones.

Government decision–making can be assisted if better information on both the costs and benefits of regulations is collected and published. Importantly, a major objective of improving the quality of regulatory information should be to achieve some consistency in the way common variables are measured. There are, for example, risks of governments making incorrect regulatory decisions if a variety of methodologies for measuring compliance or administrative costs are in use. Similarly, estimating the benefits of some regulations (such as OH&S, transport) often involves (implicit) valuations of people's lives. These results lack credibility if the valuations differ between regulations.

One option for partially overcoming informational problems is for governments to consider market–based mechanisms — sometimes known as economic instruments — as alternatives to bureaucratically managed tiering. These instruments work by using market signals, such as prices, to provide an incentive to interested parties to integrate the relevant regulatory concern into their everyday decisions. This provides firms with the incentives and flexibility to find new low cost ways of (for example) reducing pollution. On the other hand, such instruments are not applicable to many regulatory and other situations where small business compliance burdens are raised.

An area where there appears to be considerable scope for the differential treatment of small businesses is in the delivery of regulations. That is, while a particular standard or objective of a regulation might be uniform across different–sized businesses, the administrative processes to achieve the regulatory requirements may be varied. Better delivery is likely to be welfare enhancing — it has the potential to reduce compliance costs, increase rates of compliance and raise the overall benefits obtained from the regulation. Governments can improve the delivery of regulations to small (and larger) businesses primarily through information assistance (that helps businesses to better deal with administrative complexities and other aspects of regulatory delivery). Australian governments are already undertaking measures in this area — the most recent example is the Commonwealth Government's response to the report of the Small Business Deregulation Task Force.

Having made a case for the differential regulatory treatment of different–sized firms — primarily through improved delivery — it is nevertheless important that governments avoid putting too many eggs in this basket. Moves for regulatory reform should be broad and potentially encompass all firm types — that is, reform should be aimed at reducing any arbitrary, ineffective or other badly designed features of regulations, regardless of *where* the burden is felt. Policy initiatives should primarily be aimed at addressing the specific regulatory issues or key regulatory burdens which are of common concern. A focus on more lenient regulatory treatment of small businesses raises the possibility that medium and large businesses will be overlooked. And, as industry surveys demonstrate, medium and large businesses are just as concerned as small businesses about the regulatory burden.

7.2 Regulatory design guidelines

Many of the problems associated with the regulatory burden may come down to *general* flaws in the design of regulations. Inappropriate design is not just an issue of easing some of the burden imposed on businesses. If regulations and taxes are not designed correctly — so as to be efficient, effective and administratively simple — there are likely to be adverse effects on economic welfare more generally.

Australia is not alone in moving towards greater quality control in regulation making and review. A number of organisations have put forward 'checklists' to assist with regulatory decision–making in practice, including issues relating to regulatory design. Examples of these 'practical guides' are contained in appendix E.

However, this report has focused on a *specific* aspect of regulatory design — the varying of regulatory requirements or delivery mechanisms to favour small businesses. In doing so, we have developed some principles to assist government agencies and regulatory authorities to define the special circumstances when some form of tiering — or flexibility in delivery — may be appropriate. We have also made a number of observations on types of tiering mechanisms and their application.

A checklist of these guidelines — in the form of regulatory design questions — is contained in box 7.2. Some of these are quite broad and repeat the policy issues raised in the previous section. However, for the most part, they focus on the detail that necessarily underlies any proposals to vary regulations according to firm size. The checklist is illustrative — rather than exhaustive — and is meant to assist government agencies and regulatory authorities in understanding the range of issues that need to be addressed when they are considering varying regulatory requirements (or delivery) according to firm size.

Box 7.2: Varying regulations to favour small business — a checklist for government agencies/ regulatory authorities

Up–front questions on whether to tier a specific regulation or tax

- How are regulations to be selected for assessing their suitability for tiering?
- Will it be politically acceptable for a regulation to be tiered in only some industries and not for *all* small businesses?
- Optimal regulatory setting requires considerable knowledge about the likely impact on the size distribution of firms and the costs and benefits of regulations in different enterprises. In general, is government data good enough? Is all the required data to justify tiering available across different industries? How is it to be collected? How will government agencies deal with information gaps? Are there alternative methods for reliably inferring compliance costs across different industries, firm sizes and other firm characteristics?
- Can government agencies be confident that the differential application of a regulation by firm size will produce net social gains — taking into account the costs of isolating necessary information and the administration costs?

Box 7.2: cont'd

- Could government agencies ease the compliance burden on smaller businesses by bearing more administrative costs themselves?

- Is there a case for regulatory tiering on distributional and fairness grounds? How are redistributive and fairness considerations to be assessed? Can the ultimate incidence of compliance costs be accurately assessed? Is tiering the best instrument for achieving equity goals? Is the government prepared to pursue equity goals through tiering at some cost to economic efficiency?
- Would it be possible to introduce market–based mechanisms as an alternative to bureaucratically managed tiering?
- Would recourse to legislative provisions against anti-competitive behaviour be preferable (in some cases) to regulatory tiering?
- Would it be possible for different–sized firms to devise their own new regulation — or their own variation of a regulation — that lowered compliance costs but met the objectives of the existing regulation?
- Would it be less costly for government agencies to undertake research and *prescribe* requirements to smaller firms, rather than indicating to individual firms that they are free to find the least costly way of meeting a standard?
- Do government agencies possess the expertise to assess whether grounds for tiering exist? If yes, what will be the administrative costs? If no, what will be the costs of external assistance?

Is the tiering of a specific regulation or tax justified for a particular industry?

- What evidence is there that compliance costs per unit of output significantly vary with firm size? How important are compliance costs relative to overall unit costs?
- Is industry demand relatively unresponsive to price changes?
- Are competitive pressures significantly weakened by any compliance cost disadvantage of smaller firms? Do small and large businesses substantially compete with each other? How is the degree of competition to be measured? Is effective competition different between the ‘market’ and sub–markets?
- Would the introduction of tiering excessively reduce the benefits derived from the regulation of small firms in the industry? Would the decrease in benefits be greater than the reduction in regulatory costs (business compliance costs adjusted for any increase in government administration costs)?

Tiering mechanisms and their application

- Can tiering take account of the points at which unit compliance costs change significantly by firm size (rather than any adherence to pre-defined size classes)?

Box 7.2: cont’d

- How many tiers are appropriate? How is checking the eligibility of firms to be undertaken?

- Which aspects of the regulation are to be tiered — for example, the standard, the monitoring, the reporting requirements — and what is to be the rationale for the choice (eg complaints from firms, simplicity, cost, evidence of non-compliance)?
- On what basis are smaller firms to be given exemptions rather than just lighter regulatory requirements?
- How are thresholds for exemptions to be determined? How will government agencies deal with rent seeking by lobby groups? Will the economic benefits and costs of tiering be robust to mistakes in setting thresholds?
- How are lower regulatory standards to be determined? How are lighter regulatory requirements to be determined?
- How is the tiering of a regulation to be monitored for efficiency and effectiveness? How is it to be evaluated?
- Over what period is tiering to be applied? Will there be any opportunities for fine tuning tiering mechanisms?

Varying administrative processes (regulatory delivery)

- How will government agencies assess the different mechanisms by which the delivery of a regulation may be varied?
- How will government agencies determine which areas of delivery are of particular concern to businesses?
- How will government agencies be able to assess which flexible delivery options are likely to produce the largest net social gains?
- What are the benefits and costs of focusing on improved delivery for individual regulations vis–a–vis a broader–based approach (ie for a group of regulations)? To what extent are flexible delivery options transferable between regulations?
- How much onus should government agencies place on improving regulatory delivery for small businesses vis–a–vis medium and large businesses?
- Could the private sector perform the favoured delivery options better than government agencies?
- In what situations could improved regulatory outcomes be achieved by providing information to firms about ways they can minimise breaches?
- Are there grounds for a negotiated rule making process between firms and the regulatory authority?
- How is the flexible delivery of a regulation to be monitored and evaluated?

7.3 Areas for further research

Issues where further research and analysis may be beneficial include:

- Analysis of the costs and benefits of regulations and taxes and how these depend on firm characteristics (industry, size, age etc).
- Development of a full general equilibrium framework for the analysis of the impact of regulations by firm size, calibrated on the data collected above. This would allow deeper insights into when it is appropriate to use regulatory tiering. It would also provide estimates of the magnitude of welfare costs from the application of uniform regulations where regulatory benefits and costs per output unit vary by firm size.
- Analysis of the extent to which variations in regulatory requirements as firms grow constitute a 'growth trap' — for example, whether exemptions for small businesses discourage enterprises at the margin from jumping over the threshold to become 'medium–sized' businesses.

APPENDIX A: THE ECONOMIC SIGNIFICANCE OF SMALL BUSINESS

A.1 Regulatory reform and the economic significance of small business

The overriding emphasis of moves for re-configuration and simplification of regulations is improvement in business efficiency — for all types of enterprises, across all sectors, and for all sizes. However, at times this rationale is embellished with the argument that small business plays a sufficiently *special* role in contributing to economic welfare that they should be the focus of policy initiatives.

In this appendix we note some of the limitations of this view. In doing so, however, we point out that:

- Evidence on jobs, innovation, and output indicate the clear economic significance of the small business sector. It is therefore important that the sector is not encumbered by inappropriate or badly administered regulations, or institutions that are not responsive. These are themes emphasised by both the Beddall Report (Beddall 1990) and the more recent report of the Small Business Deregulation Task Force, *More Time for Business*. Economic policy should not ignore the sector, but nor, on the other hand, should it favour it. Other than when sound principles dictate otherwise (chapter 4), the typically current practice of providing equal treatment of firms regardless of their size, seems warranted.
- While small firms may not have a 'special' role in contributing to economic welfare, they can have unique problems and impediments which may be the appropriate target for public policy.
- There *are* arguments for some forms of selective regulatory reform (this is the major thrust of chapter 4), though these suffer from some pragmatic drawbacks.

Even so, it is still valuable to question the stated rationale because the argument that small business is especially 'significant' does not provide precise guidelines about where or when selective treatment is appropriate, whereas a carefully structured rationale can be useful in designing policies.

A.2 The limitations of the view

There are three principal limitations with the popular view about the policy significance of the role of small business:

- While the small business sector is economically important, claims about its dynamism, and contributions to innovation and employment, are sometimes exaggerated. Arguably, a more appropriate picture of the economy is of an interdependent set of firms of all sizes and types, each class of which has an important role.
- The heterogeneity of small business presents problems for policymakers wishing to gear policies for small business as a whole group.
- Even if the small business sector is highly significant, this may not imply that it should be a special focus of policy.

We consider these in more detail in the next three sections.

A.3 The economic role of small business

Contributions of small, medium and large firms to the macro economy

The most complete source of information on the relative contributions of different–sized firms to the macro economy is provided by the recently published results of the 1995 Business Longitudinal Survey (IC and DIST 1997). This provides information on a large variety of performance measures and forms the basis of the following discussion.

Table A.1 summarises different–sized firms' [1] contributions to the economy in seven key areas. It shows that notwithstanding their dominance in terms of firm numbers (93 per cent), small firms play a lesser role in the economy than other–sized enterprises. They play a relatively larger role in employment than their output would suggest, but a markedly smaller role in exports.

The conventional definition of small business not only covers firms having less than 20 employees in the case of non–manufacturing businesses, but also manufacturing firms with less than 100 employees. This definition is used by the ABS and was adopted by the Small Business Deregulation Task Force and by the Commonwealth Government in its policy response. Figure A.1 uses the same data source as table A.1, but recalculated to group all firms with 1–19 employees with manufacturing firms with 20–99 employees — to give us 'true' small business contributions as conventionally defined.

---

[1] The firm sizes in the table are common classifications used to represent 'small', 'medium', 'large' and 'very large' firms.

Table A.1: Role in the Australian economy of different–sized firms, 1994–95 (per cent shares) [a]

Item	*1 – 19 employees*	*20 – 99 employees*	*100 – 499 employees*	*500 + employees*	*Total*
Enterprises	93.3	5.6	0.8	0.2	100.0
Employment	39.6	20.8	17.2	22.3	100.0
Industry gross product	29.9	19.5	21.5	29.2	100.0
Sales of goods and services	32.5	23.0	19.2	25.3	100.0
Wages and salaries	28.6	20.7	21.2	29.3	100.0
Profits	38.9	20.8	14.5	25.6	100.0
Exports	15.0	21.5	24.5	39.1	100.0

a Components may not add to 100 per cent due to rounding.
Source: IC and DIST 1997.

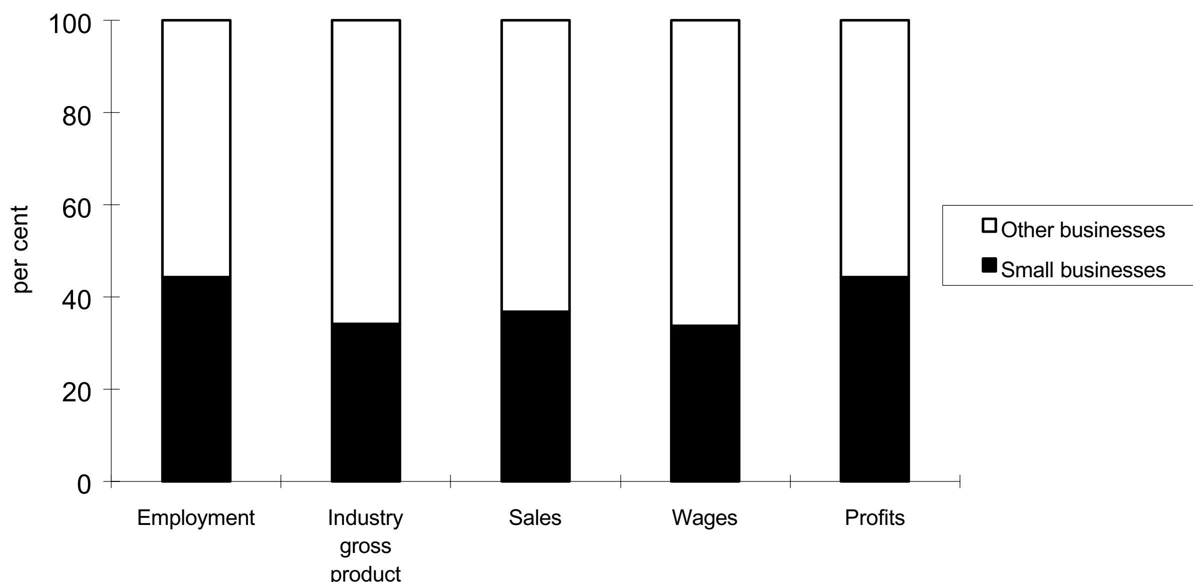
This typically adds around 4–5 percentage points to the small firm contributions shown in table A.1 [2]:

- the employment share rises from 39.6 per cent to 44.3 per cent;
- the industry gross product share rises from 29.9 per cent to 34.1 per cent;
- the sales contribution increases from 32.5 per cent to 36.8 per cent;
- the wages contribution increases from 28.6 per cent to 33.8 per cent; and
- the profit share rises from 38.9 per cent to 42.4 per cent.

The role of small business in the economy *is* significant. But in respect of key variables identified above, it is clearly smaller in size than the remaining 5 per cent or so of businesses classified as medium or large. This, by itself, does not provide convincing support for a policy rationale that small firms' regulatory burden should be especially targeted because of these firms' contribution to the macro economy.

[2] Export shares could not be separately calculated for 'small business', but table A.1 demonstrates the relatively minor contribution of small firms to the exports trade.

Figure A.1: Small business contribution to key economic indicators, Australia, 1994–95 [a]



a. 'Small business' is defined here as firms having less than 20 employees in the case of non–manufacturing businesses, and manufacturing firms with less than 100 employees.
Source: IC and DIST, 1997. Study estimates.

One other static indicator of the significance of different–sized firms is their productivity. While productivity comparisons are not shown in table A.1, the substantial differences in labour productivity between different–sized firms can be demonstrated by the employment and industry gross product data.

For example, the smallest firms (1–19 employees) and the largest firms (over 500 employees) each produce around 30 per cent of industry gross product. But whereas small firms require 40 per cent of employed workers to produce this output, the large firms do so with only 22 per cent of the work force.

Relatively higher labour productivity in larger firms has much to do with capital resources, technology, economies of scale and differences in the markets in which small and larger firms operate. But other aspects to consider — and especially in the sense of *increasing* productivity — are the 'behind the scenes activities' that underpin the big economic picture and contribute to productivity and economic growth. In other words, the same sort of dynamic and 'special' factors that some commentators attribute especially to small business.

Dynamic economic contributions of different–sized firms

The economic contributions of small, medium and large firms cannot be measured solely by reference to their share of static indicators such as employment, industry production and profits. The Australian economy is constantly changing, growing (most of the time) and producing higher living standards — and the contributions different–sized firms make to these dynamic processes are also vitally important. Arguments for small business policy therefore often refer to dynamic factors to stress the special role small firms play in moving the economy ahead — for example, in generating employment growth, entrepreneurship, and competition (for example, Beddall 1990).

One area where, as a sector, small business appears to play an important role is job generation. Revesz and Lattimore (1997) found that firms employing under 20 persons (representing around one–third of employment in 1995) accounted for about one–half of the new jobs generated in Australia from 1983–84 to 1994–95. Even though some of this may be a statistical illusion as downsizing larger firms creep under the 20 person threshold — it seems likely that small businesses have been the location of many new jobs in the Australian economy. On the other hand, the major reason for the shift in the size distribution of firms towards smaller enterprises appears to be structural change — rather than a general increase in the comparative advantage of 'smallness'. That is, sectors intensive in small businesses (typically the service sector) have tended to grow the fastest.

Measuring and comparing other 'dynamic' factors, such as entrepreneurship and innovation, across different firms has been made possible by the 1995 Business Longitudinal Survey (IC and DIST 1997). This provides up–to–date information covering many of the aspects that could reasonably be linked to these characteristics (table A.2).

The data show that larger firms in the economy are considerably more likely to be involved in activities that will improve skills, product quality and productivity. They are also more likely to be involved in innovative activities and introducing new products. Finally, larger firms are more likely to aspire to growth in production and exports.

The point is, large and medium firms do not only contribute significant shares to important economic measures such as industry gross product, exports and employment. There is empirical evidence they are more likely than small firms to be focused on introducing changes, acquiring new skills and seeking new opportunities — with favourable impacts on productivity and growth. These results are mirrored in other countries (for example see Harrison, 1994).

Table A.2: Dynamic economic contributions of different–sized firms, Australia, 1994–95

Item	*1 – 19 employees*	*20 – 99 employees*	*100 – 499 employees*	*500 + employees*	*Total*
	proportion of firms in each size category				
Decision maker tertiary qualified	33	43	64[a]		34
Documented business plan[b]	14	37	67	83	16
Performance comparisons with other firms	17	35	53	62	18
Participated in government programs[c]	4	14	33	47	5
Formal training of employees[d]	21	68	84	80	24
Introduced major changes in firm[e]	16	35	43	46	17
Introduced business improvement activity[f] (eg TQM, QA, JIT)	6	31	47	53	8
Undertaking innovative activities[d]	8	18	25	34	9
Intend to significantly increase production[g]	23	36	42	46	24
Intend to introduce new goods or services[g]	21	34	41	49	22
Intend to maintain or commence exporting[g]	4	14	26	32	5

Notes: a. For firms with 100 or more employees. Data not separately available for firms with 100–499 and 500+ employees.
b. As at June 1995.
c. In the past two years.
d. In 1994–95.
e. In the past three years. Types of change included were: range of products or services, number of locations, advertising, distribution, markets targeted, administrative computer systems, production technology, technical training and management training.
f. In the past three years.
g. Over next three years.

Source: IC and DIST 1997.

However, data on innovation show that small business is playing an increasingly important role over time (tables A.3 and A.4). For example, in 1984–85, firms employing under 100 persons in manufacturing accounted for under 18 per cent of manufacturing R&D (measured in person years). By 1995–96, they accounted for close to 30 per cent of R&D. A similar story is evident for non-manufacturing. Patterns of innovation across firm sizes are in flux.

Furthermore, data from an ABS survey of innovation show that small firms that are innovative, tend to attribute a greater share of their sales to innovation than their larger counterparts (Phillips 1997). On the other hand, innovative smaller firms tend to undertake less novel R&D, with shorter pay-back periods than larger firms.

It is probably hazardous to pigeonhole big or small business as categorically innovative, dynamic or growth oriented, when there is such diversity in the types of businesses in either group. This is an issue to which we now turn.

Table A.3: Innovation (R&D person years) in Australian manufacturing, by enterprise size

Firm size (no. of employees)	*Less than 10*	*10 to 19*	*20 to 99*	*100 to 199*	*200 to 499*	*500 to 999*	*1000 or more*	*Total*
				Person years				
1984-85	253	287	838	495	1071	752	4117	7813
1986-87	613	533	1641	713	1348	935	4337	10120
1988-89	734	600	2193	962	1570	1247	3937	11243
1990-91	771	672	2168	974	1794	1216	3664	11259
1992-93	672	658	2268	1096	2190	1439	4426	12749
1994-95	667	798	2643	1182	2168	2732	4724	14914
1995-96	788	957	2934	1298	2045	3091	4537	15650
				Share of total R&D person years (%)				
1984-85	3.2	3.7	10.7	6.3	13.7	9.6	52.7	100
1986-87	6.1	5.3	16.2	7.0	13.3	9.2	42.9	100
1988-89	6.5	5.3	19.5	8.6	14.0	11.1	35.0	100
1990-91	6.8	6.0	19.3	8.7	15.9	10.8	32.5	100
1992-93	5.3	5.2	17.8	8.6	17.2	11.3	34.7	100
1994-95	4.5	5.4	17.7	7.9	14.5	18.3	31.7	100
1995-96	5.0	6.1	18.7	8.3	13.1	19.8	29.0	100

Source: ABS *Research and Experimental Development, Business Enterprises, Australia*, Cat. No. 8104.0 (various issues).

Table A.4: Innovation (R&D person years) in Australian non–manufacturing industries, by enterprise size

Firm size (no. of employees)	*Less than 10*	*10 to 19*	*20 to 99*	*100 to 199*	*200 to 499*	*500 to 999*	*1000 or more*	*Total*
				Person years				
1984-85	418	263	623	325	340	320	1810	4099
1986-87	676	545	1298	532	536	306	2355	6248
1988-89	757	626	1519	1003	1079	628	2855	8467
1990-91	564	..	..	1185	1203	292	..	8168
1992-93	695	..	2210	..	860	452	3117	8930
1994-95	789	746	2704	902	931	670	2758	9500
1995-96	931	841	2828	916	891	704	2834	9945
			Share of total R&D person years (%)					
1984-85	10.2	6.4	15.2	7.9	8.3	7.8	44.2	100
1986-87	10.8	8.7	20.8	8.5	8.6	4.9	37.7	100
1988-89	8.9	7.4	17.9	11.8	12.7	7.4	33.7	100
1990-91	6.9	..	..	14.5	14.7	3.6	..	100
1992-93	7.8	..	24.7	..	9.6	5.1	34.9	100
1994-95	8.3	7.9	28.5	9.5	9.8	7.1	29.0	100
1995-96	9.4	8.5	28.4	9.2	9.0	7.1	28.5	100

.. not published.
Source: ABS *Research and Experimental Development, Business Enterprises, Australia*, Cat. No. 8104.0 (various issues).

A.4 Heterogeneity

Small (and big) business is extraordinarily heterogeneous — encompassing firms across all sorts of sectors, with differential technology, low and high paid jobs, varying levels of export orientation, and sluggish and rapid growth. Generalisations are apt to muddy important issues. This heterogeneity presents problems for policymakers wishing to gear policies for small business as a whole group. For example, a small service provider has, in many ways, a greater degree of similarity with a somewhat larger service provider, than with a small firm in another sector, say a high technology manufacturer.

Data on average earnings of workers, the qualifications of firm decision-makers, innovation tendencies, and a host of other variables (ABS Cat 1321.0

and Cat. 8104.0 and IC and DIST 1997) suggest large variations between small firms.

A.5 The significance of 'significance'

The claim that the economic 'significance' of a sector is a necessary or sufficient basis for selective government policy has limitations. Revesz and Lattimore (1997) lists a series of major problems of forming selective economic policies on the basis of the significance (great or small) of any sector. For example, even if small business was a major (minor) source of growth and productivity change in the economy, this might reflect inappropriate regulatory burdens on larger (smaller) firms, or the outcome of past selective policies. Ultimately, good industry and regulatory policy aims to achieve some appropriate social or economic response by firms in the most efficient way. The past size or significance of a sector does not suggest whether it will respond appropriately to such policies.

APPENDIX B: THE THEORY OF REGULATORY TIERING

The conditions under which tiering is optimal, and why this arises could not be fully explained in the main text, without overburdening the text with qualifications and technical minutiae. The purpose of this appendix is to explore two general issues:

- some further understanding about the nature of the benefit curves we use in chapter 4; and
- the elasticity conditions under which tiering is optimal.

B.1 The nature of the benefit curves

Box 4.1 in chapter 4 sets out the overall social benefits from regulations. Here we are interested in some components of the net social benefit. Imagine for the moment that RENT, ERROR, REALLOC and ADMIN are all zero, so that we can abstract from them in our analysis. This implies that for the ith sized firm, the net social benefit is:

$$NSB_i = GAIN_i - \hat{E}_i - COMPLY_i + \hat{\alpha}_i\hat{E}_i = B_i - COMPLY_i$$

where B_i is:

$$B_i = GAIN_i - \hat{E}_i + \hat{\alpha}_i\hat{E}_i$$

B_i can be interpreted as the gross benefit of the regulation ($GAIN_i$-$\hat{E}_i$) with a constant added ($\hat{\alpha}_i\hat{E}_i$).

As the regulatory design changes, two things happen.

First, $GAIN_i$ will shift up or down.

Second, the size distribution of firms will change, so that the weight of ($GAIN_i$-$\hat{E}_i$) in total social benefits will change. This has important implications. It means that that not only does the relative value of $GAIN_i$ between different i's matter, but so too does the initial level of externality ($\hat{E}_i$), where that is non-zero.[1] For example, if externalities (in the *absence* of regulations) were lower in

[1] We know little about the shape of $\hat{E}_i$ over i. Larger firms may be more likely to contain externalities even in the absence of formal codes, because of greater worker bargaining power and bigger costs from a loss of reputation. Another possible reason for autonomous 'self-regulation' are stochastic scale economies. For example, some

large firms than small firms, then shifts in the size distribution of firms towards smaller firms, can adversely affect welfare.

For example, imagine the following (contrived) scenario. Large firms generate no externalities —and indeed, regulation for them is quite superfluous. Small firms generate quite high externalities, but the regulatory instrument intended to eliminate these externalities actually occasions bigger costs than the costs of the externality. The regulation obviously needs to be re-designed. The regulators note that compliance costs per unit of output are very low in large firms, and so advocate a tiering approach to lower compliance costs in small firms only. They decrease compliance costs in such a way that for any small firm, the benefits of the regulation now exceeds its costs. Are we necessarily better off? This depends on how much the size distribution shifts. By lowering compliance costs in small firms relative to large firms, they increase the relative price of goods and services from big firms. If the size distribution shifts enough, then we forsake so much production in larger firms (with no externalities) to production in small firms (where some externalities remain), that overall welfare declines.

In chapter 4 we have drawn a 'benefit' curve which incorporates ($\hat{E}_i$). So that the benefit curve is (typically) positive we have also added the term ($\hat{\alpha}_i \hat{E}_i$) — this defines B_i. Figure B.1 illustrates the make-up of B_i for a hypothetical case.

Now, we can characterise what happens as tiering is introduced. Figure B.2 shows a hypothetical situation after a uniform regulation has been introduced. In this case, it appears that there are opportunities for tiering so long as the decrease in the benefit curve for smaller firms is sufficiently less than the decrease in the cost curve. Figure B3 shows a situation whereby the cost curve has shifted down, and net benefits from the regulation are obtained in small business. Whether, tiering should be adopted, though, will depend on the degree to which we obtain such a net benefit for small firms, and the degree to which the size distribution of firms changes (figure B.4).

---

adverse events, say bad injuries to a group of workers, are very rare. In the absence of regulation, a small business may prefer to avoid the insurance premiums (and safety precautions) for such rare but costly events, and use their limited liability status as protection against the full value of the contingent liability should the adverse event occur. A large company, however, is big enough that it would not be forced into bankruptcy by such an event, and will generally find it optimal to voluntarily insure its workers and implement safety standards. In this case, the codification of regulation — with its accompanying paper and other burdens — might produce few additional social benefits for large firms, but still generate compliance costs for the larger firm. In this case, the benefits of regulation decline with size, but it is still critical to build $\hat{E}_i$ into the cost-benefit framework so as to properly account for the impact of the changing size distribution.

Figure B.1: The components of the benefit curve

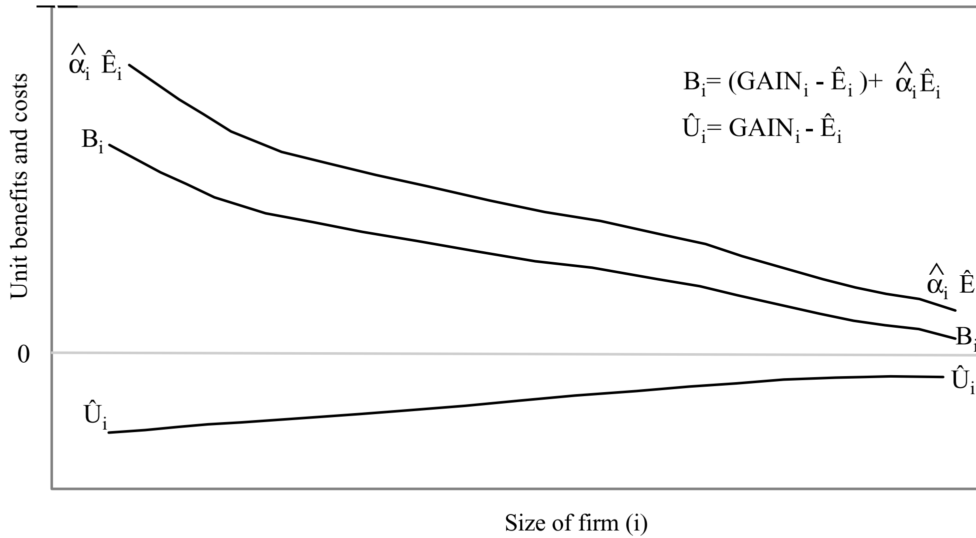
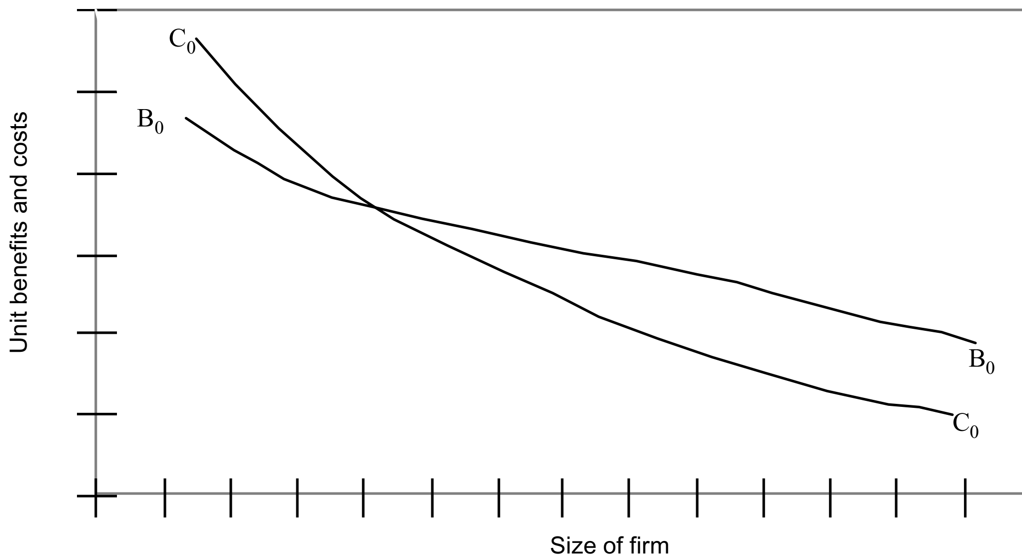


Figure B.2: A uniform regulation



The analysis can be repeated for different assumptions about the shape and slope of the various curves — the results depend on the exact configuration of circumstances for a regulation and an industry. We note, however, that while there is probably great uncertainty over the shape of the B and C curves for externalities, this is not true for taxes. We are confident that the B curve is essentially flat for revenue raising measures, and asymptotes to zero with size for the compliance cost curve.

Figure B.3: A tiered regulation

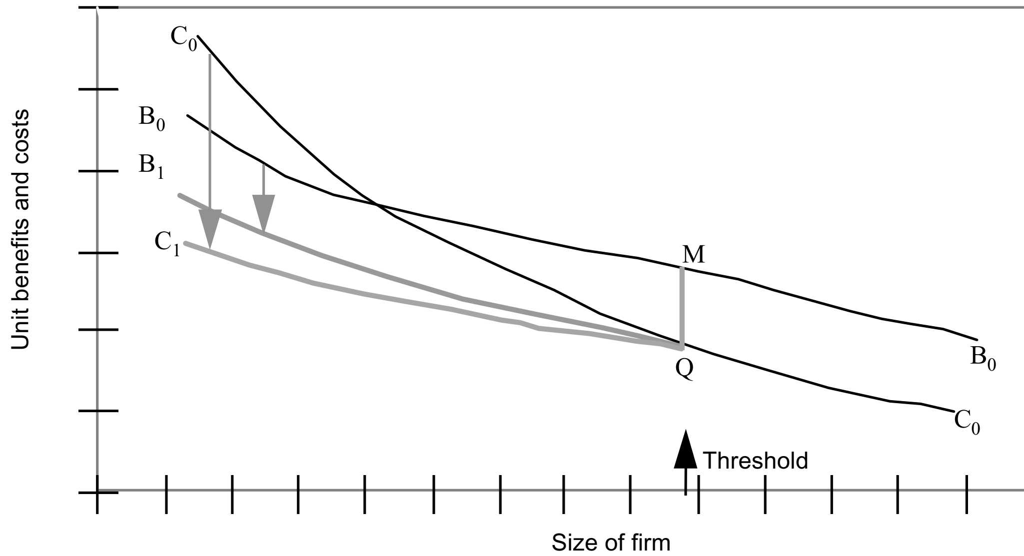
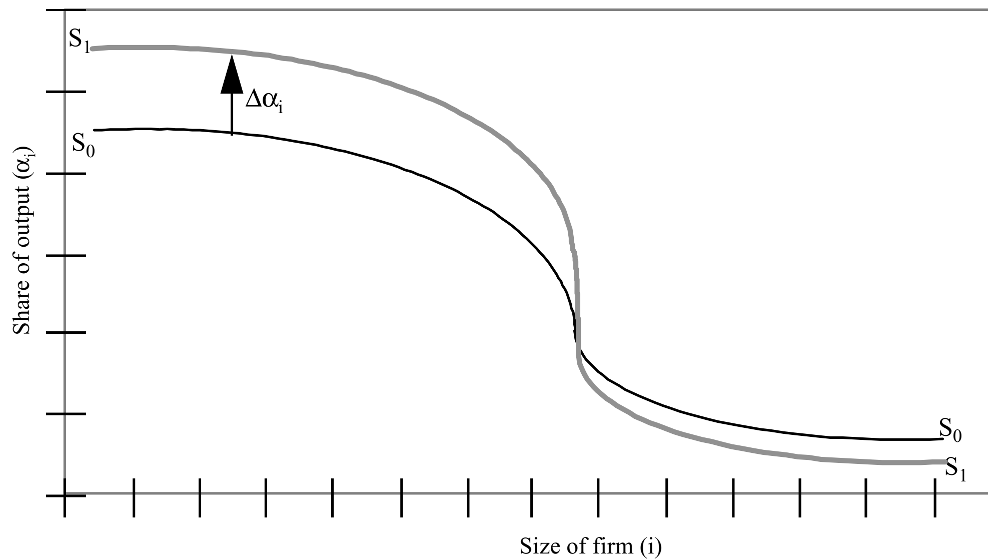


Figure B.4: How tiering can change the size distribution



B.2 Elasticity conditions

The characterisation in chapter 4 of the situations in which substantive tiering should be entertained has been illustrative, rather than rigorous. There is scope for more research into the question of when, in general equilibrium, it would be appropriate to use tiering — and to estimate the magnitude of welfare costs from the application of uniform regulations where regulatory benefits and costs per output unit vary by firm size.

Brock and Evans (1985a) rigorously analyse the welfare impacts of uniform versus tiered arrangements when the government instrument is a tax on an externality. Their focus is on when it is appropriate to vary a regulatory measure *within* an industry. But we have indicated that there may be cases where an industry is totally made up of smaller firms who bear a burden associated with a regulation which applies to many industries. In this case the interest is on how a uniform regulation applied to different industries may produce welfare costs.

The purpose of this appendix is to describe some tools for examining these issues, to highlight some differences in the results from the optimal taxation literature, and to point out further theoretical work that should be done.

The simplest case

Imagine the following, admittedly contrived, case. The government introduces a regulation. It occasions large compliance costs and zero benefits in one industry (product 1), but has no impact on prices or benefits in other industries (product 2). The production inefficiencies in this simple characterisation relate only to the use of resources to comply with the regulation. The impact of the compliance costs is to raise prices in industry1. [2]

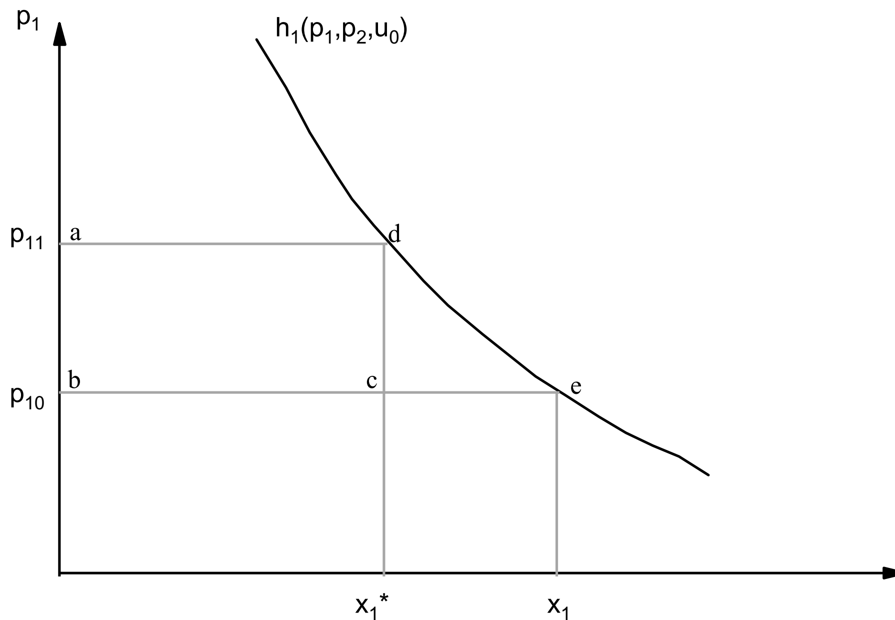
Since, by construction this regulation has no benefit, it is like a tax whose revenue is wasted (say, an ad valorem tax where the revenue is given away to foreigners). Thus even under Walras' law, the budget of the consumer is unaffected by the regulation, but prices in industry 1 have increased. We know, therefore, that welfare has unequivocally fallen — so that it seems obvious that the regulation should be repealed. However, say that there are some administrative costs in changing or eliminating the regulation. Policymakers want to know when they should be most zealous in seeking to re-design or eliminate the regulation. Should it be when the demand for the good is price elastic, or inelastic?

This can be answered by reference to the Hicksian demand (or income compensated) curve (figure B.5). Prices increase from p_{10} to p_{11}, but other prices are fixed. The loss in social welfare (here measured as the compensating variation because we use the utility of the state prior to the price rise in the

[2] In all the analysis of this appendix we abstract from possible impacts of a regulation on producer surplus. We do so by supposing that small business can have access to inputs at constant prices, and that the small business market is competitive. In this case, the long run supply curve is horizontal, and the burden of regulation is fully passed on to consumers as higher prices (eg see Rosen 1995 p. 283).

demand curve, u_0) is simply the integral under the demand curve between p_{10} and p_{11}.

Figure B.5: The impact of a regulatory burden on demand



Assuming linearity in the demand curve for small changes in p_1, it is clear that the social welfare cost (SWC) is equal to the rectangle abcd and triangle dce. Let $p_{11} = (1+c)\, p_{10}$ where c is the regulatory cost burden per unit of output. In this case:

$$SWC = \Delta P_1 \times x_1 - \frac{\Delta x \times \Delta P_1}{2} = c.P_{10}.x_1 - |\eta|.x.c^2.p_{10}$$

where η is the price elasticity of the Hicksian demand curve. Clearly, an increase in the elasticity decreases the social welfare cost. Another way of seeing this is to note that if the demand curve were to be pivoted around point e towards the origin (in figure B.5), the integral $SWC = \int_{p10}^{p11} h_1(p_1, p_2, u_0)dp_1$ must be reduced.

This result is quite the opposite of that which occurs in the optimal tax literature. In this case, it is found that social welfare is maximised if commodities whose demand is inelastic are taxed more heavily than those whose demand is elastic. Why does this difference arise? The answer is that in the optimal taxation literature the area abcd is not part of the dead weight loss, but is the tax revenue (or transfer amount). For example, in the extreme case of Leontieff preferences, there is no substitution between x_1 and x_2, and the tax

revenue gathered is equal to an efficient lump sum tax — there is a zero deadweight loss. In the regulatory burden case, though, absence of substitution between x_1 and x_2 means that the full burden of the regulation is felt — with the worst welfare outcome.

More complex cases

The simple case above abstracts from some other potentially important features of regulations:

- that even a regulation whose compliance and other costs exceed its benefits (ie net social costs), may still produce gross benefits which should be counted in calculating the welfare impacts of the regulation; and
- other goods, subject to the regulation, may have higher gross benefits and different unit regulatory costs.

A more general, but still simple model, incorporates these features. Say there are three goods, x_1, x_2, and x_3. The first two are standard goods, while the third is clean air, which is subject to pollution.

The consumer maximises utility, $U(x_1,x_2,x_3)$ subject to a budget constraint, $p_1x_1+p_2x_2<=w.z + \pi$ where w is an exogenously given wage rate, z a fixed labour supply (so that we can avoid the complexity engendered by modelling leisure as a fourth good) and π is the profit from the firm making x_1 and x_2. The firm is a competitive firm, which takes p_1 and p_2 as given and seeks to maximise profits by varying the production of x_1 and x_2. Its problem is:

Maximise $\pi = p_1x_1+p_2 x_2 - wz$ subject to production functions:

$x_1=\phi_1(z_1,c_1)$, $x_2 = \phi_2(z_2,c_2)$ and $z_1 + z_2 = z$, where z_1 and z_2 are the amounts of labour used in the production of x_1 and x_2 respectively and c is a regulatory cost factor which lowers the amount of output a given quantity of labour can produce (somewhat like negative technological growth).

There is a third segment in the problem — which relates to the production of good x_3. This is $x_3 = k - \gamma_1(c_1)\ x1 - \gamma_2(c_2)\ x_2$ where γ_i is a production function which indicates the level of gross benefit (in terms of clean air) generated by the regulation, and k is the initial endowment of clean air. As c_i rises, $\gamma_i()$ falls and x_3 increases.

Without solving the model fully, it still provides some illumination of some of the subtleties of tiering. We start with the assumption that the regulation of industry 2 is far more effective than industry 1. If this were not true then the grounds for tiering, rather than some general overhaul of the regulation, would be weak. In making this assumption we are supposing that the benefits (in terms

of clean air) of regulation in this industry far exceed the costs in forgone production.

Imagine also that we observe that the benefit *in industry 1* of the regulation is less than the value of x_1 lost, so that there appears to be a prima facie case for regulatory change in this industry.

Imagine that we are in equilibrium (at x_1^*, x_2^*), and prices are set that both maximise profit and utility. Imagine that we marginally lower the value of c_1 (ie we introduce tiering) until we just make a net benefit *in that industry*. It is clear that at existing prices, x_1 will rise (say to x_1^{**}) if we lower c_1 simply because there has been a shift in the production function, but also because, at the margin, we will divert some resources from the production of x_2 to x_1. The latter diversion has crucial implications for overall welfare, because as we reduce x_2, we lose some of the net benefits of the clean air regulations that apply to this product. That is, x_3 will be reduced through two avenues:

- First, lowered compliance in industry 1 reduces benefits (x_3) at existing output — but this is matched by the fact that the value of increased x_1 exceeds this. So we can be certain that welfare is increased if production of x_1 is unaffected (because this leaves idle some resources for production of more x_2, with its positive net benefits from regulation).
- Second, increased production of x_1 through using resources formerly devoted to producing x_2, also lowers the regulatory benefits.

The (so far partial equilibrium) insight is that, given our assumptions, competitive markets under this new regulatory regime will tend to allocate too many resources to x_1. A welfare gain could be obtained at the margin by increasing output of x_2 (with its positive externality). In fact, under some circumstances, tiering may actually reduce overall net benefits, if the externalities from x_2 are big enough.

The question can be posed: what demand properties are most likely to maximise the benefits of tiering? To answer this we must turn to the general equilibrium of this contrived economy. We have altered the ratio of x's and so the prices at which equilibrium between demand and supply hold will also have to change. In particular, if more x_1 is demanded then prices for x_1 must have fallen. If the price elasticity for x_1 is high, then a small change in price will be required to restore equilibrium (and while this will slightly reduce the incentive to produce at x_1^{**}) the ultimate equilibrium will be at a point very close to the first iteration of the problem (ie close to x_1^{**}). As noted above, that point is not Pareto optimal in that (a) we could do better at the margin by increasing x_2 or (b) may even be associated with a reduction in net welfare compared to a situation in which there is a uniform regulation.

In contrast, if the price elasticity for x_1 is low, then a bigger price fall is required for equilibrium, and through iteration between consumption and supply, the ultimate value of x_1 will be much closer to x_1^* — the original value of x_1. That is more likely to be associated with a welfare increase.

Further research is warranted. This could describe how the results depend on the nature of the production functions for the x's (including the relationships between regulatory costs and production of x_1, x_2 *and* x_3). It could also extend the economy to a multi-product, multi-consumer world with possible non-competitive behaviour. This work is likely to provide much richer insights, than the simple heuristics above.

APPENDIX C: US FEDERAL LEGISLATION RELATING TO SMALL BUSINESS REGULATION

This appendix provides background information on two key US Acts relating to the differential treatment of small business with respect to the regulatory framework. The information is sourced from the US Small Business Administration (http://www.sba.gov).

C.1 Regulatory Flexibility Act of 1980

The Regulatory Flexibility Act (RFA) requires each federal agency to review its regulations to ensure that small entities are not disproportionately or unnecessarily burdened.

The major goals of the Act are:

- to increase federal agency awareness and understanding of the impact of regulations on small business;
- to require that agencies communicate and explain their findings to the public; and
- to provide appropriate regulatory relief to small entities.

The law requires agencies to take steps to collect input from small entities on regulations and to determine whether a rule is expected to have a significant economic impact on a substantial number of small entities. Moreover, federal agencies are required to identify alternative regulatory approaches for small businesses, small governmental jurisdictions and non-profit organisations.

The law establishes an analytical process to be followed in determining how public policy issues can best be resolved without erecting barriers to competition. It calls for regulations that are 'right–sized' — regulations that require small business compliance only to the extent to which small businesses contribute to the problem the regulation is designed to eliminate or control. To this end, agencies must analyse the impact of proposed regulations on different–sized entities in various industry sectors, estimate the effectiveness of the proposal in addressing the source of the problem, and consider alternatives that minimise obstacles to compliance and compliance costs.

The procedures established by the RFA outline a process for regulating in a more informed and rational manner, and for giving decision makers better information on which to rely in drawing regulatory conclusions.

The RFA has three key compliance provisions. Agencies must:

- review existing rules periodically;
- publish a semi-annual agenda of planned regulatory activities; and
- propose rules that appropriately accommodate small entities.

Periodic Review

The RFA requires agencies to review all regulations within 10 years of promulgation to assess their impact on small entities and determine whether the rules should be revised or eliminated.

Semi-Annual Agendas

In April and October of each year, federal agencies are required to publish a regulatory agenda listing all rules expected to be published in the Federal Register during the subsequent year that will likely have a significant economic impact on a substantial number of small entities.

Publication of these agendas increases the amount of time that the small entities will have to react to agency proposals.

Analysis of New Rules

Depending on a rulemaking's expected impact, agencies are required by the RFA either to certify that 'the rule will not have a significant economic impact on a substantial number of small entities,' and provide a factual basis for the determination, or to prepare a regulatory flexibility analysis.

Initial Regulatory Flexibility Analysis

If a proposed rule is expected to have a significant economic impact on a substantial number of small entities, an initial regulatory flexibility analysis (IRFA) must be prepared and published in the Federal Register. If the analysis is lengthy, the agency may publish a summary and make the analysis available upon request. This initial analysis must describe the impact of the proposed rule on small entities and address the following:

- reasons why the agency is considering regulatory action;

- objectives and legal basis for the proposed rule;
- number and kind of small entities to which the proposed rule will apply; projected reporting and other compliance requirements of the rule; and
- all federal rules that may duplicate, overlap or conflict with the proposed rulemaking.

The initial analysis must also contain a description of alternatives to the proposed rule that would minimise the impact on small entities. This important analysis must include the advantages and disadvantages of the various regulatory alternatives that minimise burdens on small entities, but still achieve the regulatory purpose.

Final Regulatory Flexibility Analysis

When an agency issues a final rule, it must prepare a final regulatory flexibility analysis (FRFA) or certify that the rule will not have a significant impact on a substantial number of small entities and provide a statement of the factual basis for such certification. The final regulatory flexibility analysis is required to:

- summarise the issues raised by public comments on the IRFA and the agency's assessment of those issues;
- describe and estimate the number of small entities to which the rule will apply or explain why no such estimate is available;
- describe the steps followed by the agency to minimise the economic impact on small entities consistent with the stated objectives of the applicable statutes;
- give the factual, policy, and legal reasons for selecting the alternative(s) adopted in the final rule; and
- explain why other alternatives were rejected.

The FRFA may be summarised for publication with the final rule — however, the full text of the analysis must be available for review by the public.

Certification

If a proposed regulation is found not to have a significant economic impact on a substantial number of small entities, the head of an agency may certify to that effect by providing a factual basis for this determination. This certification must on a substantial number of small entities, Federal Register and is subject to public comment in order to avoid an erroneous certification.

C.2 Small Business Regulatory Enforcement Fairness Act of 1996

The Small Business Regulatory Enforcement Fairness Act (SBREFA) was enacted into law on March 29, 1996.

The six key aspects of the legislation are as follows:

- *Regulatory Compliance Simplification*: Federal agencies are required to develop comprehensive guidelines and a well defined process to respond to small business inquiries on actions that businesses are required to take to comply with rules established by the agencies. These guidelines must be written in plain English.
- *Equal Access To Justice Amendments*: Small businesses are given expanded authority to go to court to be awarded attorney's fees and costs when an agency has been found to be excessive in its enforcement of federal regulations.
- *Congressional Review*: Congress is authorised to review each major rule promulgated before it can take effect.
- *Regulatory Enforcement Reform of Penalties*: Within one year each agency shall establish a policy to provide for the reduction and, in some circumstances, the waiver of civil penalties for violations of a regulation.
- *Small Business Advocacy Review Panels*: Before proposed rules are published, the Environmental Protection Agency and the Occupational Safety and Health Administration are required to establish government panels that receive input from affected small businesses and make public the panel's report as part of the record.
- *Oversight of Regulatory Enforcement*: The SBA Administrator must appoint a Small Business and Agriculture Regulatory Enforcement Ombudsman and 10 Small Business Regulatory Fairness Boards to comment on the enforcement activities of federal regulatory agencies. Small businesses are provided with a procedure to comment on the enforcement activity conducted by federal regulatory agencies. The National Ombudsman must annually report to Congress on the findings.

The Act gives small businesses:

- more influence over the development of regulations;
- additional compliance assistance for Federal rules; and
- new mechanisms for addressing enforcement actions by agencies.

Development of regulations

Regulatory Flexibility Act

Small businesses' most significant mechanism for influencing the development of federal regulations is the 1980 Regulatory Flexibility Act (RFA). Many agencies have failed to comply with the RFA over the past 16 years, and small businesses found little recourse in the courts due to the absence of any enforcement mechanism. The SBREFA corrects that by permitting judicial review of agencies' compliance with the Regulatory Flexibility Act.

Whenever a small business is adversely affected or aggrieved by an agency rulemaking for failure to comply with the RFA, the small business may seek review of the rule in court. The RFA now also applies to previously exempt interpretative rulemakings promulgated by the Internal Revenue Service that have information collection requirements.

The Office of Advocacy will have greater responsibility and influence under the RFA because the new law gives the Chief Counsel for Advocacy enhanced authority to file amicus briefs in court proceedings involving an agency's violation of the RFA.

The following issues are subject to judicial review under the SBREFA:

- the final regulatory flexibility analysis, including the agency's efforts to evaluate alternative regulatory approaches and reasons for rejecting or accepting them;
- the agency's effort to collect comments from small entities through a variety of mechanisms;
- the agency's decision to certify that a rule will not have a significant impact on a substantial number of small entities, and the factual basis for the certification; and
- the agency's compliance with a requirement for periodic reviews at the 10-year anniversary of every rule or the enactment of the 1980 law, which ever is first.

The new law also updates the requirements of a final regulatory flexibility analysis — including a description of the steps an agency has taken to minimise the significant economic impact on small businesses.

EPA and OSHA Regulatory Review Panels

The new law requires an extra step for the Environmental Protection Agency (EPA) and the Occupational Health and Safety Administration (OSHA) in the development of regulations. Specifically, the SBREFA requires that the

agencies receive input from affected small business through the SBA's Office of Advocacy before proposed rules are published.

When an EPA or OSHA proposal is expected to have a significant impact on a substantial number of small entities, the agency must convene a panel of employees from the agency, the Office of Advocacy, and the Office of Management and Budget to review a copy of the draft proposed rule and related agency analyses under the Regulatory Flexibility Act.

The panel also will collect advice from small business representatives and submit a report to the agency within 60 days of convening of the panel. The agency will then review the report, make any appropriate revisions to the rule, and publish the proposed rule with the panel report as part of the record.

Congressional Review

The SBREFA provides for congressional review of Federal agencies' regulations. Before any rule goes into effect, agencies are required to forward the rule to Congress for review. Major rules — those with a $100 million impact on the economy or a major impact on an industry, government or consumers, or those affecting competition, productivity or international trade — cannot go into effect until congressional review is complete. Congressional review is subject to a presidential veto.

Congress may take up to 60 session days for review and use a variety of mechanisms to delay implementation.

Compliance assistance

Compliance Guides

The agencies must publish compliance guides for all rules with a significant small business impact. These guides must explain in plain language how the firms can comply with the regulations.

If a small business is cited for a violation of a regulation, the court review may include the content of the small business compliance guide in assessing the reasonableness of the proposed penalty.

Compliance Inquiries

Agencies also are required to establish a system for addressing compliance inquiries from small business. Any guidance provided by an agency will be considered as evidence of the reasonableness of proposed penalties, fines or damages assessed against a small entity.

Small Business Development Centers

To step up compliance assistance, the SBREFA requires the Small Business Development Centers (SBDC) to be used as a point of distribution for compliance assistance.

Enforcement actions

Complaint Process

The new law establishes a complaint process whereby small businesses may register complaints about enforcement actions with the newly-appointed SBA Ombudsman or a Small Business Regulatory Fairness Board.

The Small Business and Agriculture Regulatory Enforcement Ombudsman receives comments from small businesses concerning aggressive enforcement-related activities conducted by agency personnel. The Ombudsman reports annually to the Congress on agency enforcement efforts and their impact on small businesses.

Regional Small Business Regulatory Fairness Boards were established in each of SBA's ten regions to advise the Ombudsman on matters of concern to small business relating to the enforcement activities of agencies. Board members are small business owners and operators appointed by the SBA Administrator for terms no longer than three years.

Penalty Policy

Under the SBREFA, each agency must establish a policy to provide for the reduction, and under appropriate circumstances, for the waiver of civil penalties for violations of statutory or regulatory requirements by a small business. The language in this section was adopted from a statement and Executive memorandum issued by President Clinton in March 1995.

Equal Access to Justice

The SBREFA expands the ability of small businesses in litigation with the government to recover attorney fees under the 1980 Equal Access to Justice Act. In administrative and judicial proceedings, if the government's demand is unreasonable when compared to the judgement or decision, then the small business is awarded attorney fees and other expenses related to defending against the action. Allowable attorney fees were increased from $75 under the current law to $125 per hour.

APPENDIX D : SURVEYS OF FIRMS' PERCEPTIONS

D.1 Survey details

ACCI

The Australian Chamber of Commerce and Industry (ACCI) undertook a survey of its membership to assess ‘the required policy change to achieve the renewal of the Australian economy’ (ACCI, 1996). The survey asked firms to indicate the relative importance of 57 issues (see section D.3) and from this information ACCI deduced where change was most needed. The options given for the need for change were: critical, major, large, moderate, small, minimal and none. The major headings covered in the survey were the level of taxation, compliance with the tax system, industrial and employee relations, government regulation, dealing with government, infrastructure, and economic issues.

Over 2500 firms responded, which is a very large sample size for a survey of this nature. The results of the survey, published by ACCI in February 1996, did not disaggregate the findings by firm size. However, ACCI has supplied these data for use in this study. Four firm size groups (number of employees) were available: 1–19, 20–99, 100–999 and 1000 or more.

The ACCI survey is the most comprehensive of the surveys examined in this study and provides the most detailed results by firm size and regulatory problems.

Chamber of Manufactures of NSW

The Chamber of Manufactures of NSW survey was part of a special project undertaken on the manufacturing industry and regulation reform. The Chamber of Manufactures of NSW asked 506 manufacturing firms for their views on different aspects of the regulatory burden. The results were published in October 1995 (Chamber of Manufactures of NSW, 1995).

The results are usefully disaggregated into four firm sizes: 0–20 employees, 21–99 employees, 100–499 employees and 500 plus employees. The results also contain a distinctive ‘dynamic’ element — in addition to a question on the types

of regulation of greatest concern, firms are quizzed on how the administration of regulation and time spent on compliance has changed in recent years.

The Chamber of Manufactures of NSW survey provides an interesting perspective on different levels of concern over specific issues. Because the survey asked firms to choose impediments of the *greatest* concern — rather than expressing varying degrees of concern for different impediments — it forced firms to focus on the issues that bothered them the most. This approach was more likely to isolate differences between small, medium and large firms. [1]

The main drawback to the Chamber of Manufactures of NSW survey is the relatively small number of 'regulations' which are reported on as causing the most concern — only 13 in all (see section D.3). The limited range of issues is more likely to bias the findings on the 'major problems' facing firms and restrict the usefulness of the overall results.

ABS

The 1995 Business Longitudinal Survey, which was conducted by the ABS on behalf of the Department of Industry, Science and Tourism, included an open–ended question to elicit firms' views on any issue facing their businesses. The survey form stated:

> It would be helpful for government policy makers and researchers to have more information on the issues and problems facing Australian business. Please use the space below if you would like to express your views on any issue affecting your business.

The ABS survey differs from the others examined in this study by virtue of the method by which it solicited firms' concerns with specific regulations and taxes. Rather than providing a list of possible regulatory problems for respondents to register their degree of concern, the ABS left it open to firms to nominate the issues and to express their views as they saw fit. This has pluses and minuses. On the plus side, firms are not prompted in any way which should provide a more 'pure' outcome — firms only mention matters of 'real' concern. On the other hand, firms may overlook issues if they are not clearly laid out before them. In the event, the respondents registered a fairly wide range of concerns.

The number of responses to this question was only 751 out of nearly 9000 firms and there is of course the possibility of a significant non–response bias. Nevertheless, if there is consistency about the concerns expressed and similarity

[1] Although, on the other hand, it could also be misleading if firms have two or more impediments which they regard as being of approximately equal concerns.

with the answers of other surveys, then the fact that this was an unprompted question gives credence to the results.

At the request of the study team, the ABS provided us with the unpublished data relating to this question. We then classified individual firm problems into a variety of headings broadly consistent with other surveys (see section D.3). We subsequently requested the ABS to sort the data according to firm size. This brought forward the main limitation of the ABS data — it is restricted to firms with less than 100 employees (the two groups used in the analysis are firms with 0–19 and 20–99 employees). Thus we are unable to test one of this study's central hypotheses that small and large firms face different/similar regulatory burdens .

Nevertheless, the data gathered from the small and medium firms is useful in itself and can, of course, be compared with the same–sized firms in other surveys. The fact that this data is previously unpublished is also useful in that it adds to the stock of knowledge on firms' perceptions of regulatory problems.

D.2 Problems and limitations

One problem was the different methods of rating impediments across different surveys:

- ACCI results show firms' varying degrees of concern (critical, major, important, etc;
- Chamber of Manufactures of NSW results relate to the regulations of the greatest concern to surveyed firms; and
- the ABS has firms' nominations of impediments, but without any information on the strength or degree of firms' concerns.

Our approach was to focus on the 'major' concerns of firms. This allows us to unearth some of the key regulatory problems facing firms and also allows us to try to achieve some consistency. Thus, in the case of ACCI we analysed only the 'major/critical' concerns of firms. The Chamber of Manufactures of NSW survey is framed around the issues of 'greatest concern' and the fact that the replies to the ABS survey were unprompted led us to believe that the issues raised had 'major concern' characteristics.

A problems with the surveys approach is the possibility of response bias. For example, the firms which tend to respond to surveys might be those having the greatest concerns with taxes and regulations — they feel strongly enough about these issues to take time to answer survey questions. If this was the case the results would not be representative of the general population of firms. Survey

bias can also be associated with firms misinterpreting or misconstruing the meaning of a question in the survey questionnaire.

In addition, there can be other problems in interpreting surveys based on firms' perceptions. The surveys analysed for this study all report businesses' perceptions about how the regulatory/taxation burden impacts on their performance. But there are no quantitative measures — such as dollar costs of taxation compliance — to support the stated concerns of the business managers or owners. Drawing conclusions from perceptions has some dangers and potential pitfalls. It is possible that what firms *feel* about certain taxes and regulations may not always translate into significant financial or economic costs. And, in surveys relating to government regulations, taxation and other micro issues, it is not hard to envisage firms taking the opportunity to complain loudly — it would seem to be almost a self–evident truth.

All these factors can produce biases, but despite these potential problems and pitfalls we can still obtain meaningful data from the surveys:

- the 'major' concerns of firms will often be related to time and effort factors;
- perceptions will often be associated with financial/economic impacts even if these are not quantified; and
- managers will often know regulations are 'costing' their firms even if they cannot provide precise dollar amounts.

In other words, firm's perceptions — measured in terms of the problems caused to firms or the activities they believe most require remedial action — can perhaps approximate relative financial/economic costs. We can think of these as *implied* performance impacts as opposed to the generally unavailable *actual* financial and economic impacts.

D.3 Regulatory concerns listed in surveys

The discussion of survey findings in the body of the report focused on the leading regulatory concerns (usually the 'top ten'). In this section we list all the problems presented to firms in survey forms (or otherwise noted by firms in their answers).

ACCI

CHANGES TO FEDERAL TAX RULES
UNFAIR DISMISSALS
CHANGES TO STATE TAX RULES
FRINGE BENEFITS TAX
COMPLIANCE WITH TAX SYSTEM
COMPANY TAX
SUPER GUARANTEE
CAPITAL GAINS TAX
REGULATION IN GENERAL
WORKERS COMP
RECRUITING SUITABLE EMPLOYEES
TELECOMMUNICATIONS COSTS
SALES TAX
TERMINATION PAYMENTS
PENALTY RATES
ROAD TRANSPORT
COST OF ELECTRICITY/GAS/WATER
AWARD REGULATION
PAYROLL TAX
PERSONAL TAX
OBTAINING QUALITY ASSURANCE
OH&S REGULATIONS
LICENSING PROVISIONS
CORPORATE LAW

RETAINING SKILLED EMPLOYEES
AIR TRANSPORT
ENVIRONMENTAL REGULATIONS
TRANSPORT INFRASTRUCTURE
GETTING INFORMATION ON GOVERNMENT PROGRAMS
GOVERNMENT PAPERWORK
PRIVATISATION
SEA TRANSPORT
TRAINING EMPLOYEES
ENTERPRISE BARGAINS
EXCISE TAXES
ASSISTANCE FOR R&D
GOVERNMENT PROCUREMENT
OHS INSPECTIONS
TPC – UNCONSCIONABLE CONDUCT
EXPORT ASSISTANCE
INDUSTRIAL DISPUTATION
ACCESS TO FOREIGN MARKETS
TRAINING WAGES
CUSTOMS REGULATIONS
WAGE LEVELS
EMPLOYEE PRODUCTIVITY
VOCATIONAL TRAINING
RAIL TRANSPORT

ABS

Taxation

GENERAL TAXATION

TAX COMPLIANCE (COSTS AND TIMING)

COMPLEXITY/VARIABILITY OF TAXES

SALES TAX

FRINGE BENEFITS TAX

EXCISE

PROVISIONAL TAX

CAPITAL GAINS TAX

PAYROLL TAX

STATE FRANCHISE

OTHER TAXATION

Regulations

GENERAL REGULATION

INDUSTRIAL RELATIONS

UNFAIR DISMISSAL LAWS

WORKERS COMPENSATION

SUPERANNUATION

OTHER EMPLOYEE ENTITLEMENTS

OTHER REGULATIONS

Other

TARIFF REDUCTIONS

COMPETITION POLICY

INFRASTRUCTURE PRICING REFORM

GOVERNMENT ASSISTANCE

SURVEYS

CHAMBER OF MANUFACTURES OF NSW

BUSINESS TAXATION

OH&S

SUPERANNUATION

ENVIRONMENT

PRODUCT LABELLING

PLANNING & DEVELOPMENT

CORPORATIONS LAW

HANDLING DANGEROUS GOODS

BUSINESS LICENSING

INDUSTRIAL RELATIONS

QUALITY

WORKERS COMPENSATION

APPENDIX E : PRINCIPLES OF REGULATION DESIGN

E.1 Regulation design

A number of organisations and other bodies have put forward 'checklists' to assist with regulatory decision–making. These checklists typically contain issues that should be addressed when governments are developing regulations, but sometimes deal with other issues relating to regulatory design.

OECD

The OECD recently adopted the first international standard on regulatory quality: *Recommendation of the Council of the OECD on improving the quality of government regulation* (OECD, 1995). A element of the standard is a reference checklist for regulatory decision-making, which contains ten questions which it proposes should be addressed when developing regulations (box E.1).

Box E.1: OECD regulation checklist

1 Is the problem correctly defined?

2 Is government action justified?

3 Is regulation the best form of government action?

4 Is there a legal basis for regulation?

5 What is the appropriate level (or levels) of government to take action?

6 Do the benefits of regulation justify the costs?

7 Is the distribution of effects across society transparent?

8 Is the regulation clear, consistent, comprehensive and accessible to users?

9 Have all interested parties had the opportunity to present their views?

10 How will compliance be achieved?

Source: OECD 1995.

In addition, a new OECD report on regulatory reform (OECD 1997) has put forward some policy recommendations (box E.2). The report notes that these recommendations should be viewed as an integrated package and apply broadly across sectors and policy areas. It also states that the recommendations 'can help governments to update and streamline the regulations and formalities that have accumulated over years, and to set into motion a continuing process of regulatory disciplines inside public administration that will protect the gains of reform in the future'.

Box E.2: OECD regulatory reform — policy recommendations

1. Adopt at the political level broad programs of regulatory reform that establish clear objectives and frameworks for implementation.
2. Review regulations systematically to ensure that they continue to meet their intended objectives efficiently and effective ly.
3. Ensure that the regulations and regulatory processes are transparent, non-discriminatory and efficiently applied.
4. Review and strengthen where necessary the scope, effectiveness and enforcement of competition policy.
5. Reform economic regulations in all sectors to stimulate competition, and eliminate them except where clear evidence demonstrates that they are the best way to serve broad public interests.
6. Eliminate unnecessary regulatory barriers to trade and investment by enhancing implem entation of international agreements and strengthening international principles.
7. Identify important linkages with other policy objectives and develop policies to achieve those objectives in ways that support reform.

Source: OECD 1997.

SMALL BUSINESS DEREGULATION TASK FORCE

The Report of the Small Business Deregulation Task Force (Bell, 1996) observed that 'improving the way regulations are made and reviewed is crucial to reducing the present stock and future flow of regulations'. It also noted that many submissions to the task force recommended the use of regulation impact statements as a means of identifying the costs and benefits of new regulations.

The Task Force proposed an integrated package to ensure that poor proposals for regulation do not become law, the quality of proposals for new regulation is improved, and there is adequate monitoring and reporting on the progress of regulation reform (box E.3).

Box E.3: Bell Report — improving the regulatory system

An ideal regulatory system should have the following features:

- minimal duplication and overlap, with well coordinated institutions within the system;
- consistent regulation across sectors;
- transparent and predictable processes;
- regulators take a risk management approach to forming and administering regulation, and who are accountable to business and the community.

Performance indicators should be developed so they are able to gauge whether the intended outcomes for regulatory reform are being achieved. They are needed for:

- transparency
- accessibility
- appropriateness
- predicability of regulatory framework
- flexibility
- lower cost to business
- administrative efficiency
- fewer and simpler forms
- better instructions
- reduction in perceived burden
- cultural change

Source: Bell 1996.

COMMONWEALTH GOVERNMENT RESPONSE TO SMALL BUSINESS DEREGULATION TASK FORCE

The Commonwealth Government response to the Bell Report was contained in *More Time for Business* (Howard 1997). Under the heading of ‘regulatory quality’, the report noted that the Government would be taking action in a number of important areas (box E.4).

Box E.4: Commonwealth Government response to the Bell Report — government action on regulatory quality

Under new arrangements to be put in place by the Government:

- the preparation of regulation impact statements (RISs) will be mandatory for all primary legislation that affects business or restricts competition;
- subordinate legislation (eg regulations under Acts, by-laws and statutory instruments) affecting business will be subject to similar impact assessment requirements and RISs will need to be certified by the Office of Regulation Review (ORR) within the Industry Commission;
- subordinate legislation will be subject to sunset arrangements to ensure its ongoing review and the automatic repeal of redundant regulation;
- the ORR will provide training on best practice regulation and prepare a *Guide to Regulation*; and
- all government departments and agencies dealing with the public will develop Service Charters to ensure the needs of relevant stakeholders are being met.

The Government will ensure these processes are adhered to by:

- giving the Assistant Treasurer responsibility for regulatory best practice, with support from the Prime Minister and the Treasurer;
- requiring the ORR to report to Cabinet on compliance with RIS requirements, with the Industry Commission reporting on compliance levels in its annual report;
- requiring RISs to be tabled in Parliament; and
- reviewing the effectiveness of the ORR to ensure that the needs of small business are given sufficient priority.

The Government is also undertaking various other regulatory initiatives including:

- reviews of existing legislation which restricts competition or affects business under the national competition policy reforms;
- repeal of redundant regulation under the government's regulation repair programme;
- new mutual recognition arrangements for the regulation of products and services traded with New Zealand and for conformity assessment requirements with the European Union;
- new regulatory arrangements for patent attorneys; and
- reform of customs arrangements.

Source: Howard 1997.

VICTORIAN OFFICE OF REGULATION REFORM

In the introduction to its discussion of regulatory design, the Victorian ORR says that 'in achieving the Government's overall regulatory reform goal, improvements in the quality of regulations will be at least as important as a reduction in quantity. Regulating better requires that all of the features of regulatory design be carefully considered and analysed.' The Victorian ORR's principles of regulatory design are shown in box E.5.

Box E.5: Victorian ORR's principles of regulatory design

Identification of the problem

Clear identification of the objectives

Full consideration of the alternatives before regulation

Careful examination and scrutiny of the costs and benefits

Regulations must be the minimum necessary to achieve desired objectives

Direct approaches to an identified problem

A preference for performance–based over prescriptive regulations

Reasonable compliance burdens

Effective and cost efficient enforcement regimes

Effective communication of regulations

Care over incorporation of other documents into regulations

Fees to be set appropriate to the circumstances

Consistency with national competition policy

Compatibility with other laws and regulations

Source: Victorian ORR 1995.

NATIONAL SMALL BUSINESS SUMMIT : CHARTER OF PRINCIPLES

Shortly after coming to office in March 1996, the Coalition Government announced a National Small Business Summit would be held in June 1996. The summit addressed, *inter alia*, the regulatory burden on business and developed a charter of principles (box E.6). The charter 'represents reasonable and clear objectives to guide governments' regulatory activities and provides a benchmark against which those activities can be judged' (Bell 1996).

Box E.6: 1996 Small Business Summit — Charter of Principles

1. The public benefit of regulations should always outweigh the public costs imposed. Regulations should only be adopted where they are the most effective and efficient means of achieving the desired outcome.
2. Regulations should only be introduced if they are clearly defined and outcome–oriented. Where practical, regulations should not be prescriptive in defining behaviour and, should be performance–based. In these cases simple compliance guidelines should be published to assist small business.
3. Regulations should be developed and implemented using transparent processes which have specific time–frames, clearly identified responsibilities and effective consultation. This should include the preparation of regulatory impact statements or some similar form of assessment. Such assessment should include a detailed analysis of the impact on small business. Where a regulation may impact on the trade competitiveness of businesses affected by the provisions, the assessment should determine the scale of that impact.
4. As far as possible regulations should be easy to understand and drafted in plain English. In any event, regulations should be supported by plain English supporting material to guide and assist businesses and the community.
5. Governments should seek to minimise the burdens that the administration of regulations impose. Administration of regulations must have a clear customer focus and this could include guaranteed response times.
6. Regulations should be implemented at minimum cost. Each government should aim to develop a regulatory system which is coordinated with other governments to eliminate unnecessary duplication and to minimise the number of approvals, inspections and compliance reporting required of business. Easy access to sources of advice and assistance should be available to small business to help them comply with regulations.
7. All levels of government should work to promote consistency in the development, implementation and enforcement of regulations. Governments should also work to develop appropriate and consistent penalty provisions. Enforcement and penalty provisions should be the minimum necessary to encourage compliance.
8. In developing regulations, governments should take into account regional diversity.
9. Governments should conduct regular reviews to assess whether existing regulations are still relevant, efficient and place the minimum demands on business. The use of sunset provisions is one way of achieving this objective.
10. Governments should develop performance indicators to measure the effectiveness and efficiency of regulatory regimes. Governments should share performance monitoring information to promote regulatory effectiveness and efficiency.

Source: Bell 1996.

E.2 Program design

Checklists relating to program design share some common themes with regulation design.

Two recent Australian examples of program design checklists are contained in the Mortimer Review of Business Programs and in the Industry Commission's submission to the Mortimer Review.

Mortimer Review of Business Programs

In November 1996 the Commonwealth Government announced a comprehensive review of business programs, to be headed by Mr David Mortimer of TNT. The terms of reference for the review emphasised determining principles that should apply to business programs and assessing whether the current business programs were consistent with those principles.

The report of the Review of Business Programs (Mortimer 1997) included a section setting out 'a framework for determining the most appropriate form of intervention to address impediments to business performance and principles for the design and delivery of programs.' The Mortimer Report recommendations relating to design principles are set out in box E.7.

Industry Commission and program design

The Industry Commission observed in its Submission to the Mortimer Review of Business Programs (IC 1997b) that government business programs must be well designed and delivered effectively.

The IC noted that where government business programs can improve community welfare, policy should focus on getting maximum benefit for the funding involved. This will generally be facilitated, the IC observed, by the application of a number of design and delivery features.

The IC checklist to assist those proposing or reviewing business programs is shown — in the form of a series of questions — in box E.8.

Box E.7: Mortimer Review of Business Programs — Design Criteria

The Mortimer Report recommended that, as a threshold test, all business programs must:

(a) provide a net economic benefit:

- inducing new activity in a chosen area that would not have occurred without assistance; or
- accelerating activities which deliver net economic benefits;
- clearly delivering benefits that reach beyond the private individual beneficiaries; and
- with these benefits outweighing the cost of the program;

(b) address a market imperfection, being either:

- a market failure;
- an impediment imposed by Government; or
- an impediment to investment in Australia imposed by a foreign government; and

(c) not breach Australia's international obligations.

The Mortimer Report further recommended that all business programs must satisfy the following design criteria:

- have clear objectives and measurable performance indicators that focus on end results;
- avoid duplication with other programs;
- be of a scale and duration consistent with the market imperfection being addressed;
- have clear eligibility and entitlement criteria;
- to the maximum extent possible direct funds to specific activities rather than to providers of services;
- adopt cost recovery where there is a clear private benefit, with the return to be put back into the program; and
- introduce risk management strategies that match the size of the risk and the potential for fraud.

Source: Mortimer 1997.

Box E.8: Industry Commission checklist for assessing proposed or existing business programs

Threshold questions

- Are there externalities, information deficiencies or policy impediments that warrant government involvement?
- Are there significant costs if nothing is done, and do they exceed the costs of government intervention?
- Is a business program the only, or the best, way to address the problem?

Design and delivery questions

If the answer to all of the above questions is yes:

- Does the program target the problem explicitly?
- Is its emphasis on supporting additional activity?
- Is the program open to any firm, and if not, why not?
- Is there scope to reduce compliance costs without adversely affecting broad outcomes, or reducing the capacity of the managing agency to monitor the program?
- Does the program avoid duplication with other Commonwealth or State and Territory programs?
- Is the support provided to firms transparent?
- Does the program have clear eligibility criteria which avoid undue administrative discretion?
- Is there a requirement for public reporting of outcomes achieved and the beneficiaries of assistance?
- Does the program have a sunset clause and is there provision for independent, periodic review?
- Where the program involves a service to business, is delivery contestable and are users required to contribute to costs?

Source: Industry Commission 1997b.

REFERENCES

ABS (Australian Bureau of Statistics) 1996, unpublished data from the *Business Growth and Performance Survey 1994–95*, Canberra.

—— various issues, *Research and Experimental Development, Business Enterprises, Australia,* Cat. No. 8104.0, AGPS, Canberra.

—— various issues, *Small Business in Australia*, Cat. No. 1321.0, AGPS, Canberra.

ACCI (Australian Chamber of Commerce and Industry) 1996, *What Business Seeks from the Next Government in Australia*, ACCI Review, No. 18, February, Melbourne.

Ayres, I., Braithwaite, J., 1992, *Responsive Regulation*, Oxford Socio-Legal Studies, OUP.

Bartel, A.P., Thomas, L.G., 1985, *Direct and Indirect Effects of Regulation: a New Look at OSHA's Impact*, Journal of Law and Economics, Vol. 28(1), Chicago, April.

Beddall 1990, *Small Business in Australia — Challenges, Problems and Opportunities*, Report by the House of Representatives Standing Committee on Industry, Science and Technology, AGPS, Canberra, January.

Bell, C. 1996, *Time for Business*, Report of the Small Business Deregulation Task Force, Department of Industry, Science and Technology (037/96), Canberra.

BIE (Bureau of Industry Economics), 1996a, *Business Licences and Regulation Reform*, Research Report 96/10, AGPS, Canberra.

—— 1996b, *Energy Efficiency and Greenhouse Gas Abatement*, Research Report 96/5, AGPS, Canberra.

Birch, D. L., 1979, *The Job Generation Process*, Final report to Economic Development Administration, MIT Program on Neighbourhood and Regional Change, Cambridge, Mass.

Brock, W.A., Evans, D.S., 1985a, *The economics of regulatory tiering*, Rand Journal of Economics, Vol. 16, No. 3, Autumn.

—— 1985b, *The Economics of Small Businesses*, Holmes and Meier, New York.

Cabalu, H., Doss, N., Dawkins, P., 1996, *Employers' Compliance Costs*, Discussion Paper 96/10, Centre for Labour Market Research, Curtin University of Technology, November, Perth.

Chamber of Manufactures of NSW 1995, *Manufacturing Industry and Regulation Reform*, October, Sydney.

Grabosky, P., Braithwaite, J., 1986, *Of Manners Gentle : Enforcement Strategies of Australian Business Regulatory Agencies*, OUP, Melbourne.

Government of Western Australia 1997, "Economic and Fiscal Overview 1997-98", Budget paper No. 3, April.

Haralambopoulos, N., Johnson, D., Ha, V., 1996, *Employers' Compliance Costs: Some Evidence from Victoria*, Working Paper No. 2/96, Institute of Applied Economic and Social Research, Melbourne.

Hall, A.P., 1993, *The High Cost of Tax Compliance for US Business*, Special Report No. 25, Tax Foundation, Washington, November.

Harrison, B., 1994, *Lean and Mean : the Changing Landscape of Corporate Power in the Age of Flexibility*, BasicBooks, New York.

Hopkins, T. D., 1995, *Profiles of Regulatory Costs*, Report to the US Small Business Administration, Washington, November.

Howard, J.W., 1997, *More Time for Business*, Statement by the Prime Minister, the Honourable John Howard, MP, AGPS, Canberra.

IC (Industry Commission) 1995, *Work, Health and Safety*, Report No. 47, AGPS, Canberra.

—— 1996, *Regulation and its Review 1995–96*, AGPS, Canberra.

—— 1997, *Informal Equity Investment*, Information Paper, AGPS, Canberra, April.

—— 1997a, *Role of Economic Instruments in Managing the Environment*, Industry Commission Staff Research Paper, AGPS, Melbourne, July.

—— 1997b, *Industry Commission Submission to the Review of Business Programs*, AGPS, Canberra.

IC (Industry Commission) and DIST (Department of Industry, Science and Tourism), 1997, *A Portrait of Australian Business : Results of the 1995 Business Longitudinal Survey*, AGPS, Canberra.

JCPA (Joint Committee of Public Accounts) 1993, *An Assessment of Tax*, AGPS, Canberra, November.

Keating, P. J., 1994, *Working Nation : The White Paper on Employment and Growth*, Statement by the Prime Minister, the Honourable P. J. Keating, MP, AGPS, Canberra.

LRC (Law Reform Committee, Parliament of Victoria) 1997, *Regulatory Efficiency Legislation, Final Report*, Melbourne, October.

Mortimer, D., 1997, *Going for Growth : Business Programs for Investment, Innovation and Export*, Review of Business Programs, Department of Industry, Science and Technology (031/97), Canberra.

NSW Treasury 1996, Interstate Comparison of Taxes 1996-97, Research and Information Paper TRP 96-5, Sydney, November.

OECD (Organisation for Economic Cooperation and Development), 1995, *Recommendation on Improving the Quality of Government Regulation*, adopted by the Council of the OECD, Paris, March.

—— 1997, *The OECD Report on Regulatory Reform*, OECD, Paris, June.

ORR (Office of Regulation Review) 1997, *A Guide to Regulation*, AGPS, Canberra, October.

Phillips, R., 1997, *Innovation and Firm Performance in Australian Manufacturing*, Industry Commission Staff Research Paper, AGPS, Canberra, September.

Pope, J., 1994, *Policy implications arising from compliance costs of taxation research*, Discussion Paper (94.02), Public Sector Research Unit, Curtin Business School, Perth, August.

Pope, J., Fayle, R., Chen, D. L., 1991, *The Compliance Costs of Public Companies' Income Taxation in Australia, 1986/87*, Research Study No. 13, Australian Tax Research Foundation, Sydney.

—— 1993a, *The Compliance Costs of Employment–Related Taxation in Australia*, Research Study No. 17, Australian Tax Research Foundation, Sydney.

—— 1993b, *The Compliance Costs of the Wholesale Sales Tax in Australia*, Research Study No. 19, Australian Tax Research Foundation, Sydney.

—— 1994, *The Compliance Costs of Companies' Income Taxation*, Research Study No. 23, Australian Tax Research Foundation, Sydney.

Productivity Commission 1996, *Stocktake of Progress in Microeconomic Reform*, AGPS, Canberra.

Reid, B., 1997, *Finding a balance: towards fair trading in Australia*, Report by the House of Representatives Standing Committee on Industry, Science and Technology, AGPS, Canberra, May.

Revesz, J., Lattimore, R., 1997, *Small Business Employment*, Industry Commission Staff Research Paper, Industry Commission, Canberra, August.

Rimmer, S. and Wilson, S., 1996, *Compliance Costs of Taxation in Australia*, Office of Regulation Review (Industry Commission) Staff Information Paper, AGPS, Canberra.

Rosen, H., 1995, *Public Finance*, 4th edition, Irwin, Chicago.

Sandford, C., Godwin, M., Hardwick, P., 1989, *Administrative and Compliance Costs of Taxation*, Fiscal Publications, Bath.

Sandford, C., Hasseldine, J., 1992, *The Compliance Costs of Business taxes in New Zealand*, Institute of Policy Studies, Victoria University of Wellington, Wellington.

SBA (Small Business Administration, United States), 1995, *The changing burden of regulation, paperwork, and tax compliance on small business*, Report to Congress by the Office of the Chief Counsel for Advocacy, Washington, October.

State of Victoria 1997, Budget Statement 1997–98, Budget Paper 2, AGPS, Melbourne.

Thompson, L., 1989, *Measuring the costs of government regulations: an initial exploration of the economy–wide effects*, Working Paper No. 11, Industries Assistance Commission, Canberra, April.

UNICE (Union of Industrial and Employers' Confederations of Europe), 1995, *Releasing Europe's potential through targeted regulatory reform*, The UNICE Regulatory Study, Interim Report, Brussels, June.

Victorian ORR (Victorian Office of Regulation Reform), 1995, *Principles of Good Regulation*, State Government of Victoria, Melbourne.