

Design Principles for Small Business Programs and Regulations

Staff Research Paper

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The views expressed in this paper are those of the staff involved and do not necessarily reflect those of the Productivity Commission.

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FOREWORD

This paper is one of a series focusing on small business issues. It is intended to provide a guide about the rationales for, and design, implementation and evaluation of, small business programs and regulations.

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Other recent papers in the series include: A Portrait of Australian Business: Results of the 1995 Business Longitudinal Study (IC and DIST 1997), Informal Equity Investment (IC 1997), Small Business Employment (Revesz and Lattimore 1997), Innovation and Firm Performance in Australian Manufacturing (Phillips 1997) and Reducing the Regulatory Burden: Does Firm Size Matter? (Bickerdyke and Lattimore 1997).

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CONTENTS

1	page
Foreword	iii
Abbreviations	xiii
Overview	XV
1 Introduction	1
1.1 The importance of small business policy	1
1.2 Which businesses are small businesses?	3
1.3 The diversity of small businesses	4
1.4 Structure of the report	5
2 Small business: an overview	7
2.1 What is small business?	7
2.2 Small business in Australia: a statistical snapshot	9
2.3 Small firms and innovation	17
2.4 The relevance of size	20
2.5 Relations between small and large firms: cooperation and conflict	22
2.6 Concluding comments	23
3 Small business programs	25
3.1 Introduction	25
3.2 General assistance for small business	26
3.3 Policies to overcome special problems for the small business sector	26
3.4 SMEs and other business policies	33
3.5 The emphasis of small business policies in Australia and overseas	38
3.6 Use of government programs	42
3.7 Conclusion	45
4 Reasons for business assistance	47
4.1 Introduction	47
4.2 Broad economic grounds for intervention in industry	47
4.3 Are there economic failures affecting small business?	53
4.4 Do special features of the small business sector provide	53

4.5 Small businesses and managerial training	56
4.6 Small businesses' use of specialist external advice	68
4.7 Small businesses and exporting	75
4.8 Small businesses' access to finance	79
4.9 Fair trading between large and small firms	91
4.10 The costs and challenges of intervention	93
4.11 Concluding comments	97
5 Efficient small business program design	99
5.1 Introduction	99
5.2 Broad issues in program design	99
5.3 Take-up and compliance issues	103
5.4 Additionality	110
5.6 Program evaluation issues	113
5.7 Other issues in program management and design	118
5.8 Small business policy by default	121
5.9 Delivery options	123
5.10 An extended illustration	123
6 Applying the principles: some small business examples	131
6.1 Introduction	131
6.2 The Export Market Development Grants scheme	132
6.3 Export Access	140
6.4 The Enterprise Development Program	144
6.5 The New Enterprise Incentive Scheme (NEIS)	159
6.6 Other small business programs	164
6.7 Australian business programs: the broad picture	170
7 The impact of regulations on small business	175
7.1 Introduction	175
7.2 The scope of regulation and their costs	175
7.3 Compliance costs of taxation and regulation	177
7.4 Particular regulatory concerns of small business	187
8 Best practice regulatory design	193
8.1 Introduction	193
8.2 Rationale for action	195
8.3 Risks of government failure	196
8.4 Choices of regulatory or non-regulatory instrument	197
8.5 Regulation process	202

		CONTENTS
8.61	Regulation design principles	207
	Recent measures to improve regulation	215
	uld regulations take account of small business?	221
	Introduction	221
9.2 1	Is different treatment warranted?	221
9.3	Awareness raising	222
9.4]	Flexible delivery	224
9.5]	Information collection and provision	225
9.61	Regulatory tiering	226
9.7	Concluding comments	232
Appendice	es ·	
A Promine	ent small business programs	235
A.1	Improving the efficiency of business operations	235
A.2	Assistance for firms commencing exports	238
A.3	Encouraging research, development and innovation	239
A.4	Programs to improve SMEs' access to finance	242
A.5	Government purchasing	243
A.6	Creation of new small businesses	244
B Common	nwealth and State/Territory small business programs	247
C Recent 1	reforms to the fair trading law	269
C.1	The Trade Practices Act and unfair behaviour: background to the changes	269
	The fair trading inquiry	271
C.3	Government response to the fair trading report	273
D The ben	efits of the R&D Tax Concession	277
E Impacts	of the New Enterprise Incentive Scheme	279
E.1	Analytical framework	279
E.2	Results	290
E.3	A new approach for appraising NEIS	295
F Governm	nent regulation review machinery	299
F.1	Review of existing regulations	299
F.2	Review of new regulatory proposals	301

Referen	ces	305
Tables		
2.1.	Importance of small business in the economy, 1996-97	11
2.2	Small business share of employment and value	11
	added in the non-agricultural employing sector, 1993–94	
2.3	Sectoral changes accounting for the increase in	13
	the share of small business employment between 1983–84 and 1994–95	
2.4	Recent estimates of small business employment changes	14
2.5	Small business employment share changes	14
2.6	Changes in the employment shares of the small	15
	business sector, various countries	
2.7	Management and entrepreneurial characteristics	18
	of different sized firms, Australia, 1994–95	
3.1	Loan and equity programs for small businesses in selected countries	30
3.2	Significant Australian support measures for small businesses, expected expenditure for 1998–99	39
3.3	International comparison of small business policies (circa 1990-1992)	41
3.4	Type of government programs used by firm size, 1993–94 and 1994–95 (number of times a program is used)	43
3.5	Participation in government programs by firm size, 1993-94 and 1994-95	44
3.6	Relative participation in government programs by firm size, 1993–94 and 1994–95	44
4.1	Reasons for business failures	59
4.2	Economic failures in training and possible policy responses	68
4.3	Use of advisory services by small business	69
4.4	Policy implications of different rationales for export facilitation programs	77
4.5	Variable interest rates for small and large businesses	81
5.1	When is a small business program appropriate?	102
5.2	Characteristics of large vs small firms: influences on policy	104
5.3	Penetration of new communication technologies in small business, 1994–1998	108
5.4	The differing impact of the R&D tax concession by firm size	122
5.5	How the options score against the design criteria	127
5.6	Financing options	129

		CONTENTS
6.1	Design criteria and assessment of the EMDG	139
6.2	Criteria for the EDP program by state	147
6.3	Satisfaction with NIES subsidised consultancies	150
6.4	Adoption of best practice in NIES	152
6.5	Willingness to pay for the program	154
6.6	Nature of NIES/EDP participants, 1994–95	155
7.1	Hours spent by internal labour on regulatory paperwork 1996	181
7.2	Federal tax compliance burdens on business, by size of firm, 1994–95	183
7.3	Paperwork compliance cost estimates for small business, Australia	184
7.4	Summary of the impact of compliance costs by firm size, international studies	185
7.5	Extent of small business concerns over particular regulatory burdens: percentage of firms indicating concern	189
8.1	Guidance on regulatory process and design	202
8.2	Regulatory design principles	208
A.1	Business networks by stages and states, as at 30 June 1997	238
A.2	Number of SMEs registered for R&D tax concession and eligible expenditure (\$m)	240
A.3	NEIS program places and budgets, 1989-90 to 1996-97	245
B.1	Commonwealth Government assistance to small business	247
B.2	State Government assistance to small business — New South Wales	252
B.3	State Government assistance to small business, Victoria	253
B.4	State Government assistance to small business, Queensland	257
B.5	State Government assistance to small business, Tasmania	258
B.6	State Government assistance to small business, Western Australia	260
B.7	State Government assistance to small business, South Australia	264
B.8	State Government assistance to small business, Northern Territory	267
B.9	State Government assistance to small business, Australian Capital Territory	268
E.1	Possible parameters	280
E.2	NEIS participants still in self-employment	282
E.3	Characteristics of participants in NEIS (1991–92)	284
E.4	The 'neutral' results	292
E.5	The 'optimistic' results	293

E.6	The 'pessimistic' results	294
Boxes		
4.1	An example where a training subsidy is warranted	67
5.1	Policy design criteria	101
5.2	The Business Entry Point	109
6.1	Examples of self selection bias	136
6.2	Targeting NIES	156
7.1	Small business operators' comments on regulation	180
7.2	Other paperwork compliance burdens	188
8.1	Regulations relating to ashtrays for use by the US Government	198
8.2	The 1996 Arrow principles of regulatory analysis	205
8.3	Key elements of regulation impact statements	216
8.4	Common failures in regulatory reform	217
9.1	Flexible delivery of regulations	224
Figures		
2.1	The structure of Australian business, 1996–97	10
2.2	The significance of small business, 1994–95	12
4.1	The incidence of management qualifications and training in small firms, 1995 and 1997	58
4.2	The program logic for government intervention in	62
4.3	small business management training The distribution of variable interest rates by size of loan, September 1997	82
4.4	The impact of subsidised external advice	96
4.5	The impact of subsidised external advice: the details	96
5.1	Designing cost effective small business programs	100
7.1	Average annual number of pages of Commonwealth Primary Legislation enacted, 1960 to 1994	178
7.2	Proportion of small firms reporting regulation as a prime concern, 1994 to 1998	179
7.3	Tax compliance costs as a share of sales, US, 1993	186
8.1	Formulating and designing regulations	194
9.1	The criteria for regulatory tiering	231
E.1	Entrepreneurial survival	281
E.2	Better targeting	298

ABBREVIATIONS

Australian Bureau of Statistics **ABS ACCI** Australian Chamber of Commerce and Industry ANAO Australian National Audit Office **ASC Australian Securities Commission Australian Taxation Office ATO Business Advisers Skills Initiative** BASI **BEC Business Enterprise Centre BEP Business Entry Point BIE Bureau of Industry Economics** BLS **Business Longitudinal Survey BNP Business Network Program CBA** Commonwealth Bank of Australia **CDB** Commonwealth Development Bank **DEET** Department of Employment, Education and Training DEETYA Department of Employment, Education and Youth Affairs **DIST** Department of Industry, Science and Tourism **DSS** Department of Social Security Department of Workplace Relations and Small Business **DWRSB EAS** Enterprise Allowance Scheme EC **European Commission EDP Enterprise Development Program**

AATS&E Australian Academy of Technological Science and Engineering

IBD International Business Development SchemeIC Industry Commission

IIF Innovation Investment Fund

IS&T International Science and Technology

Export Market Development Grants

Governor's Office of Regulatory Reform

Innovative Agricultural Marketing Program

JIT Just-in-time

EMDG

GORR IAMP

NBEET National Board of Employment, Education and Training

NEIS New Enterprise Incentive Scheme
NIES National Industry Extension Scheme

NTBF New Technology Based Firm

OECD Organisation for Economic Cooperation and Development

ORR Office of Regulation Review

DESIGN PRINCIPLES FOR SMALL BUSINESS PROGRAMS AND REGULATIONS

PDF Pooled Development Funds

QA Quality Assurance

QCCI Queensland Chamber of Commerce and Industry

R&D Research and developmentRIS Regulation Impact Statement

SAMP Supplier Access to Major Projects Program

SBA Small Business Administration (US)

SME Small and medium enterprise

TQM Total Quality Control

TSCP Technology Support Centres Program WCM World Competitive Manufacturing

OVERVIEW

Most governments around the world, including Australia, have formulated small business policies, with the aspiration of promoting the dynamism and efficiency of this sector of the economy. Australian governments provide programs to encourage exports, innovation, access to finance, new firm formation and the internal management of small businesses. They are also increasingly assessing regulations to see if they are well designed and pose risks for small businesses. Governments also provide a range of tax benefits to small business — such as exemptions from payroll tax and concessions on capital gains and fringe benefits taxes — but taxation issues lie outside the focus of this paper.

This paper develops a detailed framework of the rationales for, and design, implementation and evaluation of, small business programs and regulations. We examine the nature of small firms to see to what extent their unique features require specific programs. We also look at a range of existing policies and processes to see what lessons they may have for the formulation and design of small business programs.

What are small firms?

Many governments define small business in terms of their employment size. Typically, however, small businesses differ in a number of respects from larger firms. For example:

- only a small number of individuals, often members of the same family, own the business;
- often the owners, rather than professional managers, manage the business;
- most have rudimentary management structures, with few specialised management functions;
- most operate in only one location and sell to nearby customers; and
- they have limited market power.

The Australian Bureau of Statistics (ABS) defines small businesses in non-manufacturing industries as those with less than twenty employees, and in manufacturing as those employing less than 100. There is considerable diversity within this group. For example, overseas research shows that many firms with more than about 10 employees employ professional managers. For this reason, it is sometimes helpful to think in terms of small and very small or 'micro'

businesses. Small businesses may also differ in many other ways, depending on their activities, age, expected growth and other factors. Effective policy making needs to use the appropriate size threshold for the problem at hand.

For some purposes, policymakers will be interested in small and medium-sized enterprises (SMEs) rather than only small businesses — for example, where an economic problem affects both small and medium-sized firms. In this paper we talk about either small businesses or SMEs depending on the context.

Small business in the Australian economy

The vast majority of Australian businesses are small. They comprise about 95 per cent of private businesses which employ people (in the non-agricultural sector). In 1994–95, such small businesses:

- produced around one-third of GDP (figure 1);
- accounted for 44 per cent of employment;
- accounted for about 34 per cent of total wages and salaries, reflecting lower wages and fewer hours worked;
- primarily produced non-traded goods and services, with about 3.3 per cent of small firms engaging in exporting, compared to 12.7 per cent of other businesses. Small firms accounted for about 15 per cent of total exports; and
- accounted for only about one tenth of total innovation expenditure.

The small business share of total employment has been rising since the early 1980s. This partly reflects broader economic changes, specifically the decline in the public sector over that period and the increase in certain parts of the service sector, where smaller businesses predominate. In addition, small businesses have increased their share of employment in the manufacturing sector. This reflects other changes, such as increased contracting out by larger firms.

Despite these figures, most individual small businesses grow little (if at all) in any period. The growth in small business employment is mostly due to a few rapidly-growing small firms — 'gazelles'. The small business sector is turbulent. Each year many new firms enter, but many also cease operation.

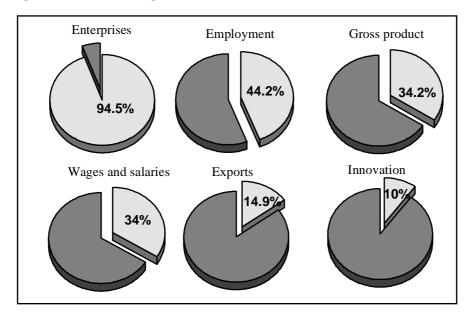


Figure 1: The significance of small business, 1994–95^a

a The measures are typically based on the shares of the private non-agricultural employing business sector. Small business is typically defined as enterprises employing less than 20 employees in all sectors, bar manufacturing, and less than 100 employees in manufacturing. The data for exports are based only on firms employing less than 20 employees, while the data for innovation expenditure are based only on manufacturing.

Source: IC/DIST 1997.

Australian policies to assist small business

Most programs aim to improve small business performance by assisting them to overcome perceived problems in:

- the use of expertise from outside sources;
- technology transfer;
- commencing exports;
- accessing finance; and
- training in small business management skills.

The costs of significant small business programs are projected to be just over \$400 million in 1998–99 (table 1).

When should government provide assistance to small business?

Small businesses are an important part of the economy, with a pronounced and growing share of employment and economic activity (figure 1 and chapter 2). It is clearly important to include them in consultation about policies which can

have marked effects on their performance, such as regulation or taxation reform. But while economic importance provides a strong basis for public policy consultation with small business, in itself it provides little justification for specific interventions. From an economic perspective, governments should only intervene when it is likely to yield net economic benefits. This suggests that policymakers should assess each intervention to see whether there is a sound underlying rationale, and that they can deliver a workable policy with good design features.

Table 1: The revenue cost of significant non-tax small business programs^a

Measure	Responsible agency	Estimated expenditure
Programs		\$m
Export Market Development Grants Scheme (EMDG)	Austrade	146.2
Export Access	Austrade	3
New Enterprise Incentive Scheme	DEETYA	78
R&D Start excluding the Innovation Investment Fund	DIST	128.1
Technology Diffusion Program	DIST	18
Innovation Investment Fund	DIST	14
Enterprise Development Program	DIST	10.5
Enterprise Networking Program	DIST	3.5
Total for small business programs		401.3

a These are programs wholly or predominantly supporting SMEs. *Source*: See table 3.2.

Unfortunately, a limitation of many current small business policies, as in other areas of industry policy, is that they tend to state objectives as if they were rationales. This applies, for example, to the Export Access program, the EMDG scheme and a range of training programs. But objectives such as increased training or exports are not economic rationales for intervention.

Failure to analyse carefully the rationale for intervention is likely to have a number of implications for the relevant business programs:

- costs may be higher or benefits lower than they could be;
- targeting may be inappropriate; and
- it is difficult to establish meaningful performance indicators if there is no clear idea about the exact nature of the problem and the objectives of the intervention.

While we found limitations in the declared justification for a number of small business policies, we also found some more persuasive rationales (chapter 4).

As an illustration, small businesses typically obtain fewer feedbacks about their performance than large enterprises (which have internal expertise, directors and shareholders scrutinising performance and managerial decisions). This could adversely constrain enterprise efficiency and opportunities for some firms. Depending on the circumstances, this may provide a rationale for a variety of programs aimed at improving enterprise performance, and in diffusing technologies.

But the economic rationale is only one of the important issues which governments should consider when deciding whether to intervene. Governments also need to take account of the difficulties in designing programs that will work well — such as the challenge of devising programs that efficiently target activities that firms would not otherwise have undertaken, proper risk management and the right scale and duration of any assistance. They also need to take account of the hidden costs associated with the raising of tax revenue to finance the programs, and the possibility of distortions to business incentives.

The scope for government intervention

In 1996–97, there were nearly 930 000 small non-agricultural businesses in Australia, most of which employed only the owners. The very large number of small businesses constrains the capacity of governments to help small business. It is simply not possible to provide tailored assistance to all such enterprises because of the informational and other transactions' costs of dealing with them, as well as the budgetary costs. At the moment only about 5 per cent of small businesses access Commonwealth government industry assistance programs.

The Internet could provide a low cost means for government to reach large numbers of small businesses (for example, by making available accurate and detailed information on issues such as taxation, program availability, regulatory compliance, new and existing technologies, investment readiness, and useful business diagnostics). In contrast, programs which provide funds to small business will inevitably have a fairly narrow reach.

The implications are that efforts by government on behalf of small businesses have to take account of the nature of the sector and the transactions' costs of interacting with them. Governments may:

help the efficiency of *all* small businesses by creating a sound economic environment. This includes macroeconomic management, corporate and other law, regulation review and simplification, and reform of the tax system and labour markets. The advantage of this strategy is that it involves few transactions costs with firms, addresses the main stated

- concerns of small businesses, and is likely to have the biggest overall impact on Australia's economic growth;
- improve information flows to very large numbers of small businesses by using low transaction cost methods such as the Internet;
- provide business assistance programs, where warranted, to a more limited number of eligible small businesses.

Designing and evaluating small business programs

Design principles

In developing a new program, policy makers should first ask whether a program is needed specifically for *small* business. Generally this will be so if the problem being addressed is specific to small business. Together with this test, policy makers need to consider how to design the program so that it is effective in addressing the relevant problem, and produces the greatest possible net benefits (box 1 and chapter 5).

The typical small business program aims to deliver a relatively modest amount of assistance to a reasonably large number of small firms. For these programs some key issues in design are:

- *definition of the target group* this should be in terms of the nature of the economic failure, rather than firm size alone. Currently, many programs set size thresholds in an ad hoc way;
- how to achieve *good take-up* of the program by those firms. For example, the Export Market Development Grants (EMDG) is a program which is big enough to make an economic difference (with about 4 000 claims in 1995–96) and is highly visible to its clients. In contrast, the other small business export promotion program Export Access has relatively low take-up. If sufficient take-up and visibility are not achieved, programs will have limited impact on economic performance and the benefits may not exceed the costs of setting up and administration of the program;
- how to keep *compliance costs* low this is important because otherwise eligible firms may not find it worthwhile to apply; and
- how to ensure, as far as practicable, that firms are not funded for activities
 which they would have undertaken even without the assistance (maximum
 additionality). For example, the EMDG scheme tries to encourage export
 marketing expenditure that would not otherwise have taken place by
 targeting smaller 'export ready' businesses and weeding out ineffective
 users of the program through an export performance test. Reducing the

maximum number of grants available to any single business from the current eight would probably increase additionality further. In contrast, it appears that many firms would implement the management improvements subsidised by the Enterprise Development Program (EDP) in the absence of the program.

Box 1: Policy design criteria

- Does the program target the problem effectively?
- Does it have acceptable take-up?
- Is it timely?
- Does it induce new activity?
- Are large transfers overseas avoided?
- Does the program have the right duration, scale and target group?
- Is it administratively efficient for government?
- Does it impose big compliance burdens on firms?
- Is it transparent and accountable?
- Is it financed in the least cost way?
- What are the risks posed by the program? eg
 - Strategic behaviour by firms
 - Unforeseen liabilities for government
 - Adverse interactions with other policies
- Does it breach Australia's international obligations?
- Does it impose significant costs on any group?

Source: Box 5.1.

These considerations suggest that, among other things, small business programs should:

- be relatively simple, with easy application procedures;
- not rely on detailed information about individual firms;
- include design features such as the export performance test in EMDG
 which can increase additionality; and
- feature good dissemination of information about the program and its eligibility criteria.

The lessons for policy design from existing programs

Examination of small business programs such as the EMDG, EDP and Export Access, R&D Start, the Innovation Investment Fund and many other smaller state-run programs (chapter 6) reveal some good features, but also a number of concerns about their designs. Some common problems are:

- Programs often do not have a clearly stated rationale. This makes it difficult to assess both program performance and the appropriateness of program design and delivery but such assessment is a vital element in achieving a coherent and efficient small business policy.
- For some programs, firms would have undertaken a high proportion of the funded activities anyway. Policymakers could alter eligibility conditions and other aspects of program design to reduce these unnecessary costs.
- In other programs, many clients, after having experienced the benefits of activities undertaken through the program, would subsequently be willing to pay the cost themselves. Here there is scope for government to recover costs from firms, possibly on a contingency basis, in order to increase benefits in relation to costs.
- The focus on firms producing traded goods or services, common to many programs, is probably not justified.

The current lack of clarity about the fundamental reasons for providing small business policies, combined with ad hoc design, has led to fragmented policies across jurisdictions. Thus there are numerous, often small, programs with limited reach, provided with minimal coordination by a multiplicity of agencies and jurisdictions.

There has been increasing effort by governments to provide a coherent view of regulatory reform and, through the Mortimer review, a clearer vision of which policy measures are appropriate. There may be further gains from developing a 'whole-of-governments' view of where small business policy should be focused, what instruments should be used, and how program outcomes can be assessed. This could include:

- shared definitions, access points and evaluation strategies (cutting down excess variety);
- coordinated administration to facilitate program management and promotion; and
- a reduction in the overall number of programs aimed at small business, and in overlaps. This may reduce confusion for potential users and cut wastage of resources on numerous small programs, where fewer, but better

resourced, programs would be more effective or efficient. A pragmatic limitation is the involvement of different jurisdictions.

Evaluation

Governments and policymakers need to know the impacts of programs in order to make them work better, or to channel the resources elsewhere. Unfortunately, the impacts are complex and often hard to measure, which makes evaluation difficult. For example, the overall effectiveness of the New Enterprise Incentive Scheme (NEIS) is unknown because of the complexities of measuring whether users would have got jobs anyway, the extent to which they displace other jobs, and the medium and longer term failure rates of the businesses created.

Most evaluations rely on the subjective views of program users, or compare quantitative outcomes with ill-matched control groups. Consequently, most do not provide very good tests of the efficacy of small business programs.

A number of practices could help improve the quality of evaluations and provide governments and policymakers with better feedback about program effects:

- evaluations should include proper controls, something akin to those used in the evaluation of drugs, at least for programs where governments apply large amounts of public resources. One useful method, now commonly used in the US in the evaluation of labour programs, is the 'randomised trial' approach. In this, some applicants to a pilot program are randomly assigned to a control group instead of obtaining program assistance this then allows evaluators to better measure program performance (chapter 6);
- independent evaluations of any large program, contracted and managed at arms length from the host agency;
- more real time assessment of program effects to gather early intelligence on how a program is functioning, and to provide basic data about the nature of users for long term evaluation. Real time evaluation could include assessments of ease of access, appropriateness of eligibility criteria, take-up by firms, compliance burdens and the time taken to give approval;
- assessment of appropriateness as well as effectiveness and efficiency; and
- attempts to examine the wider impacts on Australians in general, as well as those who benefit from program assistance.

Best practice regulatory design and small business

What are the compliance burdens on small business?

Government regulations and taxes have a significant impact on all businesses, but particularly small firms. While such measures usually produce benefits, they may also impose unnecessary compliance costs through poor design or implementation. The amount of regulation with which firms must comply has increased substantially in recent years (chapter 7):

- From 1992–93 to 1995–96, the Commonwealth Parliament passed 664 Acts, of which approximately 200 are thought to have a substantial effect on business. This represented a faster rate of addition to the stock of Commonwealth legislation than was seen in the early 1980s.
- Roughly one in 20 small firms see regulation as their prime business worry.

Small businesses may find greater difficulties in regulatory compliance for two reasons. First, where there are significant fixed costs in compliance, such as learning about the requirements and establishing systems to ensure compliance, small firms' costs as a share of turnover are generally greater.

Second, small firms do not have specialised staff to handle regulatory matters and will often find that compliance diverts managers from other important tasks in running the business.

Evidence from some recent surveys suggests that Commonwealth taxation compliance costs for SMEs are around 1.5 per cent of turnover. Other paperwork compliance burdens — associated with state taxes and other regulations — represent roughly another 0.3 per cent of turnover. It appears that regulatory and taxation paperwork compliance costs for SMEs summed to around \$9.2 billion in 1994-95 out of a total of \$10.8 billion in paperwork compliance burdens across the economy. SMEs, therefore, bear roughly 85 per cent of the aggregate paperwork compliance burden, although their share of economic activity is about one third. These figures do not take account of other significant costs associated with regulation or taxes, such as more costly inputs, less efficient production and impacts on entrepreneurship and innovation.

Improving the quality of regulation

Given increasing awareness of large compliance and other burdens imposed by regulations, many governments around the world, including Australia, have questioned whether the traditional processes which generate and assess regulations are adequate. Commonwealth and state governments have attempted to put increased focus on the proper design, implementation and evaluation of

significant regulations, using principles akin to those described for business programs in the last section. For example, the Competition Principles Agreement between the Commonwealth, State and Territory governments provides for the review of all current legislation which restricts competition, while all proposals for new regulations by Commonwealth agencies should now pass through a process of scrutiny. The reviews cover:

- assessment of the costs and benefits of the regulation; and
- consideration of other approaches which could achieve the same objectives.

This paper outlines more detailed aspects of good regulatory practice, such as proper consultation, grievance procedures, appropriate targeting, duration, and administration (chapter 8).

Commonwealth agencies have not always complied satisfactorily with the requirements for proper review of regulations. This may illustrate a certain inbuilt resistance to change in regulatory agencies, especially when increased effort is required at a time of resource constraints. It appears that further efforts are required to ensure commitment to regulatory reform.

Good regulatory design aims to minimise the transactions costs associated with regulations (the sum of the administrative costs for the regulating agency and compliance costs for businesses). An important question arises in cases where agencies could act to reduce compliance costs, and *total* costs, but only at the expense of higher administrative costs. Ideally governments would supplement an agency's budget in these circumstances, in order to achieve the social benefit of lower total transaction costs.

In designing regulations there are many options which can help to achieve an effective regime with low transaction costs. Possibilities include:

- the use of self-regulation (by an industry or professional association) rather than regulation imposed by government;
- the use of market-based solutions (such as measures which work through prices) to give firms an incentive to act in the desired ways;
- different enforcement strategies; and
- varying the form of regulatory rules for example, by specifying them in terms of outcomes, rather than the inputs and processes of the regulated activity.

When might regulators want to treat small business differently?

Many of the corner-stones of regulatory reform — such as elimination of unnecessary regulations, more simple compliance, easier access to information

on regulatory requirements, strict tests of public benefit for new regulations and eradication of inconsistencies in regulations between jurisdictions and/or agencies — benefit all sizes of firm. For this reason, it is likely that the biggest gains from regulatory reform for small businesses will come from across-the-board reform, rather than reform that is particular to small firms. Even so, some commentators argue that it is important to give particular attention to small business. This may be by:

- explicitly accounting for the impacts of regulatory and tax measures on small business, including consultation with affected parties;
- flexible delivery of regulations to small business, for example, through less frequent or more simple reporting requirements;
- collecting better information about the varying impacts of regulation on different firms, so that we know better how regulations affect the efficiency of businesses. This would also help to find out how some small firms appear to meet regulatory requirements at much lower cost than others lessons which may be widely disseminated. Finally, such an approach may identify best and worst practice regulatory delivery;
- an improvement in information provided by regulatory agencies to businesses about their compliance obligations (as exemplified by the recent Business Entry Point initiative); and
- regulatory tiering providing small business with more lenient regulatory treatment or exemptions.

The strategies of raising awareness, flexible delivery and information collection and provision do not dilute the regulatory requirements for small business, but seek to deliver regulations to small businesses in an optimal way. The grounds for such approaches appear to be strong.

On the other hand, the grounds for the more radical measure of regulatory tiering — typically based on the observation that compliance burdens are proportionately more severe for small relative to larger businesses — are less clear cut. Where government and regulatory agencies have good information (eg about compliance costs for different sized firms and about how firms and consumers respond to price and cost differences) and the other critical preconditions have been met (see chapter 9), then they could consider tiering of regulations and taxes. However, they would still need to assess each regulation (or tax) on a case-by-case basis to ensure it passed a net benefit test.

1 INTRODUCTION

1.1 The importance of small business policy

Small businesses represent an important part of the Australian economy, as in most OECD countries. In Australia, over 95 per cent of firms in the private sector are classed as small businesses. Most are very small businesses with less than 10 employees. Small firms also account for a substantial proportion of economic activity — about 40 per cent of national employment, and about 35 per cent of output.

Governments provide a range of business programs which are intended exclusively, or mainly to, assist smaller businesses. About four hundred million dollars are devoted annually to these programs. When the value of tax concessions and exemptions — notably the exemption from payroll tax — are included, total government measures specifically directed to smaller businesses cost nearly three billion dollars per year. But the overall total is more, since SMEs also benefit from a range of general assistance measures.

As well, governments have increasingly sought to examine and adapt regulations for their compliance and other impacts on small business. In 1996, the Government commissioned a study by the Small Business Deregulation Task Force (Bell Report 1996). Following its report, the Government announced a number of changes to reduce the regulatory compliance burden for smaller businesses (Howard 1997a). Other measures have also been introduced in recent years to assist small businesses in this respect and in an effort to ensure that the interests of small business are considered when introducing new regulation.

Despite the importance of the small business sector, and the level of assistance devoted to small businesses, this area of policy has received limited independent public scrutiny. Individual government programs are subject to the general requirements for evaluation, but the evaluations often have not addressed all of the questions relevant to the effectiveness, or the costs and benefits of the programs. Equally important is that program documentation, such as policy announcements, agencies' annual reports and descriptions in budget-related

¹ Using the Australian Bureau of Statistics (ABS) small business definition.

statements, only sometimes indicate the fundamental rationales for the programs.

There has also been little discussion of small business policy *as a whole*. For example, we did not discover any analysis of the relative benefits (and costs) of the different ways in which Australian governments might assist small business. In the absence of such analysis, resources may be poorly allocated between different measures. Similarly, it appears that there has been relatively little attention given to the relationships between the many different programs. Business programs may either complement or adversely affect each other. The existence of a large number of, sometimes overlapping, State and Commonwealth programs, a multiplicity of eligibility criteria, and a host of small business delivery and policy agencies, suggests the possibility of resource wastage and confusion for clients or potential clients.

While it is clear that problems may result if agencies do not give sufficient attention to this important area of public policy, Australia is not unique in this respect. Discussing small business policy in Britain and continental Europe, Storey (1994, p. 253) noted:

...Whilst there is a wide range of policy initiatives to assist small firms, governments throughout Europe have yet to formulate a coherent policy towards the [small business] sector. In no country so far as we are aware, is there the equivalent of a 'White Paper' which articulates the range of public policies towards smaller firms which currently exist, which provides a justification for the existing configuration of policies and which provides criteria for judging whether or not policies are successful.

The Australian Chamber of Commerce and Industry (ACCI) has conducted some recent analysis of the interactions between business programs. Their conclusions are not encouraging:

For many in industry, and particularly those in small firms, there is a great deal of confusion about the present suite of business programs because of the large number of assistance programs; the lack of any coherent policy framework underpinning the array of programs; . . . perplexing array of and lack of linkages between agencies delivering programs; lack of clarity about roles and accountability of outcomes . . . (cited in Mortimer 1997).

Similarly, the Mortimer Report (1997) ² makes the following comments on Commonwealth business programs:

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² The ACCI and Mortimer reports are consistent in this respect with an earlier report (Burgess 1994) which considered that there was an overlap of enterprise improvement programs, and that there were too many organisations and too many programs chasing clients.

- programs do not operate within a clear policy framework or strategy which could provide guidance to the role of business programs, and to the amount of expenditure warranted;
- program objectives are often poorly specified, hence reviews usually find it hard to determine whether to expand, alter or cancel programs; and
- programs appear ad hoc or too small for the specified task and thus appear ineffective.³

The present study — commissioned by the Department of Workplace Relations and Small Business — aims to partly address this lack of knowledge and analysis. It looks at a number of aspects of small business policy and programs, specifically:

- the major current forms of assistance to small business;
- the economic factors affecting small businesses which may provide a rationale for business programs or other government action;
- factors which determine the effectiveness and cost-efficiency of small business programs; and
- tax and regulatory policy and compliance issues.

The analysis suggests some of the advantages and disadvantages of different forms of intervention to assist small businesses, which should be useful in guiding future policy formulation and evaluation.

1.2 Which businesses are small businesses?

As we discuss in chapter 2, there are differing statistical definitions of small business, which reflect attempts to classify as a group those businesses which share common characteristics such as control being exercised principally by the owner, small turnover or employment, and a small share of the relevant market.

Reflecting the practice in small business policy and programs, we do not try to use a common definition of small businesses across all topics. This is because in different contexts, there may be different answers to the question of which businesses are sufficiently different from other, larger businesses to require special consideration. For example, the empirical evidence suggests that dealing with government regulation is a relatively much greater burden for very small businesses, with up to 4 employees, than for other firms (Bickerdyke and Lattimore 1997). Other small businesses, with 5 to 19 employees, may also face

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³ While these criticisms may have substance, the report provides very little supporting evidence. In particular, there is little analysis of specific business programs.

higher proportional costs than large firms, but the difference is not as great. On the other hand, if we consider the position of firms of different sizes which are seeking to commence exporting, it appears that even businesses with up to 50 employees may face significant barriers in gaining information, or in finding efficient methods of marketing, which do not pose barriers for large businesses.

We use the terms small businesses and small and medium enterprises (SMEs) where possible to assist in clarity. Broadly speaking, by small businesses we mean those businesses with up to 20 employees. SMEs include these small businesses and also those 'larger small businesses' with up to 50 employees.

1.3 The diversity of small businesses

There is an enormous diversity among small businesses, which is important for many aspects of small business policy and program design:

- highly innovative firms, often based on substantial R&D investments (eg, certain telecommunications equipment, scientific instrument and biotechnology firms);
- rapidly growing small (soon to be medium) firms operating in new markets or with novel products and services (eg, financial services); and
- non-growing firms in mature markets (eg, many retailers and service providers).

These groups differ from each other in many dimensions, such as their expected growth, the need for funds from outside sources, their skill levels and future training needs of their staff, and the likelihood of exporting.

In the paper we do not repeatedly draw attention to these differences, but they lie behind the approach to some policy issues. For example, in discussing the effectiveness of programs to assist smaller businesses, we consider the importance of targeting them to those businesses which are most likely to be able to benefit from them. Similarly, in considering the economic implications of disadvantages for smaller firms arising from the costs of regulatory compliance, we take into account the likely effect on competition between small and large businesses, which depends on the characteristics of each industry.

1.4 Structure of the paper

There are three parts to the main body of this paper. The first part (chapter 2) provides background on the definition and nature of small businesses. The

second part (chapters 3 to 6) examines the policies which governments use to influence or assist small business indicating:

- what the current policy arrangements are (chapter 3);
- the sorts of arguments for different types of government intervention for small business (chapter 4);
- the framework for designing and evaluating small business programs (chapter 5); and
- some of the policy design lessons provided by a range of important existing small business policies (chapter 6).

The final part looks at how a critical facet of the microeconomic environment affects small business — compliance with regulations and taxes. In chapter 7, we look at empirical estimates of the costs of business taxation and regulations for small firms. We then examine best practice regulatory guidelines (chapter 8) before considering the extent to which regulations should be tailored to small business (chapter 9).

The appendices contain a mixture of factual information about programs or regulations (appendices A, B, C and F), and more detailed analysis of some policies affecting small business (appendices D and E).

2 SMALL BUSINESS: AN OVERVIEW

The role of government in relation to small business is the major theme of this publication. This chapter provides some important background information for the discussion in later chapters. It examines what is meant by 'small business', provides some statistical information on small business in Australia, discusses theories about the determinants of firm size and considers the interrelations between small and large firms. The concluding section draws these threads together.

2.1 What is small business?

Businesses vary in size, from small owner-operated establishments to large multinationals with turnover exceeding the national income of small countries. By far the overwhelming proportion of businesses — over 90 per cent — are 'small' by any reasonable definition. But small businesses are not simply large ones scaled down. Typically they differ from larger businesses in the following respects:

- whereas larger businesses may have many shareholders, with few ties other than their common ownership, ownership of small businesses is usually restricted to a small number of individuals who are often related by ties of friendship or family. Similarly, small firms tend to be sole proprietorships or partnerships, rather than joint stock companies;
- small businesses are often managed by owners, or part-owners, rather than by professional managers with little, or no, equity in the enterprise;
- compared to large corporations, small businesses usually have rudimentary management structures, with few specialised management functions (eg, company accounts, sales, production and management functions may all be undertaken by the same person, often the owner-manager);
- most operate in one location only and sell to nearby customers; and
- they tend to have limited market power (some do, however, have some pricing power by operating in niche markets).

Definitions of small business

How small does a business have to be to be regarded as 'small' and what measure — such as employment, sales or value added — should be used to distinguish between 'small' and larger businesses? This question is of more than academic interest. As the following chapter illustrates, many government programs are available only to firms below (and in some cases above) a certain size.

Countries around the world have adopted a variety of definitions of small business, usually based upon characteristics which include employment size, turnover, capitalisation or legal status. These statistical definitions are designed to reflect the more basic qualitative characteristics of small firms. The UK Bolton Committee (1971) settled upon three defining 'economic characteristics' of small firms:

- they have a relatively small share of the market;
- they are managed by owners, or part-owners, in a personalised way, rather than using a formalised management structure; and
- they are independent in practice (not just legally independent) in the sense of not forming part of a larger enterprise.

Since these definitions were formulated, they have been subject to some criticism. For example, Atkinson and Meager (1994) have demonstrated that firms with more than around 10 employees often employ professional managers. Others have commented on the role of small business in niche markets where they have a large market share and few competitors (Storey 1994).

Reflecting research findings since the Bolton Committee, and the difficulties in any quantitative definition capturing the characteristics of small business, the term 'small and medium enterprise' (SME) has been coined by the European Commission (EC). SMEs have been divided into very small micro-enterprises (0 to 9 employees), small enterprises (10 to 99 employees) and medium enterprises (100 to 400 employees). The EC definitions are based on some research results. For example, British research indicates that the introduction of non-owner managers tends to occur when firms have between 10 and 20 employees, and that sub-contracting firms with less than 10 employees tend not to have formal contracts with their customers (Storey 1994).

The Australian Bureau of Statistics (ABS) defines small businesses in non-manufacturing industries as those employing less than 20 people and in manufacturing industries as those employing less than 100 people. This statistical definition is meant to reflect the traditional perception of small businesses as being independently owned, operated and controlled by owner-

managers who contribute most, if not all, of the operating capital and are responsible for the overall management of the business.

2.2 Small business in Australia: a statistical snapshot

This section outlines some broad indicators of economic activity and employment trends in the small business sector. In some instances, data from other countries are included for comparative purposes.

Small business share of firm numbers, employment and value added

In terms of absolute numbers, small businesses dominate the Australian economy, but they account for a smaller share of activity and employment:

- Of the 929 500 private, non-agricultural businesses in Australia in 1996-97, 97 per cent were small (figure 2.1). They accounted for approximately half the employment in the private non-agricultural business sector.
- Across the whole economy, they accounted for about 95 per cent of businesses and 42 per cent of employment in 1996–97 (table 2.1).
- Small businesses accounted for a little under 35 per cent of value-added in the non-agricultural business sector in 1993–94 and 1994–95 (figure 2.2 and table 2.2).
- The relative contribution of small business to employment and value added varied significantly across sectors (table 2.2). It is particularly high in construction, retail trade, property and business services, and personal and other services.
- Small businesses were much less likely to export (3.3 per cent of enterprises) than 'big' businesses (12.7 per cent of enterprises).¹
- Businesses employing less than 20 persons accounted for about 15 per cent of total exports of the private non-agricultural employing sector in 1994–95 (figure 2.2).

¹ Based on the ABS definition of small business, and for firms in the private non-agricultural employing sector (IC/DIST 1997).

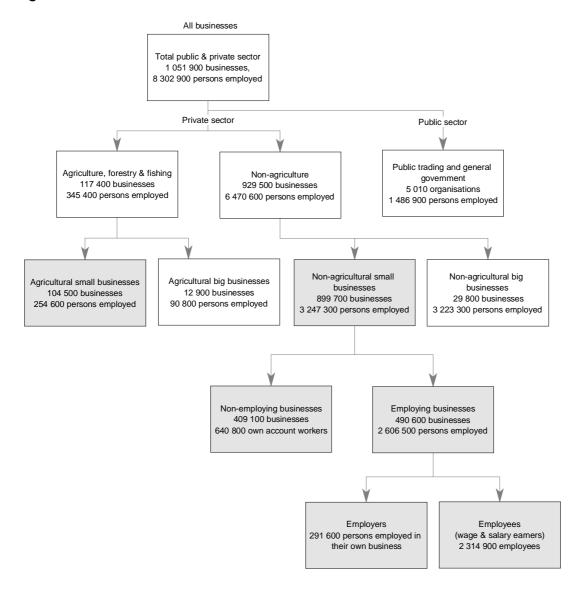


Figure 2.1: The structure of Australian business, 1996–97

Source: Preliminary data provided by the ABS.

In terms of international comparisons, the small business employment share for Australia appears to be around the average for OECD countries. For example, while the available information is somewhat dated (relating to the mid-1980s), the employment share accounted for by small business is appreciably lower than in Australia in large economies such as the US, UK and Germany, but much higher than in New Zealand, Portugal, Spain and Japan. Countries with a similar small business employment share to Australia include France, Belgium, Canada Italy and Norway (see Revesz and Lattimore 1997, figure 6.1).

Table 2.1: Importance of small business in the economy, 1996-97^a

	Share of total businesses	Share of total employment
	%	%
Small businesses		
Agriculture forestry & fishing	9.9	3.1
Non-agricultural		
Non-agricultural employing	46.6	31.4
Non-agricultural non-employing	38.9	7.7
Total non-agricultural	85.5	39.1
Total small business	95.5	42.2
'Big' businesses	4.5	57.8

a A small business is defined as one employing less than 20 employees in non-manufacturing, and less than 100 in manufacturing.

Source: Preliminary data provided by the ABS.

Table 2.2: Small business share of employment and value added in the non-agricultural employing sector, 1993–94 ^a

	Share of employees	Share of value added
	%	%
Manufacturing	39	29
Construction	71	60
Wholesale trade	38	34
Retail trade	45	46
Accommodation, restaurants	35	34
Transport and storage	24	17
Finance and insurance	18	
Property & business services	62	64
Private community services	26	41
Cultural and recreational	42	20
Personal and other services	57	52
Total private	39	33

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. Small businesses which are non-employing businesses are excluded. The shares are calculated using estimates of total employment and value-added in the non-agricultural employing business sector. Note that unlike most other data presented in this chapter, government owned public trading enterprises are included in the totals for this sector.

Source: ABS 1996a, p.110.

[.] unavailable.

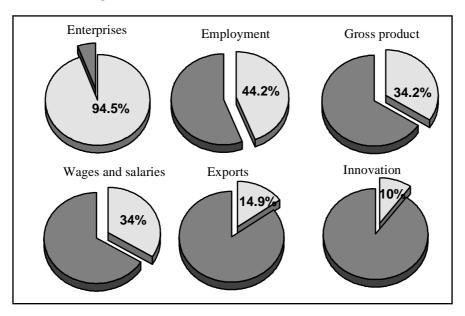


Figure 2.2: The significance of small business, 1994–95^a

a The measures are typically based on the shares of the private non-agricultural employing business sector (as noted in IC/DIST 1997, p. 5). Small business is typically defined as enterprises employing less than 20 employees in all sectors, bar manufacturing, and less than 100 employees in manufacturing. The data for exports are based only on firms employing less than 20 employees, while the data for innovation expenditure is based only on manufacturing.

Source: Based on the Business Longitudinal Survey results presented in IC/DIST 1997.

Employment trends in small business

For at least the last decade there has been a trend for small business to increase its share of total employment in Australia. For example, between 1983–84 and 1994–95, firms with less than 20 employees increased their share of total employment by 3.8 percentage points to 32.8 per cent, while firms with under 100 employees increased their share by 5 percentage points to 46 per cent (Revesz and Lattimore 1997). Table 2.3 provides a decomposition of these increases in small business employment.

To illustrate how the table works, of the 5 percentage point increase in employment share for firms with less than 100 employees, by far the largest component (3.2 percentage points) was due to contraction in the public sector.² Other increases in the small business share of employment reflect shifts in private demand. In particular, there have been increases in the relative size of

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² The contraction of one part of employment, will, by definition, increase the shares of employment accounted for by the remaining sectors.

the 'property and business services' and 'health and community services' sectors, in which small businesses play a dominant role.

Table 2.3: Sectoral changes accounting for the increase in the share of small business employment between 1983–84 and 1994–95

	Firm emp	oloyment size
Source of change	Under 20	Under 100
	%	%
Contraction in the share of public employment	2.2	3.2
Contraction in the share of farm employment	0.5	0.7
Increase in the sectoral share of property and business services	1.0	1.4
Increase in the sectoral share of health and community services	0.7	1.2
Other changes in the sectoral composition of private demand	-0.4	-1.0
Reduction in average firm size in manufacturing	1.0	1.4
Increasing importance of supermarkets and chain stores	-1.1	-1.0
Changes in the share of small business in other sectors	0.1	-0.3
Other	-0.3	-0.6
Total change in the employment share of small business	3.8	5.0

Source: Revesz and Lattimore (1997).

However, differences in sectoral growth rates do not explain all of the small business increase in employment share. For example, the sectoral share of manufacturing has declined, but small businesses have increased their share of manufacturing output. The latter development may reflect a number of factors, including larger firms moving towards an increased concentration on their core functions, with consequent outsourcing (Revesz and Lattimore 1997). The table also shows factors which tended to decrease the small business share of employment. Most significant of these is the increasing importance of supermarkets and chain stores.

More recent (revised) data from the ABS suggest that the share of small business in the private non-agricultural business sector has declined slightly since 1994–95, but increased slightly as a share of national employment (tables 2.4 and 2.5).

The trend towards faster employment growth in the small business sector has been consistently evident in most of the developed economies since around the early 1970s (table 2.6). One explanation for the increasing employment share of

small business is the relative slowdown that occurred in the automotive and heavy industry sectors (dominated by large firms) in western economies following the oil price shocks of 1973–74 (Revesz and Lattimore 1997).

Table 2.4: Recent estimates of small business employment changes

	Small business employment (ABS definition ^a)	Employment in businesses employing less than 20 persons ^b	Employment in all non- agricultural private business ^c	National employment ^d
	Persons	Persons	Persons	Persons
1983-84	2163.5	1963.7	4355.5	6343.1
1994-95	3052.5	2827.6	5950.4	7980.6
1996-97	3247.5	3022.8	6470.8	8287.0

a Here, small business is defined as enterprises in the private non-agricultural business sector employing less than 20 employees in all sectors, bar manufacturing, and less than 100 employees in manufacturing. The estimates are based on preliminary data provided by the ABS.

Sources: ABS (Cat. 6203.0) and preliminary data from the ABS.

Table 2.5: Small business employment share changes

	Small busine.	ss employment (ABS definition)		usinesses employing less than 20 persons
	Share of non- agricultural private business employment	Share of national employment	Share of non- agricultural private business employment	Share of national employment
	%	%	%	%
1983-84	49.7	34.1	45.1	31.0
1994-95	51.3	38.2	47.5	35.4
1996-97	50.2	39.2	46.7	36.5

Source: Based on data in table 2.4.

Another possible factor is the effect on manufacturing in developed economies of increased competition following trade liberalisation in this period. However, the increase in small business share is not uniform. In the US, the share of small

b This is an alternative definition of small business, which excludes manufacturing businesses employing between 20 and 99 persons. The estimates are based on preliminary data provided by the ABS.

c The estimates are based on preliminary data provided by the ABS. They cover the industry scope used in Table 2.3 of ABS (1996a).

d This is the average level of national employment over the fiscal year, from the ABS Labour Force Survey (Cat. 6203.0).

business decreased significantly between 1988 and 1991, and Japan experienced a slight decline between 1981 and 1992 (Revesz and Lattimore 1997).

The increase in economic activity and employment in small businesses does not occur uniformly across the entire small business sector. A number of studies have shown that most of the growth is due to a relatively few highly successful small firms — known as 'gazelles' (Storey 1994). For example, Storey and Johnson (1987) estimated that ten years after the establishment of a group of small firms in northern England, a mere 4 per cent of the firms accounted for 50 per cent of the jobs that had been generated.

Table 2.6: Changes in the employment shares of the small business sector, various countries

Country	Period	Starting share	Finishing share
		%	%
Australia	1984-92	54.4	57.3
UK	1973-89	41.3	54.2
Germany	1970-87	44.8	50.0
US	1967-87	39.9	42.5
Japan	1975-85	64.8	70.2
France	1971-86	39.0	43.7
Italy	1971-86	61.6	71.4

Source: BIE 1992b.

Other studies in this vein have used a representative sample of small firms in the starting year, rather than new firms, in order to account for the effect of firms which reduce their employment or fail. For example, a group of 298 firms in the UK which in 1985 employed 1932 people had been reduced to 130 surviving firms by 1991, employing 1072 people. Of these, only 24 (8 per cent) had expanded their employment (Rajan and Pearson 1986; Johnson 1989, 1991; and Jones 1991).

Similar results have also been found in the US. For example, a study of small firms commencing operations in Minnesota between 1979 and 1984 showed that by 1986 (after the firms had been operating for two to seven years), 9 per cent of the survivors accounted for more than 50 per cent of the total employment created (Reynolds and Miller 1988).

Results of the Business Longitudinal Survey (BLS)

The BLS is designed to track around 6 000 Australian businesses over a number of years. Some of the more interesting results in relation to small business are (IC/DIST 1997 and ABS 1997a):

- Many more small firms are created than large firms. Firms with less than 10 employees have about twice the new business entry rate as firms with 10 to 200 employees. These in turn have entry rates approximately twice that of the next largest size grouping (firms employing 200 to 499 persons).
- Smaller firms also have higher exit rates. Nearly a quarter of firms employing less than 10 persons intended to close or sell their businesses over the next three years. The corresponding proportion for large enterprises (500 or more employees) was less than 2 per cent.
- Small firms tend to have no unionised employees and relatively more parttime employees. Firms employing less than five persons had as many part time as full time employees. 92 per cent of these firms had no unionised staff. Forty per cent of the larger firms' employees were part time and only 12.5 per cent of them had no unionised members.
- About half of the larger firms had introduced some formal business improvement management activity, such as total quality management, quality assurance or just-in-time inventory controls over the last 3 years, whereas only 4 per cent of the smallest firms had.
- Many smaller firms had little or no growth aspirations. They also had a much lower export propensity.
- Smaller firms tended to be less highly geared than larger enterprises, but somewhat surprisingly, there was no significant variation in the frequency of a financial loss across different firm sizes. About one in five of all firms made a loss.
- Micro businesses (employing less than 5 persons) appear to be more static in terms of employment than other enterprises for the period June 1995 to June 1996.
- Small businesses contributed about 56 per cent of total job destruction³ between June 1995 and June 1996, and 57 per cent of total job

³ Jon destruction is defined as the decrease in employment of continuing firms plus the employment of firms which ceased during the reference period.

generation.⁴ In contrast, the comparable figures were 25 and 28 per cent for medium businesses (those employing from 20 to 199 people), and 19 and 14 per cent for large businesses (those employing 200 or more people).

The survey also provided information on how management and entrepreneurial characteristics differ with firm size in Australia (table 2.7). Indications are that the larger the firm, the more likely it will take action aimed at improving its efficiency over time, such as benchmarking, training or participating in government programs. Table 2.7 also indicates that the larger the firm, the more likely it is to increase production, exports or introduce new products (Bickerdyke and Lattimore 1997).⁵

2.3 Small firms and innovation

Theories of economic growth emphasise the importance of technological progress (BIE 1992a). Both product and process innovations are fundamental to economic growth and rising living standards.

There have been suggestions that small firms are particularly important in these processes. Schumpeter (1934), for example, emphasised the role of the entrepreneur and 'gales of creative destruction' in the process of innovation and economic growth.⁶ Similarly, Acs and Audretsch (1987) have suggested that small firms are particularly important innovators in highly innovative and skill-intensive industries in the early stages of their life-cycles.

However, evidence in this area indicates that neither small nor large businesses have strong claims to being more innovative than the other — both appear to be important. For example, some studies in the UK and US suggest that small firms are less likely to undertake research and development, but they tend to introduce more fundamentally new innovations per employee than larger firms. This feature has been attributed to small firms having less commitment to existing practices and products (Pavitt, Robson and Townsend 1987).

⁴ Jon generation is defined as employment increases in continuing firms, plus employment in new firms created during the reference period.

⁵ But this is not surprising if one sees a large firm as a conglomeration of smaller firms. For example, suppose 1 in 20 small firms introduced new products and large firms were usually equivalent to 5 small firms. Then the probability of new products in the larger firm is 1 in 4 — but the *incidence* of product innovation per dollar of output may be no greater.

⁶ Schumpeter's theories also underpin the hypothesis that large firms tend to innovate more than small ones.

Table 2.7: Management and entrepreneurial characteristics 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	1 ^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 (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			

a For firms with 100 or more employees. Data not separately available.

Source: Bickerdyke and Lattimore 1997, based on data from IC/DIST 1997.

Similarly, Rothwell (1989), using a UK data base of 4400 'significant innovations' in the period 1945 to 1983, showed that from about 1960, the growth in innovation share has been strongest for independent firms employing less than 200 persons. However, Rothwell's data also show that larger firms still introduced most 'significant' innovations in that period.⁷

18

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. TQM is total quality management, QA is quality control and JIT is just-in-time.

g Over next three years.

Using the same data set, Pavitt, Robson and Townsend (1987) indicate that the more prolific innovators are those firms in the 100–199 employment band.

Acs and Audretsch (1987, 1988) also produced results that indicate the importance of both SMEs (defined as firms with under 500 employees) and larger firms in innovation in the US. Using data on the type and origin of over 8000 innovations released into the market during 1982, they found that of the 35 industries where most innovation occurred, independent SMEs were the dominant innovator in 14.8 Of the top ten innovative industries in 1982, SMEs were the dominant source of innovation in half (computing equipment, process control instruments, electronic components, scientific instruments and plastic products). As a group, independent SMEs accounted for around half of the total set of innovations recorded in the period.

A study of Italian manufacturers provides stronger evidence for small business making a particular contribution to innovation. Santarelli and Sterlacchini (1990), using survey data from over 24 000 firms with 20 or more employees, found in the period 1981 to 1985 that smaller firms introduced over 77 per cent of the innovations reported. But the significance of innovations (based on the subjective assessment of respondents) tended to increase with firm size.

Of course not all small businesses introduce innovations, any more than all tend to grow or increase their employment. The OECD (1982) has noted a diversity of estimates of the proportion of smaller-sized enterprises which innovate, and concluded that a reasonable estimate is between 10 and 20 per cent.

What Australian evidence is there on the propensity of firms to undertake technological innovation (ie, to introduce new or improved products, processes or services)? Three recent ABS surveys shed light on this question: the Innovation in Industry Survey (IIS) 1991–94, restricted to the manufacturing sector (see ABS 1995, Phillips 1997); the Innovative Activities of Businesses Survey (IABS) 1993–94, covering sectors other than manufacturing (see Pattinson et al 1995); and the BLS 1994–95, covering all sectors (see IC/DIST 1997).

The surveys reveal that technological innovation is more common in larger businesses than in smaller businesses. For example, on the basis of the IIS, the proportion of businesses undertaking technological innovation is around 12 per cent overall, ranging from 10 per cent (those with less than 5 persons) to 41 per cent (those with 100 or more persons) (Pattinson et al 1995). By comparison, around one-third of manufacturing businesses undertake technological innovation, with the proportions ranging from 25 per cent (businesses with less

respect to rivals), the US study is likely to be generally relevant for 'small' firms.

⁸ The study groups data into only two categories: those with less than 500 employees and larger firms. Subsidiary firms are counted as part of their parents. To the extent that innovative effort can be linked to relative smallness (ie size within the market and with

than 5 persons) to 79 per cent (businesses with 100 or more persons) (ABS 1995, Phillips 1997).

The BLS yields somewhat lower propensities to innovate — in 1994–95, around 9 per cent of businesses overall were technological innovators, with the proportion ranging from 6 per cent (businesses with less than 5 persons) to 26 per cent (businesses with 100 or more persons) (DIST/IC 1997). Because the surveys are designed for different purposes, the innovation-specific IIS and IABS results are preferred to those of the more wide-ranging BLS (see Phillips 1997, footnote 1, p. 5).

2.4 The relevance of size

What determines the size of firms? Even in a single industry, some firms operate successfully while remaining small, but other small firms grow rapidly and may in time become large corporations. Is this the result of chance or are there underlying forces which determine ultimate firm size in a particular industry? In this section we examine some of the explanations for the size distribution of firms. All the explanations offer some insight but none can be said to offer a definitive explanation as to why some firms are small and some are not (Forsaith 1993).

Standard microeconomic theory implies that cost-minimising firms choose a scale of operations which, subject to sufficient market demand, minimises their long-run average cost of production. Long-run costs of production are assumed to fall initially due to scale economies, then rise as diseconomies come to prevail. The theory suggests that small firms will be found where:

- starting production requires only small up-front expenditures, but the costs of additional production begin to rise fairly quickly beyond a certain level of production (ie diseconomies of scale set in at relatively small output levels);
- customised goods or personalised services are involved (as the limited market size and high distribution costs tend to limit plant or firm size);
- markets are fragmented by high transport, or other distribution costs, resulting in small, localised markets serviced by small firms; or
- firms in the industry have differing access to some key production input such as a physical resource or management know-how which is in short

supply. In this case, small and large firms will coexist in the same industry (Brock and Evans 1989).⁹

Dynamic explanations of firm size

The standard microeconomic theory considered above has no time dimension. But in reality, it takes time for firms to adjust to changes in their business environment such as increased input prices, new process technology or changes in consumer tastes. Adjustment involves costs as well as time — and the financial costs are likely to be higher the more quickly the firm seeks to adjust its scale of operations. Thus, there may be advantages to firms from adjusting relatively slowly to change.

Adjustment and its associated costs can create 'windows of opportunity' for smaller firms even in industries where the long-run cost structures favour large firms. Further dynamic reasons for the existence of small and larger firms in the same industry include:

- some small firms operate in market niches created through product innovation;
- small firms may do better in some new high technology areas, where R&D costs are not too high and where production routines and processes have yet to be fully developed; and
- small firms have advantages of being able to respond quickly where market needs are continually changing. This is particularly important if there is a trade off between efficiency (the costs of production for a given output) and flexibility (the costs of adjusting output). Larger capital-intensive firms can produce a given output at lower marginal cost, but smaller labour-intensive firms can adjust output at lower cost (Brock and Evans 1989).

More formal dynamic explanations as to why firm size varies are discussed in Forsaith (1993). The explanations can be divided into two groups: deterministic (which includes the overwhelming majority of the explanations); and stochastic.

⁹ For this to occur there must be decreasing returns to scale (ie costs increase with additional output) and the largest firm must be small relative to the size of the market. Firms with access to the scarce factor can produce any given output at lower cost than those without access. But supply of the scarce factor cannot be increased, and eventually increasing costs per unit output means that the production of an extra unit by a firm with access to the scarce factor would cost more (and have a higher price if it could be sold) than a unit produced by another firm with no access to it. Thus, in equilibrium, larger firms with access to the scarce factor coexist with smaller firms, with the output costs of both firm types being equal at the margin.

Put most simply, stochastic explanations suggest that a firm's size at a particular time reflects chance factors or 'luck'.

While the various explanations or theories are competing to explain the same empirical phenomenon (different firm sizes in the same industry), they can also be seen as complementary. In particular, while it seems unlikely that different firm sizes can be exclusively explained by chance, a sensible framework would appear to suggest that there are both deterministic and chance components as to why some firms are larger and more successful than others.

2.5 Relations between small and large firms: cooperation and conflict

Small and large firm relationships take many forms and guises, from cooperative partnerships and alliances on the one hand, to 'unfair' trading or 'exploitative' practices on the other (BIE 1995a). These many and varied relationships can be grouped under two headings: cooperation and conflict.

Cooperation between large and small firms will obviously be in the interests of both, otherwise one or the other would not enter into the relationship. It does not follow, however, that such relations are necessarily in the public interest, and governments have long been concerned to outlaw, or at least circumscribe, agreements that have been regarded as anti-competitive and against the public interest.

More recently, there has been a growing recognition that some forms of cooperative agreements between firms — particularly small firms — may be in the public interest. Governments have, therefore, actively promoted networks between firms (also termed inter-firm linkages) on the grounds that such networks can promote knowledge sharing, specialisation and joint production economies.

Where there is conflict between large and small firms, it is often claimed that the interests of small firms tend to suffer most — for example, from claimed 'predatory' behaviour or from 'unfair' trading practices by larger firms. A commonly cited example of such behaviour is delaying payments to small business suppliers — in effect forcing an interest free loan. 10 Conflicting

For example, an analysis of the balance sheets of the top 500 companies over six years by Corporate Financial Diagnostics showed 'average days creditors' of these companies was 37.6 days in 1991 and 61.3 days in 1996. Corporate Financial Diagnostics considered that this increase in the time taken to pay creditors was placing great financial strains on smaller companies (Wood 1997).

relations between large and small firms — in the context of 'unfair' trading practices — are discussed further in appendix C.

2.6 Concluding comments

This chapter has discussed various definitions of small business and provided a statistical snapshot of the sector in Australia. By any reasonable criteria, small businesses are important and growing contributors to the economic health of the nation. But there is a need to keep their role and contribution in perspective in discussions of government policy and small business. While small businesses may be *where* increases in output and employment are created, it does not necessarily mean that small business is *responsible* for their creation (Revesz and Lattimore 1997). For example, increased output and employment in the small business sector can reflect factors outside the sector, including increased demand for products supplied by small business and increased outsourcing by larger firms and government.

The chapter has also examined a number of explanations of firm size. What do the various explanations tell us? Firstly, they suggest that there are both systematic and chance factors involved.

Secondly, to the extent that firm size is a result of systematic factors, the plethora of theories suggest that there are many, rather than a few factors influencing both the most desirable size for firms in a particular industry, and the actual sizes they attain. These include the size of the firm's market, the relationship between average costs and the scale of production; the quality of the entrepreneurial and managerial inputs to the firm's production; and the cost balance between undertaking transactions or particular functions within or outside the firm.

Thirdly, if efficient firm size (or range of sizes) is determined by a number of factors, it suggests that small and large firms may have different advantages and disadvantages. Some likely small firm advantages include:

- less bureaucracy in decision making and greater flexibility this will lower adjustment costs where market conditions or technologies are changing rapidly;
- small firms may be more cost-effective where markets are small or localised;
- small firms are often more efficient in supplying customised goods or personalised services; and

• small firms may be more willing to try new methods or discover new markets (eg biotechnology).

Possible large firm advantages include:

- economies of scale and scope in production, distribution and marketing;
- economies of scale in information collection and processing through the layer of technical experts they employ (lawyers, engineers, scientists etc.), and in administration, record keeping and management and planning;
- economies of scale from networks such as occur, for example, in airline and trucking services;
- pecuniary economies of scale, such as the ability to obtain labour and other supplies on favourable conditions, due to large firm bargaining power; and
- access to more resources and greater diversification, allowing them to undertake more risky, but higher return, ventures.

In other words, small firms will generally have a combination of advantages and disadvantages. One implication of this is that government policies which require small firms to behave like larger ones, may not be in their best interests. For example, measures requiring small firms to adopt resource-intensive accounting and cost control methods, may result in undesirable diversion of the small firm's resources from its core business activities.

Finally, the chapter has discussed relations between small and large firms. The discussion indicated that some of these arrangements may result in economic benefits — for example, inter-firm networking arrangements — while others may result in net economic costs. Perhaps more importantly, some of the arrangements may be inequitable in that large firms may have sufficient market and other power to take advantage of smaller firms.

3 SMALL BUSINESS PROGRAMS

3.1 Introduction

Australian governments provide a myriad of assistance measures for small business.¹ Given the importance of the sector, and the magnitude of taxpayer funding of these programs, it is important to examine what these programs aspire to achieve, their rationale, design and effectiveness.

This chapter is one of four that deals with programs assisting SMEs. In this chapter, we look at the broad sorts of policy measures that governments use to assist small business, both in Australia and internationally. This serves as background to later chapters, in which we try to draw policy design lessons from particular programs assisting SMEs, and address questions such as:

- what are the economic rationales for small business programs? (chapter 4);
- how can governments design small business programs effectively? (chapter 5); and
- how do actual small business programs match up to the ideal? (chapter 6).

Given the large number of small business programs, the discussion in this chapter does not attempt to be comprehensive, nor to include a listing of all programs. Instead, we describe (and where possible, cost) the different types of assistance, classified in terms of the activity being encouraged or the problem being addressed. We emphasise Commonwealth or combined Commonwealth/States and Territories programs. A description of the State and Territory small business programs that we have been able to identify is provided in appendixes A and B.

The chapter begins with an outline of the main SME programs, covering those which provide general assistance to all smaller businesses (section 3.2) and those which are aimed at particular problems faced by SMEs (section 3.3).

It has been estimated that the Commonwealth and State/Territory governments provide in total at least 500 such programs (AusIndustry, http://www.ausindustry.gov.au/). However, we have been able to identify only some 45 to 50 small business programs of any significance. Such differing estimates may reflect double counting of combined Commonwealth/State Territory programs, differing concepts of what constitutes a program and differing definitions of what makes a program a 'small business program'. For example, the coordinated Commonwealth/States Enterprise Development Program can be regarded as one or up to 20 programs depending on definitions.

SMEs also often participate in general industry programs — we discuss their use of these programs in section 3.4. Some comparisons with the patterns in other countries, and measures of the pattern of assistance to SMEs in Australia, are given in sections 3.5 and 3.6. Concluding comments are presented in section 3.7.

3.2 General assistance for small business

Some assistance measures do not aim to target specific small business problems, but rather provide assistance to small businesses in general. Examples are grants, subsidies, loan or equity finance from public agencies, investment allowances and tax concessions.

Only a few such measures are used in Australia. The most notable example is the exemption from payroll tax for small businesses, provided by State and Territory governments. But other than indicating the rough magnitude of the cost of the exemption, we do not analyse such tax measures in this paper.

The provision of subsidised loans to SMEs through the Commonwealth Development Bank might also be considered in this category. However, because it is also a response to difficulties faced by SMEs in obtaining finance, it has been included in the following section, which deals with programs addressing specific problems.

General assistance measures are quite common in other countries. Most OECD countries give small firms or start-ups some support through tax concessions. For example, government grants to SMEs have long been part of UK support for small business. These grants are normally distributed through regional agencies, and are usually available only to firms in special enterprise zones or as part of UK regional policy (Storey 1994).

3.3 Policies to overcome special problems for the small business sector

In Australia and other countries, many small business programs are targeted at particular problems identified by policy makers. Grouped according to the nature of the problem or market failure being addressed, these include:

- the use of business advice;
- management, business and general training programs;
- finance;
- networking;

- government procurement programs;
- regulation review and simplification; and
- understanding the nature of small businesses.

These are discussed below. The description here covers the purpose of the programs and an outline of their form; further details on the operation of the programs are provided in appendix A.

The use of business advice

Policy makers in Australia and many other countries consider that SME operators often make insufficient use of a range of external sources of business advice which could assist in improving their efficiency. This may be seen as a result of difficulties facing SME managers in locating or assessing information about business advisers, or of other management problems in SMEs.

In Australia, the Commonwealth and State/Territory governments provide a range of programs to encourage greater use of external business advice. These include:

- information services which direct firms towards sources of business advice or training (often termed 'signposting services');
- provision of business advice through public agencies; and
- subsidies for the use of private sector advisers.

These programs are provided through AusIndustry, a joint Commonwealth and State/Territory government service agency which provides a range of assistance measures to businesses, mainly SMEs.

One prominent assistance measure has been the Enterprise Development Program (EDP), involving Commonwealth funding to the States and Territories for a range of consulting services oriented towards improving management and planning in eligible firms. The services are largely delivered by the private sector, with individual firm eligibility determined by each State or Territory. Broadly, eligible firms are SMEs which can provide evidence of financial viability and a commitment to becoming internationally competitive. Appendix B provides further details on the EDP, including State and Territory variations in program eligibility and services offered. Commonwealth funding for the EDP was approximately \$15.6 million² for 1996–97 down from Commonwealth

² Unlike previous years, all of this funding is for direct subsidies to firms. The figure of \$15.6 million reflects a reduction of \$17 million for the program in 1996–97 and a further reduction of \$17 million from the forward estimate for 1997–98 (DIST 1997a).

Government expenditure of \$29 million in 1994–95 (IC 1997a). The projected expenditure under the appropriation for the EDP is expected to be \$10.5 million in 1998–99, but this includes expenditure items outside the original function of the program (such as payments to the Australian Greenhouse Office Reserve).

Most OECD countries have programs aimed at improving the efficiency of small firms by encouraging the use of external business advice. Another approach, used in the US and Ireland, is the provision of management advice through a network of retired business managers. AusIndustry is currently trialing a similar approach, which will be evaluated upon its completion (DIST 1997a).

Management, business and general training programs

Many governments around the world have specific measures to improve and increase training in SMEs. These may cover both management training and skills training for employees. In Australia, assistance is provided in the form of small business training courses delivered by the TAFE system.

All governments in the EC member states have measures to support and improve training in SMEs. Examples include:

- the UK and Ireland have provided training courses designed for individual firms:
- the Netherlands, France, Belgium and Italy have promoted part-time employment combined with part-time education for younger workers. Incentives to undertake this training are provided through grants, reductions in social insurance contributions or tax allowances; and
- some countries also provide funding for industry organisations and unions to run training courses (BIE 1992b, Koning and Snijders 1992).

Finance

It is often argued that small businesses face difficulties in accessing finance. They often cannot obtain loans on the same terms and conditions as would be available to larger businesses, while in many cases small businesses are unable to obtain finance from private financiers even though the owners and managers consider that the business has good prospects. Many governments have taken action to assist SMEs to obtain finance.

In Australia, the most important Commonwealth program assisting small businesses to obtain finance was the subsidy to the Commonwealth Development Bank (CDB), which mostly financed SMEs. As shown in table

3.1, in 1994–95 the bank provided \$233 million in subsidised loans. This subsidy ceased in June 1996 with the sale of the CDB to the Commonwealth Bank (CBA 1996).

Assistance with finance has also been provided through a number of smaller programs which are targeted at businesses undertaking particular activities — for example, export loan guarantees for firms new to exporting.

The Commonwealth Government has also acted to increase the supply of private equity finance to SMEs. This has been done through the Pooled Development Funds program, which provides tax concessions for investors in approved funds which invest in technology-based SMEs. Until 1996–97, the Government also subsidised matching services which assisted SMEs to meet private investors who were willing to invest funds, as 'business angels', in small businesses.

Other countries have provided substantial assistance for small business finance in the form of loan guarantees or loan insurance. The US, Canada and Japan are the most intensive users of these measures, which comprise their major form of support for small firm finance (see table 3.1).³ There is also some public provision of venture capital for SMEs in Japan and Canada.

Other measures used to increase the access of small firms to finance include:

- the encouragement of specialist small business lenders (in the US, the government loan guarantee scheme operates through private sector specialist small business financiers, called Small Business Investment Companies);
- specialised small business banks, owned or originally established by the government;
- UK and Canadian schemes to provide tax concessions for private investors in small firms:
- requirements on banks or other financial institutions, such as pension funds, to lend a certain proportion of their funds to small firms; and
- investor matching services, which help to match potential private investors with businesses looking for finance.

The amount of assistance provided by a loan guarantee or loan insurance scheme depends on the losses such schemes make. The schemes involve losses (and hence implicit subsidies) when total costs including defaults, administration costs and forgone interest exceed income (interest and other charges received). The subsidy provided through the US Loan Guarantee Scheme has been estimated at between 3 and 11 per cent of the amount guaranteed (Rhyne 1988, Mandell 1992), while the implicit subsidy provided by the UK scheme has been estimated at 14 per cent of the amount guaranteed (BIE 1995b).

Table 3.1: Loan and equity programs for small businesses in selected countries

Country	Type of program	Value	Share of GDP/GNP
		A\$ m	%
Australia	Loans from the Commonwealth Development Bank	233	
(1994-95) ^a	Pooled Development Funds	16	
	International trade enhancement scheme (1993-94)	47	
	Innovative agricultural marketing program (1993-94)	7	
	Export loan guarantees	11	
	Total	314	0.072
Japan	Loan insurance	9 453	
(1990)	Loan guarantees	469	
	Venture capital (1989)	69	
	Total	9 991	0.266
US ^b	Loan guarantees	4 578	
(1990)	Other credit assistance	2 603	
	Total	7 181	0.102
Canada	Guarantees	2 492	
(1994 est)	Venture capital	13	
	Total	2 505	0.338
UK	Loan guarantees	311	
(1994 est)	Total	311	0.023

a Commonwealth programs only. The Innovation Investment Fund (reviewed later) has been omitted here because it aims to provide finance to a select group of small high technology companies.

Networking

The use of business networks is promoted in Australia as a means to assist small businesses to exploit complementary strengths, or overcome problems that may be too large or difficult for a single firm to tackle. The Business Networks Program provides financial assistance to networks involving at least two SMEs, initially to obtain advice and develop a business plan. Eligible networks are also subsidised during their first year of operation. The program is a demonstration program, and is due to cease in 1998–99.

b Federal programs only, 22 US states have also set up investment intermediaries using pension funds. *Sources:* Austrade 1994b, DIST 1995a, CBA 1994, SBCICJ 1991, Storey 1994, and ESBO 1991.

Business cooperation between firms is widely encouraged throughout the developed world, through programs which encourage networks, technical collaborations or subcontracting. Japan provides financial and tax incentives, backed by legislative support, to encourage the development of cooperatives. Many countries also support cooperative ventures between high-technology SMEs and between exporters. Japan has also used legislation to promote subcontracting to SMEs and to provide some measure of protection to SMEs engaged in subcontracting.

The Netherlands, Ireland and Portugal also pursue policies designed to improve relationships between suppliers and their customers, as a source of information to assist improvements in business performance.

Government procurement programs

Australia, like many other countries, seeks to develop local industry through government purchasing, where this is consistent with other objectives such as quality or value for money. These policies often have some focus on domestic SMEs. For example, the Commonwealth Government has a commitment to purchase at least 10 per cent of its purchases from local SMEs. In support of these policies, it is typically argued that these firms are potentially efficient suppliers, but face difficulties in obtaining information about, or tendering for, government contracts; or that obtaining a government contract is important to assist a firm in gaining other business.

In Australia, the relevant policies have concentrated on supplying information to assist SMEs to make contact with government purchasers. There have also been moves to compile information on the capabilities of Australian firms and to make this information available to purchasing officers. The latest of these initiatives, the Supplier Information Program, was announced by the Commonwealth Government in 1997. The primary objectives of this program are to:

- provide a national framework for the coordination of supplier development policies and activities between industry and all three levels of government;
- raise awareness of how to do business with government; and
- design and deliver information products to educate suppliers in government purchasing policy and practices.

The budgetary cost of the program is \$435 000 for 1997–98 and 1998–99 (Commonwealth of Australia 1998 Budget Paper 4, p.161).

Some state and territory governments apply a preference margin for government purchases of goods and their related services that are produced in Australia and New Zealand. This takes the form of a notional price increase in their non-Australian or New Zealand content. Western Australia and the Northern Territory have margins of 10 per cent while New South Wales and South Australia have margins of 20 per cent (IC 1996c).

While some of the government procurement policies that have been adopted overseas are similar in that they are limited to providing information, others go further. For example:

- US government agencies reserve certain categories of purchases for small firms, and also segment many major procurement contracts into smaller elements that could be supplied by small firms; and
- the Japanese Cabinet sets out annual targets for orders from SMEs by public bodies.

Regulation review and simplification

In recent years, many OECD countries have adopted programs of regulation review and simplification, aimed at making compliance easier for all businesses. These programs may be of particular relevance for SMEs, which typically find the costs of compliance higher in relation to their turnover.

Australian regulation review policies are broadly similar to those which apply in most OECD countries. In Australia, these policies have resulted in some existing regulations being simplified. In some cases, including tax measures, moves have been made to ease compliance for smaller businesses only. There are also requirements for all new regulations to pass through a process of scrutiny, intended to ensure that they do not impose unnecessarily high compliance costs. These reforms are discussed in detail in chapter 8.

Understanding the nature of small business

The substantial policy interest in small business, and limitations in existing information sources, has led to increasing effort to gather systematic evidence about the behaviour and performance of small businesses. This new information is intended to directly help small businesses (eg, by providing benchmarks of performance), and to assist better policy formulation. The Office of Small Business (in the Department of Workplace Relations and Small Business) administers a research program on small business — the Small Business Research Program. The program commenced in 1994–95 with funding of \$5.5 million over five years (DWRSB 1998a, p. 58). The major component of the program is the Business Longitudinal Survey, which aims to gather data on a panel of firms over time.

3.4 SMEs and other business policies

Some industry and other programs are established to assist firms of all sizes. They are aimed at objectives such as overcoming barriers to exporting, promoting technical innovation, or reducing unemployment. Some of these programs predominantly assist SMEs, although they are not specifically targeted at them. This can occur because smaller businesses are more likely to be affected by the difficulties which prompted the program, or for other reasons. This section discusses some important programs, in Australia and overseas, which largely assist SMEs. We briefly examine:

- exports;
- innovation programs;
- regional policies; and
- employment programs.

Exports

All OECD countries operate export promotion programs. Those which target smaller firms are usually justified on the basis that many 'export ready' small firms face relatively greater difficulties in crucial areas such as identifying markets and complying with relevant government procedures or standards.

Assistance often takes the form of free or subsidised provision of services by government agencies. These agencies supply information and advice about export markets, organise foreign trade fairs and sometimes also assist in setting up export contracts. Such agencies exist in Australia, the US, Canada, Japan, the Netherlands, Belgium, Ireland, Germany, France, Spain and Portugal.

Assistance can also be direct, in the form of grants. In Australia, the major program assisting SMEs in this area is the Export Market Development Grants (EMDG) scheme, which had its eligibility criteria altered in July 1997 to increase the focus on SMEs (Howard 1997b). The EMDG scheme provides direct financial assistance to exporters to offset marketing costs incurred in entering or developing export markets. Justification for government schemes like the EMDG often reflect 'market failure' arguments that there are spin-off benefits beyond what can be captured by the participating firm.⁴ The direct budgetary cost of the EMDG scheme was \$188 million in 1996–97, \$173 million in 1997–98 (IC 1997a) and is expected to be around \$150 million in 1998–99 (Commonwealth of Australia 1998).

⁴ See for example, Mortimer (1997), Hughes (1989) and IAC (1982).

As part of its *Investing in Growth* package, the Government announced in December 1997 that the EMDG will be extended for a further two years to 2001–2, at a budgetary cost of \$300 million (Howard 1997b). At the same time, it announced a new program, *Tradestart*, which will establish offices in rural and regional areas to assist new exporters. Funding for this program will be \$2 million over a four year period.

Governments also subsidise the use of consultants for activities such as export planning, market research, or to make contacts with overseas customers or distributors (Koning and Snijders 1992). In Australia, the Federal Government provides such assistance through the Export Access Program, which is specifically targeted at SMEs. The budgetary cost of the Export Access Program was \$3 million in 1996–97, \$4 million in 1997–98 and is expected to be \$3 million in 1998–99 (IC 1997a and Mortimer 1997). The Government's *Investing in Growth* package announced that this program had also been extended to 2001–02.

Certain sectoral programs, such as those aimed at promoting exports by the information technology or food industries also predominantly assist SMEs, although they are not conceived as small business programs. In many cases, the cost of budgetary support for these schemes is relatively small. For example, the budgetary cost of export marketing and promotional services for the agri-food industry was only \$1 million in 1996–97. On the other hand, the Textile Clothing and Footwear (TCF) import credits scheme is expected to cost the Commonwealth \$110 million in revenue forgone in 1997–98 (IC 1997a).⁵

Innovation programs

Most governments provide support for innovation. This is because of a widely held view that innovation is an important contributor to economic growth and competitiveness, and further that businesses will generally under-invest in innovation because they cannot appropriate all of the economic returns from such investment.

While small Australian firms may also tap the R&D Tax Concession, the main form of support for innovation in SMEs is through schemes providing grants and concessional loans (under the R&D Start program). These have funding of about \$130 million in 1998–99. The main rationale for grants and loans for small firms is the concern that small technology intensive firms may often have

⁵ Not all the recipients of this benefit will be SMEs, however, and indications are that it is TCF firms towards the upper end of the SME definition which predominantly benefit from the program (IC 1997b).

tax losses during their early years (thus reducing the incentive impacts of the tax concession), and may also have difficulty in finding internal or external finance for significant R&D.

A more recent initiative announced in December 1997 is the Technology Diffusion Program. It has three elements, of which the last two emphasise SMEs:

- *Technology Alliances* which aim to establish better links between industry and the international science and technology (IS&T) community. The program replaces the International Science and Technology Program which was wound up on 30 June 1998;
- Online Business, which includes a range of sub-programs. The Information Technology Online Program aims to demonstrate to firms, including SMEs, the commercial benefits of the application of electronic or 'online' technologies to the firm's operations. The Online Business Program also aims to establish training and demonstration centres across States and Territories to provide access for firms (particularly SMEs) to the latest online commerce and business technologies; 6 and
- *Technology Transfer* which aims to facilitate the formation of a national network of technology diffusion centres covering all key technologies and reaching all significant business groups through competitive grants in three areas: network/infrastructure, technology demonstration and awareness; and feasibility studies. These grants aim to improve diffusion of new and appropriate technologies into firms (particularly SMEs).

Funding of the program for 1998–99 is \$18 million (DIST 1998a, p. 5.35). The *Investing for Growth* statement pledged an additional \$71.7 million for the period 1999–2000 to 2001–02 (Howard 1997b).

Other countries also run diffusion programs, typically by providing general information and counselling on technology and R&D matters through special centres.

Some countries also support organisations which can advise on technical issues in different industries — examples are the Fraunhofer Institutes in Germany and the CSIRO in Australia. Germany also subsidises firms to hire technical experts to solve particular problems. In several countries, including Australia, there are also incentives for businesses to undertake cooperative R&D.

A new Australian initiative (which is specifically targeted at SMEs) is the Innovation Investment Fund (IIF). The program, administered by AusIndustry

⁶ See, for instance, the Australian Electronic Business Network (http://www.aebn.org.au/).

and the IR&D Board, will provide early-stage capital, in the form of equity, to new technology-based firms. In March 1997 the Government set aside initial funding of \$130 million into the IIF (IC 1997a and Howard 1997b). The initial funding is expected to be returned in time from the investee firms' profits and the ultimate sale of the fund's equity in the firms. The IIF has been developed along the lines of a long running, although more extensive, program in the United States, the Small Business Investment Companies Scheme, which has been successfully applied elsewhere. Additional funding of \$43 million was pledged in the industry statement of late 1997 (Howard 1997b, p. 34).

Regional policies

Many OECD countries have programs to encourage the creation or relocation of businesses to particular regions in order to promote employment growth in those regions. For example, in Italy, enterprises in the less developed southern half of the country are entitled to various forms of financial support, fiscal benefits and business advice services. The US, Canada, Japan and most European countries also have regional programs which include financial aid, loans, subsidies and loan guarantees (Koning and Snijders 1992).

In Australia, while there has been concern about the prosperity of some rural areas, regional policies have traditionally focussed on attracting larger enterprises into such areas. State and Territory governments also offer payroll tax exemptions which aim partly to promote increased numbers of SMEs, but this incentive does not discriminate between regions within each State or Territory. An exception to this are the various regional enterprise schemes in Western Australia (described in appendix B).

Employment programs

Among OECD policies aimed at increasing employment opportunities at least two countries — Australia and the UK — provide schemes which assist unemployed people to start their own businesses.

In Australia, the New Enterprise Incentive Scheme (NEIS) program provides training and income support for unemployed people to commence new business ventures. This scheme is similar to the Business Start-Up Scheme which (with its predecessor the Enterprise Allowance Scheme) operated in the UK from the early 1980s. The budgetary cost of NEIS is estimated to be \$87 million in 1997–98, and just under \$80 million in 1998–99 (Mortimer 1997).

The Business Incubators component of the Commonwealth's Regional Assistance Program provides support for both the employed and unemployed in

establishing and developing 'micro-businesses' (those with less than 5 employees). Business incubators provide premises and a range of business services, typically including reception and telephone answering, and access to accounting and other business advice. The Commonwealth provides funding to local communities to establish new incubators or to expand existing ones. During 1996–97 the Commonwealth provided some \$12 million of support to 46 business incubators, 25 of which were new in the reporting period (DEETYA 1996).

It may be questioned whether such programs should be seen as small business programs. It is clear that they do not aim to assist *existing* small businesses, and that their purpose is to increase employment — in this sense they are not like orthodox small business programs.⁷ However, they are mediated through small business, and an understanding of how small businesses survive and grow is critical to their design and success.⁸ It is in this sense that they can be considered as small business programs.

3.5 The emphasis of small business policies in Australia and overseas

Within Australia

Table 3.2 shows Australia's most important small business programs and tax relief measures in terms of cost. It covers only programs which are generally targeted at SMEs, and not the support provided to SMEs through more generic programs.

Overall, small business programs costs around \$400 million, of which the EMDG and R&D Start programs are the most significant elements. Tax measures are also very significant. Tax relief to small business — mainly through state and territory payroll tax concessions and Federal Government CGT relief — costs roughly \$2.4 billion. However, it should be noted that some of these tax relief measures compensate small businesses for what would otherwise be penal tax treatment. For example, Evans et al (1997ab) show that the timing of Commonwealth tax measures benefits large businesses far more than they do small businesses. An assessment of the desirability, form and

Other programs, such as the EMDG scheme, also bridge policy categories. This program aims to increase overall Australian exports, but it does it through incentives directed only at SMEs.

⁸ For example, issues of management training and mentoring are key elements in the design of the NEIS scheme.

magnitude of tax measures relevant to small business lies outside the principal focus of this paper, which is on the design and evaluation of small business programs and regulations.

The cost of government measures for small business can be placed in context by examining total government assistance to industry. In 1994–95, the total provided by the Commonwealth was \$9.9 billion, including \$3.4 billion in budgetary assistance (IC 1996a, p.8). The States and Territories provided \$2.1 billion of budgetary assistance and an additional \$3.2 billion of assistance via general payroll tax exemptions. Local government assistance is estimated to be \$145 million (IC 1996a). Total direct assistance was thus \$15.3 billion in 1994-95.

Assistance includes the subsidy equivalent of tariffs and other border protection measures, agricultural marketing arrangements, and budgetary assistance (through budgetary outlays, such as bounties and grants, and through tax expenditures, such as the R&D Tax Concession).

Table 3.2: Significant Australian support measures for small businesses, expected expenditure for 1998–99

Measure	Responsible agency	Estimated expenditur e ^a
Programs		\$m
Export Market Development Grants Scheme (EMDG) b	Austrade	146.2
Export Access ^c	Austrade	3
New Enterprise Incentive Scheme ^d	DEETYA	78
R&D Start excluding the Innovation Investment Fund ^e	DIST	128.1
Technology Diffusion Program	DIST	18
Innovation Investment Fund	DIST	14
Enterprise Development Program ^h	DIST	10.5
Enterprise Networking Program ⁱ	DIST	3.5
Total for small business programs	••	401.3 ^j
Tax relief measures		
Revenue forgone from state payroll tax concessions to small firms ^k	Each state & territory	2 022
CGT rollover relief for small business ¹	Comm. Govt.	290
CGT exemption for the sale of a business for retirement m	Comm. Govt.	50
FBT concessions to small business ⁿ	Comm. Govt.	75
Total for tax relief measures		2 437

- a Data are all forward estimates, subject to future revision.
- b Commonwealth of Australia 1998 (Budget Paper No. 1, p. 4-90).
- c Mortimer 1997, p. 218.
- d Mortimer 1997, p.221.
- e DIST 1998a, p.3.15. Note that changes have been made to the R&D Start program which make some elements of the program available to enterprises of any size.
- f DIST 1998a, p. 5.35
- g DIST 1998a, p. 5.35.
- h Replaces the National Industry Extension Service (NIES). The data are from the Commonwealth of Australia 1998 (Budget Paper No. 4, p. 160). The figures include some payments to the Australian Greenhouse Office Reserve. Note that these sums reflect the winding down of the program. For example, DIST (1997a) report \$16 million of expenditure for 1996–97.
- i Commonwealth of Australia 1998 (Budget Paper No. 4, p. 160). Expenditure was \$7.3 million in 1997–98. The program is terminating in December 1998.
- j Funding of some programs is due to shortly finish, though there is some rollover of funds (such as the Enterprise Network Program, and the Enterprise Development program). Our measure of the resources used for small business is the sum of the forward estimates for assistance measures for 1998–99, including the two terminating programs. Longer run assistance may, therefore, decline somewhat.
- k First we estimated the revenue forgone for 1996–97 (as 1 838 million) by averaging the two estimates generated by Lattimore (1998). This figure corrects for the tax deductibility of payroll tax at the Commonwealth income tax level. Then we assumed that payroll revenues forgone grew by 10 per cent over the next two years, so that the 1998–99 estimate is 1.1 times \$1 838 = \$2 022 million.
- The Government announced two separate concessions to rollover provisions for small business, amounting to an estimated \$150 million in 1998–99 for the first suite (Commonwealth of Australia 1996) and a further \$140 million in 1998–99 for the second (Commonwealth of Australia 1997).
- m The cumulative impact of two measures announced in the 1996–97 and 1997–98 budget statements (Commonwealth of Australia 1996 and 1997).
- These are concessions to record keeping and car-parking for 1998–99 (Commonwealth of Australia 1997).

We do not have an exact estimate of small business assistance for 1994–95, but it was around \$2.1 billion. Decific assistance to small business therefore represented about 14 per cent of all government industry assistance.

However, the above estimates do not represent the total sum of government assistance to SMEs. They also receive substantial benefits from a range of other industry programs, such as export assistance, innovation and sectoral programs such as the TCF import credits scheme. For instance, SMEs receive about a quarter of the benefits from the R&D tax concession. It is not possible to calculate an exact figure for the total share of industry assistance which goes to SMEs, as for many programs there is insufficient data on the firms which benefit. However, it is of interest to note some hypothetical figures. If small businesses received 5 per cent of the value of assistance provided by other industry programs, ¹¹ their overall share of industry assistance would be about 18 per cent. ¹²

Relative to overseas

In table 3.3 we show some comparisons of the pattern of small business programs in a number of OECD countries, based on the number of programs in place rather than on expenditure. Most of the countries covered have policies to support or assist SMEs in most of the areas discussed above, and in this respect Australia is similar to the majority. Only the UK, Italy and two smaller countries (Denmark and Greece) take no action in several of the areas identified.

The most common areas of support for SMEs are in relation to exporting, promoting R&D and technological development, and business licensing. Australia is similar to the other countries in having the largest number of policy measures in these areas.

¹⁰ Based on data in IC (1997a) and a rough estimate of the revenue forgone through the small business payroll tax exemption of \$1 670 million in 1994–95. The CGT, R&D Start, and FBT concessions to small business were not available then, so overall assistance levels will probably be greater as a proportion of total assistance in 1998–99.

¹¹ This is plausible, reflecting their low level of usage and the small size of their activities, (which, in many cases, would result in small benefits under the programs).

Obtained as follows: subtracting identified small business assistance of \$2.1 billion (as discussed in the text, this represents the bulk of, though not all, specific small business programs) from total direct industry assistance (\$15.3 billion) leaves an estimate of \$13.2 billion in other assistance. If small business receives 5 per cent of this assistance (=\$0.65 billion), their share of total industry assistance is (2.1+0.65)/15.3 = 0.18.

Table 3.3: International comparison of small business policies (circa 1990-1992)^a

	AUS	US	JAP	CAN	HOL	DEN	BEL	UK	IRE	FRA	GER	ITA	SP	POR	GR
Fiscal policies b	+	+	+	+	+	0	+	О	+	0	+	0	О	+	0
Information and counselling	+	+	+	+	0	+	+	0	+	+	++	0	+	+	+
Education and training	+	+	+	+	++	+	+	+	+	++	+	+	+	+	+
Export promotion	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
Inter–firm cooperation	+	+	+	+	+	+	0	++	+	+	+	+	++	+	+
Suppliers and contractors	+	_	_	-	++	0	0	О	++	0	0	0	0	+	0
Finance	+	++	++	+	+	0	++	+	++	+	+	+	++	+	++
Business licensing	++	++	++	++	++	+	++	О	0	+	+++	+	o	О	0
Technology and R&D	++	++	++	++	++	++	++	++	++	++	++	+	+	+	++
Regulation review	+	+	+	+	+	0	+	+	+	+	+	+	+	О	+
Employment promotion	+	_	-	_	+	+	++	+	+	+	0	О	0	+	О
Environment & energy	0	-	-	_	++	O	0	0	+++	0	+++	О	++	+	О
Regional policies	О	_	_	_	++	+	+	++	0	+	++	++	+	+	++

a The table relates to relative numbers of policies and takes no account of the size or resources devoted to individual programs. The country titles are abbreviated as follows: AUS (Australia); US (United States); JAP (Japan); CAN (Canada); HOL (Holland); DEN (Denmark); BEL (Belgium); UK (United Kingdom); IRE (Ireland); FRA (France); GER (Germany); ITA (Italy); SP (Spain); POR (Portugal); and GR (Greece). The relative magnitude of the number of programs in place is given as follows: o means very few or no policy measures, + means relatively few policy measures, ++ means relatively large numbers of policy measures, +++ means very large numbers of policy measures, - means not known.

A significant difference is that, while a majority of the countries target SMEs as part of regional policies, Australia does not generally use such policies. Also, several countries have small business programs to promote environmental or energy use objectives, while Australia and several others do not currently make wide use of such programs.

b Fiscal policies include investment measures as well as direct and indirect taxation concessions. *Sources*: Koning and Snijders 1992, Storey 1994, SBA 1990, MITI 1995, ESBO 1991.

3.6 Use of government programs

A simple indicator of the potential impact of any government business program is the number of firms using it. Information on the extent to which businesses participate in government programs, drawn from the BLS, is reported in table 3.4. This shows that some of the main business programs, such as NIES and the R&D tax concession, are used by over 2 000 firms per year.

The programs more frequently used by small business (those with less than 20 employees) are NIES, NEIS, Austrade services, the EMDG scheme (for firms in the 5 to 19 employees bracket) and the R&D tax concession. Except for the last program, most of these are oriented towards small business and the extent of small firm use is, therefore, not surprising. But small firm use of the R&D tax concession illustrates how a business program not specifically targeted at small business may nevertheless assist quite large numbers of small firms.

It is also important to note that only a very small proportion of SMEs use any government programs. This is especially so for the smallest firms. As shown in table 3.5, over the two year period from 1993–94 to 1994–95, less than 3 per cent of very small firms (1 to 4 employees) and less than 5 per cent of firms with 5 to 9 employees, used any government program at all. While program usage rises steadily with firm size, even for firms with 50 to 99 employees the relevant figure is still less than 16 per cent. This is in strong contrast to what is observed for larger firms. Almost 50 per cent of firms with more than 500 employees used at least one government program. This overall picture is reflected in the usage of individual programs (table 3.6).

As well, smaller firms which *do* participate in government programs tend to participate in fewer programs than their larger peers. The average number of programs used was only just above one for the smallest size of program participants, while it was above 1.6 for participating firms with employment of 100 persons or more (table 3.5).

The relatively lower take-up of government programs by small businesses may be linked to fact that:

- many SMEs do not have the characteristics targeted by the programs (eg an orientation to growth, exports or innovation). This will, in part, reflect the relative importance of small firms in the service sector; and
- they face higher opportunity costs of compliance with program requirements, due to the diversion of resources from core business activities.

Table 3.4: Type of government programs used by firm size, 1993–94 and 1994–95 (number of times a program is used) ^{a,b}

		Size of firm	(employment)		
Program	1 - 4	5 - 19	20 - 99	100+	All sizes
National Industry Extension Service	896 (36)	821 (33)	568 (23)	225 (9)	2 510 (100)
150% R&D Tax Concession	783 (26)	643 (22)	763 (26)	782 (26)	2 971 (100)
Grants for R&D	30 (4)	253 (35)	326 (45)	110 (15)	719 (100)
Best Practice Demonstration Program	20	6	26	42	94
	(21)	(7)	(28)	(44)	(100)
New Enterprise Incentive Scheme	544 (55)	355 (36)	41 (4)	45 (5)	985 (100)
Export Access	30	77	140	45(292
	(10)	(26)	(48)	(15)	(100)
Export Finance and Insurance Corporation	20	140	136	149	445
	(5)	(31)	(31)	(34)	(100)
Export Market Development Grants	66	545	702	325	1 638
	(4)	(33)	(43)	(20)	(100)
International Trade Enhancement Scheme	20	12	44	49	125
	(16)	(9)	(35)	(40)	(100)
Austrade services	245	956	493	238	1 932
	(13)	(50)	(26)	(12)	(100)
Other	4 434	5 067	1 303	405	11 209
	(40)	(45)	(12)	(4)	(100)
Total programs ^c	7 090 (31)	8 874 (39)	4 542 (20)	2 414 (11)	22 920 (100)
Total number of firms using programs	6 312	7 249	3 190	1 472	18 223
Average number of programs per using firm	1.12	1.22	1.42	1.64	1.26

a Based on results from 1995 Business Longitudinal Survey (BLS). The survey asked for firms to nominate whether they participated in the specified government programs in the last two years.

Source: IC and DIST 1997, table 3.126.

b Figures in parentheses are the percentage of firms in that size class which used the program.

Because respondents to the BLS could nominate more than one program in which they participated, the total number of programs used exceeds the number of firms using programs.

Table 3.5: Participation in government programs by firm size, 1993-94 and 1994-95

Size of firm (employment)	Participate no progre		Participated in at least one program			
-	Number	%	Number	%		
1 - 4	236 551	97.4	6 312	2.6		
5 - 9	82 693	95.1	4 247	4.9		
10 - 19	33 610	91.8	3 002	8.2		
20 - 49	14 426	86.0	2 352	14.0		
50 - 99	4 437	84.1	838	15.9		
100 - 199	1 407	67.5	679	32.5		
200 - 499	894	65.5	471	34.5		
500+	357	52.6	322	47.4		
Total	374 376	95.4	18 222	4.6		

Source: IC and DIST 1997.

Table 3.6: Relative participation in government programs by firm size, 1993–94 and 1994–95^a

	i				
Program	1 -4	5 - 19	20 - 99	100+	Total
	%	%	%	%	%
National Industry Extension Service (NIES)	0.37	0.66	2.57	5.44	0.64
150% R&D Tax Concession	0.32	0.52	3.46	18.92	0.76
Grants for research and development	0.01	0.20	1.48	2.66	0.18
Best Practice Demonstration Program	0.01	0.00	0.12	1.02	0.02
New Enterprise Incentive Scheme ^b	0.22	0.29	0.19	1.09	0.25
Export Access	0.01	0.06	0.63	1.09	0.07
Export Finance and Insurance Corporation facilities	0.01	0.11	0.62	3.61	0.11
Export Market Development Grants Scheme	0.03	0.44	3.18	7.86	0.42
International Trade Enhancement Scheme	0.01	0.01	0.20	1.19	0.03
Austrade services	0.10	0.77	2.24	5.76	0.49
Other	1.82	4.10	5.91	9.80	2.85

a Firms could nominate more than one program.

Source: IC and DIST 1997.

b NIES have eligibility criteria aimed principally at SMEs. While many more SMEs use the program than larger firms, a significant share of larger firms still participate in the program. This is likely to reflect the fact that in some states eligibility extends to larger enterprises, and that some SMEs which used the program in 1993–94 will have jumped size categories to be recorded as 'large' firms at the time of the survey.

3.7 Conclusion

Governments in Australia, like those in many other developed countries, intervene in a variety of ways to assist SMEs. It is not possible to provide the exact budgetary cost of all government programs that assist small business. However, as table 3.2 indicates, the Commonwealth Government is projected to provide approximately \$400 million of budget related assistance in 1998–99 through the main business programs targeted *specifically* at small business. Tax relief measures by Australian Federal, state and territory governments amount to a further \$2.4 billion. Depending on accounting methods, the cost of measures for small business represent somewhere between 14 and 18 per cent of all government industry assistance.

4 REASONS FOR BUSINESS ASSISTANCE

4.1 Introduction

As shown in the previous chapter, Australian governments devote substantial public resources to programs which assist smaller businesses. It is important that these resources are used only when intervention will provide benefits for the community at large, and in a way which achieves the maximum effect for any given level of expenditure.

We begin in the following section by describing the various circumstances in which government intervention may be justified. Sections 4.3 to 4.9 then look in more detail at whether these conditions apply to small businesses in Australia. These sections also discuss the feasibility of government intervention and what forms of intervention may be preferred.

It is important to note that the economic criteria described in these sections indicate only the *possibility* that government intervention will produce better outcomes. Whether intervention does actually improve outcomes depends on a number of other important factors, including the design features and effectiveness of particular government programs. These issues are discussed in section 4.10.

4.2 Broad economic grounds for intervention in industry

This section considers, in general terms, conditions under which government intervention may be able to improve economic performance. By 'improving economic performance' we do not mean simply that intervention could provide benefits for, or improve the performance of, a particular sector of the economy — most imaginable business programs would pass this test. Rather, we mean that intervention would lead to a net gain for the community as a whole. Though in some cases industry programs may be introduced wholly or in part to meet other objectives such as fairness, or arguably for political reasons, our interest here is in the question of whether intervention is justified on the grounds of an economy-wide net benefit. Even if there is a mixture of motives, any intervention can be assessed in terms of whether it is likely to produce net gains in economic terms. If it is intended also to serve other purposes, these should be

considered, together with the economic impacts, in making a final determination as to whether the program is desirable.

A central, though often unstated, principle underlying the organisation of modern developed economies is that relatively unencumbered markets generally represent the best way to organise the allocation of scarce resources. Prices in these markets provide information which guides participants in making the vast numbers of necessary decisions on what to produce and consume, and on the best ways to organise production. Together these decisions coordinate the level and structure of production from available resources.

Equally, it is true that in virtually all industrialised economies, governments do not leave all economic outcomes to be decided entirely by market forces. They devote significant resources to various programs of industry development or support. Here we outline the main economic rationales for such intervention.

In broad terms, governments may be able to intervene and produce net gains:

- when there is market failure when markets do not work to allocate resources in a way that produces the best overall outcome;
- by undertaking reform of the fundamental institutions around which the
 economy is organised (including labour market arrangements, the taxation
 system, regulation and legal institutions and systems). These institutions
 are an important element of the business environment facing firms. It may
 be that governments have in place adverse policy settings (eg badly
 designed taxes and regulation) which can be reformed to improve
 economic and social outcomes; or
- where economic agents systematically make misjudgments.

Market failures

If markets do not allocate resources so as to produce the outcome that is most highly valued by society, it is possible that government can act to improve the outcome. There are several different ways in which markets may fail — anti-competitive behaviour, externalities, missing markets and information problems.

Anti-competitive behaviour can reduce efficiency, increase prices and reduce output. Such issues often relate to larger businesses and natural monopolies, though they are also relevant to some small firm dominated industries where entry is regulated. General protection against undesirable practices is provided through legislation such as the Trade Practices Act. Recently the Australian government has foreshadowed legislative changes in a number of specific areas where it was argued that small businesses were disadvantaged in their dealings with larger businesses. These 'fair' trading issues are discussed in section 4.9.

Externalities may be associated with some business activities. These occur where firms making decisions at the margin either do not incur all of the costs of their actions (a negative externality¹), or do not receive all of the benefits from them (a positive externality). Spillovers from research and development (R&D) or other knowledge generating activities are a common example of a positive externality (BIE 1994b, 1994c pp. 84-88). Other businesses or individuals may be able to obtain benefits from such new knowledge without paying for it (eg, by reverse engineering, movement of people, rumour, or information disclosed in patents). This implies that, at the margin, some projects which have a socially acceptable rate of return, do not go ahead because the investor is not able to capture those returns. Tax concessions and grants may ameliorate the problem, as may the public conduct of some activities (eg research by CSIRO). Other than the fact that appropriation of returns is harder the greater is the number of firms in an industry, externalities are not usually perceived as a problem which particularly confronts any given size of firm.

There may be *missing markets*. These are markets which, in principle, could allow certain transactions of value to both buyers and sellers, but which have not developed.² Their absence may imply lost business opportunities. For example, there may be no market allowing insurance for certain types of risk, or for allocating some forms of finance. It has been often claimed that there are significant capital market imperfections which prevent small firms from accessing finance during important stages in their development. If true, this may prevent certain socially valuable ventures from going ahead.

Markets may not work efficiently if there are *information problems*. For example, if some participants have superior information about the goods or services to be traded, markets may not form (while in other instances the market may form, but trade will be restricted). Akerlof (1970) illustrated this problem using a caricature of the used car market. Sellers have better information about the cars than potential buyers. In the absence of warranties and professional inspection services, prices will tend to be discounted because of the risk perceived by buyers that the cars are 'lemons'. This in turn is likely to deter owners of better quality used cars from selling. If the information asymmetries are preserved, the market can become dominated by poorer-quality cars and, in extreme cases, may fail to form at all (Akerlof 1970). Such information asymmetries probably underlie most apparent capital market failures said to affect small business.

¹ For example, pollution.

When the benefits conferred appear higher than the transactions cost of developing them.

While information asymmetries (and missing markets) are often termed market failures, the use of the term in this context can be misleading³:

- First, markets often find ways of limiting the impact of information problems without governments for example through warranties, reputation, or agents who sell quality information.
- Second, unlike many other market failures, such as non-competitive markets, pollution externalities and public goods, there is no general mechanism to remedy any problem. If a missing market occurs because of information asymmetries, the government may not be in a better position than any other party to establish the market. For example, private agents may not have established the market because the total costs of establishing and operating it appear likely to exceed the returns from doing so. In this case, the same would apply if the government were to set up the market, unless the government either had some particular advantages in doing so or could see greater returns from the market's existence. Each case has to be looked at on its merits.

Institutional failures

Governments have an enormous influence over the performance of all businesses. They provide the macroeconomic settings (such as interest rates and other conditions affecting economic growth), the legal environment, much of the training of the labour force, and significant elements of the national infrastructure which affect how firms operate.

It is certainly true that under asymmetric information, the market outcome may be inefficient compared to one in which everyone had equal access to information (Varian 1978 p. 293) — but that begs the question of the costs of information. In some categories of problems which asymmetric information seems to explain why there is no market (as in the 'lemons' case described above), the true source is actually another missing market (for example, no contingent claims market). The classic 'lemons' problem of Akerlof is solved by issuing warranties. On the other hand, Arnott, Greenwald and Stiglitz (1993) argue a more general case that imperfect information leads to inefficiencies in market outcomes, though they do not address whether actual intervention by (real world) governments would make things better.

⁴ This is possible if operation of the market has a natural complementarity with some other government activity, or generates positive externalities. Another possibility is that the government in judging their value might use a lower trade-off for risk than private interests would. A lower trade-off may be appropriate when judging returns from the perspective of the economy as a whole rather than from the perspective of a private investor with a limited portfolio of investments.

Many economists rate the legal environment as an area of major importance, especially for smaller businesses (OECD 1994). This includes, for example, protection of intellectual property rights and a court system which provides appropriate sanctions for those who break the law.

Apart from the issue of fair trading and anti-competitive practices (mentioned above), the major area of interest is the impact the government has on businesses through the regulations it imposes. The apparent differential in the costs of regulatory compliance between small and larger businesses has been an important policy issue in Australia in recent times (Bickerdyke and Lattimore 1997). Such a differential could have some adverse effects on the wider economy. This would provide a reason for considering changes to reduce the burden on smaller businesses while attempting to preserve the benefits which are provided by the regulations.

The optimal design of regulations is another important issue. If regulations do not achieve a good balance between promoting the intended policy objective and minimising compliance costs, then they impose avoidable costs on the economy as a whole. In this case, aside from any considerations of small business policy, there are grounds for redesign in order to reduce these costs and allow resources to be redeployed to more productive uses. These issues are discussed in chapter 7, 8 and 9.

Inefficiency in business management

Firms do not always operate at best practice, nor do managers always make the 'right' decisions. Nor do markets necessarily evict poor performers quickly. In their detailed study of the performance of 962 Australian manufacturing firms, Ergas and Wright (1994) find a significant tail of relatively poorly performing firms, many of which are small. According to this study, these less competitive businesses tend to underinvest in human or research capital, face constraints on finance, and are too small to match the competitiveness of larger plants. They also find that smaller enterprises tend to have significantly higher product defect rates.

There are many possible explanations for such deviations from best practice, but some factors which are likely to be important include the complexity of the business environment, the range of tasks facing firms' decision makers, the fact that the managers of some newer firms are still learning some of the skills involved, and poor management. These inefficiencies are probably most commonly reflected in informational inadequacies in small firms. This is because nearly all management functions are exercised by just one person, without the specialised managerial skills, or strong internal informational

feedbacks that exist in larger enterprises. For instance, business managers may operate their businesses inefficiently because they are unaware of certain technological advances, management techniques or other information which would allow them to improve their performance. Moreover, such small businesses may also face informational or capital market impediments to accessing external advice.⁵

Any such inefficiencies will lead to a reduction in national output below the level which could be achieved with better management. This creates the potential for government intervention to produce net benefits — essentially this will occur if the costs of action leading to an improvement in business decisions are less than the value of the resulting gains. Arguably, any assistance should be directed as closely as possible to the source of the failure. For instance, measures to improve the flow of information would have advantages over measures encouraging the use of particular products or services which are not fully exploited because of poor information.

It should be noted that it is sometimes hard to distinguish cases where managers are making poor (and therefore, in some sense, irrational) decisions from those where there are significant transactions costs (eg large adjustment costs) which make existing, apparently sub-optimal, practices quite rational.

Special benefits from particular sectors or activities?

It is sometimes argued that governments should promote the small business sector because it provides benefits which will be enjoyed by the economy as a whole.

There are essentially two types of claims. The first refers to features of small businesses which may lead to some benefits for the economy as a whole. These features include the importance of smaller businesses to maintaining competition in many industries, and the importance of the many innovative small businesses as a component of the nation's industrial development.

The second argument is that the small business sector has a special importance because of its record in generating new jobs — a matter of particular interest at a time of high unemployment.

⁵ On the other hand, small owner-operated businesses do not have some of the complex governance problems of large, more bureaucratic business organisations. And any gains from increased business efficiency raise returns to the business manager, so that they have substantial incentives for efficiency.

4.3 Are there economic failures affecting small business?

The next 6 sections apply the general arguments outlined above to arguments for intervention to assist smaller businesses. We start by looking at whether there are 'special' characteristics of small businesses which justify intervention (section 4.4). We then consider the economic arguments for intervention in training (section 4.5), the use of external advisers (section 4.6), exporting (section 4.7), access to finance (section 4.8) and fair trading (4.9).

It is important to note that we are interested here in issues that wholly or mainly affect smaller businesses and which may provide an economic rationale for intervention. There are also economic failures that affect businesses regardless of their size. Perhaps the most notable instance concerns innovation. As noted in chapter 3, many small businesses receive assistance under R&D programs and this makes up a significant proportion of the total assistance received by small businesses. However, since decisions about intervention in these cases are not small business policy decisions, we do not discuss the rationale for such programs here.

4.4 Do special features of the small business sector provide a rationale for assistance?

A range of measures to assist small businesses have been justified, or partly justified, by arguments that small businesses play a particularly important role in the economy. It is important to distinguish two different versions of such arguments. In some cases, people refer to the economic role of small business as an embellishment to other, soundly based, arguments for small business policies. At other times, particular features of the small business sector are put forward as the prime reasons for supporting measures to assist or encourage small businesses in some way.

Industry policy and the small business sector

Differences between small and large businesses, and the contribution small businesses make to the economy, were discussed in chapter 2. Small businesses are certainly a very important part of the economy, accounting for (in 1994–95) 44 per cent of employment in Australia, 34 per cent of value added, and 15 per cent of exports. We also noted evidence that small businesses are playing an increasingly important role in innovation.

Governments and political groups often couch their support for measures to assist small business in terms of their economic importance:

The small business sector is a dynamic source of employment generation, an important supplier to the production processes of larger businesses and a breeding ground for innovation and entrepreneurship. The maintenance of a dynamic and innovative small business sector is therefore a critical element in the development of economic and industry policies (Australian Government, 1990).

Australia's 860 000 small and medium businesses are the backbone of the economy and one of the main sources of economic prosperity. As individual businesses are integrated widely throughout the community, they offer opportunities for employment, investment, industry and commerce (Coalition 1996).

As Australia's largest employer and the main source of employment growth in the last few years, the economic health of the small business sector is critical to the Australian economy (Howard 1997a).

These factors provide good reason for governments to keep the small business sector in mind when making industry policy, and a range of other policies which have significant impacts on business — in particular, when making or reviewing regulations. But they do not provide, *by themselves*, a basis for governments to introduce any industry program in order to solely assist the small business sector.⁶

One key reason is that (as discussed in chapter 2) small and large businesses are set up and develop in response to a range of underlying factors such as the technology used in different industries, and customer preferences in relation to features such as the quality of service and the proximity of the business. Any policy which provides selective assistance for small (or large) businesses, without any other rationale which is particular to businesses in that category, will affect the incentives facing entrepreneurs and so create costs resulting from distorted choices.

In addition, any argument along the lines that, for example, small businesses deserve special assistance merely because they are collectively a large employer, or responsible for a substantial share of economic activity, has an arbitrary focus. One could easily point out that, after all, the few large businesses in the economy are responsible for more than half of total employment, value added, and exports. Equally, it could be noted that large businesses are more productive than small ones, and that a higher proportion of large firms are involved in innovative activities, in developing the skills of their workforces, in seeking new business opportunities and in seeking to work 'smarter' (Bickerdyke and Lattimore 1997).

⁶ In fact, policy papers typically provide other (often implicit rather than explicit) rationales for government intervention, such as modifying costly regulations, while embellishing these more cogent rationales with references to the economic importance of the sector.

Another important point is that small businesses are not a uniform group with common priorities on a range of issues. There are great differences among small businesses, in terms of their levels of technology, the skills of their workforces, past and planned growth, and many other dimensions. This points to a likely diversity of 'needs' for assistance, and also suggests that there would be difficulties in designing programs to efficiently assist small businesses *per se*.

Employment creation in small business: a basis for selective policy?

In recent years, various groups have called for some form of assistance to the small business sector to enable it to create more jobs and thus hopefully to reduce unemployment. These arguments are based implicitly or explicitly on the fact that employment in small businesses has risen strongly in recent years, while employment in larger businesses has been steady or declining. We do not devote much attention to this important issue in this paper, because of recent substantial research undertaken in the Productivity Commission (Revesz and Lattimore, 1997).

Revesz and Lattimore find that it is true that the small business sector has been the location of the bulk of net job growth since the mid 1980s. However, this does not imply that any program to create jobs in small business will actually produce the desired results. Several factors may frustrate these aspirations:

- The recent trends in employment shares do not show that small businesses of themselves are responsible for job creation rather, they reflect changes in demand patterns in the economy. Also, we cannot be sure that these trends will persist in the future there might be good reasons why more jobs could be created in larger firms.
- Most small firms do not grow much if at all. The net job growth in the small business sector occurs in a small number of rapidly-growing firms. Thus, we should question whether policies to encourage small firms to take on more employees would have much impact as far as the great majority of small firms are concerned. Any such measures should probably be targeted to potentially rapidly growing firms but there would be considerable difficulties in identifying these firms and targeting assistance at them.
- Even granted that small businesses do create most of the new jobs, this does not imply that any assistance to small businesses to take on new employees could achieve a net benefit from the use of public funds. This would depend on a number of factors including whether assistance would go to firms which would have taken on new employees in any case and the

extent to which any extra employment and activity generated by the program would displace employment and activity elsewhere in the economy.

4.5 Small businesses and managerial training

Running an effective small business requires marshalling knowledge about aspects of the day-to-day management of many different functions of a firm, as well as all of the longer-term strategic issues. The practical skills and knowledge to run a business are acquired via a host of mechanisms — past and current training, on-the-job learning, mentoring, networks with other business owners, internal expertise (including hired management expertise) and external advice. If, for some reason, entrepreneurs suffer major handicaps in accessing these skills, this could lower economic efficiency and national productivity.⁷

Almost every Australian inquiry into small business problems, such as the Wiltshire report (1971), the Bailey and Royston Report (1980), the Beddall Report (1990), the NBEET Report (1994) and the Karpin Report (1995), has alleged the existence of such handicaps. They maintain that there is a deficit in adequate management knowledge in small business — particularly that acquired via formal training. These inquiries have urged either further or amended provision of management training for small business. Their implicit rationale for government intervention into small business training is based on observations on the amount and impact of small business managerial training. The claim is that:

- small business managers have less qualifications and train less than other managers;
- there is a link between training and business success; and
- therefore, more training should improve business performance.

In this sub-section, we start by reviewing the empirical basis for these claims. We point out some of the problems in existing studies that assert a link between formal training and firm performance. We also explore to what extent any empirical link between training and performance has policy relevance.

This subsection deals only with business management training for small business operators. There may also be significant policy issues to do with the levels of training provided by small businesses for their employees, which are typically lower than those in larger businesses. We have not addressed these issues here, essentially because they are connected with broader issues in the Australian economy such as the structure of wages and the proportion of training costs which are borne by employees rather than employers. These issues are not specifically small business policy issues.

We then try to isolate the fundamental rationales for government intervention in small business managerial training, about which the previous set of claims are largely silent. Even if empirical evidence pointed to big gains from small business training, this begs the question of why entrepreneurs would not have strong incentives to undertake training and make these gains, without any government assistance. Our question, then, is why might entrepreneurs forgo profitable opportunities to train?

Evidence about the level of small business operators' qualifications and training

There is little direct contemporary Australian evidence about the actual level of skills most small business operators have for dealing with the complex management tasks they face. Information on educational attainment drawn from the BLS suggests that a much greater proportion of major decision makers in small business have lower educational attainments than their equivalents in larger businesses (IC/DIST 1997, p. 57). For example, about 34 per cent of major decision makers in enterprises employing one to four persons have tertiary qualifications (and just over a third of these have business management training). In comparison, about 70 per cent of major decision makers in businesses employing 200 or more workers have tertiary training (and about 55 per cent of these have business management training). Managerial training by small business also appears to be significantly less frequent (IC/DIST 1997, p. 170).

Williams (1991, p. 47) found that about 30 per cent of owner/managers had 10 or less years of schooling, 30 per cent had 11 or 12 years of schooling, and roughly 40 per cent had engaged in some post-school education.

He also found that 68 per cent of a sample of owner-managers had never participated in a management training course of any type (p. 61). Recent ABS information (figure 4.1) suggests that only a little more than a quarter of small businesses have operators with any qualifications or training in small business.

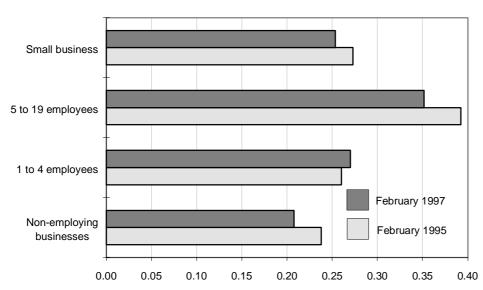


Figure 4.1: The incidence of management qualifications and training in small firms^a, 1995 and 1997

Share of businesses with some operators with small business qualifications or training

a Small business is defined as firms employing 19 or less employees. *Sources:* ABS 1996b and 1998.

But just because many owner/managers tend to have lower qualifications than their big business peers, have not undertaken training in management, and exhibit indifference to acquiring it, does not necessarily imply that more training would produce a better outcome (Holmes et al 1995). We consider the link between training and business outcomes next.

Evidence about the link between training and business success

Studies of small business failures, conducted in a number of countries over the decade from 1981, suggests that a significant proportion of operators lack some skills which are important in the successful functioning of a business (table 4.1). In an Australian context, Williams (1991) found that businesses run by managers with higher management skills have significantly higher survival rates. The same is true where managers have undertaken management training courses since their start-up. But non-business training and qualifications do not appear to deliver large dividends in terms of success rates. For example, the business survival rate (over the period from 1973 to 1990) for owner-managers with no formal education in relevant technical, trade or professional studies was around 18 per cent, while the survival rate for owner-managers with university training was only slightly higher at 21 per cent (p. 53).

Table 4.1: Reasons for business failures

	Number of instances specified as a cause of business failure ^a
Management inefficiencies	
Lack of general planning	4
Lack of financial planning	1
Poor financial management	34
Marketing deficiencies	8
Operations management problems ^b	9
Knowledge deficiencies ^c	14
Total management inefficiencies	65
Other non-managerial reasons	118
Total reasons	188

- a Berryman examined 15 studies on business failure conducted in the period between 1981 and 1991 for a number of countries. She developed 59 categories of failure, and then added up the frequency with which these studies cited these categories. Some studies nominated many causes of failure (for example, some cite a number of aspects of poor financial management) so that the total number of reasons for failure considerably exceeds the number of studies. While we employ Berryman's detailed groupings, we allocated them to different broad groups of management failure.
- b This sums responses on the categories: poor management accounting, poor operational management, and under-estimating.
- c This sums responses on the categories: lack of technical knowledge, deficiency in accounting knowledge, limited education and lack of breadth of management skills.

Source: Berryman 1993.

The absence of a strong relationship between qualifications and success may reflect the fact that there is no significant link between the years of formal education completed and the actual quality of management skills of owner/managers (p. 49). However, there are a number of definitional and other data problems in William's study that suggest care in interpreting the results.

Recent evidence from the ABS (1996b, 9.37) suggests that small businesses which rate themselves as highly successful tend to have operators with management training.

On the other hand, Storey (1994, p. 293, p318) after examining the literature on the effectiveness of small business management training in the UK argues that:

... considerable doubts over the effectiveness of small business training have to be registered and contrasted with the 'received wisdom' in this area. ... The inability to demonstrate an impact of training either owner or workforce on small business performance is serious, bearing in mind the large public sums which have been,

and will continue to be, spent in this area. ... There is now a strong case for government to look closely at small firm training with a view to making changes which will lead to improved value for money.

Overall, the empirical evidence is not conclusive about the link between business success and operators' management training — even though on a priori grounds we expect that, up to a certain level of investment, there are likely to be positive results.

Does any link constitute an in-principle case for government intervention to stimulate training of small business managers?

Even if there were an empirically strong link between training and business performance, this would not necessarily be sufficient to justify government intervention.

First, apparent links between training and business performance provide evidence on the average effect of training. It does not indicate that the gains of further training, at the margin, would exceed the costs of that training for any given firm. These gains must be exhausted at some level of investment. This amounts to saying that, once we account for the fact that training consumes resources, more of it is not always better.

Second, it may be that it is mainly successful businesses that can afford to finance management training, in which case causality runs both ways. This makes it hard to work out how much training influences business performance, unless causality is explicitly examined using time series information.

Third, there may be self-selection into management training courses. People are not randomly assigned to management courses. They *choose* to undertake training depending on the nature of the business and their own preferences, limitations and strengths. It may be these characteristics, rather than the training, which have the biggest impact on their success. Or it may be that training only works well for those people who willingly choose it, so that even if it is successful for that type of person or business, it may not be an effective way of learning for other people and other businesses.

Why wouldn't business operators engage in management training if it was worth it to them?

While it is easy to see why there may be temporary new opportunities for making a quick dollar, it is genuinely harder to understand why any significant group of people — such as small business managers — might systematically and persistently forgo apparently profitable actions, like training. Someone

alleging such seemingly suboptimal behaviour can make appeal to three possible causes (figure 4.2): market failures, adverse government policies and misjudgment by entrepreneurs.⁸

Market failures

Capital market failures, information problems and externalities constitute the main possible sources of market failure that may lead to underinvestment in management training.

Where there are *capital market failures*, cash strapped entrepreneurs may not be able to finance intangible investments like training. However, the costs of (typically short duration) small business training are low compared to many other investments, and there is little evidence of pervasive capital market failures for small investments by existing businesses (Janissen, Lattimore and Pearson 1996). As well, the cost of undertaking business management training has not apparently been identified as one of the significant barriers to a higher level of management skills in small business. Notably, even if there were some capital market failures for some managers, this would not necessarily imply training subsidies, but rather unsubsidised loans or loan guarantees.

On the other hand, there may be larger capital constraints for people who wish to acquire small business training prior to being in business. They have no business assets or reputation as a basis for loan arrangements, and training expenses may not be tax deductible. Financial institutions may be unwilling to lend to such individuals for a variety of reasons (summarised in IC 1997j, pp. 74–76), and this may introduce a role for government.

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⁸ Also see Gallagher 1991a,b.

The time available to the manager may be far more important. The owner-manager is often indispensable to daily operations of the firm.

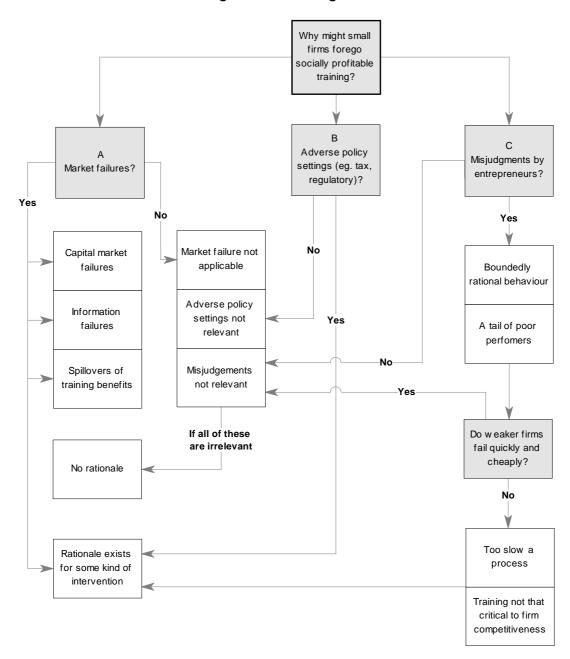


Figure 4.2: The program logic for government intervention in small business management training^a

a The shaded boxes represent the decision points of the program logic diagram.

As well, information asymmetries and lack of collateral — which leads to some forms of capital rationing — are greatest for start-up businesses run by people with low means, such as the unemployed. Given that there are economic and social advantages in trying to lower unemployment, there is some justification for training subsidies (possibly in a HECS form) incorporated into government

programs aimed at increasing self-employment of the unemployed. For example, the New Enterprise Incentive Scheme (NEIS) includes subsidised provision of training to unemployed people who set up a business.

There also may be *information failures*. It is possible that some sources of information which could be part of a training package (for example about best practice) may not be produced privately because of its public good nature. This might imply subsidies for the production of information, but not necessarily its dissemination.

As well, there may be other problems in information markets which make it difficult for small businesses to:

- locate training information of value to them. High search costs arise because there are many heterogenous training providers and it is costly to search among them for a provider which meets the needs of any individual entrepreneur. Managers also have to invest considerable time in undertaking any training, and in applying it to their businesses, which increases costs further. They may also have to employ a manager in their own absence from the business;
- believe statements by (scarcely disinterested) trainers about the value of small business management training; and
- distinguish high quality trainers from low quality ones. One of the major problems in information flows between firms is 'noise' some people make mistakes and/or they deliberately misrepresent or lie. Warranties are not likely to be a feasible solution to this information asymmetry problem because it is hard to assess when training has been genuinely inadequate, and because the direct cost of a training program is only a fraction of the true cost of undertaking training for an entrepreneur.

These search, credibility and other costs are the *transactions costs* of engaging in training. If government has a special ability or reason to lower these transactions costs (say because there are public good elements or natural advantages in collecting data), there may be grounds for intervention. For instance, government could:

- make available detailed and credible information about the importance and impact of training on small business performance;
- increase awareness of the impact of training by using general information programs such as press advertisements, or information packs provided to businesses registering for the first time with the ASC, the ATO, or other authorities; or
- develop a user friendly database of training provision. This could detail costs, course attributes, and any accreditation details.

The cost of doing this through an Internet access system could be low¹⁰. But it would be of limited use unless lower-performance businesses actually use and value these services. It should be noted that none of these measures involve the actual subsidisation of training.

If there is no effective way for government to reduce these transactions costs, then they are like any other costs in an economy — and there are few grounds for government interventions to overcome them. Firms in this case might appear to be irrational, but their behaviour may be the best possible, taking account of transactions costs.

Finally, entrepreneurial training may, at the margin, generate *spillovers* to others. For example, there may be spillovers to:

- close competitors which copy obvious management innovations;
- employees who at some future stage set up a business; and
- those who bear the residual costs of business failure. Under limited liability, business owners do not bear the full risk of their enterprises employees, creditors and customers may all bear some of the costs of business failure. To the extent that business failure rates are reduced through business training, then they produce gains for these groups.

However, unlike non-vocational courses, such as the sciences, small business management courses are highly practically oriented, and tend to be tailored to the individual needs of the manager. This implies that some of the pathways for spillovers (through imitation for example) are missing. Moreover, entrepreneurs are, by definition, self-employed, so that some of the problems which affect incentives to train for employees (such as poaching) are absent.

Thus, in conclusion, it is very hard to make assessments of the magnitude of spillovers from small business managerial training — as it is for any discipline (IC 1997j, pp. 64ff). Such spillovers are probably smaller than for non-vocational training — it is hard to mount a strong case for public policy intervention on these grounds.

And there is reason to think that such a system could be set up, given that AusIndustry currently provides information about government programs to small businesses through BizLink, an Internet-based service. If there are concerns about access to the service for business without Internet access, a supplementary or backup service could be provided. For example, printed information could be made available in a suitable form at locations such as offices of Federal and State/Territory industry departments, and business associations.

Adverse policy settings

The policy settings of government — in tax, regulation and education — could lead to underinvestment in small business training.

By taxing capital and labour income, governments may reduce incentives for small business training. However, given that governments must raise at least revenue through some taxes, the real issue is whether tax rates are too high, the mix of taxes appropriate, or the tax regime is designed poorly. In any case, a first step would be to directly address any problems in rates or tax design, before compensating one form of investment (small business training) over all others.

Governments also require small businesses to comply with regulations and taxes, which inevitably eats up a scarce resource of the entrepreneur — their time. The more that is consumed by such compliance burdens, the less time is available for dealing with the running of the business, or the accumulation of business skills. Compliance burdens effectively raise the price of training, thereby limiting its uptake. However, once again the first best solution is to reduce regulatory burden when it is not justified by cost/benefit considerations, rather than subsidising training.

Finally, governments are already major providers of training to small businesses — to some extent through universities, but primarily through TAFEs. This may have impacts on the provision of other (more small business-centred) training by competing private sector agencies. For example, the BIE (1991a, p.108) notes:

A factor which may contribute to insufficient levels of demand to make fine targeting by private providers commercially unviable is the competition from the public sector. Insofar as public sector provision may not be pursuing full cost recovery, it may tend to impede private providers in the supply of more market oriented, but higher priced, activities.

The assessment of potential crowding out is complex, and to our knowledge there have been no recent studies. To the extent that there is a problem¹¹, the solutions would appear to be possible re-orientation of courses in public educational institutions, greater contestability, or different levels of cost recovery, rather than further training subsidies.

¹¹ There have already been appreciable changes to TAFEs and to the development of accredited small business courses, such that the possible problem observed by the BIE may have already vanished.

Misjudgments by entrepreneurs

There may be misjudgments on the part of small business operators about the benefits of training. Entrepreneurs may, for example:

- underestimate the importance to the business of certain management capabilities (at least until a serious problem develops); or
- be ignorant of training opportunities or overestimate the transactions costs of deciding which training programs would be of value and the costs of discriminating between quacks and genuine training providers.

Misjudgments may persist because training (of oneself or other managerial staff) is not a core activity of small businesses. Small firm managers are preoccupied with the pressing day-to-day requirements of running their business, and do not search all parts of their business for the optimal way of doing things. Such managers may be 'boundedly rational' — they use rules of thumb and conventions, and look for satisfactory rather than perfect outcomes (Simon 1979; BIE 1996a, p.33).

Why don't the good businesses — which do take up the training — push out the bad ones which don't? One answer could be that markets *do* weed out the most inefficient practices (through firm failure) but perhaps not quickly or costlessly. And moderately inefficient practices don't have enough impact on competitiveness, except in the long run. Strong internal and external networks (such as major customers, boards of directors, major shareholders, major financiers) which provide feedback to managers, probably limit the scope for inefficiency, but these networks are weakest for small business.

In this case, it is possible that there is a subgroup of small business managers who have underinvested in training, and who would acquire skills which would improve their business performance. If policies can distinguish between this subgroup and other subgroups which should not receive training¹², then there may be grounds for a small business policy aimed at training.

Arguably, as a first step, intervention would aim to inform small business operators — probably through trusted intermediaries like accountants — about the value of management skills and about available training programs. It might include the creation of diagnostic tools to assess deficiencies in managers' skills, which could be used as a basis for more objective decisions about whether training (and which forms of training) was likely to be beneficial.

¹² Those which would have undertaken the training anyway, and those for whom the training is ineffective as a way of improving business performance.

One major drawback of the information approach is that it may either be not specific enough to the concerns of particular small businesses, or not credible enough to convince them of the merits of training. In this limited case, there may be grounds for subsidising training (see box 4.1 for an illustrative example). The grounds for such subsidies are stronger when the training is a new and specialised form, whose impact has to be demonstrated to firms.

Box 4.1: An example where a training subsidy is warranted

Bill is a businessman, and is highly sceptical of the benefits of any further training. An authoritative study has shown that for a firm like Bill's, an extra investment in training of \$5000 yields a private gain (in net present value terms) of about \$10 000. But this study only provides estimates of typical gains. It cannot predict with certainty that in Bill's case there will be a gain of \$5000, only that this is the average outcome in a portfolio of such investments.

In any case, Bill doesn't believe the study. As a first step, the government hands over the results of its study to private training providers, and urges them to convince Bill (and similar peers). Bill is no more convinced by them than the authoritative study, because he sees that they have an interest in misrepresenting the gains from training, and he can't tell the good trainers from the poor ones. Maybe the reputable trainers among them could offer warranties or performance contracts with Bill? For example, they could specify that they will only be paid if the training achieves specific outcomes for the business. Unfortunately, there are a myriad of influences determining the performance of firms like Bill's and there is too much scope for opportunism by either trainer or trainee to develop such contracts.

The government decides to provide a subsidy of \$2500 for the training. Bill sees this as a demonstration of faith in the value of the training — and he thinks he will probably get at least that value out of a \$5000 course. He undertakes the course.

Assuming that they can target the subsidy, then across all the people like Bill, the government makes a good return. The economy is better off by about \$5000 for each subsidised firm, less the financing costs of raising the subsidy (around \$750).

We emphasise that the numbers in the above example are purely fictitious. Unfortunately there are no authoritative studies which reliably quantify the returns to such small business management training. Nor does the example deal with the myriad of design problems and risks of government failure that may beset real policies aimed at subsidising training. For instance, the government has to reliably identify the types of firms for which such training is probably beneficial, and exclude those for whom this is not true. But the example does illustrate a set of circumstances in which socially profitable gains might go unrealised.

Implications of possible economic failures

This assessment of possible problems affecting training indicates that appropriate government responses to the impediments to management training can take a variety of forms (table 4.2).

Given existing subsidies to the TAFE system, it suggests that there is probably only a limited justification for further general subsidies for small business training. However, there may be arguments for special purpose grants (preferably in repayable forms):

- to demonstrate the benefits of new aspects of knowledge; and
- for certain types of entrepreneur (as in unemployed people participating in NEIS).

The acid test of the effectiveness of government-induced small business management training is its impact on the performance of firms. But as noted earlier, UK empirical research does not demonstrate any clear link between training and business performance (Storey 1994, pp. 291-295). Further, the Australian evidence is limited and inconclusive (we examine evaluations of the NIES scheme, which effectively incorporates a training element, in chapter 6).

Table 4.2: Economic failures in training and possible policy responses

Economic failures	Potential policy response	
Market failures		
Capital market	Loans, loan guarantees	
Information markets	Publicly funded research, accreditation, promotion, information provision	
Spillovers	Concessions including possible training subsidies	
Adverse Policy settings		
Tax	Tax re-design	
Regulatory burden	Regulatory assessment and reform	
Existing training measures	Pricing policies, course content, contestability	
Misjudgments by business operators		

4.6 Small businesses' use of specialist external advice

Encouraging small businesses to make greater use of specialist external business advisers has been an important component of small business programs in Australia for some years — for example through the NIES/EDP.

An initial question is the extent to which small business actually uses external advice. In fact, just over three-quarters of small business make use of at least one source of external advice — most commonly accountants, banks and solicitors (table 4.3). But very few firms use specialist external advisers.

Table 4.3: Use of advisory services by small business

	Non- employing businesses	Businesses with 1 to 4 employees	Businesses with 5 to 19 employees	Total small business
	%	%	%	%
Businesses which used advisory services	67.5	82.0	88.4	76.1
Advisory services used ^a				
External accountants	54.8	72.5	81.2	65.5
Banks	31.3	49.9	60.9	42.8
Solicitors	13.1	26.6	45.7	23.5
Business associations	9.5	15.6	28.3	14.9
Suppliers of machinery/equipment	11.2	23.2	37.2	19.9
Business consultants/lecturers	7.0	8.3	15.7	9.0
Government small business agencies	7.2	5.2	6.3	6.4
ABS	2.2	4.5	7.2	3.9
ATO	19.3	24.7	28.9	22.9
Other	2.9	3.0	3.2	3.0

a Firms could use more than one advisory service.

Source: ABS, 1996b.

Non-employing businesses are the least likely to seek advice — for example, 68 per cent used advisory services compared to 88 per cent of businesses with 5–19 employees. Interestingly, a slightly larger percentage of non-employing businesses made use of government small business agencies than did the other categories of small firms.

There is also some evidence that firms which use external advice are more likely to be successful than those which don't, though interpreting the evidence is fraught with hazards (similar to those that affect judgements on the impacts of training). For example, the ABS (1996b, p.37) found that in 1995, 22 per cent

of small businesses which used advisory services were considered highly successful, compared to 14 per cent which did not. 13

Notwithstanding the fact that most small (and especially employing) businesses are obviously willing to pay for external advice for some aspects of their business, it is still possible that other problems may result in less than optimal use of specialised external advice — which *might* justify government intervention.

Possible rationales for government intervention are identical to those described in the previous section. This reflects the fact that external advice is a way of imparting information similar to some forms of one-on-one short-term training. Given these overlaps, we only consider the nuances of government intervention in the provision of specialist external advice to small business, rather than repeating the arguments of the previous section.

Factors affecting the use of specialist external advisers

There may be a variety of reasons why small businesses sometimes do not use external advisers. These indicate different forms of policy action — or in some cases, no action.

One factor which is likely to be important is the small size of management teams in most small businesses. The management of a small business requires decisions on a wide range of matters (eg, accounting functions, staff selection and management, or the development of new markets). Many small businesses will not have internal experts in some of these areas. While this may mean that they could benefit from external advice, at the same time it poses some barriers to using it. For example, it may be difficult for the managers to identify clearly the problems facing them. They may also be unaware of some of the key options which could be useful in addressing problems facing the business. In this respect, small business management teams are in a vastly different position from that of managers in a larger business, who may decide to use an external adviser for certain questions, but also have access to internal expertise with relevant knowledge.

It appears likely that small businesses face more substantial transaction costs than larger firms in accessing specialist external advice. Some of these costs are likely to be greater in the provision of specialist advice than in training because:

A subsequent survey, conducted in 1997, found that 19 per cent of small businesses which used advisory services were considered highly successful, compared to 14 per cent which did not (ABS 1998, p. 81).

- external advice is mediated through thousands of individual professionals, whereas training is mostly mediated through a smaller number of institutions. It is, therefore, harder to pick up information about the quality of advice, or for advisers to develop 'brand name' reputations; and
- often specialist external advice is offered on a one-off basis so that the entrepreneur cannot build up a long-term trusting relationship with the adviser (as they probably would with their accountant).

Market solutions

It is possible that market mechanisms for dealing with the uncertain quality of specialist external advisers may be more effective than they would be for training. Arrangements such as performance contracts and warranties may be more applicable because specialist advice is often directed at achieving particular, quantifiable changes in a company — such as defined savings in energy use. ¹⁴ For example, energy advisers audit a firm's operations, identify a range of energy saving investments, finance and install these investments and then make a return by recouping some of the energy savings over a prespecified period. Though contracts can be complicated, so long as success is definable there appears to be scope for such arrangements (BIE 1996a, pp. 35ff). Because payment is contingent on success, the 'credibility' problem vanishes.

In addition, advisers themselves may have incentives to overcome some of the transactions costs by forming natural professional groupings which:

- provide more information about their services by advertising in suitable forums;
- publicise their successes;
- liaise with accountants (since most small businesses use external accountants); and
- develop and publicise a scheme of self-regulation aimed at assuring that accredited advisers are suitably qualified and maintain ethical standards in their practice.

Other examples are an effective marketing campaign with a particular sales target, the installation of a computer network, or the development of a quality assurance system.

Policy responses to potential economic failures

At least for some individual firms, these market solutions to high potential transactions costs may not be feasible. This may mean that it is perfectly rational for small business managers to forgo external advice. Moreover, if government does not have a way of reducing these transactions costs more effectively than other agents, then these impediments to advice are simply like other costs in the economy. Where irretrievably high transaction costs are the *only* reason why small business operators do not use external advisers, there is nothing to be gained from subsidising such advice.

However, if there are any of the kinds of market failure discussed in the last section (such as public good problems in the generation of information) or if small businesses deviate from best practice management, it is still possible that intervention could produce benefits in excess of its costs. But what form of intervention is likely to produce the greatest benefits?

Many of the likely problems are best addressed by approaches other than direct subsidies for specialised external advice. For example, government could:

- finance or even generate the information needed by small business but only where there are public good arguments, or natural advantages in government doing so;
- develop systems for small businesses to better locate information about business management issues so long as there was a market failure that prevented markets from developing such systems themselves;
- identify the circumstances in which external advice may be of high value;
 or
- examine whether there are any persistent problems for small businesses in identifying reputable sources of advice. In some cases, governments have acted directly on the skills of advisers. For example, the now terminated Business Advisers Skills Initiative (BASI)¹⁵, sought to enhance the skills and knowledge of the business adviser community. However, in most cases, markets develop their own ways of increasing skills or certifying the quality of advisers, through voluntary certification and warranties. We note that short-term problems for example, as noted by the BIE (1996a) when assessing the market for energy efficiency advice often resolve themselves over time without government intervention.

These approaches have advantages over direct subsidies to firms to reduce the cost of external advice. Not only do they address the fundamental problems, but

¹⁵ This was introduced as a Working Nation initiative in 1994 and terminated at the end of 1995–96 (DIST 1997a).

they should be cheaper than a subsidy program if the government could provide useful information through a fully or partly automated system.

One of the major advantages of automated information provision (say through the Internet) is that the marginal costs of disseminating the information are close to zero, and the use of the information by one firm does not reduce access for other firms. In contrast, there are major problems in targeting subsidies (as suggested by the Venn diagrams in figure 4.4 and 4.5 in section 4.10).

On the other hand, some may argue that subsidies for external advice have advantages. First, they may be appropriate where spillovers exist — but it is doubtful that spillovers are substantial because the external advice is highly firm and problem specific.

Second, they may be applicable, as in the preceding section, where an identifiable 16 sub-group of managers make systematic misjudgments about the value of specialised external advice — and cannot be persuaded by information. This may be because such managers like to see hands-on proof of the workability of new ideas. So instead of providing the information, the government subsidises the learning-by-doing of managers. However, if the success of external advice can be monitored, then this suggests that any assistance should be fully repayable — or that the private sector should address the problem itself by developing performance contracts. If the success of external advice cannot be precisely enough monitored at the firm level, then this at least suggests that government should not intervene unless there is strong evidence that the subsidies elicit useful performance outcomes in the average firm.

Third, such subsidies may, in theory, lead to institutional changes in the supply of information. It may be that certain markets for information and expertise are presently underdeveloped because of coordination problems. For instance, firms don't ask for advice on specialist matters because there is insufficient high quality advice out there, and they can't tell the charlatans from the good practitioners. Advisers correspondingly have little demand for their services and have, therefore, developed too little expertise from contact with the real-world problems of firms. Also, the market size may be insufficient to warrant the fixed costs of investing in certification, or other mechanisms to increase the credibility of information. This scenario may justify the use of catalytic measures for a limited period, including subsidies, to encourage the development of market solutions. A subsidy for external advice may provide the basis for learning-by-doing on the part of the advisers, and build up the market sufficiently so that investments in certification are feasible. For example, energy

¹⁶ Noting that the assumption of identifiability is a relatively strong one.

efficiency auctions encourage energy efficiency service providers to devise the least cost ways of achieving target reductions in energy, instead of less informed bureaucrats (BIE 1996a). The aspiration of such measures is to develop private practices and institutions that eventually require no public subsidies. However, any policy based on this argument should provide evidence that existing markets are performing poorly — which is not evident for most forms of specialist advice.

Finally, subsidies may be justified in special circumstances, such as when demonstrating the value of novel specialist advice. But if demonstration is the basis for such programs, then the program should be designed accordingly:

- it should be short term only;
- impacts of the advice should be carefully documented in a publicly accessible database, to pass on the lessons from the experiment;
- as a condition for eligibility in the program, participants might be required to have their names listed as contacts for other potential users of such advice;
- there should be (detailed and accurate) promotion of the benefits realised by participants; and
- it may be better to target business associations, major customers or business networks, instead of individual firms, so as to maximise the diffusion benefits. For example, major customers such as car manufacturers played an important role in the Best Practice Demonstration Program.

Given the complex and subtle possible rationales for intervention by government — each tending to point to a different mechanism for intervening — specific policy recommendations should be based on more detailed analysis which addresses the questions identified above.

Finally, the case for government intervention in information markets should not be overstated. The private sector is very active in many information markets (eg consultancies on international market conditions, software development, management improvement and pollution abatement strategies, and thousands of management improvement books and magazines). This activity still takes place, even though there are likely to be some public good elements to many of these goods and services. Moreover, the private sector has developed strategies, such as trust, reputation and warranties, to overcome the credibility problems of information.

Current programs related to small business use of external advisers

So far, we have made little reference to the current small business programs in this area. As discussed in chapter 3, these have essentially two components: signposting services, and subsidisation of the cost of obtaining advice. The above analysis suggests that there is an inconsistency between the real economic failures that may be involved, and the latter programs. The actual cost of using external advice services has not been identified as a policy concern—thus in many cases subsidisation is likely to be a second best measure. We look more closely at evaluation issues for such programs in chapter 6.

Government-provided signposting services pose the question of whether a government agency can really make a better assessment of the needs of a business and the abilities of individual advisers, than the business' own operators. It is possible that this is sometimes the case. For example, if the agency's staff have substantial experience with a range of smaller businesses, then the agency may be able to make valuable recommendations. In terms of cost-effectiveness, the staff's skills would also influence the average cost of serving each client. Another important factor may be the level of variation between the needs of different small businesses — the greater the variation, the less likely it is that even with experienced staff, a government agency could provide appropriate recommendations for the majority of clients at a reasonable cost.

On the other hand, we question whether government is particularly well equipped as an intermediary for such services, when there is such a wide variety of business associations and chambers. Such business institutions tend to be more familiar with their clients, and have stronger incentives for performance, since their survival depends on membership dues. This at least suggests that publicly financed signposting services should be contestable.

4.7 Small businesses and exporting

For any business, commencing exports involves overcoming a number of barriers. Among other things, it is necessary to identify potential customers in overseas markets, estimate the costs involved in exporting, and develop effective marketing plans and distribution channels. Survey evidence from the BIE (1991) suggests that the costs of establishing a distribution network and lack of information are the most severe impediments to exporting by small firms:

- 49 per cent of exporting small firms nominated the cost of expanding distribution as a very important impediment, compared to 33 per cent of large firms. The comparable figures for non-exporters were 44 and 14 per cent respectively; and
- 27 per cent of exporting small firms nominated lack of information as a very important impediment, compared to 17 per cent of large firms. The comparable figures for non-exporters were 34 and 17 per cent respectively.

But greater difficulty is not, by itself, a good basis for policy intervention. An economic rationale for assistance to small firms to commence exporting would require that there was some failure which led to firms not exporting when the benefits of exporting — either private benefits or the sum of private benefits and other benefits to the rest of the economy — were greater than its costs. Table 4.4 sets out the economic problems which *might* form the basis for an export facilitation program for small business.

The appropriate policy would depend on which of these problems applied, as we discuss in detail when we look at the EMDG and Export Access programs in chapter 6. If it were firms' ignorance of the benefits to themselves of exporting (rationale V), the best solution — if feasible — would be to act to remedy this information problem. Since the relevant information may reside mainly with current exporters, the best approach might be to attempt to facilitate an increase in firms' sharing of this type of information.¹⁷ This could possibly be done through a network of exporters, or through the use of industry associations as reservoirs of the information.

The government's role would probably be limited to assisting in setting up the means of sharing information, and to disseminating information about it. As a second best approach, if the above were not feasible or too costly, government could inform firms about the existence of benefits from exporting which are commonly overlooked.

¹⁷ It is possible that an impediment to information sharing is that firms would not wish to encourage entry into export markets by new competitors. However, this should be a problem only where current and potential exporters are in direct competition with each other.

Table 4.4: Policy implications of different rationales for export facilitation programs

Rationale	Source of problem	Questions	Possible implications for policy
I Reputational externalities	One firm's marketing may build up product reputations and market presence for other Australian competitors, as well as their own (IAC 1982 p.22). For example, a concerted campaign by a particular exporter of certain food products pushing Australia's clean food image may enhance the sales of other Australian exporters of food.	How big are the problems? Are they equal between different types of product (eg complex goods compared to simple easy- to-monitor products)? Can the externalities be internalised by organising joint marketing or common logos funded by the industry participants? Are the externalities experienced by all sizes of firm, or only some?	Such externalities probably not very big for most products. Might suggest government mandated industry levy which funds product promotion focusing on a few common themes (service and product quality). Might suggest work at organising some cooperative marketing, like Southern Gold, a confectionery network, and programs such as the Business Network Program. Any externality is probably not limited to small firms.
II Knowledge transfers from overseas leading edge customers	Firms may learn a lot from leading edge customers abroad and from the mere challenges of exporting (World Bank 1993, AMC and McKinsey 1994, BIE 1995a and Stiglitz 1996). There may be an economic problem if firms do not anticipate such learning, or if knowledge acquired through exporting spills over to other Australian firms.	How big are these gains? Are they the same for different products, industries and firm sizes? Do they depend on the nature of the overseas customer (eg, their size, sophistication) and the longevity of contracts?	Probably only a significant problem for smaller firms without export experience. Gains will probably only be realised for continuous exporters, which deal with big and sophisticated overseas customers. These features might be included in eligibility criteria. Gains for any individual firms are probably short-lived, (ie the program is a demonstration program). This suggests only short-term funding of any given firm, although the program itself could be enduring. The program could involve a repayable grant if the firm exports.
III Externalities from knowledge about new markets	Firms entering new markets learn about how to sell in those markets, but may not be able to appropriate all the benefits of that knowledge at the margin (eg a new exporter to China today does not have to repeat all the errors of the exporters which trail-blazed that market). See Aitken et al (1994).	How big are these externalities? In what markets are they most important? How long do they endure?	Probably only significant for radically new or altered markets (eg selling to China in the 1970s or Eastern Europe in the early 1990s). Probably affects all sizes of enterprises. Might suggest short-term assistance for marketing and promotion to such markets — but also suggests obligation for assisted firms to diffuse general knowledge to other Australian exporters.

Table 4.4: Continued

Rationale	Source of problem	Questions	Possible implications for policy
IV Adverse business attitudes to exporting	The heritage of protectionism may have produced a business culture unused to an international orientation (Hughes 1989).	How is such a culture manifested? Do all sizes and types of firms display it? For example, do new firms born after the period of trade liberalisation suffer from it as much as older firms?	At best, suggests a temporary program — Australian cultures have already changed significantly. Might suggest awareness raising programs and 'how to export' programs. Might focus on inwardly focused sectors with mature incumbents rather than new highly traded industries, where awareness is already high.
V Ignorance of the benefits of exporting	Firms may be entirely ignorant of the benefits of, or know-how to, export.	How systematic is this ignorance? Can market mechanisms, like advice from private consultants, solve the problem? Are all firm types and industries similarly affected?	Probably only a problem for smaller currently non-exporting firms in certain industries (where exporting is not a common occurrence). Suggests a temporary awareness raising program rather than subsidies to individual firms.
VI Capital market imperfections	It may be that capital markets for providing finance for export marketing and promotion (intangibles rather than collateral based assets) fail to work well.	How big are these failures? What size or type of firms do they affect most? What is the source of the capital market failure — and can it be directly remedied?	Suggests possible innovations in financial institutions. Should involve loan guarantees rather than grants (ie no subsidy unless the firm reneges). Probably only relates to smaller neophyte exporters. The EMDG entry test specifies that firms should have access to finance or a sufficient cash flow to support the additional costs of exports over 1–3 years — which suggests that the program is not a remedy for capital market failures.
VII Tariff compensation	Tariffs on imports are taxes on exporters. A <i>theoretical</i> case can be made for compensation (IAC 1977).	What is the magnitude of compensation by industry group (since it will depend on the pattern of tariffs on inputs)?	Average tariffs are now very low, so that the argument has minimal contemporary relevance. It is best to remove remaining tariffs than to provide (slight) compensation to exporters. Note that when the argument was relevant (prior to trade liberalisation reforms), it applied to export sales for all exporters, regardless of size.

Externalities (rationales I, II and III) provide a more durable *theoretical* basis for export subsidies. However, prior to intervention on these grounds, there remain some important issues to be addressed, such as:

- there is no quantitative evidence on the magnitude of any spillovers;
- compliance with the WTO as an institutional constraint;
- the optimal design of any program. For example, how do policymakers ensure reasonable additionality (ie that subsidies assist genuinely new exports, not ones which were going to occur anyway) and determine the 'right' level of any incentive? This and other design issues for programs assisting small business to export are considered in detail in chapter 5; and
- all firms probably produce some knowledge spillovers for other firms. The spillovers have to be big enough and widespread enough to warrant policy action.

Even if spillover benefits from exporting are above the threshold required to make a case for government intervention, it seems likely that their magnitude is relatively modest (compared to R&D, for example). This suggests that any incentive should be small — or targeted so that it was only paid to some group of firms which were capable and close to the margin of deciding to export. Otherwise the total benefits could well be exceeded by the program costs.

Finally, arguments for export assistance based on the attitudinal legacy of protectionism, or on tariff compensation lack credibility. The decline of tariffs and other changes since the early 1980s have assisted and encouraged suitable businesses to compete in world markets.

4.8 Small businesses' access to finance

The apparent problems

It is often claimed that many small businesses find it very difficult to obtain finance through the formal capital market, or face cost penalties relative to larger businesses. More specifically, the concerns expressed about loans are that:

- small businesses generally face higher interest rates from banks or other financial institutions for their loans;
- in addition, lenders impose too stringent requirements for collateral, or/and are unwilling to provide unsecured lending; and

 some small businesses are unable to obtain funds from banks or other financiers, even though the firms are willing and, in the opinion of their own managers, able to pay the going interest rate, or meet other investor requirements.

Evidence about banking practices tend to support the first point. For example, since the abolition in April 1985 of interest rate ceilings on overdraft amounts less than \$100 000, interest rates for small business have usually exceeded those of bigger businesses (table 4.5). The average interest rate gap between big and small businesses, while initially around 2 percentage points in favour of SMEs, is now stable at around one half a percentage point in favour of large businesses. Bata on the distribution of interest rates by loan amount are even more revealing (figure 4.3), showing that most large loans (typically to larger businesses) have low interest rates, while many small loans (typically made to smaller businesses) have interest rates between 2 and 5 percentage points higher.

In the UK it appears that start-ups can often obtain debt finance on an unsecured basis (Cressy 1992), but unfortunately, there is little empirical evidence relating to banks' collateral practices in Australia. The RBA (1997b) noted that a number of Australian banks have recently made available loans to small business against their expected cash flow or using non-real estate collateral (such as plant and equipment or inventories). However, these loans have higher interest rates, and apparently demand for them has, so far, been low.

Evidence regarding the third point is ambiguous. There is some evidence that many small businesses are refused finance even though they believe they are capable of servicing a loan. A Yellow Pages (1995a) survey of small business found that one in three small businesses considered that they were constrained by lack of capital. But most of these firms indicated that they would not be willing to borrow more. Only one-fifth of the firms apparently facing capital constraints nominated difficulty in actually obtaining finance — so that about 7 per cent of small firms considered that they were constrained by *suppliers* of finance.

Note that this gap is between the indicator rates only. In practice, banks add a customer risk margin to the rates. Evidence from the RBA (1997a) suggests that when the customer risk margin is incorporated, the gap grows to between 1.75 and 2 percentage points (in favour of large businesses).

Table 4.5: Variable interest rates for small and large businesses^a

	Small and medium		
Year (at June 30)	Large businesses %	businesses %	Gap %
1982	17.50	14.50	-3.00
1983	15.50	13.75	-1.75
1984	14.63	13.25	-1.38
1985	17.63	15.25	-2.38
1986	17.00	18.13	1.13
1987	16.13	18.38	2.25
1988	15.00	16.75	1.75
1989	20.00	19.63	-0.38
1990	18.50	18.63	0.13
1991	14.13	14.38	0.25
1992	10.50	11.00	0.50
1993	9.45	9.80	0.35
1994	8.98	9.35	0.38
1995	10.68	11.08	0.40
1996	10.80	11.25	0.45
1997	9.00	9.50	0.50

a In many cases a margin is added when setting rates for individual loans — if these margins are included the gap between small and large firm interest rates grows (RBA 1997a). Data from 1982 to 1995 are based on taking the midpoint of the range of rates of the major banks from the December 1995 RBA *Bulletin*. Data from 1996 are the representative indicator rate published by the RBA in its September 1997 *Bulletin*.

Source: Reserve Bank of Australia, various issues, Bulletin.

However, what exactly 'constrained' means in this context is difficult to assess. For example, a business might want a loan of \$2 million for five years at 8.5 per cent per annum. A bank refuses such a loan application, saying that it is only prepared to lend at 11 per cent per annum for the proposal. From the firm's perspective there is a constraint on finance; from the bank's perspective it is being asked to enter a deal which it judges is not commercially attractive.

In fact, the vast majority of loan applications by small businesses appear to be successful. Yellow Pages (1995a) found that 26 per cent of small businesses had made a loan application in the last 12 months, and that 82 per cent were immediately successful. A further 6 per cent were able to secure debt finance from other intermediaries, so that only 12 per cent of loan applications were ultimately refused.

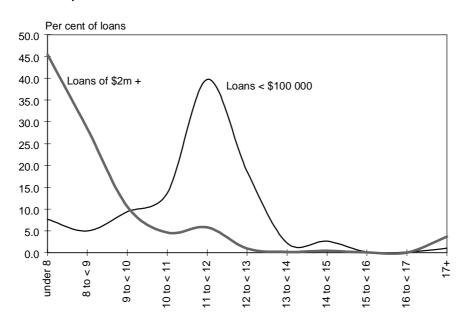


Figure 4.3: The distribution of variable interest rates by size of loan, September 1997^a

a The interest rates include a charge for credit risk, but *exclude* any costs associated with loan fees and charges. These charges might be expected to be higher as proportion of the loan amount for small loans than large ones, so that, if anything, the figures underestimate the extent to which smaller loans bear higher overheads. *Source:* Reserve Bank of Australia 1997, *Bulletin*, Table B.17.

There is a sizeable international empirical literature concerning the nature of any liquidity constraints facing small business, ¹⁹ but the results are dependent on the specification and data used. For example, Cressy's (1996) study, using a richer data set for the UK, overturns conventional wisdom based on previous results. He finds that provision of finance is demand driven, and that proprietors 'self-select' to acquire finance, with the 'better' businesses more likely to borrow. Of course, whether liquidity constraints warrant government intervention will depend on the exact nature of the liquidity constraints and the feasible set of interventions. Liquidity constraints are optimal in some cases of information uncertainty.

In terms of equity finance, there is evidence that small businesses have often found it difficult to locate financiers who were willing to provide funds on terms that the business operators found suitable (Ernst and Young et al 1997). Informal and venture finance markets also appear to be less well developed in Australia than in some other industrialised economies, such as the US.

¹⁹ For example, Black et al (1996), Blanchflower and Oswald (1990), de Meza and Southey (1996), Cressy (1996), Holtz-Eakin et al (1994ab) and Carlino and DeFina (1997).

The policy dilemma

The findings on access and pricing of finance to small business are sometimes interpreted as a symptom of market failure, requiring correction by government. In fact, such differentials, by themselves, may be a 'red herring'. At the outset, it is important to distinguish two cases in assessing whether there is a potential role for government:

- evidence on real cost differentials in the provision of finance to small compared to large firms; and
- forgone opportunities for profitable investment.

Real cost differentials

In the first case, the access and pricing differentials between small and large firms may reflect genuine cost differences, such as higher default risk, and higher assessment and administration costs of (typically small) loans to small businesses.

In order to minimise loan defaults, financiers must scrutinise each loan application carefully to assess the probability that the potential borrower will be able to service the loan. While the costs of such assessment increase with the size of the potential loan, for smaller loans the costs are much higher in relation to the loan amount. Financiers also periodically review the business affairs of borrowers in order to check whether they are still good risks. These costs are also proportionally higher if the loan amount is small. All of these costs must be recovered through either interest rates or other charges on the borrower.

This cost difference provides a reason for financiers to distinguish in some way between small and large borrowers — which typically means small and large businesses. Rational responses for financiers could include charging higher interest rates or administration charges on small loans, or deciding not to make any loans below a certain threshold amount.

Despite such scrutiny, financiers also appear to face higher default risks when lending to small businesses (IC 1991, Storey 1994). To reduce the risk of default, financiers may be more conservative in their approach to lending to small businesses, approving loans only for those which appear to have the best prospects. As an alternative (which appears to be commonly practised), they may require substantial collateral as security for the loan, so that even in the event of business failure the financial institution is unlikely to suffer a capital loss.

Empirical research (for example, IC 1991; Storey 1994; Holmes et al 1994) confirms the centrality of such factors in shaping the differentials between the cost of finance to small and medium businesses.

To the extent that any restrictions in the supply of finance to small businesses result only from the proportionally higher costs involved in smaller transactions, there is no economic reason for any intervention. Similar differentials, based on real cost differences, exist elsewhere in the economy and do not provide grounds for intervention.

Where more restrictive conditions for loans (such as the requirement for collateral) to small businesses are imposed because of a correct perception that default risks are higher on these loans, there are also no grounds for intervention. If finance markets are sufficiently competitive, then financial intermediaries face strong incentives for efficiency. They will tend to competitively price their services and (over time) adopt best-practice administrative, monitoring and credit screening procedures. Under these circumstances, few knowably profitable opportunities for investment in small businesses should go unexploited. This explains why financial liberalisation (such as opening up Australian banking to foreign rivals and non-bank financial intermediaries) — intended to promote competition — has been a major feature of policy for successive governments.

If variations in market rates of interest for finance to small versus large firms fully reflect real cost differentials, there are no inefficiencies from apparent problems in access to, or pricing of, finance. And ironically, government moves which might be intended to help small business, might actually harm the sector. For example, if banks were forced to deal with small businesses at lower interest rates, as they were prior to 1985, then the banks may well respond by rationing loans to small business borrowers, actually *creating* a small business finance problem.

Forgone opportunities for profitable investment in small business

In the second case, the access and pricing 'problems' of small business are presumed to represent more than genuine differentials in the cost of financiers' dealings with small versus large firms. In this case, there are market or other economic failures which distort prices or access to finance, so that some knowably high returning investments in the small business sector are left unrealised. Such a finance problem for small business would exist if:

• intermediaries or small business owners missed privately profitable opportunities to finance small businesses projects. On the finance supply side, government regulations might create disincentives to lend to certain

classes of borrower. Market power (without price discrimination) might inflate interest rates. Or intermediaries might suffer from x-inefficiency. For example, they might use 'satisficing' rules to allocate finance so that some classes of borrower could not get finance, even if optimally they should.²⁰ On the firm side, small businesses which had the capacity for expansion and external finance, might sometimes fail, through lack of awareness, to meet the governance and reporting requirements of potential financiers — lack of 'investment readiness';

- there were certain types of information asymmetries between the business and the financier, which made it hard for the financier to gauge the quality of the project being financed; and
- opportunities for risk pooling of small business investments by the market were low.

It is unquestionably true that government regulations have at times adversely affected the supply of capital to small firms, by making its provision unattractive for banks. However, the arrangements that led to this have long expired. The IC (1991, p.112) and the RBA (1994) indicate that lending to small businesses has grown much faster than other commercial lending since these changes were made.

Similarly, any market power and x-inefficiency in the banking sector is likely to be a lesser problem today, with a myriad of competing financial intermediaries. DWRSB (1998a, p.52) noted that 'a further sign of growing competition for small business lending appeared in late July [1997], when a mortgage manager announced a loan product for small business at a rate about 1 percentage point below the bank's indicator rate.' Even so, in a UK study, Binks, Ennew and Reed (1992) found collateral to overdraft ratios of 4:1, which were far in excess of those in the US. The ratios used in Australia are unknown, but the point is that it should not necessarily be assumed that all financial intermediaries operate optimally in all areas.

That leaves three other sources of inefficiency: information asymmetries, risk pooling and problems with investment readiness. We turn to these more subtle influences next.

²⁰ Other aspects of x-inefficiency might include managerial inefficiency, poor credit screening tests, cumbersome and ineffective administrative procedures, and low incentives to seek out new profitable customers or to innovate in the provision of services.

Information asymmetries

Some aspects of the riskiness of a business are readily observable by financiers (such as available collateral, existing balance sheets and prior credit history), while other aspects are reliably known only to the business operator (current levels of motivation and honesty of the entrepreneur, and knowledge about the products and customers). Lacking full information, the potential lender must treat all potential borrowers of the same *observed* risk class the same, and will offer the same terms and conditions to them. It might seem rational for the financier to set higher interest rates, the greater is the uncertainty over the unobserved components of the risk of a group of potential borrowers. However, this strategy may not work, because returns to the financier may be lower if they raise interest rates. To see why, note that the *actual* risk clearly varies within the observed risk class. The effects of information asymmetries — and therefore the implications for policy — vary, depending on the exact nature of the variation in the projects of different potential borrowers.²¹ There are two cases to consider:

Actual risk and return are correlated, so that high actual risk firms tend to have higher actual returns. In this case, low risk, low return borrowers may not find it worthwhile to borrow at the interest rates set by financiers for the observed risk class. But high risk, high return firms still wish to borrow. Their downside losses are limited by bankruptcy provisions, and they obtain the full rights to any gains if the ventures are successful. The financier, on the other hand, makes a loss (assuming no collateral) if the venture fails, but only gets the interest rate margin as profit if the venture succeeds. The bank then faces a high likelihood of a large downside risk, which is not compensated by a countervailing reward when the business venture succeeds. Financiers may try other approaches, such as the use of collateral requirements, to try to avoid incurring losses on this type of lending. However, the end result may be that financial institutions decide not to offer unsecured loans to some classes of small borrowers.²² There could be a potential gain from policies (such as an interest rate subsidy) to expand lending to less risky prospects.

²¹ These ideas arose from the work of researchers including Flam and Staiger (1989) and De Meza and Webb (1987). This and other work is summarised by Grossman (1990), and the following outline is based on his treatment.

These problems result in the market featuring 'adverse selection', that is, those seeking loans are faced with a set of incentives which lead to those ventures with a higher probability of success leaving the market while the others remain. The further problem of 'moral hazard' will be present if successful applicants reduce their efforts to minimise business risks because a significant portion of the risk is in fact borne by the financier.

However, if the more risky projects have *lower* expected returns to the business owner (as will happen if returns in the event of success are the same for all projects, and only the probability of success varies) then the market produces a different result. In fact, the businesses which are more likely to accept loans on the terms offered by the financier are the better prospects, so that there is no adverse selection. In this case, an interest rate subsidy would encourage lending to progressively worse prospects, and the best policy would be to reduce lending somewhat, for example, by an interest rate tax.

An appropriate policy response to these probable asymmetries in financial markets requires substantial and detailed knowledge of some characteristics of potential borrowers' businesses — and this is unlikely to be available without high costs. Further, there is no apparent way to directly address the information asymmetry itself.

There may, however, be a stronger case for government involvement in the risky provision of finance for some R&D ventures. As noted by Shah (1995, p.249):

What is special about R&D is the information asymmetry between the performer of the R&D and the financier. It is in the interest of the performer of the R&D not to release vital information relating to the project to an outside party because of the possibility that the release of such information will jeopardise the chances of success ... or that someone else will capitalise on the information. But to raise capital for a project requires releasing information about the prospective returns from the project. ... As a result there emerges an imperfect market for financing R&D projects.

Could government be a risk-pooler for small business?

It is sometimes argued that society as a whole has the scope to pool risky ventures more efficiently than existing institutions, and would prefer to see more high-risk, high-return ventures proceed than will occur under the present arrangements. If this is true, it suggests potential benefits from some form of intervention in lending for such ventures. Any such intervention would not be solely a response to small business issues, since some high-risk, high-return ventures may be very large projects; however, it could be expected to provide benefits for some small businesses seeking finance.

There might be a range of possible ways to encourage increased lending to more risky ventures ranging, for example, from a loan insurance scheme to some public finance. But one important question, which should be asked prior to considering policy intervention, is whether financiers could not themselves find procedures which would have the same result. This could be done through risk-

pooling arrangements by financiers. If financiers have not found it worthwhile to do this, the next step should be to analyse whether there are any particular impediments to some valuable form of cooperation between financiers. If so, governments might do better to address these impediments directly than to intervene as a lender or guarantor.

The issue of investment readiness

It is orthodox to regard the root of small business finance problems as either deficiencies in finance suppliers (such as apparent conservatism, x-inefficiency or weak competition among financial intermediaries) or as the outcome of intractable information asymmetries between the financed and the financiers. However, increasingly, financiers point to problems that they face when considering sizeable equity injections into small business — the issue of investment readiness (Ernst and Young et al 1997 and Marsden Jacob Associates 1995). Equity finance can be a major source of finance for growth and innovation, but small firms may not be ready for it, because they:

- fear they will lose control over their businesses;
- fail to have the governance and reporting systems which allow outside investors to appraise business performance;
- have limited formal plans about business growth or strategy; and
- lack information about the sources and nature of different types of equity providers.

Accordingly, some firms may miss out on opportunities for finance because they lack awareness of some of the key things they must do in order to be attractive to a potential investor. There may be a temporary role for government to raise awareness among small business managers of these issues, and to consider whether existing government-funded management training courses cover these issues adequately.

Implications for policy

If there is a market failure in the provision of finance arising from forgone opportunities for profitable investments, it provides government with the potential to address the problem and make a return. This, for example, was one of the original goals of the UK Loan Guarantee Scheme, where the government provided partial guarantees on loans to SMEs in return for a premium on the standard business rate. The scheme was devised because British policymakers believed that their banks were too conservative in their lending practices; and that the premium on the interest rate would more than offset the increased loan

default. This proved incorrect, and even with substantial modifications, the scheme continued to draw on taxpayers' funds (Janissen et al 1996 and Cowling and Clay 1995).

The failure of the UK Loan Guarantee Scheme and the Victorian VEDC scheme (IC 1996a pp. 43-44), does not necessarily mean that there is no scope for government intervention in finance markets. Government has a clear role in setting the regulatory and competition framework for the finance sector to minimise the long run costs of accessing finance (eg appropriate due diligence tests and prudential requirements; lack of interest rate ceilings/floors; liberalised entry into the finance sector subject to prudential rules, and appropriate taxation of capital).

There may also be an in-principle role for government to intervene in selective finance markets where market failures are thought to be severe — for example, perhaps for young, small high technology firms (Shah 1995; Storey 1994, p.305). However, such interventions primarily serve to demonstrate that there are viable returns for investors. This implies that they should not be permanent interventions and that they should cease if they do not generate a return for government.

Surprisingly, the amount of finance provided to any given enterprise should also be neither very large, nor small; and should probably be oriented towards longer horizon investments. It should not be very large (as was evident, for example, in the implicit amounts of finance provided by government to some Syndicated R&D projects) because this provides too little diversification of risk. Nor should it be small and short term because it is unlikely that there are severe market failure problems for small packets of short term finance. This is because:

- there is a large number of such very small loans, so it is possible to develop an actuarial basis for lending;
- finance requirements are often indivisible, so it is easier to find collateral backing for small loans than large ones (Janissen et al 1996); and
- uncertainty is much less the shorter is the loan horizon.

Tax arrangements, including tax rates, treatment of foreign investors, due diligence and other corporate regulations, affect the after tax rate of return on investments, and may sometimes make it difficult for some ventures to obtain finance at all from key sources of capital, such as overseas pension funds (IC 1997f). The possibility for, and nature of, reforms of existing arrangements is outside the scope of this paper.

Finally, quite apart from interventions designed to ameliorate a particular deficiency in capital markets, it may sometimes make sense for governments to

use a financial instrument — such as a loan, securitisation or guarantee — to achieve some other policy purpose. As noted by Janissen et al (1996, p. 6):

You do not need finance to be a 'problem' in the sense defined above [market failure] for finance to be potentially useful as a policy instrument.

For example, it may be better to convert some existing grants to small businesses into contingent loans (see chapter 6 on the EMDG scheme).

In summary, the grounds for, and appropriate nature of government intervention into finance for small business appear to be heavily circumscribed. As Hughes and Storey (1994, p. 14) note:

the evidence... provides little ammunition for the case of a widespread 'market failure' in the financing of small businesses.

Some recent developments in finance for small business

There are other possibilities for improving the situation facing small firms seeking external funds. One is that financiers may arrive at better ways of identifying good small business prospects. Possibilities include a greater use of indicators such as the operators' qualifications or business track record, and the size of their own investment at risk in the business. Others might be identified through research into factors affecting small business performance. Government could have some role to play in encouraging developments in this area, but in fact it appears that some lenders are already beginning to develop more sophisticated approaches to risk assessment and management (Fry 1997).

This change may be due to a recent increase in competition between banks in serving small business customers. Hawtrey (1997) notes several recent developments which suggest that some of the problems faced in the past by small businesses seeking finance are now being alleviated as a result of increased competition. Changes include some increase in the availability of finance for SMEs, a decline in interest margins (though this is offset to some extent by an increase in fees and charges), an increase in willingness to lend on the basis of cash flow, and innovations in loan products tailored to the needs of smaller businesses.

In the US, there has been an increasing shift to small business credit scoring, in which a bank assigns a single quantitative measure to a potential small business borrower that predicts the likelihood of loan default. Credit scoring lowers the cost of underwriting loans for (high quality) borrowers, increases the speed of lending, may allow some borrowers to access finance remotely (without meeting bank officials at all), and makes risk-based pricing a more viable

alternative to credit rationing (Feldman 1997). It is likely that this practice will become more widespread in other countries, including Australia.

If financiers become more ready to provide equity finance instead of loans, this would also be of value as it would provide more options for small businesses seeking finance. It may, however, be of greater relevance to those seeking larger amounts, as many financiers might be unwilling to incur the greater costs of involvement in the business operations as an equity partner if the amount of funds is small. There used to be regulations preventing banks from financing small businesses in this way, but they were relaxed in 1995. Initially there was little interest by banks in providing equity finance, but more recently the larger banks have established units which offer equity finance to SMEs (Hawtrey 1997). Moreover, the venture capital industry in Australia is becoming more specialised so that there are now some funds which specialise in providing finance to smaller businesses.

Some of the problems that have been experienced are likely to be reduced in the future by the increase in financing of small businesses by wealthy private individuals ('business angels'). The government assisted in the early development of business angel finance by subsidising some matching services which assisted investors and businesses seeking funds to locate each other. The Industry Commission (1997c) examined this type of finance and concluded that it was likely to become considerably larger during the next few years. The study also noted that there is a rapidly developing network of private sector matching services which will be able to further reduce search costs for participants, and found that there appears to be no further need for subsidies to these services. ²³

4.9 Fair trading between large and small firms

As discussed earlier in this chapter, governments may have a large impact on business performance through their shaping of the business environment. One issue on which the Federal Government has recently taken action, and which is of interest for many smaller businesses, is that of trading relations between large and small firms.

Small business groups sometimes express concern that larger firms may be able to exploit advantages that they have over small firms in some situations. Such conduct is seen as unfair to the smaller firms, and it is argued that the legal framework for business should ensure that unfair conduct is ruled out.

²³ These subsidies in fact ceased at the end of the 1996–97 financial year.

Governments may have two different reasons for being interested in this issue. First, governments are not just concerned with the size of national output and income. They may also be concerned with how much of national income and wealth individuals get relative to each other (distributional equity); and that economic relations between individuals or firms should reflect society's norms of what is fair or unfair. Second, ruling out some forms of unfair behaviour in business may also promote economic efficiency — although this will not always be the case. Sometimes governments face a difficult trade-off between promoting economic efficiency and fair conduct.

In Australia, firms have general protection against unfair business conduct through the Trade Practices Act. However, a review of relevant legislation was undertaken in response to concerns about problems experienced by small businesses in particular sectors (House of Representatives Standing Committee on Industry, Science and Technology, 1997). The findings of the review, and the changes proposed by the government in its response, are discussed in appendix C.

As described in the appendix, these changes involve a new statutory prohibition against unconscionable conduct in the supply of goods and services between commercial parties. The reforms also involve new regulation of business relations in franchising and the oil industry. In addition, the Commonwealth will work with the states and territories to develop uniform regulations in connection with retail tenancies in shopping centres.

It is beyond the scope of this paper to analyse the overall implications for economic efficiency of changes in these areas, or the deficiencies of the previous situation. There are considerable complexities in assessing the economic and social impact of conflicting relations between firms and any legislative response to it. In due course, the changes are likely to be reviewed, for example under the Competition Principles Agreement (appendix C). Ouestions which such a review will need to consider include:

- what are the impacts of the changes on business certainty, investment intentions of larger businesses,²⁴ and on the terms and conditions they establish with smaller firms (eg, retail tenancy rents)?
- what are the alternative mechanisms for dealing with breaches of fair trading? and
- how effective are the new proposals in quelling unfair practices, while maintaining business efficiency?

²⁴ For example, see Deane and Flahvin 1998.

4.10 The costs and challenges of intervention

Government intervention to assist one sector of the economy always comes at a cost. The cost to the government in the form of budget expenditure or revenue forgone is not a very good guide to the overall economic costs of a program. By and large such costs represent transfers of income to groups in the economy, rather than economic costs. This section outlines some of the more important elements of the economic costs of intervention, rather than the direct cost as seen, for example, in government budget figures. We ignore compliance and administrative costs of taxation because these are examined in chapters 7 to 9.

The 'hidden' costs of taxation

The costs of any government program must ultimately be met through some form of taxation — and all forms of taxation in common use involve economic costs, which may be quite significant. This is because taxes distort some prices or other incentives facing consumers or producers, and so lead those people to make decisions which are not economically efficient. This cost is referred to as the marginal excess burden (MEB) of taxation (Dempster 1993).

Findlay and Jones (1982) estimated the MEB for Australia at between 10 cents and 60 cents in the dollar of revenue spent, with a preferred estimate of 40 cents. Campbell and Bond (1997) suggest a MEB of between 19 and 24 cents in the dollar. Gabbitas and Eldridge (1998) estimate even lower burdens associated with labour taxes.

Another perspective on the costs associated with business programs is given by noting that any decision to provide public assistance to one sector, such as small business, implies that all other sectors will bear a relatively higher share of the net imposts of government on productive activity. That is, businesses in other sectors will be paying higher taxes or receiving less assistance. These businesses may thus be disadvantaged in various ways. For example, they may face a reduction in demand, or find it more difficult to compete in international markets. These disadvantages must be included among the indirect costs of any decision to provide sectoral assistance.

Sectoral assistance and the political system

Another possible side-effect of sector-specific government interventions is that they invite 'me too' responses from other sectors also wishing to obtain assistance (IC 1997g).

Unless governments can point to a set of clear criteria and a transparent process for determining when assistance will be provided, these demands may be hard to resist. But if governments sometimes accede to them, the likely results are ad hoc policies, higher taxes and significant dissipation of resources by interested parties lobbying for special treatment. This danger underlines the need for very clear statements of rationales, careful program design and accountable decision making.

Distortions to business incentives

Small business programs and concessional tax or regulatory measures — by limiting eligibility to firms of a given size — may lead to inefficiencies in decisions made by some managers. For example, where a significant government measure is available only to firms with less than a certain number of employees, managers may be deterred from expanding the firm beyond that limit, although they would otherwise choose to do so — the 'growth trap' problem (chapter 9). There is anecdotal evidence of this occurring in the US, where many measures are targeted at firms with less than 50 employees (SBA 1995), and managers are reported to be very reluctant to expand beyond that limit (Weidenbaum 1996). Some Australian small business managers have claimed that exemptions on payroll tax act as a disincentive for growth.²⁵

Another type of problem may arise where businesses have the opportunity to structure their affairs in order to take advantage of some form of assistance. This possibility arises, for example, in connection with the new capital gains tax exemptions and rollover provisions for smaller businesses, where eligibility is based on the size of a business' assets (Gome 1997 and Lattimore 1998).

The efficiency of intervention

The discussion in section 4.2 was framed in terms of the potential for net benefits from intervention, based on the existence of certain economic failures. These failures imply certain losses relative to some feasible alternative situation; the benefits to be obtained from intervention consist of moving towards that alternative.

Implicitly, our discussion has presumed that the hypothetical industry programs of which we spoke would be efficient in achieving those benefits. But when we come to think about the details of industry programs, it is clear that it is often a difficult task for government to bring about a desired change. For example,

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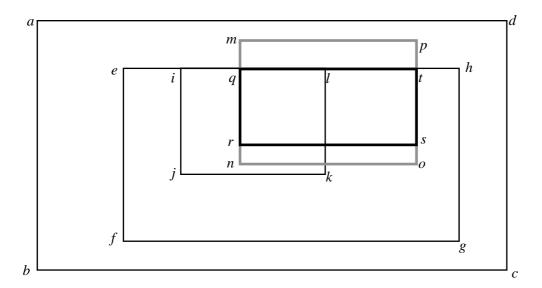
²⁵ See Lattimore (1998) for analysis and documentation of these disincentive effects.

suppose that the government wanted to encourage firms to adopt better management practices by obtaining external expert advice. It could provide a financial incentive, such as a subsidy or a tax concession. If this was sufficiently large, it would be very likely to induce an increase in the amount of advice sought. But the real objective is presumably to increase the amount of high-quality advice which will raise efficiency or productivity in the economy. It is a good deal harder for the government to ensure that the advice it supports meets this criterion. Further, there is no good reason for the government to subsidise advice which firms would have sought even in the absence of the incentive scheme. So what is really needed, to ensure an efficient use of public funds, is to design a scheme which provides the financial assistance only for that amount of high quality advice which would not have been sought without the incentive. This is likely to be an even harder task.

Figures 4.4 and 4.5 suggest that there is the potential for much of the subsidy provided by government to external advice (the area *mnop*) to flow to the wrong firms, and in particular, to firms which were going to obtain advice anyway. These targeting problems extend to all other subsidies intended to change firm behaviour, and is one of the biggest challenges facing efficient program design.

This simple example illustrates how the costs and benefits of a program may vary depending on its design. These variations may be very important — good or poor design may mean the difference between a program having benefits which exceed its costs, or the opposite. That is, even when the criteria considered in section 4.2 suggest that there is potential for intervention that would deliver net benefits, there are more hurdles to be jumped before concluding that any feasible intervention will indeed do so. Program design is discussed in chapters 5 and 6.

Figure 4.4: The impact of subsidised external advice



abcd: All small businesses.

efgh: Firms which can obtain net benefits from external advice.

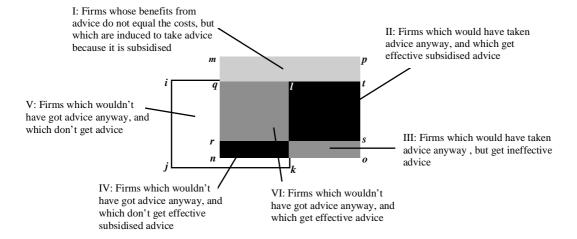
ijkl: Firms which don't know they can obtain net benefits, or for some reason (eg liquidity constraints,

misjudgment) do not access training when they would obtain a net benefit.

mnop: Firms which take a grant.

qrst: Firms for which the advice is worthwhile.

Figure 4.5: The impact of subsidised external advice: the details



4.11 Concluding comments

There are various circumstances — market failure, sub-optimal performance of economic agents, and deficiencies in a number of institutional and regulatory settings which influence the general business environment — in which governments may be able to intervene to improve economic performance. However, for some major categories of small business programs in Australia, it is not clear which economic failure is being invoked as a rationale for their existence.

The analysis in this chapter is necessarily preliminary. But it is useful in highlighting the complexity of issues that affect whether intervention is appropriate, and what form of action, if any, should be undertaken. To take a case in point, evidence that small businesses often face difficulties in accessing finance, even combined with an apparent market failure in the form of problems affecting information flows, does not necessarily provide grounds for intervention to increase the supply of finance for small businesses. To do so without a better understanding of the nature of the problems, is to risk diverting funds from better uses, and at the same time incurring economic costs associated with administration, raising tax revenue to fund the program and rent-seeking behaviour. While no one would wish to see government action inhibited due to 'paralysis by analysis', the high costs and risks of inappropriate programs indicate that intervention should be based on a good understanding of key issues — such as the causes of the behaviour which have been identified as a concern, how the government might be able to improve performance, and what form of intervention would address the concern most directly and effectively.

This chapter focused on the main rationales for small business programs. In doing so, we may give the impression that these are the prime means by which government can influence outcomes in small business. To the contrary, most small businesses do not use government programs at all (chapter 3). For many small businesses, the critical policies relate to the tax, regulatory and macroeconomic regimes, and other economic fundamentals. We devote three later chapters (chapters 7 to 9) to the regulatory and tax compliance issues which are seen as having special significance to small business. The other fundamentals are ignored not because they are unimportant, but rather because getting them right is the objective of broad microeconomic and macroeconomic policy and not a uniquely small business aspiration.

5 EFFICIENT SMALL BUSINESS PROGRAM DESIGN

5.1 Introduction

The broad principles that should guide government intervention in small business are discussed in chapter 4. In this chapter we presume that government intervention is warranted. We then ask, given that intervention is appropriate, what factors should be considered in attempting to maximise the effectiveness and cost efficiency of a small business program?

Sections 5.2 through to 5.7 discuss a range of issues associated with principles of program design and program evaluation. Where possible, these issues are illustrated by reference to Commonwealth business programs with an explicit or implicit small business orientation. In section 5.8 we look at the cases where an economic rationale exists for a business program for all sizes of firm, but other issues suggest targeting small firms only. In section 5.9 we examine cases where a business program exists for all businesses, but are delivered differently to businesses of varying size. Finally, section 5.10 provides an illustration of how to apply the principles.

5.2 Broad issues in program design

Policy design criteria

Poorly designed programs may impose unnecessary compliance and administration costs or result in reduced benefits. At the extreme, a program that could have improved the well-being of Australians may instead result in net social costs.

What principles should guide program design? A host of reports have recommended a hard headed approach to policy making and design.¹ The key features of this approach are outlined in figure 5.1 and box 5.1. Rather than

Mortimer (1997), Lattimore (1996 and 1997), IC (1997 e,f), and Burgess (1994). Good examples of reviews incorporating these principles are BIE (1993b, 1995e and 1996c) and IC (1997f).

repeat the analyses of these reports, we look more closely at some of the issues which are likely to be most pressing for SME policies.

Is there an No No program economic rationale? small business policy general policy Yes either Are there large Is the problem Yes threshold/ largely specific to definitional small business? problems? No No Are the dangers of Is there an government failure administratively sufficiently small? feasible policy mechanism? No After a period... evaluate the Is there an Choice of policy program alternative design Yes instruments? or instrument? Small business Is it likely to program Examine design generate a net criteria (box 5.1) economic benefit? Do the design criteria work better Generic program in small business? No No Are there gains A generic program Yes from delivering the Work out delivery with small business mechanisms policy differently to awareness small business?

Figure 5.1: Designing cost effective small business programs

Box 5.1: Policy design criteria

- Does the program target the problem effectively?
- Does it have acceptable take-up?
- Is it timely?
- Does it induce new activity?
- Are large transfers overseas avoided?
- Does the program have the right duration, scale and target group?
- Is it administratively efficient for government?
- Does it impose big compliance burdens on firms?
- Is it transparent and accountable?
- Is it financed in the least cost way?
- What are the risks posed by the program? eg
 - Strategic behaviour by firms
 - Unforeseen liabilities for government
 - Adverse interactions with other policies
- Does it breach Australia's international obligations?
- Does it impose any significant costs on any group?

Source: BIE (1996b), Mortimer (1997), IC (1997e), IC (1997f) and Lattimore (1997).

The initial important issue is to consider when a *small* business program is appropriate, rather than simply a business program. Government programs specifically targeting small business seem to be warranted (table 5.1) when either:

- all the conditions for a general business program are met *and* the underlying problem is relatively specific to small business (or a segment of small business); or
- all the conditions for a general business program are met *and* the design of the program is only effective when the program is targeted at small business.

The first point is an obvious basis for targeting. If a problem is specific to small firms, then programs with a broader coverage will suffer from poor focus, and waste resources. However, the same logic also implies that it will often be appropriate to make only a subset of small firms eligible for a particular program (eg, small start-up firms). Ultimately, appropriate small business policies are *problem-directed* — they attempt to resolve economic problems

that are associated with firm size — rather than aimed at supporting small business as such.

Table 5.1: When is a small business program appropriate?

	Small business specific programs	Generic programs with small business awareness	Generic programs
Relatively unique small business market failures	✓		
When design problems rule out larger firms	✓		
Better delivery of a generic program to different sub-groups of firms		✓	
None of the above			✓

The second condition for appropriate small business policy is more subtle. We consider it in section 5.3.

Presupposing that there is a rationale for a program aimed only at small business, a range of other issues must be examined closely:

- defining what is meant by small business for the present purpose and working out precise thresholds in policies;
- considering the extent to which small business programs are taken up by eligible firms, and the associated issue of program compliance costs;
- how to design small business programs so that they produce results which would not have occurred otherwise (the issue of additionality);
- administrative innovation and learning critical because administrative efficiency in delivery is a key factor in the potential success of an SME program;
- how to evaluate small business programs appropriately; and
- interactions with other government programs.

These are examined in the following sub-sections.

But even if there are no grounds for programs dedicated to small business in particular policy areas, it may be appropriate for generic business programs to have different program delivery or information dissemination strategies for small business — an issue examined in section 5.9.

Definitional problems

One of the immediate difficulties in any small business-specific program is that of defining what is meant by a small business. The attempt to find a single definition of small business for the purposes of policy making is almost certainly a sterile exercise — so that the ABS, OECD or other alternatives should not be used unquestioningly in any given policy application. A small business policy presumes that some market or other failure is specific to a certain size of firm — and it is this empirically determined size range, not some pre-ordained size grouping, on which the policy should be based.

Other issues also arise in connection with choosing the definition. Ultimately, small business policies exclude some bigger firms from a policy measure. This means that firms around that threshold size may face disincentives for growth — a 'growth trap'. This is most likely to be a problem for regulatory or tax measures which have broad coverage, rather than business assistance programs where subsidy amounts are small (chapter 9). Payroll tax thresholds may be an example (Lattimore 1998). However, where program assistance to each firm is substantial there may be incentives for firms to adopt the size which meets the eligibility criterion.

5.3 Take-up and compliance issues

There are two broad sorts of small business programs:

- 'a little for a lot' programs. These try to provide small amounts of assistance to a large number of enterprises. This is typical of small business programs. Examples are NIES and EMDG; and
- 'a lot for a little' programs. These, rather less common, provide more substantial assistance (potentially millions of dollars) to each of a few enterprises. The R&D Start program is an example.

Each type of program poses unique sets of take-up and compliance issues.

'A little for a lot' programs

How big 'a lot' is matters in such business programs. This stems from the key differences between big and small enterprises (table 5.2). Each small business, by definition, accounts for a very small share of economic activity. To make much of a difference to economic performance, the outreach of a program — either directly through firm participation, or indirectly through demonstration effects — must be high. Otherwise the impact of the business program on resource allocation and efficiency will be very small. Then, since there are often substantial fixed costs in developing and running programs, the overall administrative overheads may be higher than the program's benefits.

Table 5.2: Characteristics of large vs small firms: influences on policy

Big firms	Small firms	Implications for policy design		
A few account for a large amount of activity.	Atomistic firms — any additional activity or improvement for any particular firm is likely to have small impacts on the overall economy.	Need a lot of small firms to be influenced by a policy to make any economic difference OR need to identify the few small firms where policy can make a very large difference.		
		Administrative costs of dealing with each firm becomes critical — if the costs are too high then the program may generate net costs.		
		Compliance costs per firm becomes central — programs have to be simple and pose few costs.		
Good pre-existing information about specific large firms, which tend to survive from year to year.	Little pre-existing information about specific small firms. Information collection imposes substantial costs on administrators and small firms.	Program designs which need detailed enterprise-specific information will tend to be too costly when dealing with many small enterprises. This suggests programs should also avoid bureaucratic discretion, which at best, rely on information-rich decision making environments.		
Have internal specialists (eg government liaison staff), who understand how government functions and can take over responsibility for implementing programs within a firm.	The CEO is responsible for liaison and program implementation, as well as most other management functions of the small business.	Programs for small firms should be simple and easily accessible.		

This implies that dissemination of information about small business programs is likely to be an important aspect in their success. This contrasts with the position for generic business programs, where a large proportion of the economic activity being targeted will be accounted for by a few, readily identifiable firms. For example, the 108 largest R&D performers accounted for about 60 per cent of R&D expenditure eligible for the tax concession, and 20 per cent of eligible R&D performers accounted for 80 per cent of eligible R&D (BIE 1993b, p. 45).

Similarly, compliance costs imposed by programs become much more important in small business policies. This is because compliance costs often vary little with the size of assistance provided. For example, say that the costs of complying with registration for a business grant program are around \$5000 for a grant of around \$50 000 (or 10 per cent compliance cost), compared to a cost of \$20 000 for a \$2 000 000 grant (or a 1 per cent compliance cost) in a program aimed at providing bigger amounts. If small business programs focus on giving small benefits to many firms, then compliance costs tend to eat away at net gains much more than they do for programs which give large amounts to a few.

The implication is that small business programs aiming for high take-up by small firms must be designed to keep compliance costs low.² This is more likely to be the case where:

Programs are relatively simple (Mortimer 1997, IC 1997e) and application forms easy to read and answer. Apart from the issue of compliance costs per se, simplicity in programs is more important for small businesses because they usually have no internal specialists acquainted with government. Unlike larger businesses, which often have specialist government liaison officers, the small business CEO is often responsible for implementing and complying with a government program—at the cost of diverting attention from core activities.

While lower compliance costs maximise the takeup of a program, they may adversely affect additionality. This is for two reasons. First, restrictions on eligibility invariably make schemes somewhat more complicated, thereby increasing compliance costs. This may increase additionality by filtering out certain groups of firms which were going to undertake the subsidised activity anyway. Second, compliance costs deter some firms (even if eligible) from undertaking the activity. For example, suppose that a firm recognises that it needs to undertake R&D to realise a significant innovation opportunity, but has insufficient funds to finance the investment. A grant — even if it imposes some burdensome compliance costs — will be taken up by this finance-constrained firm. But another firm, which could access finance, and thereby proceed anyway with the R&D investment, may well prefer to forgo the subsidy because of the presence of the compliance costs. Lattimore (1997) provides empirical evidence on the impact of compliance costs on additionality under the R&D tax concession.

- Information about the program is easily accessible (eg through the Internet, fax availability, one-stop shops).
- Information required by bureaucrats is limited. Unlike major enterprises, firm-specific information is often not readily available about SMEs, and such information can be difficult and costly to obtain. This suggests that discretion-based programs, where officials have to make a judgement based on often inadequate information about particular firms, should be avoided.
- Eligibility criteria for programs are clear. It may often be best to rely on self-assessment of eligibility for a program, instead of detailed bureaucratic assessment of each application. The potential for abuse of self-assessment can be reduced by using random audits, with penalties for incorrect disclosure. For example, say that a government department provides a subsidy for management training to small businesses run by young women of a certain ethnic background. One approach is to require upfront proof of the age, gender and ethnic status of each business, as well as corresponding audited accounts to ensure every applicant meets the other established criteria. This minimises the risk of abuse, but maximises compliance burdens. An alternative is to require random audits (accompanied by penalties for dishonest disclosure) and less upfront proof, with the goal of minimising the *sum* of compliance costs and costs of abuse.
- Good governance mechanisms are worked out for programs. Government departments may not always have the right incentives for minimising firms' compliance costs, especially if there are trade-offs between departmental administrative costs and compliance burdens imposed on firms (a point we also note in chapter 8 on administration of regulations). Arguably, departments should be able to gain a larger budget appropriation if there is independent proof that higher central administrative costs more than proportionately reduce the sum of compliance burdens felt by firms. Similarly, there should be rewards to staff (or to outsourced service providers) which develop methods for lowering compliance costs for client firms (so long as these do not produce excessive risks for government of abuse). It is possible that some business associations may have stronger incentives than government departments for providing business programs with low compliance burdens on program recipients. It may be desirable to deliver programs through these associations, so long as the program budgets are capped to minimise moral hazard problems.
- Programs are targeted (where appropriate) at collectives rather than individual firms. For example, programs could be aimed at business

associations and business networks and, whose role is as a mediator with their constituent businesses. For example, a program aimed at providing best-practice information might better inform the business manager of a firm network, who then is able to diffuse this information appropriately to the right people and firms within the network.

If nothing else, some measurement of the likely magnitude of compliance burdens posed by different small business programs, and the degree of risk faced by government, could be used to establish a benchmark for improvement.

The Internet may play a particularly important role as a medium for this sort of small business policy. Businesses are increasingly connected to the Internet (table 5.3)³. The Internet offers some substantial advantages as a medium for distributing information — on the availability of programs and their eligibility criteria, and even as a means for firms to apply. It can be accessed any time, the costs of obtaining information are close to zero, and information is obtained immediately. Software could be used to check eligibility and automate acceptance of a firm in a small business program.

Moreover, many of the problems facing small businesses are informational — how to tackle export markets, how and where to obtain finance, advice on technical issues, training and management advice. One way of solving these problems — if deemed appropriate — is to provide subsidies for firms to hire expertise for their particular problem. But this involves either substantial compliance costs or problems of low additionality (where firms get subsidies for things they were going to do anyway).

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The Queensland Chamber of Commerce and Industry conducted a survey of Queensland companies in May 1997 (www.surveys.qcci.com.au). They found that 20 per cent already had the technology, and that by the turn of the century an estimated 80 per cent would have Internet access. Another survey suggested that 38 per cent of businesses were connected in 1997 (Poon and Strom 1997, National Business Bulletin Website). This is a relatively high number and may reflect a sample biased towards larger enterprises, where use seems higher. The Yellow Pages Index suggests that 63 per cent of businesses employing 20 to 100 used the Internet in February 1998, and 78 per cent of businesses employing between 101 and 200. In contrast, 31, 31, 40 and 55 per cent respectively of businesses employing 1 to 2 persons, 3 to 4 persons, 5 to 9 persons and 10 to 19 persons had Internet access. Another survey (conducted by VECCI), cited by the *Age* (8 June 1998, p. B4), suggested that 73 per cent of SMEs were on the Internet — though this seems very high compared to other contemporary estimates Collectively, the data suggest that Internet penetration among businesses which are likely to be the target of any government assistance is already quite high.

Table 5.3: Penetration of new communication technologies in small business, 1994–1998

	Modem	Email	Internet
Feb-94	19		
May-95	30		5
May-96	31		9
May-97	42	25	23
Feb-98	42		34

Based on surveys of businesses with employment of 20 or less. For more technology details see Yellow Pages (1995b, 1996a, 1997, and 1998).

Source: Yellow Pages, Small Business Index (various issues).

The Internet provides some interesting alternatives:

- highly detailed, carefully indexed material could be provided on an Internet site. The fixed costs of developing such an information base could be high, but spread over thousands of inquiring firms could be very low. Moreover, unless the Internet site becomes congested, there is no problem of wasting resources through dealing with firms which would have obtained the information from somewhere else anyway. Information is non-rivalrous in consumption if one firm gets some knowledge it does not mean that there is less available for other firms; and
- when the technology has been diffused more broadly, the Internet may provide a system whereby different small businesses could assist each other through question-and-answer sites or via mentoring without some of the high transactions costs of face-to-face arrangements.

The Commonwealth has introduced a number of Internet initiatives for small business, such as the Business Online component of the Technology Diffusion program (chapter 3) and the Business Entry Point (box 5.2, DWRSB 1998b and DIST 1998c).

However, even if new dissemination techniques are exploited, at best even successful small business programs are unlikely to reach more than a minority of small businesses. In contrast, around half of large firms currently access government assistance programs (chapter 3). This implies that effective macroeconomic management (such as avoidance of volatile or high interest rates), regulatory and tax reform, and other economic policies directed at the 'fundamentals'— factors which influence virtually all businesses — are the key component of public policy crucial to the success of most small businesses.

^{..} not available.

Box 5.2: The Business Entry Point

The Business Entry Point (BEP) is an initiative of the Australian Federal Government. At present, it reflects joint efforts of the Department of Industry, Science and Tourism, the Department of Workplace Relations and Small Business, and the Treasury agencies. It provides a service to Australian businesses — of any type and in any location — to make it easier to access information from and fulfil the compliance requirements of Commonwealth, State/Territory and local government agencies.

The BEP will provide an environment where information and transaction facilities are integrated so that users can be confident of receiving comprehensive, up to date, targeted information and can carry out transactions with agencies securely and privately. It will link as much as possible with initiatives at other levels of government.

Early phases of the BEP will allow businesses to undertake a limited number of transactions with government agencies. As the BEP evolves, it will expand to enable interactions related to submitting annual returns, employing staff, applying for government assistance programs or winding up business — all the major and minor events in the life of a business. The BEP will also allow businesses to make payments to government departments and agencies and receive grants and refunds electronically.

The BEP service will be developed in an Internet environment. It will also be available through a range of physical outlets, such as shopfronts and phone inquiry services, so that users with limited access to information technology will not be disadvantaged.

 $Source: http://www.business.gov.au/bep_siteBEP.html$

A 'lot for a little' programs

The concern about the number of firms involved in a program does not usually extend to large enterprises, or to programs which aim to provide significant amounts of assistance to a select group of firms. Also in these cases, compliance and administrative burdens tend to be small relative to the scale of any assistance.

However, programs which aim to provide large scale assistance to a few small firms face another set of problems associated with targeting assistance. Such programs aim to filter firms — for example, to discriminate between a firm with a potentially successful technological innovation from one with an apparent technological 'lemon'. If anything, there is a case for strengthening the careful appraisal of any such substantial grants (even though this entails increased administrative and compliance burdens) to decrease the risks of poor targeting. These risks include providing assistance:

- to sure winners, which would have proceeded anyway;
- for projects with high private rather than high public returns;
- to popular 'fad' technologies, rather than assistance based on a hardheaded assessment of which investments may generate spillovers and maximise overall economic welfare; or
- to technically 'bad' projects, rather than promising ones, because of too limited a technical knowledge in the area in question.

It may be that, where absolute assistance amounts are substantial, there is a case for *more* detailed programs which reduce some of these risks. For example, features such as very careful technical and economic assessment of individual proposals, application fees for assessing projects, budget capping of such programs, and claims (by government) on the royalty stream of any benefits from a business venture, tend to create incentives for managers only to put forward good projects which would not otherwise have gone ahead (Lattimore 1996). These design features are only feasible when the overall assistance amount is big enough to support the higher associated administrative and compliance costs.

5.4 Additionality

One of the major issues in program design is that of additionality or inducement. Small business programs may *aim* to do all sorts of apparently good things — from encouraging knowledge diffusion, establishing firm networks, improving management practices, to increasing exports — and indeed may pay out large amounts of money in support of these activities. But this does not mean that these things have been caused by the program. Many small businesses export, undertake innovation, or train their managers or workers — without government assistance. If the eligibility conditions are not tight and compliance costs are low, many such firms will apply for government subsidies for such activities, even though they were going to do them anyway. Then the program expenditures are merely transfers to the assisted firms, requiring costly taxes, but producing no additional beneficial economic impacts.

How could additionality be increased? There are a variety of policy tools though, not surprisingly, none are perfect and some may conflict with other good design principles.

Eligibility criteria?

Eligibility criteria can be used to try to maximise additionality. For example, the US R&D tax credit is available only for R&D expenditure which exceeds the R&D to sales ratio in a base period for the firm. The UK Loan Guarantee Scheme is only available to firms which have had their loan application rejected by a bank.

The practicability of such measures needs to be assessed on a case-by-case basis. For instance, eligibility criteria which are highly restrictive in an effort to ensure only additional activity is funded are likely to have both high administrative and compliance costs, thus lessening cost effectiveness (IC 1997e).

Allocate resources to a collective institution?

In some cases, additionality may be best achieved by allocating resources to a single or few centres which undertake work collectively on behalf of firms or Australians as a whole. CSIRO's existence, for example, is largely justified because it undertakes applied research with strong public good properties.

The Technology Support Centres Program (TSCP — an AusIndustry program) may be another case where directing subsidies to a collective, rather than to individual firms is justified. The TSCP is a competitive grants program under which universities, TAFEs and other organisations establish centres for diffusion of information and advice to particular industries about the application of technologies, particularly to SMEs.

Diffusion is about spreading knowledge among a group of firms. Assuming that there are market failures impeding such diffusion (chapter 4), one way of doing this would be to provide subsidies to individual firms to allow them to engage consultants to provide technical advice (eg, to examine the application of specific new technical modifications to existing production processes). This is the approach recommended for SMEs by the Mortimer report (1997, p. 113). However, it would likely be a relatively inefficient policy mechanism because of low additionality. Many small firms would simply get a subsidy for something they were going to do anyway.

The existing model of funding centres for diffusion is likely to be a much more effective vehicle. This is because the cost of diffusion can be very low, especially if online services are used, and the high fixed cost of gathering information (about best practice technology or work practices) can be spread over many potential users.

Activities where firms are uncertain

Inducement will tend to be higher where assistance is for an activity which firms are naturally hesitant to undertake, perhaps because the activity is a departure from the established business culture for such firms. For example, formal business network formation was, at least until the 1990s, a relatively rare form of business arrangement. A program which encourages these networks — such as the Business Network Program — is likely to induce mainly new arrangements.

Constrained firms

Inducement may also be higher where eligibility criteria select firms that are constrained from undertaking the activity in question. An example would be criteria that identified firms which cannot access finance easily (so called liquidity-constrained firms) — such as start-up firms, firms with tax losses, or firms with higher debt/equity ratios.

On the other hand, while a subsidy given to a liquidity-constrained firm may generate genuinely new activity, there are problems with this approach. In particular, the firms selected for assistance may perform worse than the average, and have a higher failure rate. This suggests that subsidies given to such firms should be relatively modest (and capped) to avoid unforeseen liabilities to government (as appeared in the case of R&D Syndication).

It also suggests that they should be mainly tailored at efficiency improvement in the enterprise through learning by the manager and staff, since these gains may outlive the firm if it fails.

Incentive-compatible mechanisms

One of the major problems facing most business programs is that managers of firms have weak incentives to tell program administrators whether they were going to undertake some subsidised activity or not. Some program designs — so-called incentive-compatible mechanisms — try to create incentives for managers to put forward only activities which are really new. One method is a repayable grant.

Say, for example, that a government small business program is based on stimulating R&D in small firms, because there are spillover benefits to other firms. The firm is paid a grant. If the project fails, then the firm pays back nothing to the government. But if it succeeds, the government obtains a right to the royalty stream. For the program to be truly incentive-compatible, this right

should be greater than the original injection of equity would have implied. The principle is not one of 'user pays' or revenue maximisation for the government, but rather to provide incentives for managers only to put forward projects they were unable otherwise to fund.

Unfortunately such complicated ways of increasing additionality (Fölster 1991) are unlikely to be feasible for most small business programs, other than those which provide large amounts of subsidy to a small number of players. Even there, they suffer from some practical limitations, though some experimentation with the concept is probably justifiable.

One area where incentive-compatible mechanisms may have some application for small business programs is where firms suffer ignorance about the value of a business practice and are unwilling to make subsequent investments unless they can overcome their ignorance. A contrived example illustrates this point. Say that a firm may be unwilling to make energy saving investments because it's managers are completely unaware that gains are possible. One way of resolving this problem may be to provide a contingent grant for an assessment by an energy auditor, which is repayable if the investments suggested by the auditor are implemented. The point of such a program is to overcome ignorance, not to subsidise energy saving investments per se. A firm which was going to make an energy assessment with likely subsequent investment will not bother to apply for a grant under such a program. Such contingent grants are like guarantees — the government is effectively betting that worthwhile energy saving options will be identified, and is backing that hunch with money equivalent to the assessment cost.

5.6 Program evaluation issues

Program evaluations are necessary disciplines on all business programs, but arguably they play a special role in small business policies because the impacts of the programs on small businesses are much less visible than are policies whose main impact is on large firms (for example, the automotive tariff and the 1980s Steel Plan). No external commentator can readily acquire the information about the impact of small business programs, because they affect a large number of, usually unknown, heterogeneous firms.

Moreover, as noted by Mortimer (1997), business policies — many of them accented towards smaller businesses — tend to lack clear rationales and are fragmented. But this is not a uniquely Australian problem (for overseas experience, see Storey 1994, p.253).

For these reasons, this section outlines some of the methodological and practical aspects of small business program evaluation — an issue often given trite treatment. Program evaluations conducted both on individual programs, and groups of programs, may be a device for bringing greater coherence to small business policy.

Questions a program evaluation should address

A program evaluation assesses whether taxpayers are getting value for money from a program. Typically, it should address all, or some, of the following questions:

- is the business program *appropriate* for example, is there some underlying market failure which the program seeks to rectify, and does it do this in a way which confers net economic benefits to Australia?
- is the program *effective* that is, does it achieve its objectives? and
- is the program *operationally efficient* that is, does it achieve its objectives at a lower cost than other feasible alternatives?

If the program is found to be appropriate, evaluations may suggest changes which will increase its cost-effectiveness, and/or its efficiency and thus its net economic benefits.

The 'clients' of small business programs are ultimately Australians as a whole. This is because government programs should be justified by public rather than private benefits (Mortimer 1997). Evaluations are the mechanism for providing feedback by a program's customers about its performance — as critical a role as customer feedback plays in other contexts.

Having a well designed program evaluation is critical to the accountability and performance of small business programs. An evaluation which finds that a program is appropriate and cost-effective provides an imprimatur for its continuation. If the evaluation study errs, taxpayers' funds may be wasted and Australians made worse off. Or conversely, a program may be discontinued that is enhancing national economic welfare.

Elements of program evaluation design

In broad terms three factors are central to a well designed evaluation:

- independence of approach;
- adequate resourcing; and
- sound methodology.

Independence of approach

While internal evaluations may be satisfactory for seeking ways of improving a program's cost-effectiveness, the fundamental question of program appropriateness is best addressed by organisations independent of program administration or policy. Understandably, program personnel are usually convinced of the virtues of the programs they administer.

However, the use of organisations outside the program area does not necessarily guarantee an independent evaluation. In many instances, the program area is also responsible for letting the evaluation contract and sometimes there may be an incentive to please the client, rather than conduct a genuinely independent evaluation (the so called 'consultancy problem').⁴

Arguably, evaluation best practice should include measures to minimise the 'consultancy problem'. For example the consultancy contract could be let and overseen by an independent, arms' length organisation within government. Alternatively, individuals from outside the program delivery area could be seconded to an overseeing committee. Evaluations can also be undertaken by independent organisations within government, such as the Auditor-General's office or specialist agencies set up for this purpose.

Resourcing

Funding for program evaluations is also an important issue. Notwithstanding a requirement to undertake some level of review by the Department of Finance, program areas may seek to minimise evaluation expenditure if it requires a diversion of funds from program delivery. Such a tendency is reinforced if program personnel are convinced of the intrinsic merits of the program and the efficiency of its delivery. Also, sometimes those letting the evaluation contract lack hands-on evaluation experience and tend therefore to underestimate the time necessary for an evaluation of sufficient standard.

But more systematic factors may be involved. Evaluation contracts are usually competitive and specify, among other things, a time period for the evaluation to be completed. In order to win the evaluation contract, consultants seek to minimise their estimated evaluation costs by, for example, limiting the size of their surveys or by using less rigorous analytical techniques — all particularly critical in evaluation of small business policies where the number of firm participants is substantial. Thus, unrealistic time and cost expectations by those

115

On the other hand, many consultants will have a sense of professional ethics that require them to conduct an unbiased evaluation. It can be in their interests to do so if their future prospects depend on having a reputation for conducting rigorous and unbiased evaluations.

letting the evaluation contract, can lead to contracts being let to consultants using low cost, but often inadequate, methodologies.

Methodology

Evaluations are fundamentally about measuring the impact of a program on its participants. They will therefore involve an empirical investigation, such as surveys of participants or analysis of other data relating to the program's targets. In practice, no evaluation methodology is ideal — evaluations are constrained by limited time, resources and expertise. That said, there are some factors that, where practicable, are useful elements in the empirical component of most evaluations:

- a control group (individuals or firms not in the program, but which are, in other respects, identical to the 'treatment' group⁵) may be used to help distinguish the impact of the program from the many other influences affecting the behaviour of participants;
- recognition that apparent relationships, for example, between a program and firm performance, may in fact be due to chance or have the reverse causation; and
- where sampling of the program's population is undertaken, sample size
 needs to be sufficient to allow statistical testing with a reasonable degree
 of confidence in the conclusions. If precise numbers are not possible,
 ranges which are likely to include the true numbers are useful for
 sensitivity analysis.

Commonwealth Government program evaluation strategy

The Commonwealth Government has required and encouraged program areas to evaluate their programs since the late 1980s (Mackay 1996). The Commonwealth's evaluation strategy appears to have a number of objectives. One of the more significant is to encourage program managers to use program evaluation as a management tool. Other objectives are to provide information on program performance to the Government and to strengthen program managers' accountability (Mackay 1996). However, one result of this focus on evaluations as a management tool appears to have been to place an emphasis on evaluating

In practice, such control groups are hard to find. Self-selection by enterprises for program participation, combined with selection mechanisms used by program administrators, often mean that the apparent 'control' group are, at the outset, very different in character to the treatment group. In these cases, it may be appropriate to use econometric techniques which control for sample selection bias, or to use experimental techniques.

programs' effectiveness and internal efficiency, rather than the more fundamental question of program appropriateness.⁶

There were four main elements to the Commonwealth's strategy which, until 1997, were mandatory:

- all new policy proposals were to be accompanied by statements of objectives, performance measures and proposed arrangements for future evaluations;
- most, if not all, programs were to be subject to some form of program evaluation at least once every three to five years;
- portfolios were to provide evaluation plans to the Department of Finance covering those evaluations with major resource or policy implications; and
- results of evaluations identified in portfolio plans were expected to normally be released publicly.

In 1997, the Commonwealth dropped its requirement for portfolios to comply with these procedures and effectively devolved responsibility for program evaluations to program areas. Until that time, the Department of Finance monitored portfolio compliance as well as providing advice on the conduct of evaluations.

While both the quantity and quality of evaluations has apparently improved since the 1980s, Mackay (1996) has identified a number of 'problematic' areas:

- the methodological rigour, objectivity of program evaluations and the expertise of evaluators;
- the coverage of evaluation activity; and
- the timeliness of evaluations, especially failure to complete evaluations in sufficient time for Commonwealth budgetary requirements, and overambitious and unrealistic deadlines (Mackay 1996).

In a similar vein, after a study of program evaluations in the Commonwealth Public Service, the ANAO (1996) concluded that while aspects of the Commonwealth's evaluation framework were operating satisfactorily, there was significant scope for further improvement. In particular, based on its review of a sample of evaluation reports completed in 1995 to 1997, the ANAO identified the following weaknesses in Commonwealth program evaluation:

- failure to clearly address terms of reference;
- unclear descriptions of evaluation methodology and limitations;

117

Some evidence for this is that of the evaluations surveyed by the ANAO only about one-third examined the question of appropriateness (ANAO 1996).

- inappropriate and/or poor quality of data collection and analysis;
- conclusions that were not supported by the data or were contradicted by the data; and
- recommendations being included without identification of priorities or likely benefits.

However, the ANAO does not suggest these weaknesses are necessarily widespread. Indeed, overall it appears to have found most of the evaluation reports it sampled as either satisfactory or having only a few of these weaknesses.

5.7 Other issues in program management and design

Administrative innovation and learning

The administration of small business programs is somewhat akin to the provision of commercial services by banks and insurers to businesses — large numbers of clients are involved across many regions, service variety can be complex, and the costs of transactions have a sizeable influence on the quality and the magnitude of demand. If program administration is not efficient, and/or firms have to face high compliance costs as a substitute for government administration costs, then small business programs will typically have a limited clientele, and little effectiveness. This implies that governance and organisational structures should be designed to:

• Maximise learning by program providers. Just like most new commercial products or services, new small business programs will not be designed perfectly at the outset, and will have to be 'tweaked' over time to improve them. It should be recognised at the outset that program change will be required and mechanisms should be built in to facilitate this process. Intra-program information channels can also be supplemented by monitoring and benchmark arrangements with other organisations, both locally and overseas. While there are obvious advantages of benchmarking with recognised 'best practice' organisations having similar functions, benchmarking with other organisations can also be valuable. For example, the Business Network Program (BNP), aimed at facilitating networks between SMEs, was developed in Australia after detailed study of the

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⁷ It is also desirable, however, that a program's *impact* be robust to changes in the environment. This was not the case for Syndicated R&D where the value of Syndicated R&D varied with the business cycle, tax rates and interest rates (Lattimore 1996).

operation of similar Scandinavian programs. Australia also entered into an agreement to jointly evaluate the BNP along with other countries' network programs.

- Maximise efficient information flows between policy developers and program delivery agents if the two functions are separated. This is particularly important for those small business policies which are delivered at the state level (eg NIES).
- *Increase incentives for cost minimisation and service innovation.*

Program efficiency will be enhanced if the program has clear program objectives and measurable performance indicators (Mortimer 1997). Performance indicators are an important tool for monitoring program performance and, provided program objectives are sensible and the indicators well designed, for improving the efficiency and effectiveness of program delivery. They should be simple, easy to calculate, relatively few in number and concentrate on outcomes rather than inputs.⁸ Productivity indicators (for example, some measure of output per employee or per dollar of program funds) are useful in this regard. However, one danger is that complex and time consuming performance indicators can divert program personnel from their core activities or invite only cursory adherence to their requirements.

Interactions with other government programs

It is important in program design to take account of possible interactions with other policies. This is especially true for small business programs, given the fact that across all jurisdictions there are a substantial number of such programs.

Small business programs may overlap, compensate for, complement or adversely affect each other. Whether they collectively exhibit a degree of redundancy or complementarity is an important consideration for government. Program duplication provides opportunity for 'double dipping' by firms, unnecessarily increases government administration costs and clouds the assessment of individual programs (Mortimer 1997). The sheer number of small business programs can confuse clients, and lead to unwieldy administrative and organisational structures. On the other hand, having a number of programs in the same area may simply reflect efforts to target firms in different circumstances or with different characteristics.

⁸ For example, the Auditor-General noted that the NEIS performance was measured by the number of scheme participants, essentially an input measure (ANAO 1992). A better, but by no means perfect, measure was that used by the Auditor-General, cost per 'NEIS assisted business'. The cost-effectiveness of NEIS is discussed in chapter 6.

To some extent what constitutes duplication is a matter of judgement. However, there can be little doubt that some degree of duplication occurs. For example, the Auditor-General noted in 1994 that there was a tendency for Commonwealth programs to emerge which had similar objectives to NIES or supplied similar services. Similarly, an inter-departmental committee in the same year concluded that while no two Commonwealth programs could be described as being identical, there was evidence of duplication amongst Commonwealth programs with resulting confusion amongst program users (ANAO 1994a).

Trade-offs between good design criteria

Efficient and effective program design is not an easy task, as might be suggested by the presentation of a 'check-list' of desirable program attributes. In fact, program design will often be a highly constrained exercise, involving difficult trade-offs between desirable features. Some possible trade-offs that program designers face are:

- Higher additionality may come at the cost of greater administrative complexity, bigger compliance costs for program applicants and higher risks that bad firms will be selected by programs (adverse selection), or that either the firms or others will change their behaviour in a costly way (moral hazard). For example, government guarantees of loans to business may result in a relaxation of the prudential standards of lending institutions involved in delivering the program. The potential for such moral hazard is lessened by having some degree of involvement of stakeholders. For this reason, 100 per cent subsidies are generally undesirable.
- The advantages of separate program delivery and policy units need to be weighed against possible additional administration costs and the advantages of a unified structure, such as a freer flow of information and less scope for strategic behaviour between operational and policy personnel.
- The benefits of cost recovery (Mortimer 1997), such as through repayable grants, need to be balanced by additional firm compliance and government administration costs.
- While curtailing administrative discretion as advocated by the IC (1997e) may result in less corruption, error or political favours, lack of administrative discretion may result in lower additionality.

In practice, many decisions about program delivery will be quite difficult. This emphasises the importance of administrative innovation and learning, as the

initial program design or other features may need to be modified in the light of experience. It also reinforces the need for good quality program evaluations to provide information about program performance.

5.8 Small business policy by default

As foreshadowed in section 5.2, even if a policy response is appropriate for all sizes of business, there may be limitations in designing policies that work well for all business sizes or types. In this case, small business policies may sometimes be warranted, not because small business faces special problems, but to the contrary, because there are design problems in implementing policies for their larger counterparts.

The (former) 150 per cent R&D tax concession provides an illustration of how policy design problems can vary with firm size. Calculations of the net benefit to revenue ratio by firm size reveal a declining return from the program for firms with more than 500 employees. On the basis of a social benefit-cost framework developed by the BIE (1993b), the smallest category of firms (employing less than 10 people) appear to generate net benefits per dollar of revenue about 20 times greater than the largest category (employing 1000 or more people). In fact, with minor variations to assumptions about the spillovers produced by R&D, the net benefits may even be negative for the larger firm size groups, though they remain strongly positive for the smaller groupings. The main reasons for these outcomes are:

- the inducement rate⁹ for small firms was about twice that of the largest firms;
- very few small firms are foreign owned, thus removing one major source of leakage of benefits. Leakages to foreigners per dollar of revenue are about fifty times greater in the largest enterprises compared to the smaller ones (table 5.4); and

Defined as the percentage of R&D conducted by a firm which is due to the introduction of the R&D tax concession (at the 150 per cent deduction level). There are a number of possible reasons for the variation in inducement rates by firm size. These include greater financial constraints on smaller firms; the fact that larger firms tend to have longer planning horizons for R&D investments than small firms and may, therefore, discount the value of the R&D concession because of uncertainty over its future; and response biases in different

sized firms (because different types of people fill out questionnaires in large versus small firms). Assuming the difference in inducement rates is not illusory (the third explanation), then the higher inducement rate in small business makes the R&D tax concession much more effective for small firms than large firms.

• smaller firms face a higher likelihood of being in loss which leads to claims for the concession being deferred, thus reducing the cost to revenue. On average, about 12 per cent of the value of the concession is lost to small firms due to timing delays and deferral of the benefit, compared to only 4.4 per cent for the largest enterprises (table 5.4).

Table 5.4: The differing impact of the R&D tax concession by firm size^a

Employment size	Net benefits per firm	Revenue costs per firm	Induced R&D per firm	R&D per firm	O	Tax ad- justment	Bang for buck	v
	\$'000	\$'000	\$'000	\$'000	\$'000	%	\$	%
1 to 9	13.7	22.7	34.7	143.6	0.1	12.0	1.53	60.4
10 to 19	16.6	37.5	47.9	232.2	1.0	7.9	1.28	44.3
20 to 99	41.8	79.4	108.4	487.0	4.1	8.0	1.37	52.6
100 to 499	56.5	165.6	205.6	1 022.0	28.5	6.7	1.24	34.1
500 to 999	11.0	196.1	179.6	1 143.2	41.2	5.8	0.92	5.6
1000+	28.4	819.2	671.4	4 865.5	138.0	4.4	0.82	3.5

a Based on analysing the unit records from the BIE (1993b) survey of R&D tax concession registrants. Data are for the year 1990–91 and the results are based on 715 observations. There are some small variations with aggregated data published by the BIE (1993b) due to slight variations in the sample used. The method used to calculate these results is outlined in appendix D.

Source: Unit record data from the BIE survey of R&D registrants, 1991.

If there were no alternative designs for the tax concession, these results suggest that an R&D tax concession which excluded larger firms would more likely generate net benefits for Australians. However, there are dangers in such a selective approach too — because, at the margin, it can distort the optimal size distribution of firms. Moreover, in this particular case there are probably better ways of increasing additionality and dealing with the problem of leakages to foreigners (IC 1997f), other than simply rationing access to the concession to SMEs. However, in other policy contexts where similar problems occur, it may be appropriate to selectively target programs to small firms.

5.9 Delivery options

In many cases, the problems facing small firms are not unique. For example:

• problems relating to non-appropriation of knowledge — the spillover problem — are common to firms of all sizes;

- large firms as well as small firms experience problems of interfacing with the public sector and university science system; and
- it is sometimes maintained that small subsidiaries of large multinationals often classed as 'large' firms by association face many of the same problems as small non-subsidiary firms.

But even if the problems may not be unique, there may be grounds for having different delivery mechanisms for small firms in programs which have a more general applicability.

Documentation and forms relating to programs which provide small amounts of assistance to individual firms could be simplified to take account of the compliance burden imposed, relative to the benefit received by firms. Different dissemination strategies may be desirable — such as via accountants, business chambers and associations, and the Internet, rather than direct paper-based marketing to the firms concerned.

It is possible that contestable service delivery — where private sector agencies and government agencies, other than the managing agency, also have an opportunity to tender for the right to deliver programs — may provide some of the incentives for appropriate delivery to small firms. The IC (1996a) discusses the circumstances where this approach may be effective.

5.10 An extended illustration

To illustrate some of these principles, we now consider an example. We emphasise that the policy situation is entirely *fabricated*, and is intended to be illustrative only about how good policy design can be achieved.

The problem

Suppose that systematic evidence mounts that a small proportion of small business operators in some activity are providing very low quality service to their customers. These are tarnishing the reputation of the good operators (a negative externality), and threaten the growth of the industry.

The policymakers faced with this apparent problem first ask some questions. For example, won't the bad businesses simply fail, so that the problem is self-correcting? Unfortunately the evidence suggests that the bad operators are able to survive for some time because most custom is non-repeat business and new customers are ignorant about the quality of operators. In any case such 'bad' businesses are constantly re-appearing.

Why are the 'bad' operators bad? In what way? For example, are they dishonest, ill-suited to the industry or badly trained? Are badly trained operators ignorant of best practice, or does some other factor explain low training levels? The policymakers discover that the major problem is that they are poorly trained and are simply unaware of the skills needed to ensure good customer service.

Isn't there a private means for solving these problems — such as an association of operators which can certify quality standards of their members and self-regulate? Unfortunately again this appears to be precluded because the industry is so heterogenous, there are so many very small operators, and because they are highly geographically spread, in many cases throughout regional Australia. Furthermore, many of the firms are unaware of the 'contagion' problems posed by the apparently 'bad apples' in their midst, and so have little incentive to look at issues like quality accreditation.

This process of examination of the problem suggests that there may be an economic problem (negative externalities) without an obvious market solution, and that the problem is largely confined to the smallest operators. This suggests that intervention may be appropriate.

Moreover, the data gathered by policymakers indicates which sort of small firms experience the relevant problems — which is the basis for working out the thresholds for program eligibility.

Possible policy options

In considering the scenario set out above, the government might establish the following set of six possible policy options:

- 1. Raise the awareness of the operators about the adverse impacts of the problem. That might be enough for firms to organise a solution by themselves.
- 2. Put in place new training courses in TAFEs or other institutions which provide the training needed for deficient operators.
- 3. Regulate all relevant operators, requiring them all to attend specific training courses and to gain formal accreditation. Operating without a license would be illegal.
- 4. Issue annual licenses to all the relevant operators, charging a license fee which would meet the average costs of compensating customers whose expectations are left completely unmet, and imposing financial penalties and license withdrawal on operators who breach clearly defined guidelines. Training and accreditation would not be required.

- 5. Provide information on how to overcome business deficiencies over the Internet. This seems a feasible method because, in examining the industry, the responsible department finds that most of the small business operators, including those providing poor service, have Internet connections and email to attract and communicate with their customers.
- 6. Provide a training subsidy for operators to seek additional training in areas where the problems are greatest.

Options 1, 3, 5 and 6 could be funded by either general revenue (taxation receipts), or a compulsory levy on small business operators. Option 4 already incorporates a financing method via its penalties and license fees. Option 2 could be financed by tax, a levy on all small business operators, or a fee on business operators which use the service.

In looking at these options, policymakers find that each has limitations. Thus they find that the costs of organising an association, developing accreditation, and marketing their logo are seen as too great by the operators, so that adopting policy 1, *by itself*, will be insufficient. As well, provision of training in typical educational institutions (option 2) suffers from problems because many of the firms operate in regions where access to these courses would be limited, and in any case, the bad operators are largely unaware of the source of their problem.

Other solutions, such as the highly regulatory option 3 pose other substantial costs — for example, by training people who do not need training, by setting excessively high standards, and by limiting entry to the industry. Such a policy solution may well be worse than the problem. Accordingly, policymakers might decide to eliminate option 3, where the risks of government failure are too high, and to look more closely at how the other options fare when examined in the light of good design criteria.

Assessment of options against policy criteria

Each of the options can be assessed against the major policy criteria set out in box 5.1 above. Details of such an assessment are summarised in table 5.5, and possible financing mechanisms set out in table 5.6.

This assessment provides a picture of the adequacies and inadequacies of the various options — and possible early responses to these in the policy making process. While there are probably a number of alternative options which have not been considered here, the example is intended to be illustrative of how to apply the policy making framework.

Depending on the severity of the problem being addressed, policymakers might decide on a combination of options 1 and 5 as a first approach, with careful and

timely monitoring of the impacts of these policies on firms' behaviour. This is because:

- option 1 (financed through taxation) seems a necessary component of any program simply to inform the bulk of the industry of the problem; and
- option 5 (also financed through taxation) may be a good way of approaching all operators directly even though they are geographically dispersed. This option also spreads the fixed costs of information gathering over many operators, and is relatively quick to implement. If it fails (say because the 'bad' firms do not use the service) then the costs have been relatively modest.

If these policies are ineffective, and the costs of the negative externalities are very high, then option 4 (financed through licence fees) may be applied, but with safeguards to minimise the risk of regulatory capture, excessive licence fees or poorly developed guidelines.

If the contagion costs are not too high, and options 1 and 5 are ineffective, having no policy may be the best option. This recognises that the costs of regulation may exceed the benefits, even if there is an ostensible economic problem.

Table 5.5: How the options score against the design criteria

Criteria	Option 1	Option 2	Option 4	Option 5	Option 6
Target the source of the problem	Yes — partly, via awareness, but will firms change their behaviours when informed, and will they find the infor- mation credible?	Yes — partly, by training, but will the bad operators elect to use educational services?	Yes — partly, by penalties	Yes — partly, by information, but will the bad operators elect to use the service?	Yes — partly, by training, but will the bad operators elect to train?
Take-up	Depends on effectiveness of dissemination and quality of information	Depends on effec- tiveness of dis- semination and the relevance and quality of training	sory — but will	•	tiveness of dis-
The additionality problem (wastage through dealing with firms which do not need any service)	firms are assumed to be ignorant of the	Depends on how the courses are funded. If it involves general revenue or a levy then wastage could be high	C	e ,	Probably high — many firms will take the subsidy for training they were going to do anyway
Timeliness	Quick to implement	Depends on above and time for training providers to organise the market		Relatively quick — needs time to de- velop and maintain the site	Relatively quick
The right target group	It covers all small business tourism operators — which is appropriate	Covers same as option 1 — but may be inefficient since many need no training	Same as option 1	Same as option 1 — note that defining the target group is less critical because of the low cost of accessing the information	Covers same as option 1 — but inefficient since many need no training
Scale of resources	Small scale — publicity of problem	Depends on whether small changes can be made to existing courses or whole new courses are required	•	Low costs — mainly the fixed costs of setting up the appropriate site and advertising it	subsidises training of all small business
Duration	Probably available while there is a significant rate of new firm entry	As in option 1	As in option 1	As in option 1	As in option 1

Table 5.5 continued

Criteria	Option 1	Option 2	Option 4	Option 5	Option 6
Administrative efficiency and compliance costs	Efficient and low compliance	Relatively efficient and low compliance	Moderate: firms and government face significant compliance and administrative costs	Efficient and low compliance: remote access, voluntarily used service	Moderate: administration and compliance costs may be high if try to filter out firms which don't need the training; and subsidies require at least moderate administrative burdens
Accountability and transparency	Transparent	Process for determining training priorities has to be clear	Determination of guidelines for breach of license conditions would have to be open to scrutiny, as would the determination of the licence fee	Transparent by nature: all material is publicly available	Transparent, but any process for determining business size thresholds for eligibility should be open to scrutiny
Risks:					
Strategic behaviour?	No significant problem	No significant problem	Might lead to bureaucratic 'capture' and become like the discredited option 3	No significant problem	Free-riding on subsidy
Unforeseen liabilities?	Not likely	Not likely	Not likely	Legal issues of advice over the Internet?	Huge unanticipated demand for training by eligible firms
Interactions with other policies	None obvious	Complementary to general vocational training development	Increases overall regulatory complexity, which tends to increase business uncertainty	Complementary to general vocational training development, and to Commonwealth Government expertise as a sophisticated user of the Internet	
Evaluation issues	Would have to survey industry to see if awareness had changed — and then assess behaviour change	•	with the license conditions? Are penalties sufficient?	Are firms using the service and does it produce behavioural changes? Is it cost effective?	•

Table 5.6: Financing options

Option 1	Option 2	Option 4	Option 5	Option 6
ě	Probably user pays. Taxation is probably only e appropriate if only small changes to existing courses. A levy may be apt if bigger changes are required	License fees	Same as option 1	A levy may be appropriate instead of taxation

6 APPLYING THE PRINCIPLES: SOME SMALL BUSINESS EXAMPLES

6.1 Introduction

Having outlined some desirable characteristics of good program design and pitfalls to be avoided, an obvious question is how well do Australian small business programs measure up against these criteria? There are so many different programs across jurisdictions that we cannot examine each of them against the exhaustive set of criteria set out in chapter 5. Rather, in this chapter, we set out to achieve two main objectives.

First, we look at the design and performance of some important individual small business programs. Because detailed independent reviews of each of the programs could not be undertaken here, we rely on past evaluations as the prime source of information. This approach also enables us to draw out some lessons about the design and evaluation of small business programs. We look closely at four programs across three portfolios:

- the Export Market Development Grants (EMDG) scheme and Export Access programs run by Austrade (sections 6.2 and 6.3 respectively);
- the National Industry Extension Service (NIES) now known as the Enterprise Development Program (EDP) run by DIST (section 6.4); and
- the New Enterprise Incentive Scheme (NEIS) run by DEETYA (section 6.5).

We also examine some aspects of the recent R&D Start program, which also includes the Innovation Investment Fund (section 6.6).

Second, on the basis of these case studies, we draw attention to some of the common problems and lessons. Readers not interested in the detail of individual small business programs should turn straight to that discussion (section 6.7).

6.2 The Export Market Development Grants scheme

Background

The EMDG scheme is by far the most important business program focused on small business (in terms of budgetary outlays) and has recently received an additional \$300 million in funding for the two years to 2001–2 (Howard 1997b, p.54). As noted in chapter 3, the scheme aims to stimulate exports by subsidising eligible expenditure on export promotion and marketing. It does this by providing a 50 per cent (taxable) grant for eligible expenditures — which translates to about a 32 per cent subsidy rate (on the basis of a corporate tax rate of 36 per cent).

Rationales?

While its stated goal is to promote an export culture and to increase export marketing, thereby stimulating exports of Australian firms, this does not constitute an *economic* rationale. There are many possible arguments for export assistance — some of them spurious (as cited in IC 1992, pp. 14-15 and IC 1997g), and some with more basis. Knowing exactly which rationale lies behind the program is essential in designing an effective program, evaluating its impact, and in linking it with other small business programs.

The most recent evaluation of the program by Austrade (1994a) does not examine or state an economic rationale for the program, although it approvingly cites Hughes' view (1989) that the program helped promote a change in the anti-export business culture which was a legacy of protection. However, rates of protection are now much lower than at the inception of the program, casting doubts on the plausibility of this as a currently relevant rationale.

There are other possible economic rationales for export assistance. Their nature and implications for policy are described briefly in table 4.4 (chapter 4). Some do not imply a subsidy to small business alone (eg rationales I, III and VII); some suggest there should be some repayment of any subsidy (rationales II and VI); and some imply only temporary assistance to individual companies (rationales II, III, IV and V).

Of these rationales, the second (and perhaps elements of the first and third) provides the strongest *economic* basis for the EMDG scheme in roughly its present form. These rationale suggests that the economic benefits of the program may be derived, not from exports per se, but largely through productivity increases stemming from the extra discipline and challenges imposed by exports. Exporters have to handle exchange rate variability, cultural

and language problems, deal with customers remotely, work out pricing in new markets, link up with large and sophisticated customers abroad, and compete in a far more ferocious and challenging market environment.

For example, leading edge foreign customers may provide learning benefits to Australian suppliers (AMC and McKinsey 1994). If firms do not fully anticipate these benefits, or there are information spillovers, then at the margin some firms may not seek to export in new and difficult markets or in risky or novel ways, even though there might be economic benefits from doing so.

It might appear that the appropriate response to the opportunities posed by exports is an across-the-board export subsidy. But such a subsidy would probably suffer from low additionality, because it would be hard to distinguish between exports which would have happened anyway and genuinely new exports. A subsidy to eligible marketing expenditures incurred by small exporters seeking to expand their overall export markets — the target of the EMDG scheme — may be a better way of achieving the possible benefits.

In principle, there are economic rationales that could support export oriented programs like the EMDG scheme. However, such theoretical justification is the weakest basis for a program. As yet, the empirical evidence on the magnitude of any learning benefits or spillovers has not been rigorously assessed.

Evaluations of the EMDG scheme

The EMDG scheme has been reviewed or evaluated a number of times since its inception in 1974. In 1977 and 1982, the then Industries Assistance Commission (IAC) reviewed the scheme as part of inquiries into export incentives. The IAC concluded that the scheme appeared to be successful in meeting its objective of encouraging SMEs to become involved in exporting through the provision of export market development incentives — in an economic environment biased against exporting because of border protection. The IAC reviews recommended short-term continuation of the scheme, but did not endorse its long-run continuation. Subsequent reviews by Ferris (1985), BIE (1988a), Hughes (1989) and Austrade (1994a), while finding some faults in the scheme, recommended continuation of funding.

The evaluations of the scheme have had a number of persistent limitations:

- with the exception of the Austrade review (1994a), none of the evaluations assessed the connection between the grants and additional marketing by firms, and the impact of marketing on new exports;
- various economic rationales for the scheme have been mooted by some reports (eg attitudinal change, knowledge externalities etc) but, as noted

above, the extent to which the program actually generates outcomes consistent with these rationales has not been assessed. This should be remedied through careful empirical work; and

• none have probed the *economic* benefits of the program in any depth. There are two major possible ultimate sources of benefit from a scheme like the EMDG. It may stimulate some additional economic activity using otherwise unemployed resources, or it may use existing productive resources better (by diverting resources from lower to higher valued uses). But the evaluations have not examined the magnitudes of these effects.

The Austrade review, the only significant empirical investigation¹ of the scheme, found that on average 47 per cent of (eligible) marketing expenditure made by grant recipients in 1991–92 was induced by the program. This appears to be a high rate of inducement, but a reasonably large response would be expected given the generosity of the program.

Additionality has to be seen in relation to its cost. This is measured by the 'bang for a buck' — the increase in small business' spending on export marketing promotion (relative to what would otherwise have occurred) per dollar of revenue forgone. When the fact that the grant is taxable is taken into account, the bang for a buck in the EMDG scheme is \$1.54 — which is still relatively high for a business program.^{2,3} The implied elasticity of demand for marketing is about 1.8 — which is quite responsive.⁴ In turn, each dollar of net subsidy is

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In order to quantitatively assess additionality, Austrade arranged for the collection of data from firms which had used the EMDG scheme and a control group of non-EMDG firms which were also exporters. Then, using these and other data, the relationship between EMDG grants and marketing expenditure, and between such expenditure and firm exports was econometrically estimated.

In 1991–92, recipients received grants of \$156 million (Austrade 1994a, p. xv). This implies eligible marketing expenditure of \$312 million. Induced expenditure was estimated at 47 per cent of this, or \$147 million. As grants are taxable, the payments of \$156 million is greater than the subsidy to firms. In 1991–92, the corporate tax rate was 39 cents in the dollar. Ignoring time delays in the tax system, this suggests a net subsidy of \$95.2 million, and a bang for a buck of 1.54 (=\$147m/\$95.2m). Note that Austrade used the average tax rate paid by businesses, from ATO data (of 28.2 per cent), but this is probably not a good measure of marginal tax effects.

For example, the BIE (1993b, p.238) estimated that the bang for a buck for the 150 per cent R&D tax concession was between \$0.6 and \$1.0.

The elasticity is the percentage increase in demand brought about by a percentage decrease in price. Using the Austrade data for 1991–92, marketing expenditure under the EMDG scheme apparently increased from \$165 million to \$312 million under the scheme, or by about 90 per cent. The after tax cost of marketing expenditure is reduced by 50 per cent by the grant. Hence, the apparent discrete measure of the elasticity is 0.9/0.5 = 1.8.

estimated to generate exports of around \$14.75 (and even more for mature exporters).

This level of additionality appears to be a major strength of the program, but it may be mismeasured, or subject to misinterpretation, as may other aspects of the scheme's performance.

- The evidence on additionality is based on comparing EMDG participants with a control group of non-participating exporters which, based on their size, would have been eligible for the program. However, there only appears to be limited control for the sample selection bias problem, which, in this case, may seriously overstate the measured degree of additionality (box 6.1). If additionality is really as high as purported, it is surprising that 'graduate' firms (those with more than 8 claims, which are no longer eligible for the program) tend to preserve or even increase their export promotion expenditure after leaving the scheme (Austrade 1994a, p.27). As well, results from the survey used in the Austrade review (1994a, p. 23) indicated that the EMDG scheme was an important, but secondary factor, affecting firms' export marketing expenditure which also suggests that additionality may be lower than the econometrically derived estimates.
- The average additionality experienced under the scheme does not tell us about the different experiences of individual small businesses. For example, how many (and what type of) firms did not appreciably alter their marketing expenditure because of the program, but still received the subsidy for expenditure they were going to undertake anyway?
- The total value of exports apparently achieved through the EMDG scheme may be a poor measure of its economic value. Many of the external or other benefits cited in table 4.4 do not increase indefinitely with exports. The benefits may depend more on the qualitative aspects of exporting⁶ than the actual value of exports.

⁵ Incremental exports were estimated at \$1.4 billion from grant payments of \$156 million, or \$95 million in grants after tax (Austrade 1994a, p. xv) — 1400/95 = 14.7.

⁶ For example, how demanding are overseas suppliers? What learning is achieved? Do other Australian exporters get spillover reputational benefits from another exporter's promotion?

Box 6.1: Examples of self selection bias

A hypothetical EMDG example

Firm A intends to expand its export activity significantly over a prolonged period, and intends to undertake significant long-term export marketing. Firm B is also an exporter, but is less committed than A, and does not plan for sustained year-by-year export marketing. Firm A applies for, and receives an Export Market Development Grant, while firm B, realising that it is a long-term program and that there are upfront compliance costs, decides not to.

In this case, any statistical analysis that tries to calculate the impact of the EMDG scheme on additional marketing by comparing the expenditure patterns of firms like A with firms like B, will tend to exaggerate the impact of the program. The problem arises because the control group, comprising firms like B, is not made up of the same sort of firms as those which participate in the program. From an ideal evaluation perspective, the impact of a program would be assessed by asking firms to apply for the grant, and randomly refusing some — a method with obvious pragmatic drawbacks. In practice, the best that can be done is to either match the control group with the recipient group, or to separately model the decision to apply for a program and the impact of the program (the Heckman two stage procedure).

A manufacturing technology extension example

Jarmin (1997) examined the impact of manufacturing extension services on client productivity. By comparing a control group with clients, he estimated that extension services had increased productivity by between 3.4 and 4.5 per cent in the program recipients between 1987 and 1992.

He then used the Heckman two stage procedure to take account of sample selection bias. He found that sample selection bias was important, and that it had a big impact on the productivity findings — in this case, suggesting that the simplistic analysis had underestimated the impact of the extension services. Taking account of selection bias, extension services increased productivity by between 7.1 and 16 per cent over the relevant period.

• While there is evidence on the impact of eligible marketing expenditure on the export orientation of grant recipients, there is no evidence on the export impact of marginal expenditure induced by the grant. It could be, for example, that there are declining returns from promotional

⁷ In other contexts, the sample selection bias problem can lead to underestimating the performance of a program.

- expenditure. In Austrade (1994a) the scheme is evaluated as if the marginal and average return from marketing expenditure is the same.
- The calculations do not take an economy-wide view. From a firm's perspective, extra exports generated by incremental export marketing are truly new. But from a national perspective this is unlikely to be true. As exports expand in one firm, they typically use up resources that would have been involved in productive activities elsewhere, including exports.

How does the EMDG scheme rate against various design criteria?

Some aspects of the design of the EMDG scheme offer lessons for other small business programs (table 6.1). The program is big enough to make a difference (with nearly 4000 claims in 1995–96), is highly visible to potential clients, tries to control additionality by targeting smaller 'export ready' businesses, weeds out ineffective users of the program using an export performance test⁸, is administratively efficient, uses state-of-the-art risk management techniques (such as a computerised risk assessment model) and limits taxpayers' exposure through a novel annual cap on expenditure. Many of these valuable traits stem from the scale of the program — the fixed costs of professional administration of programs are only worthwhile if the scale is sufficient. The scheme may also have relatively high additionality — though there is uncertainty about this.

Where are the greatest uncertainties and what are possible options for improvement?

- The economic rationales and impacts of the scheme beyond export enhancement should be rigorously examined. In particular, this should include assessments of: the productivity and quality impacts of the program; the impact on marketing expenditure (avoiding the problem discussed in box 6.1); and any spillovers to other firms about entering difficult or emerging markets.
- Criteria such as a maximum export expenditure of \$25 million, and a maximum of eight grants probably increase additionality in the program. It is possible that higher additionality *may* be achieved by reducing the maximum number of grants available to any individual small business noting the limitations in the econometric analysis in Austrade (1994a). As well, while the export performance test has a valuable role in limiting the

Firms which do not make exports in their third or subsequent year of participation are not able to obtain any grant. This is because for these years the grant is calculated as the *lesser* of 50 per cent of eligible expenses in excess of \$15 000, OR a percentage of export earnings applicable to the year of the claim (3rd year — 40 per cent, 4th year — 20 per cent, 5th year — 10 per cent, 6th year — 7.5 per cent, 7th year — 5 per cent, 8th year — 5 per cent).

involvement of firms which do not succeed to any great extent in exporting, it may have perverse impacts on additionality for firms which are in their 7th or 8th year of the program. This is because the test means that only firms which have dramatically increased their exports will be eligible for a significant grant in the 7th and 8th years of their program participation. Such obviously successful firms probably have the capacity for self-financing their export marketing.

- To the extent that it is possible to derive an evaluation strategy to measure individual firms' responses to the program (akin to that used by the BIE, for example, in its 1993 evaluation of the R&D tax concession), this could be used to develop other criteria for maximising additionality.
- A loan instead of a grant could be contemplated, since this would lower the revenue cost of the program by more than it reduces the program's effectiveness. The International Business Development Scheme (IBD) now discontinued was a two year pilot program which offered loans for marketing. It may provide evidence on the possible effectiveness of a loan scheme.
- It is also possible that a contingent payback scheme could be considered as an alternative funding option. Under such an arrangement, firms pay back the grant if a pre-agreed level of exports is achieved by a certain time. This sort of arrangement can act as an incentive-compatible measure discouraging small businesses from applying for the grant if they were already intending to self-finance their marketing expenses. It obviously also reduces the revenue cost of the scheme, which would mean that more firms could receive assistance before the revenue cap was exceeded. A contingent payback scheme was used in the now discontinued Innovative Agricultural Marketing Program (IAMP), and there may be lessons to be drawn from its application.
- There are a significant number of firms which fail the export performance test that is, they apparently do not develop export markets over the long run (Austrade 1994a). It may be worth statistically analysing whether such drop-outs systematically display traits which would allow them to be detected at an earlier stage, including the eligibility phase.

Table 6.1: Design criteria and assessment of the EMDG

Criterion	Assessment
Targeting the problem?	This depends on the economic rationale, so the answer is rather uncertain. It does focus on export enhancement, where externalities may be present.
Acceptable take- up?	Very high program take-up. There were 3712 claims in 1995–96, more than any other small business program, and a relatively high proportion of the target group of SMEs with significant new export potential. Non-using firms are generally aware of the program's existence.
Timely?	There has been some criticism of the time taken for firms to get grant payments, but 96 per cent of claims for 1994–95 were processed by 30 June 1996. Claim processing times improved around 10 per cent in 1995–96.
Inducement?	Seemingly high – but likely statistical measurement problems mean that in fact it is probably somewhat lower than estimated.
Large transfers overseas?	Probably not a significant problem, given its focus on SMEs.
Right duration, scale and target group?	Hard to assess right duration without clear rationale. If it is based on externalities then this suggests a permanent program. But individual entitlement by firms should be temporary — the current 8 years may be too long if the economic benefits are derived from export relationships and learning, rather than exports per se.
	The scale of assistance for eligible expenditure is relatively high at around 32 per cent. For example, the R&D tax concession provides a subsidy of less than 9 per cent.
	The focus on SMEs is probably appropriate — if nothing else, to increase additionality.
Administratively efficient?	Exclusion of firms making very low marketing expenditures keeps down compliance and administrative costs, as well as filtering out firms that are less committed to export growth. Administrative costs were \$6.3 million or 3 per cent of grants paid in 1995–96.
Firm compliance burdens?	Unknown, but Austrade has run client satisfaction surveys to assess problems.
Transparent and accountable?	There are clearly defined eligibility criteria. Some criticisms were made by the ANAO (1994b), but the problems appear to have largely been remedied.
Financed in least cost way?	Probably — depending on the rationale, a levy is probably too administratively burdensome, and it is difficult to pinpoint the exact boundaries of the class of firms which could pay it. But loans or some element of repayment could be considered.
WTO compliance?	The fact that eligibility for the grant (after the second year) depends on an export performance test may have implications for the scheme's concordance with WTO/GATT — see Pearson (1995).
Risks?	The scheme has advanced risk management processes to stem abuse. It filters out poor performers with export performance test after 2 years. Budget capping limits government exposure.

Source: Austrade (1994a and 1996).

6.3 Export Access

Background

Export Access is the small sister program to the EMDG scheme — with revenue costs of \$3.3 million in 1996, or roughly 1.5 per cent of the EMDG budget in that year (Austrade 1996). It delivers training and practical assistance to SMEs to become export-oriented (at no cost to the participant). It delivers its services via major business chambers and industry associations which, with participating firms, provide in-kind contributions to the program. From the inception of the program (in 1991) to 1995–96, 1566 companies had participated in the scheme. Current participation is about 250 firms per year — indicating the small scale of the program.

The review of the scheme by Wendy Tubman & Associates (1994) was critical of many features of the program. The scheme has undergone some slight modifications since that review, and is now administered through Austrade rather than DIST. But it is still useful to examine the major insights of the review, because it illustrates how to assess and re-design small business programs to improve their performance. Moreover, the review itself represents a good example of best practice in evaluation. It is a highly detailed, disinterested examination of the program — and uses a large range of analytical and empirical techniques.

We re-examine their findings below, supplemented by any additional evidence.

Rationales

The review did not find a well articulated economic rationale for the program, from policymakers or government. Unlike the EMDG scheme, it is unlikely that a case for intervention could be made on the basis of spillovers. This is because the Export Access program aims to develop some relatively simple skills in new or potential exporters, rather than to subsidise the generation of substantial new information about export markets. Using the classification set out in table 4.4, rationales V and VI probably provide the strongest in-principle basis for intervention. However, as discussed in chapter 4, it is possible to overstate the degree to which apparent capital market or informational imperfections really justify government intervention. Many private information markets are highly developed without government subsidies, and high transactions costs of dealing with smaller firms may sometimes be mistaken for capital market failures.

The evaluators assessed the question of whether small business had systematic problems in obtaining advice on exporting. They found that small businesses participating in the program used a wide range of other sources of advice on export expansion apart from Export Access. Many of them used EMDG — this is surprising as Export Access is primarily intended as a training tool for firms which have not yet achieved substantial exports, whereas EMDG is intended to subsidise export marketing in firms with a serious pre-existing commitment to exports.

The review also found that about 50 per cent of the very small firms used (and self financed) private consultants as a source of advice for exporting. As noted by the evaluators, this somewhat challenges the justification for the program. Even so, the evaluators argued that there were enough residual concerns about capital and information markets to warrant some government intervention.

Eligibility criteria

The evaluation was sceptical of allowing eligibility for firms which were already established exporters. As recommended by the review, the current version of the scheme limits eligibility to small businesses with less than \$1 million of exports in the year prior to application (and to less than \$3 million in the last three years). How effective this threshold is for limiting participation by experienced firms is uncertain.

The review also questioned the inclusion in the program of some very small firms with limited short-run export capabilities. In theory, the current (amended) set of eligibility criteria may solve some of these problems. Eligible firms must have turnover greater than \$300 000 (and less than \$20 million), and a business track record of at least 12 months in Australia as the main place of business. They must also demonstrate that the firm's export development would be substantially enhanced by assistance from Export Access — though inevitably such assessments must be subjective.

Another longstanding element of the eligibility criteria is the requirement that eligible firms must (other than in special circumstances) have more than 50 per cent Australian ownership. This should curtail transfers of benefits to foreign shareholders.

The apparent contemporaneous use of the EMDG scheme and Export Access by some firms also raises the question of whether it would be appropriate to amend eligibility criteria to:

• exclude firms currently using EMDG from Export Access? and

• only allow eligibility for EMDG grants after the initial four phases of Export Access have been completed?

Impact on exports and other firm activities

The review found that the amount of exports attributed by participants to the impact of the program was low, although a few participants performed extremely well. A limited econometric exercise failed to find any statistically significant difference between the export performance of 21 graduates of the program, and 17 potential participants — but these are small samples.

Austrade (1996) estimates that the program has generated an additional \$84 million of exports (or \$53 639 per firm). Based on program expenditure, the program yields about \$4 of new exports per dollar of government expenditure, which is considerably lower than that apparent in the EMDG scheme.

The evaluation found that the biggest non-monetary benefits of the program were very intangible. Program participants recorded increased confidence and motivation to export, rather than any large benefits from improved management, knowledge or product quality. For example, only:

- 9 per cent of the small business participants said the program had improved management or administration in the firm to a great extent;
- 11 per cent saw big impacts on product quality; and
- 19 per cent cited significant impacts on new product ideas or marketing concepts.

While these are subjective evaluations by the firms, they raise some doubts about the importance of one of the major theoretical mechanisms for benefits from export enhancement programs — knowledge transfers and increased incentives for efficiency. This is of relevance to both the Export Access scheme and the EMDG scheme. Further, less subjective, evidence is needed.

Administration and funding arrangements

The review noted that the small businesses participating in the program generally believed that the delivery of the program was improved by being through industry associations rather than direct from government. The review considered that even greater competition in delivery could generate benefits.

Program overheads were assessed as high relative to overall program expenditure, in part due to some large fixed costs, and the relatively low take-up of the program.

The evaluators were concerned about a miscellany of administrative practices which reduced accountability and transparency, and tempered the effectiveness of the scheme, including:

- poor identification of the small businesses that were likely to succeed under the program;
- loose application of the eligibility criteria;
- poor program records; and
- program monitoring questions to clients that elicited ambiguous and biased answers.

The evaluators also considered that funding arrangements could be re-designed. In particular, they argued that firms should contribute to the costs of the program, if they achieved export success(Wendy Tubman & Associates 1994, p.109):

Under such a system, participants would pay for the assistance they received if and when they achieved export success. That is, participants would enter into a contract with service providers for assistance of a certain value. At the same time an amount of reasonably expected export income would be negotiated. Once this amount had been earned as a result of the assistance, the value of the assistance received by the client would be re-paid. In essence, such a system is addressing perceived failure in the capital market by emulating a business lending agency. The difference is that the Program Lenders are making up for the perceived unwillingness for private lenders to lend to SMEs despite the fact that they would be justified by eventual higher earnings. Of the 50 firms interviewed, 47 (94%) supported the idea.

This idea is similar to that advanced in our previous analysis of the EMDG scheme.

Cost-benefit analysis

The 1994 review found that the program failed the cost-benefit test, but considered that changes to the scheme — such as conditional repayment of grants — would generate net benefits. This underlines an important point. Finding that a program currently generates a net social loss does not necessarily imply that cessation of public funding is appropriate. Re-design may also be an appropriate response.

In undertaking their cost-benefit analysis, the reviewers noted that increases in production or employment notionally brought about by the program are mostly not additional to the economy. They estimated that around 10 per cent of the value of production was genuinely new to the economy — either because of productivity improvement or because some formerly unexploited resources were

now used. That means that most of what *appears* to be a gain from the program is illusory, and that less intuitive methods have to be used to properly appraise the real economic impacts of such programs. This is relevant to the evaluation of any small business program.

6.4 The Enterprise Development Program

Background

The EDP, formerly NIES, delivers a range of enterprise improvement services to SMEs in the traded goods and services sector.⁹ The program is jointly administered by Commonwealth, State and Territory Governments. It achieves its objectives by:

- providing diagnosis and assessment of a firms' strengths, weaknesses, opportunities and threats;
- planning services with private sector consultants;
- continuous improvement, for example via the Self-Help Benchmarking Manual: and
- monitoring the performance of participants.

The principal vehicle for achieving these objectives is the provision of subsidies for private sector consultancy services to small businesses.

Rationales

What is the economic rationale for extension services? Existing statements by policymakers and government tend to emphasise the value of upgrading the competitiveness of small businesses in the traded goods sector. This is the goal of the program, but is not by itself a coherent economic rationale. Firm competitiveness confers private benefits to owners, and markets provide strong incentives for firms to pursue efficiency gains. In the absence of market failures, firms should, on average, undertake the right amount of activities which improve their competitiveness (such as training, innovation or investment). However, as noted in chapter 4, there may be economic rationales for providing advice or training to firms.

The EDP includes a range of initiatives relevant to small business but which are not delivered to small businesses. For example, the School Industry Links Demonstration Program, 'E' teams, and Young Achievement Australia are all educational programs for fostering business culture. These program elements are not considered here.

First, at the margin, firm activities which are intended to upgrade competitiveness may sometimes produce spillovers benefiting other firms. This is emphasised by the Price Waterhouse (1996) and BIE (1992c) evaluations of NIES/EDP, and by BIE (1993a). But the EDP is largely aimed at the *diffusion* of best-practice techniques — existing knowledge — rather than the generation of entirely new knowledge. If such knowledge was highly non-rival¹⁰ and non-excludable¹¹ as maintained by the BIE (1992c, p.13), then there may be a basis for a subsidy to generate the stock of information in the first place. But once in place, its non-rival, non-excludable nature would by definition assure its adoption by firms without the need for a diffusion subsidy. The role of government might be to subsidise the research that led to the knowledge in the first place, but it would not have to actively diffuse it thereafter.

Accordingly, spillovers may justify minor elements of the EDP — like the development by AusIndustry of information about best practice. But they do not obviously mandate the most important element of the EDP, the subsidisation of consultancy services. Such subsidisation presumes that there are impediments to information transmission between firms. To explain why there might be a rationale for such subsidies we have to turn elsewhere.

As noted in chapter 4, businesses do not always operate at best practice — they can be technically inefficient and they may have misperceptions about the means of improving their performance. Moreover, even poorly performing firms may not exit rapidly. If it is possible to raise the performance standards of such firms through enterprise improvement programs, there may be a productivity gain to the economy. On the other hand, as we warned in chapter 4, it is hard to tell whether the reluctance by a small business to engage external advice reflects sub-optimal practice, or perfectly rational behaviour based on the high transactions costs of selecting appropriate advisers.

A third possible rationale is capital market failures. Small firms may not be able to borrow to finance the cost of advice from consultants for enterprise

 $^{^{10}}$ Such that one firm's use of the knowledge has no impact on the ability of another firm to use it

¹¹ Such that one firm cannot prevent, or charge for, others' use of the knowledge (for example, if it is not patentable).

But it is important to also note that programs aimed at subsidising knowledge acquisition by SMEs are only one means of improving enterprise performance. Other measures, such as 'toughening' the environment in which firms work (Ergas and Wright 1994), so that poor firms exit quickly, may have an equal if not greater role. This suggests that it may be appropriate to scrutinise and reform measures which weaken competition between firms (such as border protection, restrictive licenses for business operation, discriminatory curbs on shopping hours, and some zoning regulations).

improvement. On the other hand, the amounts required for such finance are very small, and are highly unlikely to be subject to systematic capital market imperfections. This applies especially to the somewhat larger SMEs which are the current target of extension services.

In summary, the strongest in-principle rationale for programs aimed at improving enterprise productivity is the apparent persistence of technical inefficiency in a sizeable minority of firms — though this is not without its limitations as an argument.

There is a far less obvious rationale for limiting assistance to firms in the traded goods and services sector. Indeed, to the extent that there is a link between intensity of competition and enterprise performance (as found by Ergas and Wright 1994) then firms producing non-traded goods and services may have greater problems of technical inefficiency than others.

Eligibility criteria

States use different criteria for filtering firms, so that the program should really be seen as eight regional sub-programs (table 6.2). For example, some sizes of firm eligible in Victoria would not be eligible in Queensland.

The differences may reflect:

- appropriate responses to variations in the size structure of industries and in the nature of the problems experienced by different types of firms in each state. However, data from the ABS (1996a) suggest that firm size structures across the states are very similar, with the exception of Tasmania, where significantly more people are employed in smaller businesses (employing less than 20 persons) than in other states;
- differences in the subjective judgements of different jurisdictions when determining thresholds; and
- the existence of other state and territory programs intended to deal with the problems of firms excluded from the EDP.

While it may make some sense to allow different jurisdictions to determine appropriate thresholds for programs, the observed degree of variation does not appear to have an obvious policy rationale.

Table 6.2: Criteria for the EDP program by state

State	Size criteria	Other criteria	Other information
NSW	Turnover between \$0.5m and \$30m. Must have at least 5 employees.	Value-adding manufacturer or traded services (eg not retailing or legal services). Must be exporting or have export potential or import replacement potential. Suppliers to export industries have received assistance, eg processors of sheep skins and freight forwarders.	Initial inquiry may come through 'hotline' or be referred from state industry department or from accounting profession. There is an initial screening process and those considered worthy are referred to program Client Managers. The latter are under contract to the state, have industry experience and may have undertaken Commonwealth training modules.
WA	Funding is restricted to firms (counting the parent and all subsidiaries) with less than 100 full time equivalent employees (if a manufacturing firm) and less than \$20m in turnover.	Must be a WA-based manufacturer or service provider that is currently exporting or has the potential to export. Must have existed and been successfully trading for 2 years and be less than 10 per cent owned or funded by government or government agencies.	The scheme offers two modules only: business planning and export planning. The most any metropolitan firm can get is \$5000 on dollar-for-dollar basis (ie a 50% subsidy). Nonmetropolitan companies, however, can get a 65% subsidy.
Tas	Guidelines are flexible, but usually the firm must have at least \$500 000 turnover. No employment requirement. Also, if firm can demonstrate potential for rapid growth it may be exempt from turnover requirement.	Must be in internationally traded goods and services (includes suppliers providing inputs to these activities). Local management must have sufficient autonomy to undertake EDP programs.	Promotion is via publications, referrals from consultants but most come from client managers who are 'on the road'. Initial appraisal may be subsidised up to 100 per cent if total cost does not exceed about \$3500. A company contribution is expected for subsequent EDP products.
Qld	Minimum of \$500 000 turnover to maximum of \$50 million or minimum of 4 employees to maximum of 500.	Must be value-adding and have potential to generate economic benefits for Australia by exporting or import competition. Firms supplying essential goods and services to an exporter may also be eligible.	Note however that particular EDP services have their own thresholds. Many services are not available for smaller firms.

Table 6.2: Continued

SA	If the firm is a manufacturer then it must have minimum of 15 employees, if it is in services the firm must employ a minimum of 8 employees.	Company must be in financial position to support the project and implement improved practices. There must be a management commitment to implementation, and potential for export and growth or competing against imports. Suppliers to firms meeting export or import competition criteria above are also eligible.	Diffusion of program's existence is by word of mouth but also Internet site. Use Client Managers similar to NSW.
Vic	Firms must have 20 or more employees or turnover \$1m or more.	Operating or intending to operate in Victorian minerals, energy, manufacturing, or service sectors. Firm should have financial and management strength. Maximum assistance is \$50 000 and firm must complete a business plan. The firm must undergo a strategic/economic management and financial assessment. Note there are no criteria to target traded goods or services.	Use Client Managers similar to NSW. Most clients referred to them by consultants.

Source: Advice from relevant authority in each jurisdiction, January 1998.

It should be noted that at its inception in 1986, NIES/EDP replaced a series of much more ad hoc state and territory programs, and it is hardly surprising that a few elements of variation between states persisted in the new scheme. There may be gains from analysing whether the existing set of criteria in each jurisdiction maximises the effectiveness of the program, and whether there is scope for a greater degree of uniformity in the industry extension arrangements.

Funding and take-up

The budget allocation for EDP is relatively small. The Commonwealth provided \$15.6 million to the states and territories for EDP in 1995–96, of which \$10.6 million was for direct subsidies for businesses. AusIndustry estimated that about 2500 enterprise improvement services were provided to firms under the program in 1995–96 (DIST 1997a), or a subsidy of \$4250 per service. Actual uptake of the program is probably somewhat less, as many firms use multiple services.

Given the focus of the program on bigger small businesses with export orientation, the take-up appears to be appreciable.

Even so, the Price Waterhouse evaluation (1992) revealed significant ignorance (at that time) by non-participating firms about NIES. Forty two per cent of firms were not aware of NIES at all. A further 27 per cent did not know enough about NIES to know if it was relevant to them. A more recent study (but focused only on the processed food sector) by the AATS&E (1994) found that over 80 per cent of firms were aware of the program. But the LEK (1994) study found that only 41 per cent of service exporting firms were aware of the program.

Impacts of the program

One measure — albeit an imperfect one — of program effectiveness and impact is participants' satisfaction with the program. The BIE (1988b) found that 91 per cent of firms using NIES services were satisfied with the consultancy services they had received. These consultancies covered a wide range of management, planning, marketing and technical issues (table 63).

However, another BIE survey done at around the same time, covering innovative small firms in emerging industries, gave a different picture. This survey found a higher usage rate for NIES (around 7 per cent) but a lower level of satisfaction — only half the firms which had used NIES perceived the services provided had been useful (BIE 1988c). The study also suggested there may well be a lack of awareness of NIES services.

But firms' reported satisfaction with a subsidised service is very weak evidence in favour of such a subsidy. Firms would have incentives to paint the services in the most favourable light if they fear that there is a risk of losing the subsidy through adverse comment.

Moreover, even if firms value a particular subsidy, this does not mean that the money is well spent. This is because firms are getting something for nothing. In theory, they will favour such subsidies so long as their value to them exceeds any costs they face — but the budgetary costs borne by taxpayers may be much greater than the net benefits firms receive. Suppose that the government gives a group of firms \$2000 each in subsidy so long as it is spent in certain specific ways, and say that the firms value the services at \$1500.13 To them the services

Why is it not worth the full \$2000? A cash donation of \$2000 *would* be worth \$2000, as would a subsidy for an activity the firm was going to undertake anyway. But a tied subsidy 'equivalent' to \$2000 will, in many cases, be worth less to the individual firm, because it can only be earned by the firm changing its behaviour, which at the margin it may not want to do.

are well worthwhile, because they get \$1500 of services for nothing. But the economy is worse off in two ways:

- there is a waste of resources amounting to \$500 per firm, unless there is some compensating external benefit; and
- there are distortions generated in raising the \$2000 subsidy through the tax system, amounting to perhaps around one quarter of this amount (chapter 4).

Table 6.3: Satisfaction with NIES subsidised consultancies

	Satisfaction (share of total responses)			
Type of service	yes	partly	no	total
	%	%	%	%
Strategic or business planning	89	11	-	100
Export marketing	90	8	2	100
Other marketing plans	89	8	3	100
Production processes and technology	96	2	2	100
Computer applications	90	4	6	100
Management accounting	91	4	4	100
Product design and development	97	-	3	100
Contribution of workforce to firm's goals	93	7	-	100
Quality	100	-	-	100
Other	81	14	6	100
Total	91	6	3	100

Source: BIE 1988b.

A better way of assessing program effectiveness is to link objective measures of firm performance with program usage. A UK study by Segal Quince Wicksteed (1989) linked the use of consultancies to improved firm performance. The study assessed additionality (inducement) by asking firms whether they would have gone ahead with projects if consultancies had not been available. 14

Using a similar methodology to that study, Price Waterhouse (1992) undertook an evaluation of the NIES program in 1991. The Price Waterhouse study involved a survey of firms that had used NIES services which yielded some 650

150

¹⁴ This method is subject to some concerns over strategic answers, subjectivity and economywide feedbacks. For example, while some projects might go ahead in firms which used the policy, other firms not using the policy might find their investments crowded out.

useable returns, and a control group of non-NIES firms which provided approximately 800 useable returns. However, other than specifying that they be in the manufacturing and software sectors, the evaluation did not appear to match the two samples for firm size, age or other characteristics which could be expected to influence any comparisons between the two samples.

The Price Waterhouse assessment focused on two issues:

- the extent to which NIES firms had implemented 'best practice' activities, which was defined to involve 'specific, formal and integrated programs oriented to one or more aspects of improving productivity'; and
- the extent to which NIES had resulted in improvements in firms' performance and international competitiveness.

Survey results generally showed that NIES firms implemented best practice techniques to a greater extent than the control group (table 6.4). For example, 53 per cent of NIES firms were 'substantially' or 'rigorously' engaged in best practice strategic or business planning, compared to 34 per cent of the control group. The evaluation also found that NIES respondents were more competitive in their prices and had higher export intensity (exports as a proportion of total sales) and profitability than the control group.

A follow-up study (Price Waterhouse 1996) found that the firms undertaking more than three EDP programs performed better in terms of a range of firm performance indicators than those which undertook less. On this basis, Price Waterhouse concluded that the benefits identified in its 1991 study had been shown to be of a longer term nature.

Price Waterhouse also compared EDP firms' growth in sales and value of exports with that of manufacturing as a whole and found that the data suggested that EDP firms outperformed manufacturing as a whole in the period 1990–91 to 1994–95.

¹⁵ As these results were based on firm self-assessment, Price Waterhouse used follow-up interviews to see if there was any systematic tendency to over- or under-estimate. They concluded there was no such evidence either way (Price Waterhouse 1992).

Table 6.4: Adoption of best practice in NIES

Extent to which the enterprise implemented best practice substantially or rigorously NIES participants Control group % % Strategic or business planning 53 34 23 8 Export planning Quality management planning 51 42 25 28 Advanced technology plan Sound product development procedures 46 22 Use of advanced manufacturing systems 44 40 People development/involvement programs 53 26 Average 42.1 28.6

Source: Price Waterhouse (1992, pp. 5-6).

However, there are a number of limitations in attempting to discern the impact of NIES by making comparisons of these kinds. The control group in each case is not a genuine control group. Thus, biases may be introduced by comparing:

- The adoption of best practice among participants with a group of non-participants. Non-participants are not randomly assigned to a control group (as in a clinical trial) but *decide* whether they will, or will not, participate in the program. Only certain types of firms will choose to, or not to, enter the program. Thus, (analogous to possible problems with the EMDG scheme) it is possible that those firms which are likely to use NIES may be inherently more likely to adopt best practice techniques, be more competitive and perform better than those which elect not to participate. This will tend to overestimate the real impact of the program (box 6.1). Or, the firms which don't take up the program may already have adopted these best-practice techniques in which case the sample selection bias problem will tend to underestimate the real impact of the program.¹⁶
- Those participants which use three or more program modules with those who used less. It is possible that firms which use only one program are

Another possible problem may be non-respondent bias, which could be significant given the relatively low response rate to the survey. This bias arises when survey respondents are not representative of the underlying population of NIES firms. The usual method of checking for this bias is to undertake a further survey of firms which did not respond, to check that they do not differ systematically from those firms that did respond.

younger than those which use more — in which case, the effects attributed to NIES may be really due to firm age. Or it may be that firms which find the programs useful go on to use more programs. This would not imply that multiple programs would necessarily be beneficial for all firms.

• Export growth among participants with export growth in manufacturing as a whole. But the program generally specifies that only firms which operate in the traded goods sector, are above a certain size, and have a growth orientation, are eligible to participate. In this case, the comparison is akin to saying that people in a weight reduction program tend to be heavier than the rest of the population.

The Price Waterhouse evaluation did address some of these sample selection bias problems by appraising the impact of the program on participants using self-assessment. They asked NIES participants to attribute the extent to which their implementation of best practice could be ascribed to NIES. They found that 51 per cent of respondents considered NIES had no impact, 3 per cent attributed the impact entirely to NIES and 46 per cent considered it largely, but not wholly, due to NIES (Price Waterhouse 1992, p. 20).¹⁷ This result provides a subjective, but still useful indicator of the effectiveness of the program. It also suggests that while there may be significant benefits from NIES-type programs, they apparently have no impacts for a sizeable share of the participating firms.

The 1996 survey by Price Waterhouse found that 37 per cent of more recent EDP participants would have implemented the management improvements even in the absence of government assistance — indicating significant wastage of the subsidy.

Interestingly, with the exception of the business diagnostic service, most participants in these extension programs said (after the fact) that they would be willing to undertake the best practice programs at their own expense (table 6.5). This has two implications. It suggests that:

- these users obtained good value from the program; and
- a loan or contingent payback scheme, as elaborated for EMDG and Export Access, may be appropriate. Contingent payback schemes are particularly relevant where the fundamental problem is one of firm ignorance or underperformance. Under such an approach, firms which implemented continuing systems of best practice, such as TQM, could be required to pay back the grants. This would also have the advantage of providing automatic information about the effectiveness of the scheme.

¹⁷ The study also found that the benefits to the firm of involvement with NIES increased with the number of NIES programs undertaken.

While many firms clearly obtained enough benefits out of the NIES programs to be willing to pay for them, the results in table 6.5 imply that for a sizeable minority the programs did not produce benefits equivalent to the cost of the program — particularly for the business diagnostic, business assessment and planning, and WCM modules. For the program to have net benefits, the shortfall to participants who valued the program less than the resources used would have to be offset by participants with favourable experiences, and/or by spillovers to others. The 1996 study did find some evidence of spillovers, with the benefits of EDP programs flowing on to participants' suppliers and customers and, to a lesser extent, to competitors and the wider community.¹⁸

Table 6.5: Willingness to pay for the program

	Per cent of participants
Business assessment	56
Business diagnostic	39
World Competitive Manufacturing	61
Business Planning	61
Quality Assurance	84
Total Quality Management	85
Other Quality Programs	100
Value Adding Management	83

Source: Price Waterhouse (1992, p. 91).

Target groups, nature of assistance and duration

While there appear to be some in-principle rationales for the program, and some evidence of positive impacts for participants, this still leaves obvious questions about the appropriate target group, nature of any assistance, and its duration.

Longer-term participants in NIES/EDP have an average turnover, employment size and export orientation much greater than average Australian businesses (table 6.6),¹⁹ almost certainly reflecting eligibility conditions which are oriented towards bigger exporting businesses. Is this the right target group?

¹⁸ Though it is possible some of these flow-on effects were mediated by the price system — so-called pecuniary externalities — which should not be counted in cost-benefit analyses.

Data for average Australian businesses exclude those active in the agricultural, forestry and fishing industries, as well as self-employing businesses in all sectors.

Table 6.6: Nature of NIES/EDP participants, 1994–95

	Long term NIES/EDP participants	Participants since 1994	All non- agricultural employing businesses	All employing businesses in manufacturing
Average turnover (\$m)	13	7	1.8	4.6
Average employment (persons)	75	37	12.5	34.2
Percentage which export	68	61	3.8	13.8

Sources: Data for NIES/EDP participants are from survey data in Price Waterhouse (1996, pp. 3-5). Data on the employment by non-agricultural employing firms and manufacturing employing firms are from the ABS (1996a). Data on turnover and exports of such firms are from IC/DIST (1997, p. 127, p. 112 and p. 143).

Arguably, extension policies should target firms which are not just about to exit, but which lie in the lower tail of productivity performance. If the program targets the bigger, faster growing firms in this group then, for a given amount of additionality, it is likely that spillover benefits to customers and suppliers will be larger, as will absolute efficiency gains (box 6.2). On the other hand, if the program focuses on smaller or slower growing firms, additionality is likely to be higher, because these sorts of firms are less likely to have autonomously introduced the enterprise improvement measures.

The analysis in box 6.2 suggests that, so long as the main vehicle for assistance is subsidised consultancy services, the current focus on the intermediate sized enterprises is probably appropriate — so long as additionality is not too low. This was also the conclusion of a review by Nicholas Clark and Associates (1995). However, empirical work should be undertaken to check the productivity gains and additionality for participants of different sizes.

Even so, there may be grounds for other enterprise development measures — delivered at low cost — to the smallest firms. One possible strategy is for government to pay for the development (perhaps jointly with industry associations and chambers) of high quality enterprise improvement information and computer based diagnostic tools.²⁰

Box 6.2: Targeting NIES

Imagine a firm (call it firm i) which has value added equal to Y_{it} at time t. If the firm undertakes an enterprise improvement program then its productivity increases by γ_{it} in each period t. Future gains are discounted by a factor (1+r) to account for the fact that people prefer current gains to

At the moment, AusIndustry develops some material on best practice, but it is distributed via publishing houses at prices which will deter some potential users.

future ones. The cost of providing the enterprise improvement service to the participating firm (for example, subsidising consultant's advice) is a subsidy of S_i . The degree of additionality (the probability that the firm would not have undertaken the enterprise improvement program without the subsidy) is ϕ_i . The net benefit of NIES (g) is therefore:

$$g_{i} = \left\{ \phi_{i} \sum_{t=1}^{J} \frac{\gamma_{it} Y_{it}}{(1+r)^{t}} \right\} - S_{i}$$

The policy maker has to try to choose firms which maximise the value of g_i . The value of g_i for different types of firms has not been assessed in any evaluation, but we can make some conjectures. First, it seems likely that for a given budget, only a few more firms could be reached by an extension program aimed at smaller firms — this reflects the fixed costs in finding suitable firms, and in providing consultancy services. Thus the per firm subsidy probably only increases weakly with firm size. This implies, *all other things being equal*, that it is better to target bigger firms, because the productivity gains are realised across much larger value added. For example, say that policymakers have two groups lining up for assistance. They have a fixed budget of \$5 million to give out as grants. Let us suppose that for both groups of firms the following parameters are fixed: ϕ =0.3, r=0.05, γ is 0.01 (for only one period, and thereafter zero). Each firm in the first group has Y=\$5 million and S=\$5000 (so that 1000 grants can be given out); the other has Y=\$1 million and S=\$4000 (so that 1250 grants can be given out). If the program is directed at the first group, the overall gain in millions of dollars is 1000 (0.3*0.01*5/1.05-0.005) = \$9.3 million. If it is directed towards the second group the gain is 1250 (0.3*0.01*1/1.05-0.004) = -\$1.4 million.

Second, it is likely that additionality is lower for fast growing and/or large firms because these sorts of firms tend to have information networks and corporate structures which would encourage enterprise improvement without the program, and they face less financial constraints for funding such improvement. On the other hand, we suspect that additionality initially decreases less than proportionately with size.

Third, the relative magnitudes of productivity gains realised from additional investment in enterprise improvement in small versus larger firms is unknown. It may be that some aspects of enterprise improvement programs (such as quality assurance systems) are less suited to less sophisticated smaller firms — and then firms have to exceed some threshold in sophistication to realise large benefits. On the other hand, larger businesses are larger because they have acquired characteristics suited to survival — and additional investments in enterprise improvement may yield decreasing returns. Thus, there are offsetting influences on how γ might vary by the size of the firm.

Finally, if there are spillover benefits to customers and suppliers, these are probably greater (in absolute terms) for bigger businesses, because they have more firm relationships, and are more likely to forge formal linkages (a medium for knowledge transfer) than smaller firms (BIE 1995a). The overall implication of these varying factors is that we suspect that overall gains of a program like NIES are maximised by choosing intermediate sized firms.

These could be disseminated using low cost media such as the Internet, floppy disks or CD-ROMs. The marginal variable costs of information disseminated over the Internet is effectively zero. For governments aiming to maximise information diffusion, the efficient price is then zero. The costs of other media are non-zero, but still small. For example, a CD-ROM can easily contain 500

Mb of information and costs about \$4 to produce. The Internet has particular advantages as a mode of communication to small businesses, because they can access information after normal business hours. Its major current disadvantage is that many firms still do not have Internet facilities.

One problem with such an approach is the risk of government 'failure'. Government officials may not be very good at undertaking or even commissioning research into diagnostics and best-practice information for small businesses. In contrast, markets are already highly active in the provision of information and business software, and they face market disciplines that mean that products which have limited usefulness do not survive.

There may be scope for effective government information provision, where:

- the government has access to useful data which are unavailable to private sector agents (eg tax office or ABS data);
- there are systematic information/diagnosis problems for a large number of small firms, and the information is potentially easily diffused which creates disincentives for the private creation of the information. This argument is similar to that for subsidised rural R&D corporations; and
- there are few existing commercial or public sector services. But in many cases, government only needs to refer small business to pre-existing sources of information.²¹

Even where government funds the provision of information, it may be better to leave both delivery and choice of the type of information services to industry associations and business chambers. Arguably, they have better credibility with business, stronger networks and greater incentives to supply businesses with relevant and useful tools than do government officials.

What is the optimal *duration* of extension services? The BIE (1992c, p.45) noted that while there were continuing permanent grounds for government to facilitate the supply of new NIES-type programs:

on the demand side, the justification for continuing assistance is less credible. As the impact of NIES-type programs become more widely known, through the information programs of NIES, the demonstration effects of successful firms, the development of competing programs to meet the demand created by NIES and the pressure put on firms to become more internationally competitive by other actions of government, the non-appropriability problem for adopters should diminish.

²¹ For example, the Commonwealth Bank provides inexpensive software for better business planning, and the Small Business Victoria website (http://home.vicnet.net.au/~sbusvic/sbv.htm) provides small business research links to sites which offer thousands of free information resources to small businesses.

Eventually there should no longer be a need for subsidies for adopters of NIES-type technologies.

Similarly, the Burgess report (1994, p.36) saw extension services as serving a short-run catalytic role only. On the other hand, it could be maintained that, due to the continual emergence of *new* firms and *new* ideas about what constitute best practice, there may be grounds for a more enduring program.

There are few grounds, however, for long-run assistance to *existing* firms, if the major problem is ignorance of the general benefits of best practice. Once firms have participated in an EDP program, they should be well aware of the gains from adoption of best practice techniques — even if these techniques are continually shifting. In this case, it is hard to justify continuing subsidisation of participants in extension services.

Summary and lessons

On the basis of its findings, the 1996 Price Waterhouse evaluation recommends a number of changes to improve the cost-effectiveness of the program. These include: the inclusion of spillover criteria in its firm targeting; greater emphasis to EDP programs that bring about early improvements in the way firms do business rather than the previous emphasis on various EDP planning programs; and giving more priority to firms which are likely to undertake repeat EDP programs.

Overall, the Price-Waterhouse and BIE studies suggest that the NIES programs should clear some evaluation hurdles. Even so, there is evidence of resource wastage from firms which would undertake improvement programs anyway — which may provide scope for better targeted assistance. Moreover, there are significant differences in eligibility criteria between states, and an emphasis on the traded products sector which is hard to justify. These could be re-examined. There may also be scope for repayable grants, rather than the existing subsidy/grant arrangements. Finally, none of the evaluations to date have used methodologies — such as those used by Jarmin (1997) — which provide rigorous evidence about the impact of extension services on productivity. This deficiency should be addressed.

Commonwealth funding for the EDP is currently winding down, but other extension services may be provided by other jurisdictions.

6.5 The New Enterprise Incentive Scheme (NEIS)

Background

NEIS provides a package of assistance for people on social security benefits to establish new small businesses. The program includes initial training and then, subject to an acceptable business plan, income support, business advice and mentor support for up to one year.

The scheme was introduced as a pilot program in 1985 and is administered by the Department of Employment, Education, Training and Youth Affairs. Expenditure has increased rapidly. From 1989–90 to 1996–97, the budget increased from \$5.2 million to \$112.2 million — or by a factor of 22. In 1996-97, the program financed 7492 people in 5625 new small businesses.

Rationale

The objective of the scheme is to assist unemployed people to find jobs by setting up self-employment opportunities — and as such, is one of a range of labour market programs intended to lower overall unemployment rates. There are clearly strong rationales for government involvement in moderating unemployment — both for economic and social reasons. Labour market programs other than NEIS provide training and employment opportunities with existing employers. But it is possible that there are also job opportunities that can be best realised through self-employment in new enterprises.

- One of the major barriers to obtaining a job is overcoming employers' ignorance about the real aptitude and motivation of potential recruits. These informational problems are eliminated for the self-employed, though they can re-appear in a different form if the fledgling firm needs to acquire financial capital from banks.
- Self-employment is much more flexible, in respect of wages, conditions, hours worked and labour market regulations than many jobs in existing firms. This may suit particular people, and overcome some rigidities that affect the abilities of employing businesses to recruit new staff.
- Some individuals value highly the independence and control they have when running their own business. The wage level at which they are prepared to work as an employee may then be higher than the level required as a self-employed worker acting as an impediment to their success in searching for a job as a hired worker.

The above factors do not, by themselves, contribute a case for subsidies for starting new businesses — they are natural advantages of self-employment over hired work. However, some unemployed people may not pursue self-employment, even if otherwise suited to it, because they lack some business skills, are uncertain over the returns or because of the disincentive effects of social security payments. NEIS, by tapping the possibility of employment generation in new enterprises, fills a gap that would otherwise exist in labour market programs.

Eligibility and delivery

To be eligible for assistance a person must be receiving a DSS allowance or pension, be available to work at least 20 hours a week, not be an undischarged bankrupt, and may not have received the NEIS allowance in the previous two years, or previously for the same business activity.

The business has to be new, independent and not compete with an existing business unless the applicant can show that there is an unsatisfied demand for the product/service. The latter eligibility criterion appears to be an attempt to increase the likelihood that the job created is truly additional, rather than one which displaces employment in similar competing businesses.

A successful applicant is paid a flat rate (taxable) allowance, in line with the unemployment benefit, for the first year of the business.

The scheme provides one of the few examples of contestable delivery. It is delivered locally by 140 managing agents (such as Business Enterprise Centres, accountancy firms and training organisations), determined on the basis of open tender. Managing agents are paid an agreed fee based on achieved outcomes.

Impacts and lessons

The NEIS program was audited by the Australian National Audit Office (ANAO) in 1992. The conclusion of the ANAO (1992) was:

On the available limited data, the ANAO considers that NEIS has only been moderately successful in achieving its primary objective of assisting unemployed persons to establish viable long-term businesses, and that there is a substantial cost to the Government in training and supporting the participants in the scheme (in terms of successful businesses established). The scheme also appears to have had some successes in helping participants to gain employment.

This conclusion was based on their measure of the program's cost effectiveness. They estimated the net cost per successful participant to be \$17 100 in 1991–92 prices (\$18 599 in 1995–96 prices). To establish the number of successful

participants, ANAO used survey results which indicated that 36 to 75 per cent of NEIS participants remained in businesses after three years. ANAO used the lower of these estimates.²²

NEIS has also been evaluated by the Department of Employment, Education and Training (DEET 1992, 1993). As in the ANAO review, they calculated the cost per successful participant as follows:

- The cost of the scheme in 1991–92 was \$38.68 million with 2752 participants.
- Three months after the cessation of NEIS grants (15 months after the start of the program for an individual participant), 64 per cent of the original group of participants were still self-employed (1761 people), and 9 per cent were in other employment (248). The rest were unemployed or had withdrawn from the labour market.
- The cost of the scheme per 'successful' participant is therefore \$38.68m/1761 = \$22 000 per self-employed participant or \$38.68/(1761 + 248) = \$19 300 per employed participant.

Using this method, the 1992 and 1993 DEET evaluations found that the cost effectiveness of NEIS in obtaining desirable labour market outcomes was relatively low. In the 1993 evaluation, DEET found that JOBSTART and JOBTRAIN cost \$3400 and \$10 300 respectively, or roughly 18 and 53 per cent of the NEIS cost per employed participant.

However, the ANAO and DEET figures suffer from a number of shortcomings as measures of the real budgetary and economic impacts of NEIS, relating to:

- how many participants would have set up a business anyway (the additionality issue);
- displacement (as other unemployed people fail to get a job, and existing businesses shed jobs or close);
- gains from tax revenue obtained from the earnings of entrepreneurs (as well as savings of social security payments) though these are only relevant for additional non-displacing jobs; and

As participants would generally have received unemployment support in the absence of the program, ANAO used adjustment factors to calculate a net budgetary cost for the program. The adjustment factors were 65 per cent of the program's income support component and 95 per cent of the program's formal training allowance (ANAO 1992). In other words, if NIES had not existed, the NEIS participants would have received unemployment benefits equal to 65 per cent of the program's income support component and 95 per cent of formal training allowance.

• discounting of future employment gains as a job created in the future is not as valuable as a job created today.

Effectively, the ANAO and DEET studies assume that NEIS inducement is one hundred per cent and that there is no displacement of other jobs. In appendix E we set out a theoretical framework for the assessment of NEIS, and use a variety of data sources to estimate the possible magnitude of the real budgetary cost per new job created. Depending on the parameters used, we obtain estimates of between a budgetary cost of about \$100 000 per new job and a budgetary gain of \$2800 per job. Our neutral scenario suggests a budgetary cost of about \$14 400 per job. Further empirical work is required to more precisely determine the budgetary impact of the program.

Even though we set out an detailed methodology in appendix E there are other costs and benefits which, ideally, should be considered.

- The economic costs of firm failures under NEIS probably exceed the costs of failures of JOBSTART participants. Say that a particular worker is poorly matched to a business under a labour market program such as JOBSTART. The manager is probably able to identify the problem early, and remedy it, ultimately through separation if it persists. However, in a self-employed business under NEIS, the degree of external scrutiny of the performance of the NEIS participant is relatively small.²³ A badly run business will lose customers and eventually fail (voluntarily or through compulsory liquidation or bankruptcy) with costs for badly served customers, any employees, the operator and creditors.
- It is widely thought that many of the economic and social costs of unemployment are tied closely to the proportion of unemployed people who are long-term unemployed. For example, skills and self-esteem erode after long spells of unemployment. In this case, labour market programs which shift the long-term unemployed into jobs, even though this is at the cost of others entering spells of short-term unemployment (so-called 'churning') may increase labour market efficiency, as well as produce social gains. The methodology of Piggott and Chapman (1995) may have some relevance to the analysis of this issue.
- There may be advantageous learning effects. A NEIS venture may fail, but the subsidised entrepreneur may learn some additional skills which lead to another job, either as a subsequent non-subsidised business or as an employee.

²³ The mentor may have some influence, asmay creditors.

• In some cases, skills acquired by NEIS participants may be transferred informally to other unemployed people (eg family members), or there may be demonstration impacts.

Past evaluations have sought to identify ways to increase the survival rates of businesses set up under NEIS. For example, the evaluation by DEET (1992) suggested:²⁴

- better screening arrangements, in particular improving the opportunities for self-assessment by applicants of the likelihood of their business success before fully participating in the program;
- using business mentors to provide an increased level of program support to participants;
- improving the quality of training of participants, for example by providing more specialist training; and
- increased monitoring of outcomes after the NEIS allowance ceased.

However, as noted in appendix E, if measures increase survival rates by (unintentionally) decreasing additionality, then the real economic effectiveness of the program can decrease. The challenge is to target the program at those businesses which are genuinely additional and to design program attributes or screening mechanisms which increase survival rates. A possible strategy for achieving this is set out in appendix E.

Another important aspect of the performance of the program is the effectiveness of managing agents versus delivery by state governments. In 1989-90 the Government encouraged private and non-government organisations to act as intermediaries in the delivery of the program. DEET (1993, pp. 17-19) examined the effectiveness of these agents in two ways.

First, they compared the employment outcomes of participants under managing agents with those under non-managing agents. This suggested that outcomes were worse under managing agents (with for example, 50 per cent of the managing agent group in self-employment after 12 months compared to 61 per cent of the non-managing agent group). However, it appeared that most participants in the non-managing group were from states where better outcomes have been traditionally achieved, so that the difference in performance may reflect confounding factors, such as state location.

Second, the evaluation compared the performance of the program in 1990 (mostly state administered) with that in 1993 (mostly managing agents).

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²⁴ Compared to the 1992 report, the 1993 recommendations were relatively minor.

Outcomes had improved over this time. This, with other reasoning²⁵, was taken to be evidence that the managing agent approach had improved the delivery and effectiveness of the scheme.

It is hard, on the basis of this conflicting evidence, to be certain about the impact of managing agents on the effectiveness of the program.²⁶

6.6 Other small business programs

So far we have assessed only four small business programs. As noted in chapter 3, there are many times this number. However, it is impossible to review them all in detail. In any case, most of the remaining small business programs involve relatively modest budgets. An exception is *R&D Start*, which is an umbrella program consisting of five elements:

- Grants for R&D projects in SMEs (covering both 'large' and 'small' R&D projects);
- *Grants for graduate-based R&D related projects* in SMEs;
- Grants for collaborative R&D projects between research institutions and Australian companies;
- Concessional loans for the commercialisation of technological innovation; and
- *Innovation investment fund* (IIF) to help small, technology-based companies access equity finance (venture capital).

In *Investing for Growth*, the Government announced a major expansion of the *R&D Start* program, to also include:

- *R&D Start*-Plus to provide grants for (larger) companies excluded from the general *R&D Start* program; and
- *R&D Start*-Premium to provide a higher rate of assistance (but repayable upon successful commercialisation) than *R&D Start*-Plus.

The various R&D sub-programs and the IIF have funding of \$739 million and \$153 million respectively to June 2002 (Howard 1997b). While the IIF is

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²⁵ Most managing agents come from organisations with a business focus, which can, in principle, hep in better business planning and advice. On the other hand, managing agents are rewarded for each unemployed person that is approved for the NEIS allowance, which might lead to recruitment drives among ill-suited groups of unemployed people.

²⁶ It may be possible to better discern the impacts of this approach using more complex methods, such as regression analysis. This could control for the time and state of recruitment and other factors, apart from the management mode used for the unemployed person.

targeted only at small business, some of the R&D sub-programs are available to large businesses (eg *R&D Start*-Plus).

Some of the R&D sub-programs have operated in different guises for the past ten years or so — for reviews see IC (1995a, chapters D4 and D5) and BIE (1991a). But since these programs in their present form have been running for only a short period of time, here we make some observations about the rationale, selection criteria and target groups of different segments of the *R&D Start* program.

Rationales

As discussed in chapter 4, there is a good in-principle case for support of R&D because of spillover benefits to consumers and other businesses. As there are multiple ways in which these spillovers may occur, there are also grounds for plurality in mechanisms to support R&D or technology diffusion. For example, different benefits may be obtained via network arrangements such as the graduate-based R&D project element of *R&D Start*, compared to direct subsidisation of R&D within companies.

However, arguments for public subsidies for commercialisation of R&D (as embodied in the IIF program and in concessional loans under *R&D Start*) on the grounds of spillovers are much less strong than for earlier stage research. Firms have better prospects for appropriating returns at this stage of the innovation process. Instead, the rationale for subsidies for commercialisation typically posit capital market failures. For example, the Government noted in *Investing for Growth* (Howard 1997b) that:

The programme [the IIF] focuses on an area of market failure — the limited availability of high risk venture capital for small firms. (p. 34)

Similarly, one possible rationale for the coexistence of the 125 per cent R&D tax concession, which can be accessed by all sizes of firm, and R&D grants targeted at SMEs, is that smaller technology-based firms may face liquidity constraints.

While, in principle, capital markets may fail, there is little existing evidence of widespread failure. One major barrier to examining the prevalence and nature of any capital market failures is appropriate data. It is difficult to distinguish an inefficient capital market that fails to make some profitable investments, from an efficient market which, faced with intractable information asymmetries and high transactions costs, optimally decides to ration finance (chapter 4).

Investing for Growth draws attention to the relatively small share of GDP accounted for by early stage venture capital in Australia relative to Canada or

the US (Howard 1997b, p.35) as symptomatic of Australia's capital market inadequacies. Evidence such as this is not definitive, since there may be other reasons for international differences, such as industry structure. Some better indicators of an inefficient capital market would be:

- high average risk-adjusted returns to projects financed by the venture capital industry compared to other investment projects;
- sub-standard practices by existing venture financiers compared to world's best practice (eg, poor expertise and low quality information collection methods);
- the existence of regulatory or taxation burdens which are biased against venture finance compared to alternative forms of financing; and
- projects supported by public subsidies on the grounds of financing constraints are gauged to be truly additional and earn high (risk-adjusted) private returns. If the premise of liquidity constraints is true, then identifiably good investment projects will not be privately backed when they should be. Government then has the apparent scope to make money out of financing these projects.

The IC (1997f, pp. 212-219) reviewed some of these issues, but found no compelling evidence either way.

It is important that future evaluations of capital market arrangements, such as the IIF, probe the extent to which there are genuine imperfections in capital markets. In particular, one implication of capital market imperfections is that, in theory, governments should provide upfront payments or equity injections to firms, with the potential for full reimbursement on project completion. If capital market imperfections are the sole basis for the business program, then it should be fully self-funding.²⁷

It is theoretically possible that the IIF program may be self-funding, and it provides very strong incentives for fund managers to make it so. As noted in the Government's 1997 announcement on small business policy, *More Time for Business* (Howard 1997a, p. 102):

The SBIF will be structured to provide a return on the public investment. For profitable funds, the Government will seek repayment of capital, an interest rate at the long-term bond rate and ten per cent of profits. While government and private investors will share any losses in proportion to their investment (that is, on a 2:1 basis), overseas experiences suggests that appropriate risk management strategies

²⁷ If, however, there is also evidence of externalities or other market failures, subsidies may be warranted.

can limit fund failure and that there is a strong likelihood of positive returns on public funds.

In contrast, the concessional loans for the R&D element of *R&D Start* cannot be self-funding, given the size of the concession and the risk of default. As both programs are aimed at commercialisation within technology-based SMEs, the differing treatment of repayment appears puzzling. The IIF's approach appears to be more in tune with the design principles described in chapter 5.

Selection criteria

There is a substantial degree of uniformity in the eligibility criteria for most of the sub-programs in *R&D Start*. The IR&D Board assesses applications for either the graduate-based program or the SME grants²⁸ on a competitive basis against five criteria:

- management capabilities of the applicant;
- commercial potential of the project and the applicant's potential to exploit that potential;
- technical strength;
- national benefits (eg to the wider community and Australian industry generally); and
- the need for R&D Start funding the degree to which the project would not proceed satisfactorily without a grant.

These criteria potentially embody a number of good design principles. The first three criteria assess R&D readiness — they endeavour to 'weed out' companies which would probably fail to conduct the R&D satisfactorily. The fourth should, in principle, be an assessment of any external spillovers from the project, which would form a major basis for government intervention. The fifth is an attempt to gauge additionality, and to exclude projects which would have gone ahead anyway — increasing the effectiveness of the program. Just publicising the selection criteria — as is done on the AusIndustry website — may deter some companies from applying. Of course, the real test of these criteria is whether they can be operationalised successfully. For this reason it would be useful to have explicit (and publicly available) guidelines about *how* additionality, spillovers and other desirable design features are tested.

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²⁸ The concessional loans program adopts somewhat differently worded criteria, including omission of the fifth requirement. However, it states elsewhere that the program is restricted to companies that are unable to adequately fund their commercialisation through commercial lending sources.

Of the criteria, the second has a less obvious basis, in that applicants have natural incentives to maximise commercial opportunities (which confer private benefits), and it is debatable to what extent external observers could exercise better judgements.

The IIF guidelines are highly detailed (19 pages in length), but completely different in orientation to those outlined above. This partly reflects the fact that the IIF aims mainly to develop a new institution — an early stage venture capital market in Australia as an intermediary for financing small technology-based businesses — rather than to provide grants to individual SMEs directly. Accordingly, the guidelines emphasise the desirable qualities of the fund managers, such as their ability to transfer capital appraisal skills to Australian finance personnel, rather than broad criteria for equity financing of the investee companies. In part, this is because such broad criteria would be superfluous. For example, fund managers have very good incentives to choose investees with good management skills and commercial prospects.

However, one possible limitation in the guidelines is the absence of provisions intended to increase additionality. The danger is that the IIF will choose projects that were going to be financed anyway by venture capitalists. The extent to which this is a risk partly depends on the existing scale of early stage venture finance in Australia. If the existing scale of finance was very large relative to the subsidised investment, then additionality may be low.

With 2:1 government to private funding, the IIF can finance a stock of early stage venture finance of two to three hundred million by the year 2002, depending on subscription rates. *Investing for Growth* (Howard 1997b, p.35) indicates that the stock of early stage venture finance in Australia was over 0.5 per cent of GDP in 1996 (or about \$2.5 billion), while the total venture finance market was about 9 per cent of GDP (about \$45 billion). If these estimates are correct, then one of the immediate problems of the IIF fund managers will be distinguishing applications for finance from firms which were going to get finance anyway, from those which weren't — with the risk that the IIF program would have low additionality. However, Ernst and Young and the Centre for Innovation and Enterprise (1997, p. 17) estimate that the total value of all venture capital funds in Australia was about \$1.8 billion in 1994-95. Other data imply that about 10 per cent of this stock is in early stage development of firms. The IC (1997c, pp. 32-33) suggest total investment by venture capital firms of about \$4 billion in 1996. It is likely, therefore, that the stock of early stage venture finance was around \$200 to \$400 million in the mid 1990s, and that the IIF program has the potential to increase that stock substantially — especially given the focus on small investees (see below).

Target groups

Only firms with annual turnover of \$50 million or less (including that of related companies) in each of the three years prior to application are eligible for SME or graduate-based grants under the R&D Start program. Only firms with 100 employees or less are eligible for participation in the concessional loans program. It is not clear why this sub-program uses a different size threshold to the grant components, and raises the question of how the size criteria are determined.

The IIF is targeted at much smaller enterprises, and prescribes a much more detailed set of auxiliary characteristics for eligible investees. Eligible investees must be at the seed, start-up or early expansion phase of development, operate in the traded goods and services sector, involve investment in predominantly Australian located resources, have average annual revenue in the past two years of less than \$4 million and have net tangible assets of not more than \$5 million. There are probably sound rationales for the smaller size threshold under the IIF. In particular, existing venture finance appears to favour larger companies. If these were allowed to tap IIF finances, additionality would be lower and resources would be wasted.

On the other hand, as in the NIES scheme, it is not clear why the IIF should target small businesses in the traded goods and services sector only.

6.7 Australian business programs: the broad picture

The large number of small business programs can lead to an 'illusion of efficacy' — it seems that so much program diversity must have an appreciable impact on small business. However, most of these programs have low take-up, and provide small subsidies to select firms. As shown in chapter 3, the overwhelming majority of small businesses make no use of government programs at all. Thus, in looking at small business programs, it is important to place them in a broader policy context. For most of small business, other policies — like macro policy, regulation, industrial relations and taxation — matter much more.

Even so, small business programs may play a significant role for some small businesses (eg, growing, relatively sophisticated, bigger small firms operating in the traded goods sector). It is these businesses which are seen as important sources of innovation and economic growth. In this sense, small business policies deserve close scrutiny to see if they have clear rationales and are well designed.

Past evaluations and our assessments of a range of programs suggest that small business programs display a number of common problems. We deal with these next, and offer some tentative suggestions where possible.

Lack of articulated rationales

While all small business programs state clearly what they would like to achieve (more export marketing and greater exports, better business planning, greater uptake of technology), they rarely state why markets may have failed to achieve these goals in any case. Of course, in part this fuzziness about rationales reflects the fact that government programs arise out of a complex set of processes — of which economic considerations are only one (Storey 1994, pp. 295-301).

In the absence of clearly stated rationales, we have had to tease out what we conjecture are the likely possible rationales. In nearly all cases, we find at least one *possible* economic rationale for each of the programs reviewed in this paper (though we emphasise that this is just the first test of legitimacy for programs). But the lack of clear statements of rationales by policymakers makes it much harder to assess and design programs well. For example, in table 4.4 we contrast the very different sorts of export marketing programs that would be justified by different market failures.

This is not a problem peculiar to Australia as Storey (1994, pp. 257-258) notes of UK and European small business policy:

Policies have been introduced on a piecemeal basis...It is therefore necessary to guess at the objectives of policy, rather than being able to view each initiative as clearly fitting into an overall conceptual framework...The fact that it is only possible to infer objectives by observing policies in operation, rather than these being clearly stated as a coherent response to an agreed role which government plays in the market-place, is a severe criticism.

Better statements and tests of the fundamental economic rationale behind small business programs would help to improve their design, efficacy and evaluation. In some cases, it may mean that programs would be abandoned — but that would free resources for other programs, budgetary uses or tax savings.

Scope for improved additionality

One of the prime challenges of small business programs is to provide assistance to groups of firms for activities which they would not otherwise have done. Few small business programs, with the partial exception of the EMDG scheme, build in mechanisms aiming to increase additionality. Mechanisms for achieving additionality are discussed in chapter 5.

Excess variety of designs

Small business programs have a wide range of eligibility criteria, thresholds, and design mechanisms. Some use loans, others non-repayable grants, others royalties. Some provide completely free or highly subsidised services, while in other cases firms receive very small subsidies.

Variety is not, by itself, a vice. However, there has to be a rationale for variety, and this appears to be lacking in many cases. Arguably, much of the variety reflects communication problems between policymakers in different jurisdictions and portfolios, some arbitrariness in designing policies, and inertia in existing programs which may have been designed long ago. There are grounds for compressing the range of policy mechanisms, thresholds and eligibility criteria across small business policies. This does not mean that all programs should share the same basic designs. It will be appropriate to vary these depending on the circumstances of the program — but variation should be a deliberate rational choice, not a reflection of piecemeal policy design.

While some aspects of program effectiveness, design and rationales can be addressed by individual program evaluations, a broadly-based comprehensive study of all but the most minor small business programs is probably a better way of assessing overlap, complementarities or other interactions. Even brief sets of analyses — such as those we have undertaken on EMDG, Export Access, NIES and NEIS — can provide useful insights. To date no such across-the-board assessment has been undertaken in Australia — the Mortimer inquiry did consider some design issues for business policies, but provided very scant details on any single program. Nor, according to Storey (1994), has such an assessment been undertaken in Britain or continental Europe.

There are grounds also for increasing international cooperation in the design and evaluation of small business programs. Many jurisdictions and countries have small business programs, and they use a wide variety of designs in implementing them. There may be gains from systematic study of the many policy experiments that have been conducted worldwide. In particular, there may be gains from looking at common design issues in programs in different jurisdictions — like additionality, displacement, repayable grants — so as to develop better designs.

Unknown efficacy

Publicly available evaluations of programs with a small business orientation have not been wanting. Some programs such as NIES and EMDG, have received repeated evaluation. However, few of these evaluations have provided

enough information to be confident about the real impacts of the programs, let alone their net economic benefits. The greatest uncertainty stems from doubts about the real extent to which outcomes are truly additional. In many cases, things which were going to happen anyway — more exports, new small businesses, changes in the rate of enterprise improvement —are counted as outcomes of programs, when they should not be.

Many programs were initially introduced as pilot programs. While such pilots are a useful vehicle for proper randomised assessments of program impacts, to our knowledge, no such assessments have been undertaken in Australia.

Such a clinical approach cannot be used for already existing programs (unless they are oversubscribed). One possible remedy for the evaluation problem for existing programs is the use of more sophisticated methodologies which take account of sample selection biases (as set out in this chapter and in appendix E). This may seem to be a formidable challenge given the sheer number of small business programs. However, notwithstanding this, a few programs (EMDG, NEIS, and R&D Start) account for most expenditure by government. Evaluation and design appraisal should, therefore, be concentrated on these key programs.

Addressing high transactions costs of dealing with small business

As observed in chapter 5, the very large number of small firms, and the size and nature of their management, means that the costs of communicating with them can be substantial. For example, the time costs of providing information, or in dealing with program or regulatory compliance issues, using traditional mechanisms (such as phone contact) are very high. Remote techniques like software and the Internet offer substantial advantages to small businesses, especially as computer and Internet use increases in such businesses.

Existing software tools like BizLink — while very useful — are in their infancy, and suffer a range of limitations, which could be addressed:

- relatively rudimentary query facilities;
- no direct links to other Internet sites within the BizLink database;
- absence of key information which could be provided for many programs (such as eligibility criteria); and
- absence of automated systems (eg expert systems for enrolling a firm in a program).

There is probably also scope to improve and extend information services to small business, but this should be subject to the services:

- passing some rigorous tests of usefulness. Storey (1994, p. 305), in summarising international research into the provision of training and information services to small business, is sceptical about their impacts on firm performance — suggesting some care in what type of information is provided;
- not duplicating information already available; and
- taking advantage of existing government advantages in collecting certain sorts of data (for example, energy efficiency auditing results as described in BIE 1996a, pp. 73-76).

In particular, the government has scope to undertake either itself, or through an intermediary, information collection and interpretation on behalf of small business, and then to make it publicly available at marginal cost using appropriate media (such as CD-ROMs and the Internet). There are also grounds for re-examining pricing rules and practices for government-provided information (such as ABS data, self-help manuals produced by AusIndustry or other agencies, and technical databases, for example, relating to energy efficiency).

The focus on the traded goods and services sector

Many government small business programs specify that the clients must be operating in the traded goods or services sector. There do not appear to be good grounds for such a restriction, other than as an arbitrary way of limiting the demand for program subsidies. The overwhelming number of small businesses operate in non-traded services, and in theory, they can suffer from some of the market failures that inhibit their counterparts which trade actively.

Repayment mechanisms

Many small business programs appear to be rationalised by information deficiencies, capital market failures, and attitudinal problems. In this case, the government program provides largely private gains to small business. In theory, it is appropriate to require firms to repay subsidies, *if* they realise the benefits of the program. In practice, this may be difficult in some cases — for example, where it is hard to assess whether the program has genuinely succeeded for the firm or not. But in other cases, as in EMDG and Export Access, the practicality of repayable grants, appears to be more promising.

7 THE IMPACT OF REGULATIONS ON SMALL BUSINESS

7.1 Introduction

The need to comply with government regulations in many areas, including with taxation requirements, is a significant overhead for most businesses. As the Small Business Deregulation Task Force report Time for Business (Bell Report 1996) puts it, small business seems to face an often bewildering array of overlapping Commonwealth, State and government local regulatory requirements. Evidence given to the Task Force also indicates that small business in Australia wants a sustained reduction in its regulatory burden, although this view is not peculiar to small firms alone (Bickerdyke and Lattimore 1997, p. 73ff). The challenge for policymakers is to take into account any regulatory burdens on small business, but as part of an overall calculus designed to maximise the welfare of all Australians.

This and the next two chapters examine regulation impact, design and implementation, focusing on the implications for small businesses. This chapter examines the actual levels of burdens on small business, and compares them with bigger businesses. Chapter 8 sets out a framework for regulatory formulation, delivery and evaluation which is likely to produce better regulatory outcomes for Australians, with less onerous burdens on small and other businesses. Finally, chapter 9 asks when it is appropriate to take specific account of small business in regulatory design and reform, and also brings together the threads of the three chapters in an overall conclusion.

7.2 The scope of regulation and their costs

Regulation may be broadly classified into two categories:

- Economic regulation which is intended to influence the behaviour of some or all businesses. Examples include various controls on entry to particular business activities, product standards and controls on firms' behaviour in competing with each other. Revenue-raising measures such as taxes and tariffs also represent a form of economic regulation.
- Social regulation which is intended to promote non-economic objectives, but which may also have significant effects on businesses that

have to comply. Examples include regulations relating to occupational health and safety, protection of the environment, consumer protection and unfair dismissal.

It is important to note that regulations extend beyond laws to administrative practices such as guidelines, codes of conduct, standards, advisory instruments and other departmental 'requirements', which have impacts on businesses.

Regulations have the goal of increasing community welfare — and many will provide substantial benefits. However, they also impose costs. Few quantitative assessments have been undertaken for Australia which enumerate the costs or the benefits of regulations, let alone the net outcome. The purpose of this chapter is to quantify, as far as possible, the nature and magnitude of costs of regulations on businesses, especially smaller ones. In some cases, such analysis may suggest where it may be possible to lower costs without adversely affecting benefits. In others, the overall assessment of directions for reform also requires measures of the countervailing benefits of regulation. This paper does not undertake that assessment. But as in the federal budget, just counting costs helps to make more reasoned decisions (Hopkins 1997b).

Regulations can impose a range of costs on business, such as:

- the additional costs of paperwork, management and record-keeping systems associated with compliance with government regulations and taxes;
- government costs of administering the regulation, including the process of regulatory formulation, administrative systems, monitoring, enforcement, and reporting;
- additional output costs stemming from regulations (such as the additional costs of pollution abatement or energy efficiency investment, changed workpractices, higher prices for inputs, and restrictions on activities);
- reduced incentives for efficiency, entrepreneurship and innovation that feed into lower productivity levels and growth rates. For example, Vedder (1996) estimated that regulation cut productivity growth by about 1 percentage point per year in the US from 1963 to 1993; and
- indirect effects on economic efficiency. These include resources dissipated by rent-seeking, and systemic problems in the market system that interact to impede efficiency. For example, in a case study of manufacturing fabrication plants around the world, the BIE (1991b) found that workpractices in the Australian plant, combined with other regulatory-induced inefficiencies *outside* the plant, made it impossible for the plant to export to any degree, and therefore meant that it operated below minimum efficient scale.

In practice, it is difficult to enumerate all aspects of aggregate regulatory costs facing Australian business (and, in turn, Australian consumers). In this chapter we look most closely at just the first of the above costs, but that should not be taken as acquiescence with the view that the other costs are small.

7.3 Compliance costs of taxation and regulation

While the economic costs of regulation extend far beyond compliance burdens on firms, examination of compliance burdens felt by firms is still instructive because it:

- indicates potential areas where regulatory simplification and better delivery may produce lower overall costs without compromising the objective of the regulatory or tax measure; and
- explains why small firms are particularly disenchanted with regulations.

Small business organisations have often voiced concerns about the burden for SMEs of compliance with regulation and taxation requirements.¹ The issue has also been a focus of government interest in recent times, as shown by the 1996 inquiry into ways of reducing the burden (Bell Report 1996) and the Government's response to its recommendations (Howard 1997a).

Among the bases of the recent concern about compliance costs for SMEs is the argument that small businesses face higher costs than larger businesses, producing an unwarranted disadvantage for the small business sector. Also, operators or managers of smaller businesses may find compliance more difficult because they are less likely to have staff with detailed knowledge of regulations or taxation matters. In effect, in smaller businesses, regulations can distract prime decision-makers away from their core business activities whereas, in larger firms, regulatory matters are often handled by specialist staff.

This section considers the evidence on compliance issues as they affect SMEs, including the level of effort required and how this compares with compliance costs for larger businesses, and the nature of the problems managers experience with regulation.

One theme of recent discussion about the compliance burden (for all businesses) has been that it has increased rapidly in recent years. There is some evidence to

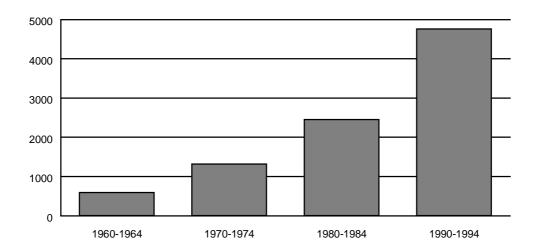
177

The presumption that all regulations hurt small business is not true. Some regulations create barriers to entry which protect existing small business operators (eg, retail pharmacies, newsagents, and a range of health professionals). A variety of tax measures, such as payroll tax exemptions, also favour small businesses.

support this. From 1992–93 to 1995–96, the Commonwealth Parliament passed 664 Acts, of which approximately 200 are thought to have a substantial effect on business (IC 1996b). An average of nearly 5000 pages of new primary legislation were enacted per year from 1990 to 1994. This is much higher than in any of the previous sub-periods (figure 7.1).

Businesses also face the requirements of regulation by State/Territory and local governments. Comprehensive data on this component of regulation are not available, but it is known that subordinate legislation, as measured by the average number of pages enacted, increased dramatically for the Commonwealth, New South Wales and Victoria (both in total and for each jurisdiction) between 1970–74 and 1990–94 (Ratnapala 1996).

Figure 7.1: Average annual number of pages of Commonwealth Primary Legislation enacted, 1960 to 1994



Source: (IC 1996b).

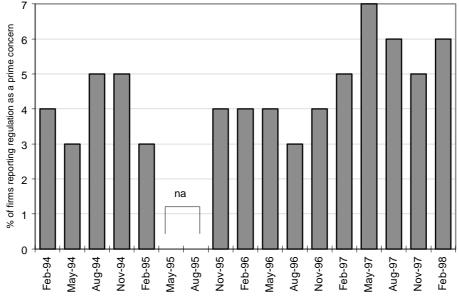
Managers in firms of all sizes consider that the regulatory burden is increasing. Bickerdyke and Lattimore (1997), using unpublished data from a NSW Chamber of Manufactures survey, report that 70 per cent of the smallest firms indicated that the burden increased from 1993 to 1995. For larger firms, the percentage was even higher — 90 per cent for firms with over 500 employees indicated an increase. Only 1 per cent of all firms surveyed thought the time spent on regulatory compliance decreased between 1993 and 1995. The Yellow Pages Surveys also suggest that the proportion of small firms reporting regulation as a prime concern has risen slightly from 1994 to 1998 (figure 7.2). Commonwealth and State/Territory governments have introduced programs of regulatory reform, which aim to reduce these burdens (chapter 8).

The recent concerns of the small business community are illustrated by statements such as the following:

The small business community is frustrated and overwhelmed by the complexity and cost of dealing with government regulation and paperwork. Small businesses often do not understand their compliance obligations and have an underlying fear from doing the wrong thing . . . (Bell Report, 1996).

This summary is consistent with the opinions of many small business operators, as shown, for example, by some of the responses to a 1994–95 survey conducted by the ABS (Box 7.1).

Figure 7.2: Proportion of small firms reporting regulation as a prime concern, 1994 to 1998



Source: Yellow Pages Small Business Index, various issues.

We turn next to quantitative assessments of regulatory compliance burdens on small business, before considering other, broader, regulatory concerns.

Box 7.1: Small business operators' comments on regulation

'I have now worked for myself for seventeen years. Each year, the book work and red tape that exists between a small business and government departments — local and state or federal — has grown and grown. Then, when you start employing someone it gets worse and worse, as more and more paperwork is shoved under our noses. It is no wonder small businesses are reluctant to increase their work forces.'

'The proliferation of regulations and charges and the cost of compliance is an ever increasing burden, diverting senior staff from productive activities. In broad terms this creates the need for one non–productive person. We realise some of the following fees and taxes serve a useful purpose but would like to list the various ones this office has to cope with: P. P. S Tax, Pay As You Earn Tax, Payroll Tax, Diesel Fuel Rebate, Fringe Benefits Tax, Land Tax, Training Guarantee, Sales Tax, Workers' Compensation, Superannuation Guarantee Levy, Business Registration & Corporate Affairs, Financial Reporting required under Corporations Law, Government Bank Account Debit Tax, Child Support Agency, Portable Long Service Leave, Various Licences and Permits, Workplace Health and Safety, Registration of Premises, Stamp Duty, Australian Bureau of Statistics, Quality Assurance.'

'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 for the business growth survey, other economic surveys, occupational health and safety issues, training etc. It has come to the stage where approximately 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 to the ABS Business Growth and Performance Survey, 1994–95.

The costs of paperwork compliance

A study² conducted for the Bell Report found that, on average, small businesses spent 219 hours a year or about four hours per week³ on local, state and federal government paperwork and compliance activities (table 7.1).⁴

² The Yellow Pages Small Business Index, October 1996.

³ However, the median figure was only a little over 1 hour per week.

⁴ Unlike some other work, this study distinguished activities which were required solely in order to comply with government regulations (including tax compliance), and those which would have been done anyway for purposes of business management. It was estimated that small businesses spend about 16 hours per week on all accounting and bookkeeping tasks, so that regulatory and tax compliance accounted for only about one quarter of this activity.

Table 7.1: Hours spent by internal labour on regulatory paperwork 1996^a

	Average hours per year per business spent by those affected by the tax/regulation	Hours spent averaged across all small businesses
Tax		
Company tax	71	69
Group tax	49	32
Sales tax	56	20
Fringe Benefits Tax	32	8
Payroll tax	35	5
Prescribed Payments System	56	3
Other tax types	36	4
Sub-total tax		141
Employee related		
Superannuation Guarantee Levy	32	21
Workers' Compensation	13	10
OH&S	37	7
Sub-total employee related		40
Other		
Licensing requirements	36	13
Government/ABS Surveys	9	3
Local Council Planning	70	15
Other	87	7
Sub-total Other		38
Total compliance		219

Based on a survey of 1200 small employing businesses (employing 20 or less employees). The hours spent *excludes* time spent on accounting required to run the business (which was around 615 hours per year). In order to convert the hours into a cost measure, the Yellow Pages study assumed that proprietors' costs were \$20 per hour and staff costs \$15 per hour. The average internal labour costs of compliance were \$4 000 per annum.

Source: Yellow Pages Small Business Index, October 1996.

Total compliance costs were estimated at \$7000 per year⁵, of which \$3000 was spent on external advice. Company tax, sales tax and local council planning

⁵ Of this, proprietors estimated that roughly \$2 500 was beyond that which was fair and reasonable.

imposed the greatest compliance burdens on firms to which these provisions were relevant.

Of the total internal compliance effort, that associated with tax measures accounted for about three-quarters (or three hours per week). The time spent on tax compliance increased with the size of the business and the number of different taxes to which it was subject.

Another detailed study of labour costs associated with federal tax compliance (Evans et al 1997a,b) suggests that average compliance costs per SME (defined as firms with less than \$10 million of turnover) was around \$3240 or 1.5 per cent of turnover in 1994–95 (table 7.2). Of this, about \$1000 represented average external costs.

While the aggregate estimates of the Yellow Pages and Evans et al are different, they are roughly consistent when account is taken of the differing scope of the studies.⁶ A number of other Australian studies of paperwork compliance costs for small business — each with different survey frames, sample sizes, response rates and scope — suggest business paperwork compliance costs of around 1.1 to 1.3 per cent of turnover for small firms (table 7.3).

How do compliance costs change with firm size?

Absolute compliance costs tend to rise with firm size. However, a number of studies in Australia and overseas have indicated that when expressed as a share of turnover or as a cost per employee, costs fall steeply with firm size (table 7.4).⁷

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Evans et al's (1997ab) estimates that internal compliance costs associated with federal taxes are \$2240). In the Yellow Pages survey the internal costs of compliance with all tax measures is around \$3000 for small businesses. The compliance burden of payroll tax is about 4 per cent of total tax burden. Other state taxes are assumed to add another one percentage point, so that the overall federal tax burden is 95 per cent of \$3000 or \$2850, which is close to Evans et al. On the other hand, external compliance costs are roughly three times higher in the Yellow Pages study, though some of these costs may relate to advice on non-federal taxes.

These studies are discussed in greater detail in Rimmer and Wilson (1996) and Bickerdyke and Lattimore (1997). In particular, Rimmer and Wilson point to some of the methodological problems.

Table 7.2: Federal tax compliance burdens on business, by size of firm, 1994–95

Measure	Small (Turnover < \$100 000)	Medium (Turnover \$100 000 to \$10 000 000)	Small & medium (Turnover < \$10 000 000)	Large Turnover > \$10 million	All firms
Firm level costs					
Estimated average turnover per firm \$'000a	31.7	875.6	214.6	113 793.1	706.4
Average compliance costs per firm (\$) ^b	1 707	8 784	3 240	91 864	3 624
Average compliance costs <i>borne</i> by firm (\$) ^c	1 348	5 951	2 346	66 899	2 625
Costs as a share of turnove	er				
Compliance costs as a share of turnover (%)	5.38	1.00	1.51	0.08	0.51
Compliance costs borne by firm as a share of turnover (%)	4.25	0.68	1.09	0.06	0.37
Economy-wide measures					
Number of taxpayers	1 909 564	528 299	2 437 863	10 602	2 448 465
Total compliance burden \$ million ^d	3 259	4 641	7 900	974	8 874

a In their study, Evans et al (1997b) use the midpoint of the turnover range (\$50 000) as the average turnover. However, we use the more detailed data in Evans et al (1997a, p.88) to estimate a more accurate measure of the average turnover.

d Total compliance costs are calculated using Evans et al's (1997b) method, which is:

$$CC = \sum_{k=1}^{3} \sum_{l=1}^{5} \{EC_{kl} + IC_{kl}\}$$
 where k is sizes from small to large, 1 is legal forms (sole traders, partnerships, trusts, superfunds and companies), EC is average external tax adviser costs of firm kl, and IC is average internal labour costs (including time spent by business owners, staff and unpaid helpers on business tax affairs).

Sources: Evans et al (1997ab).

b Average compliance costs are calculated as total compliance costs divided by the number of relevant taxpayers.

c Average compliance costs borne by the firm are based on the measure above, less tax deductions for compliance costs. That is, part of the overall business cost of compliance is borne by taxpayers. Evans et al(1997b) also examined the cash flow advantages to firms of timing delays in the tax system, but it is a moot point whether these should be deducted from compliance burdens — we have left them out in this table.

Table 7.3: Paperwork compliance cost estimates for small business, Australia^a

Study	Scope	Size of firms studied	Compliance costs as a percentage of turnover	Average Compliance costs (\$)	Year
Cabalu, Doss and Dawkins 1996	Total paperwork burdens	Up to 20 employees (100 for manufacturing)	1.10	4 937	1993–94
Yellow Pages Small Business Index October 1996/Bell Report	Total paperwork burdens	Up to 20 employees (100 for manufacturing)	~1.1	7 000	1996
Pope, Fayle and Chen 1993, 1994	Selected tax paperwork burdens	Turnover between \$1/2 and \$1 million	1.34	~10 000	1989–90
DTSBI 1996	Paperwork, fees & new equipment purchases associated with 5 regulatory areas	Firms employing under 20 people	1.9 to 3.5	17 094	1996
Evans, Ritchie, Tran-Nam and Walpole 1997a,b	Selected federal tax paperwork burdens		1.51 ^b	5 951	1994–95

a ~ indicates an estimate.

Such 'regressiveness' may be explained by high fixed costs in learning about applicable regulations and undertaking procedures to ensure compliance. Larger firms can average these costs over their greater turnover, so that compliance costs per employee or sales is much lower than smaller firms.

For example, the studies of Evans et al (1997ab) suggest that taxation compliance costs in Australia are highly 'regressive', with the burden being above 5 per cent of turnover for the very smallest business taxpayers, and only 0.06 per cent for large business taxpayers — about one seventieth of the burden (table 7.2). Their figures imply that SMEs accounted for about 90 per cent of the economy-wide federal tax compliance burdens, though only 30 per cent of the turnover. Very steep falls in taxation paperwork compliance burdens with firm size are also apparent for the US (figure 7.3) and other countries (table 7.4) — implying that the Australian situation is not unique.

b The figure here is prior to tax deductions for compliance burdens, so that it is on an equivalent basis to the other estimates

Table 7.4: Summary of the impact of compliance costs by firm size, international studies

What is included as a compliance cost	Cost estimates	Source
Administrative burdens of compliance in the Netherlands in 1993	Absolute compliance costs increase 14 fold from a firm with 1 to 9 employees to a firm with 100 or more employees. But costs per employee of firms employing 100 or more people are just under one sixth of those of firms employing 1 to 9 people.	OECD 1997 p.24
Administrative and compliance cost of taxation in the United Kingdom in 1986-87	Average costs are 58 pounds per employee for firms with 1 to 5 employees, and 11 pounds per employee for firms with over 500 employees.	Sandford et al 1989
Compliance costs associated with taxes and regulations, Queensland businesses 1996	Average costs of those facing <i>all</i> federal and state taxes were \$24 553 for firms employing up to 5 people and \$93 471 for firms employing 100 or more people — roughly a fourfold increase in costs. Note that many firms do not actually face these taxes, and so the actual average costs would be significantly smaller. The costs of complying with environmental and health and safety regulations for those who bore them were \$3 147 for firms employing up to 5 people, and \$21 587 for firms employing 100 or more people.	QCCI 1996
Tax compliance costs Australia 1989–90	Cost were around 4 per cent of turnover for firms with sales under \$0.2 million and about 0.04 per cent for firms with sales of over \$20 million.	Pope et al 1994, 1993a
Direct information costs to SMEs, Canada 1995	Costs were 8 per cent of turnover for firms with less than 5 employees, 3.8 per cent for firms with 5-19 employees, 2.4 per cent for firms with 20-49 employees and under 2 per cent for firms with 50-99 employees.	IME 1995
Corporate tax compliance costs US 1993	Compliance costs were around \$5 025 (0.5 per cent of sales) for firms with sales under \$1 million, and \$5 million (0.05 per cent of sales) for firms with sales of \$10 billion.	Hall 1993
Overall regulatory burdens , US, 1992	The average cost per employee was \$5 532 (4.4 per cent of sales) for firms employing less than 20 people, \$5 298 (4 per cent of sales) for firms with 20 to 499 employees, and \$2 979 (1.8 per cent of sales) for firms with 500 or more employees. ⁸	Hopkins 1995

Unfortunately the Australian studies relate mainly to a limited range of regulatory costs — mainly the paperwork burden associated with taxation measures. Does a similar picture of disproportionate compliance burden emerge when the broader regulatory costs are taken into account? While there is no

The SBA (1995) have slightly lower estimates of US burdens, based on an adjustment of Hopkin's data.

Australian data, the US evidence may still be a rough guide to what is likely to prevail here. Once other regulatory compliance burdens are included (such as those associated with environmental regulation), the US evidence suggests that the small firms (employing less than 20 persons) face a *total* regulatory cost to sales premium of between 0.2 and 0.4 percentage points greater than firms employing between 20 and 499 persons, and between 1.9 and 2.6 percentage points greater than firms employing 500 or more people SBA (1995).

0.6 Compliance cost to sales ratio (%) 0.5 0.4 0.3 0.2 0.1 0 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Sales (\$'000)

Figure 7.3: Tax compliance costs as a share of sales, US, 1993

Source: Hall 1993.

In summary, there are differences in the regulation burden expressed as a share of sales for large and small businesses. The significance of these differences for economic welfare and policy is considered in chapter 9.

Aggregate regulatory costs on business

Aggregate federal tax paperwork compliance costs

When expressed as percentages of turnover, or as average amounts per business taxpayer, paperwork and time compliance costs appear relatively modest. However, aggregated over the millions of business taxpayers, the burden is large in absolute terms. Over the whole economy, Evans et al (1997b) estimated that aggregate *federal* tax compliance burdens for Australian businesses were around \$9 billion, or about 2 per cent of GDP in 1994–95.

Aggregate compliance costs for state taxes and other regulations

Presumably, if the paperwork and time costs of compliance burdens associated with state taxes and the host of other regulatory measures imposed on firms were also included, the aggregate compliance burden would be substantially greater. Rough calculations suggest that such additional burdens were around \$1.8 billion (box 7.2), so that the total regulatory paperwork burden was roughly \$10.8 billion in 1994–95.

Other regulatory costs

Moreover, Hopkins (1996) suggests that in the US, the paperwork compliance burden is around one third of the aggregate regulatory burden (which includes the direct impacts of environmental and risk reduction regulation, and price and entry controls). In the US, he estimates that the regulatory compliance burden is around 9 per cent of GDP.

Unfortunately the data for accurately assessing the overall regulatory burden are not yet available for Australia. However, *if* the estimated Australian paperwork compliances are grossed up using the same factor as the US — and we appear to be no less regulated — it would suggest a regulatory burden of around \$32 billion in 1994-95, or about 7 per cent of Australia's GDP.

Of course, compliance burdens are the quid pro quo of regulatory benefits — and these too may be very significant. But when it is realised how big regulatory burdens are likely to be at the economy-wide level, and how disproportionately they fall on one group of business, it suggests that careful assessment should be made to ensure that regulations and tax measures are designed and implemented in the most cost-effective fashion.

7.4 Particular regulatory concerns of small business

Businesses may be concerned about regulation because of dissatisfaction with the time and effort required for compliance. However, the Bell Report (1996) also identified issues such as a lack of coordination between different government agencies, and a view that policy makers and regulators often lacked knowledge or understanding of the impact of their decisions on small business. SME operators also stressed that they wanted certainty and simplicity in the regulations that they had to comply with, and less change in the regulatory environment.

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⁹ But still excluding many other regulatory costs (such as incentive effects on innovation and entrepreneurship) and the impact of state regulations.

Box 7.2: Other paperwork compliance burdens

The Yellow Pages survey suggests that regulatory compliance costs were around \$1 360 per small firm, and state tax compliance costs were around \$150 a year, so that average 'other' compliance costs were about \$1500 for small firms.

To get an estimate of economy-wide costs associated with these regulatory burdens, we need to multiply \$1500 by the relevant number of firms, and correct for any biases in the sample frame used by the Yellow Pages survey.

But what is the right number of firms? Evans et al (1997b) estimate there are roughly 2.5 million business entities, but the ABS estimate around 920 000 business enterprises (ABS 1996a). The difference occurs because what counts as a business taxpayer from the perspective of the Australian Tax Office (the source of the sample frame of Evans et al) is different from what is counted as an enterprise by the ABS. Business taxpayers, for example, include trusts and businesses which are vehicles for channelling property returns, rather than direct suppliers of goods or services. Many of these will not be listed as businesses by the ABS. The sample frame for the Yellow Pages Survey most closely resembles that of the ABS, rather than the ATO. It is likely that the majority of the business entities excluded from the ABS sample frame would not face any compliance burdens, other than those associated with federal taxes.

Accordingly, we use the ABS estimates of the number of enterprises in the economy. About 890 000 of the firms in the ABS are either non-employing, or employ less than 20 persons (noting that all firms in the Yellow Pages sample employed less than 20 persons). This suggests 'other' compliance costs of \$1.33 billion for such small firms. But what of the remaining 32 000 larger firms which lie outside the scope of the Yellow Pages survey? Other data (eg SBA 1995, Hopkins 1996 and OECD 1997) show that absolute compliance burdens tend to rise significantly with firm size (though cost per employee falls). These data suggest that we can expect average compliance burdens in these larger firms to be roughly ten times those in the small firms (or \$15 000 per firm). This adds another \$475 million in costs, so that the economy-wide estimate of 'other' compliance burdens is around \$1.8 billion.

These additional data suggest that the total paperwork compliance costs for SMEs are around \$9.2 billion, out of an economy-wide cost of \$10.8 billion — or just over 85 per cent of the total.

Two surveys by the ACCI and Chamber of Manufactures of NSW have shed light on the concerns that businesses, and especially SMEs, have with regulation. These surveys are discussed in detail in Bickerdyke and Lattimore (1997, pp. 75–82 and pp. 127-130). Some results from these surveys, and another conducted by the ABS, are shown in table 7.5. Each of the surveys used a different methodology, which probably explains why there appears, in some

cases, to be significant variation in the level of concern about different aspects of the regulatory burden.

Table 7.5: Extent of small business concerns over particular regulatory burdens: percentage of firms indicating concern^{a,b}

Regulatory burden	ACCI survey, 1995	Chamber of Manufactures of NSW, 1995	ABS survey, 1996
Aspect of regulation causing concern			
Tax compliance	62	64	21
Complexity/change in taxes	~67	~4	17
Finding out which regulations apply	na	36	na
Type of regulation causing concern			
Unfair dismissal	59	9	16
Fringe benefits tax	58	na	10
Superannuation	55	48	23
General regulation	53	na	26
Company tax/business taxation	49	68	na
Workers compensation	48	na	13
Capital gains tax	47	na	na
Payroll tax	34	na	7
OH&S	32	39	na
Environment	na	27	na
Sales tax	na	na	14

a ~ indicates approximate; na means not applicable.

Source: Bickerdyke and Lattimore 1997.

In the ACCI survey, conducted in 1996, around two-thirds of small firms (with up to 20 employees) rated the frequency and complexity of changes to (federal and state) tax rules, and tax compliance, as the aspects of regulation causing most concern. Furthermore, among the types of regulation perceived as being of most concern to small firms were unfair dismissals legislation and fringe

b A small business was defined as having 1 to 19 employees in the ACCI and ABS surveys, and 1 to 20 employees in the Chamber of Manufactures of NSW survey.

The disparity between some of the survey results is at its most extreme in relation to concern about the pace of change and the complexity of regulations (as revealed from the ACCI and Chamber of Manufactures of NSW surveys).

benefits tax. These areas were also major concerns for firms in all the larger size groups (see Bickerdyke and Lattimore 1997). However, there were areas of difference too. A greater proportion of the smaller firms had concerns about the superannuation guarantee, whereas a bigger proportion of larger firms had concerns about payroll tax.

In the survey conducted by the Chamber of Manufactures of NSW, 'compliance burden' was the main difficulty with regulation reported by firms of all sizes. However, small firms nominated this difficulty less frequently than the average — 64 per cent of small firms compared to 80 per cent of respondents overall. This result is surprising given that quantitative assessments of the burden suggests it falls disproportionately on small business. The second most important concern revealed by this survey was 'finding out which regulations apply' — a difficulty for 36 per cent of small firms and 35 per cent of respondents overall. The four types of regulation causing concern for firms in all size categories were business taxation, superannuation, occupational health and safety regulation, and environmental regulation. Indeed, these were the only areas which scored high ratings — no other was reported as a concern by more than around 20 per cent of firms of any size.

The ABS survey produced a rather different pattern, with lower percentages of firms indicating concerns across the board, and 'general regulation' having the highest concern for small firms. The lower share of firms nominating regulatory problems stems from the open nature of the survey, which asked for comments from firms about problems they were experiencing (see Bickerdyke and Lattimore 1997, pp. 127-130). However, there were similarities in that tax compliance, the complexity and variability of taxes and some specific taxes (the superannuation guarantee charge and sales tax) were among the highest ranked issues.

In summary, these surveys indicate that of firms' total compliance burden, tax issues are the major concern for firms of all sizes. When specific areas are considered, fringe benefits tax and superannuation generally had the highest ranking among small businesses. Among other government regulation, occupational health and safety, environmental regulation, unfair dismissals and workers' compensation appear to be the major areas causing difficulty.

Finally, the Bell Report (1996) and some other studies (discussed in Rimmer and Wilson 1996) indicated that many small business operators were not satisfied with the service received from the ATO if they sought advice to assist them in tax compliance. They said that the general information products provided by the ATO to assist taxpayers to understand their responsibilities were not always sufficiently clear and straightforward to be useful to people without considerable specific tax knowledge.

8 BEST PRACTICE REGULATORY DESIGN

8.1 Introduction

Private sector goods and services are designed to work well, and are constantly tested by the market. Inferior designs are quickly weeded out through customer choice. However, there is no equivalent mechanism for government produced outputs, such as regulation.

Many governments around the world, including Australia, have questioned whether the traditional processes which generate and assess regulation and programs are even passably adequate. For example, in the US, the National Performance Review (1993) noted that:

It is almost as if federal programs were designed not to work. In truth, few are "designed" at all; the legislative process simply churns them out, one after another, year after year.

The Ontario Red Tape Commission (1997) suggested:

Little or no thought was given to the cumulative effect of red tape on the cost of doing business in the province, job creation, the size of government or the cost to taxpayers. Ontario had no criteria in place to ensure that the costs and benefits of new regulatory controls were fully considered or obsolete measures removed. The regulatory burden just kept growing, with no overall strategic plan to address priorities, coordination and duplication.

Moreover, with the increasing prevalence of budgetary constraints, government agencies may be tempted to achieve their objectives through costly off-budget interventions, including regulation (Hahn and Litan 1998; Nivola 1998b).

One of the safeguards against badly designed (and therefore overly costly) or unnecessary, regulation, is genuine appraisal of existing and new regulations to ensure that they meet a public benefit test, combined with conscious and publicly accountable decisions by regulators about the why, how, who and when of any regulation. Australia and many other countries have introduced formal systems of regulatory appraisal as a tool to filter out unnecessary regulations and to increase the chance that necessary regulations are better designed (as summarised in Hopkins 1997a and Ogus 1997).

What are the key ingredients of best-practice regulatory formulation and design? We list some of the key ingredients in figure 8.1.

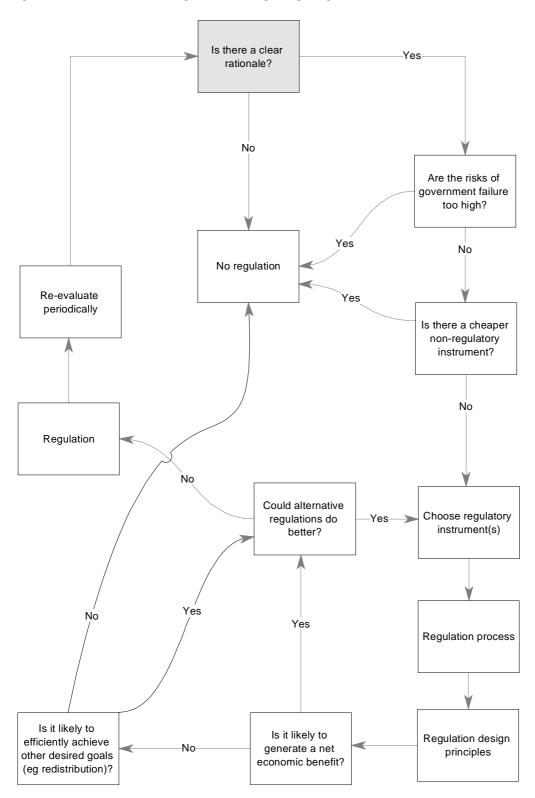


Figure 8.1: Formulating and designing regulations

In the following sections we consider six of these in more detail:

- a good rationale;
- the risk of government failure;
- the choice of instrument;
- the regulatory process;
- regulatory design principles; and
- the cost-benefit and superiority test.

We end the chapter by examining how Australian governments have improved regulation, its administrative processes and evaluation (section 8.7).

8.2 Rationale for action

The first element in the formulation of a regulation is the existence of a persuasive rationale for government action. Economists generally agree that there are a range of circumstances in which governments may potentially improve economic welfare by intervening to alter market outcomes. This is likely when unregulated markets do not produce the best outcome for the community as a whole ('market failure'). Some examples are:

- where there are externalities or public good considerations, such as in relation to environmental pollution;
- where information is not readily available to users and making the wrong decisions can be hazardous. Examples could include regulation relating to occupational health and safety, and consumer protection; and
- if there is a monopoly. Here intervention may retain the advantage of monopoly (lower unit cost of production due to scale economies) while reducing abuses of monopolistic power.

Regulation may also be justified in order to implement government policies with 'non-economic' objectives (usually those of equity or fairness). These include regulations which provide social services or subsidised health care. In these cases, the design should seek to minimise the costs of achieving the objective — that is, to achieve cost-effectiveness.

The supporting material for any regulation should state clearly the underlying problem which regulation is intended to overcome (such as a particular social, environmental, equity or economic problem), and not just the objective of the regulation. It should not prescribe the mechanism for alleviating the problem, since there may be many possible options.

¹ The discussion in this section draws extensively from Noll (1989).

If there is no such rationale, clearly regulation should be avoided. This seems common sense, but given the character and extent of many regulations, it has not been a frequent feature of past regulatory practice. For example, the Australian Financial Review (25 June 1997) reported a European example:

A Swedish businessman had to destroy 80 cases of cucumbers because they were not bendy enough for the European Union, DPA reports. A food inspector in the town of Helsingborg had found the ends were less than 2cm out of true from a notional straight line drawn through them. Under EU rules, the bend must be between 2cm and 10 cm.

8.3 Risks of government failure

A regulation might have good intentions, but sometimes the risks of regulatory failure (due to, for example, rapid technological change, the creation of perverse incentives, countervailing responses by the regulated, the risk of loopholes, unrealistic information requirements and the inability to properly enforce) may warrant doing nothing.

Some examples include:

- until financial deregulation in Australia, there was an interest rate ceiling for small firm borrowing from banks (chapter 4). While this regulation may seem to assist small businesses, it made bank lending to small firms unattractive to banks. The result was considerable credit rationing, which meant many enterprises were not able to borrow at all for expansion;
- in the US, the White House Commission on Air Safety and Security recommended that the airline industry require child safety seats for all infant passengers. However, an earlier study by the FAA suggested that while the regulation would lower injury rates for children in aircraft, its overall effect would be greater death and injury. This is because the regulations would increase the cost of air travel, forcing some families to travel by far more dangerous modes of travel;²
- the US introduced mandatory fuel consumption standards to reduce fuel use, but Vogel (1998) suggests these had little impact because motorists responded to the reduced operating costs of cars by driving more; and
- the requirement for safety caps on aspirin bottles apparently increased the hazards they aimed to reduce, because making it difficult to remove the

² Based on the regulatory 'horror story' of the month, March 1997, from http://www.regulation.org/outrage.html.

caps led people to leave them off, increasing the risks to young children (Hahn and Litan 1998).

Policymakers should make an assessment of the risks of government failure, and balance these against the prospective benefits of any regulation.

8.4 Choices of regulatory or non-regulatory instrument

Even where there may be a good reason for government intervention to solve a particular problem, it may be that regulation is a relatively inefficient mechanism. The ORR (1997, p. B2) and the Treasury Board of Canada (1994b) detail a range of alternatives to traditional regulations, such as information provision, licensing and standards.

And even where regulation is selected as the appropriate mechanism, there are many different forms of regulation. One of the key advantages of avoiding early specification of the method for ameliorating a possible problem is that it reduces the risk of ad hoc regulatory 'solutions'.

There are a number of broad approaches to regulatory regimes:

- *Prescriptive rules* which focus on inputs and processes of an activity, specifying the technical means to be used in achieving the objective of the regulation. An example would be the mandatory installation of a speed governor in motor vehicles.
- *Performance-based rules* which specify an outcome in precise terms, for example a maximum speed limit or minimum energy efficiency (eg BIE 1994d pp. 19-21).
- *Principle-based standards* which outline the desired outcomes by specifying the spirit or broad intention of the regulation. These require interpretation by those to whom the regulation applies, for example a rule that drivers shall travel in a manner appropriate to the conditions (IC 1995b, Williams-Wynn 1996).
- Self-regulation which, as the name implies, involves a number of firms agreeing to a common set of rules or 'guidelines'.
- The use of market-based instruments which work by altering market signals (usually prices) so that firms have an incentive to modify their behaviour.

All approaches have their costs and benefits and no approach can be said to be best in all circumstances. Nevertheless, there is a trend away from the prescriptive approach. Prescriptive rules are costly to create and don't

encourage firms to search for lower-cost ways of meeting regulatory objectives. They may involve excessive and superfluous detail, as exemplified by the ash tray example in box 8.1. On the other hand, they do offer a high degree of certainty and do not necessarily involve high user costs. Other disadvantages are that they encourage a regulation-avoidance mentality which can lead to a socially costly trend of regulatory amendment followed by avoidance 'innovation' followed by further amendment and so on. Technological change can also make prescriptive regulations redundant (IC 1995b, Williams-Wynn 1996).

Box 8.1: Regulations relating to ashtrays for use by the US Government

In March 1993, the GSA outlined, in nine full pages of specifications and drawings, the precise dimensions, color, polish and markings required for simple glass ashtrays that would pass US government standards. A Type I, glass, square, 41/2 inch (114.3 mm) ash receiver must include several features: "A minimum of four cigarette rests, spaced equidistant around the periphery and aimed at the center of the receiver, molded into the top. The cigarette rests shall be sloped toward the center of the ash receiver. The rests shall be parallel to the outside top edge of the receiver or in each corner, at the manufacturer's option. All surfaces shall be smooth.

"Government ashtrays must be sturdy too. To guard against the purchase of defective ash receivers, the GSA required that all ashtrays be tested. "The test shall be made by placing the specimen on its base upon a solid support (a 1 3/4 inch, 44.5 mm maple plank), placing a steel center punch (point ground to a 60-degree included angle) in contact with the center of the inside surface of the bottom and striking with a hammer in successive blows of increasing severity until breakage occurs." Then, according to paragraph 4.5.2., "The specimen should break into a small number of irregular shaped pieces not greater in number than 35, and it must not dice." What does "dice" mean? The paragraph goes on to explain: "Any piece 1/4 inch (6.4 mm) or more on any three of its adjacent edges (excluding the thickness dimension) shall be included in the number counted. Smaller fragments shall not be counted."

Source: National Performance Review, US, (1993).

Performance-based rules are also costly to create, but probably less so than prescriptive rules. They too offer certainty to business and are particularly useful when outcomes are easy to measure. They give firms an incentive to search for the lowest cost means of achieving the performance standard. An example is the Altona Chemical Complex regulatory agreement (BIE 1996e) Their main disadvantage is that they provide no economic incentive for firms to

exceed the standard, even if the social benefits of doing so exceed the social costs (IC 1995b, Williams-Wynn 1996).

Principle-based standards or 'fuzzy laws' have relatively low costs of establishment and administration. They have the flexibility which allows them to deal with changing technologies and circumstances, do not encourage an avoidance mentality, and give firms an incentive to search for lowest-cost solutions. However, from the perspective of the regulator, they may not provide outcomes with the same degree of certainty as prescriptive rules. Similarly, because of their lack of precision, businesses may be uncertain about what is expected and, especially if they are risk averse, may opt for unnecessarily costly solutions (IC 1995b, Williams-Wynn 1996).

It has been suggested that, compared to large businesses, small businesses tend to prefer prescriptive regulations as they lack the skills or resources to develop their own compliance methods. One way of meeting the wishes of both larger and smaller businesses is to have performance—based or principle-based regulations, accompanied by a set of *voluntary* prescriptive provisions which meet the performance standards. Such provisions provide certainty for those firms which wish to avail themselves of the provisions, while providing innovative opportunities for others.

Self-regulation can involve any of the following:

- a non-enforceable code formulated by a professional or industry association;
- an enforceable code with sanctions enforced by an industry or professional association; or
- an industry or professional code implicitly or explicitly underpinned by government, or the possibility of government intervention.

In practice, the boundaries between self-regulation, industry and government co-regulation and 'pure' government regulation are somewhat blurred.

For governments, self-regulation has the virtue of largely shifting the costs of regulation from government budgets to the regulated businesses. But in terms of net social benefits, when can self-regulation be expected to be more efficient and effective than government regulation?

For self-regulation to be effective, there must be an industry or professional association with complete, or near complete, coverage of all relevant businesses. As compliance will involve costs, association members have an incentive to ignore the 'self' regulation — such behaviour needs to be easily detected. Thus self-regulation is likely to be relatively effective where:

- the number of regulated firms in an industry is smaller rather than larger;
- where reputation is important (as for example in health-related regulation, where knowledge of any breach of standards by a firm might lead to its losing business);
- where the industry or professional body has expertise not available to the government;
- where non-compliance with the rules would be clearly apparent to other businesses in the association; and
- where non-compliance with the rules imposes a cost on other association members (this provides an incentive for all to monitor and police the others).

Self-regulation will be the economically efficient solution if it involves lower total costs than government-imposed regulation. This depends on:

- government administration costs (which will be lower under self-regulation);
- firm compliance costs, which may or may not be lower (for a given set of requirements) depending on the manner in which compliance is achieved;
- the relative effectiveness of sanctions for non-compliance. It might well be thought that compliance will always be greater under government regulation, but this is not necessarily so. For instance, the medical and law professions, and horse racing associations, have available a very strong sanction, namely powers to effectively revoke a member's right to practice;³ and
- whether the rules limit competition by increasing barriers to industry entry
 and exit, or limit firms' innovation or consumer choice. Again, it might be
 argued that self-regulation is more likely to involve social costs of this
 nature, but this is not proven. There are numerous examples of
 government regulations having these effects and the private interest group
 theory of government regulation implies that it will often involve such
 outcomes.

Examples of market-based regulatory instruments include subsidies and tax concessions, tradeable permits and some government charges and taxes. As an example of their use, instead of having regulations which define pollution as an offence, polluters could be required to pay a tax proportional to the level of

³ Assuming non-compliance involves net social costs.

pollution they emit. Polluters would then have an incentive to adjust the amount of pollution more in line with desired levels.

Under the tradeable permits approach, the government would specify a total amount of pollution and issue permits, allocating this amount amongst polluting firms, who are then free to trade their permits. The more highly-polluting firms can then decide whether to acquire additional pollution 'rights' from less-polluting firms, or to adopt some other pollution-abatement strategy, based on the relative costs of the alternatives (IC 1997i, Grabosky and Braithwaite 1986).

How does the effectiveness and efficiency of market-based instruments compare to government regulation? Suggested virtues of the market-based approach are its greater flexibility, lower compliance costs and reduced information needs for regulators (IC 1997i). Other things being equal, if the regulator does not need as much information, this implies lower administration costs. It has been estimated, for example, that tradeable permits for sulphur dioxide emissions in the US will reduce the cost of the 1990 acid rain control program by at least 50 per cent compared to the most likely command-and-control alternative (Palmer et al 1995).

However, the relative virtues of regulation and market-based instruments depend on other features of the regulatory regime, including the form of the rules (discussed later). For example, a market-based approach may not be more flexible than performance-based rules, while the transaction costs may or may not be lower than those for principle-based standards or self-regulation.

In the mid-1980s, Grabosky and Braithwaite (1986) noted that, while environmental agencies in Australia had all given some attention to possible market-based instruments, all had rejected them on the grounds of impracticality, mostly related to uncertainties about whether emissions would be accurately measured. But in more recent years the use of market-based instruments by environmental agencies has become more common (James 1997). For example, a trading system now operates in the Hunter Valley of New South Wales to control certain salt discharges. Similarly, a tradeable permit scheme allocates salt discharge rights in the Murray-Darling irrigation district between New South Wales, Victoria and South Australia (IC 1997d).

8.5 Regulation process

The process of formulating a regulation is often defective, with consequences both for the efficacy of the regulation and for subsequent compliance. Many jurisdictions around the world have realised that existing processes for reviewing or vetting old or new regulations are significantly flawed and have developed better frameworks (table 8.1). Some of the critical features of an appropriate process of regulation include:

- transparency;
- consultation;
- forewarning;
- grievance procedures;
- sunsetting; and
- changing incentives.

Table 8.1: Guidance on regulatory process and design

Agency	Internet address
Australian Commonwealth Office of Regulation Review	http://www.pc.gov.au/orr/
The Victorian Office of Regulation Reform	http://home.vicnet.net.au/~sbusvic/rrhome.htm
Worldwide compendia of regulation analysis sites	http://www.regulation.org/
	http://www.oecd.org/puma/regref/reglinks.htm
US National Performance Review	http://www.npr.gov
UK Cabinet Office Better Regulation Unit	http://www.open.gov.uk/co/bru/bruhome.htm
Treasury Board Secretariat of Canada, Regulatory Affairs	http://www.tbs-sct.gc.ca/tb/rad/index_e.html
Governor's Office of Regulatory Reform (New York)	http://unix2.nysed.gov/ils/executive/gorr/gorr.ht m
Congressional Research Service reports on regulatory reform and risk analysis	http://www.cnie.org/nle/crsrsk.html
Ontario Red Tape Review Commission	http://www.gov.on.ca/MBS/english/press/redtape/index.html

a Addresses correct at 15 July 1998.

Transparency

There should be clear, and unless precluded by special circumstances, public, communication of the rationale, objectives, target groups, timing, compliance requirements and enforcement strategies of any new regulation. Governments' regulatory intentions, administrative and delivery regime (including reporting requirements and enforcement) need to be in the public domain if small business is to influence their design. As one commentator put it, 'the people may have to dance to bureaucracy's tune, but they are entitled to a copy of the music' (Grabosky and Braithwaite 1986).

In the US, for example, Federal agencies have been required to publish agendas of regulatory and deregulatory activities since 1978. The Regulatory Information Service Center, created in June 1981, publishes a 'Unified Agenda of Federal Regulatory and Deregulatory Actions' twice yearly.⁴ This identifies regulatory priorities and contains additional detail about the most important significant regulatory actions that agencies expect to take in the coming year. The US Office of Office of Management and Budget also provides a comprehensive indication of which regulations are under anticipated review.⁵ Some steps have also been taken in Australia. In 1997, the Victorian Government commenced publication of an annual plan of government regulatory intentions.⁶

Consultation and forewarning

Regulators should undertake genuine consultation with representative stakeholders to assess the impact on various groups. In the UK, a compliance cost assessment was introduced as a mandatory requirement for regulations with a business impact (DTI 1992). Some jurisdictions are now introducing a small business 'litmus' test to ensure that the regulatory design is at least cognisant of the interests of this diverse and fragmented group.

Consultation with key stakeholders should continue, periodically, after the regulation has been enacted, to assess: the magnitude, incidence, origin and appropriateness of compliance burdens; the efficacy of the regulation in achieving its objective; and to discern any unintentional adverse impacts. It is important to find out which firms have difficulty in compliance, why this is so, and how, if possible, they could achieve best-practice in compliance.

Forewarning of regulations provides firms or other regulated parties with time to develop compliance and administrative systems or to make necessary equipment investments (as required for meeting certain environmental regulatory requirements).

Grievance procedures

Regulators should adhere to complaint resolution principles that:⁷

⁴ http://policyworks.gov/mi/.

⁵ http://library.whitehouse.gov/omb/OMBREGS.HTM.

⁶ http://home.vicnet.net.au/~sbusvic/rr_alert.htm.

⁷ Based on Canada's regulatory policy, Treasury Board of Canada Secretariat 1995b.

- are easily accessible and well publicised;
- are simple to understand and use;
- allow speedy handling, with established time limits for action;
- keep people informed of the progress of their complaints;
- ensure a full and fair investigation of complaints;
- respect people's desire for confidentiality;
- provide an effective response and appropriate redress to complainants; and
- provide information to management so that services can be improved.

This might include provision for championing bodies that mediate between regulatory agencies and the regulated (such as the New York Governor's Office of Regulatory Reform⁸ or a regulation ombudsman).

A Regulation Impact Statement

There is evidence that careful regulatory appraisal and reform can produce significant benefits, without prejudicing social and economic objectives.⁹ The requirement for a regulatory impact statement (RIS), where practicable, is a discipline on that appraisal. A RIS assesses the benefits and costs of the proposed regulation compared to alternatives, along the lines described by the ORR (1997) and Arrow (Box 8.2). 10

⁸ See GORR 1997.

See, for example, the success stories published by the Governor's Office of Regulatory Reform (http://www.state.ny.us/gorr/success.html).

¹⁰ Hopkins (1997a) provides a critique of various regulation assessment guides available around OECD countries. Canada has published all its major guides on a website (http://www.tbs-sct.gc.ca/tb/rad/guide2.html). In particular see the Treasury Board of Canada Secretariat (1995a).

Box 8.2: The 1996 Arrow principles of regulatory analysis

- 1. Each analysis contains a useful comparison of favourable and unfavourable effects of proposed regulation, with a primary focus on estimates of overall benefits and costs, and a secondary focus on distribution consequences (that is, on impacts on particular segments of society as well as on issues of equity within, and across, generations).
- 2. The analysis relates these effects to those of practicable, alternative approaches, including more and less extensive requirements.
- 3. Scale and scope of analysis varies with the stakes involved and with the prospects that analysis can affect the regulatory outcomes.
- 4. Estimates of the regulatory cost stemming from any job or wage losses are based on whatever transition costs will be incurred from job switching, since regulation generally affects employment distribution across industries rather than total employment. In the rare cases where a particular regulation significantly affects total employment, regulatory cost estimates are of the net effect on workers, consumers and producers.
- 5. Emphasis is on incremental effects effects expected relative to a clearly specified baseline, the situation likely in the absence of the regulation.
- 6. Effects are quantified to the extent practicable, using plausible ranges and best estimates reflecting expected values; any "margins of safety" are stated explicitly.
- 7. Qualitative factors are not subordinated to quantitative factors in situations where the former are recognised as being important, in which case they are fully characterised in the analysis. Potentially irreversible consequences are identified.
- 8. Analysis is subjected to external review, the extent of which varies with the importance of the decision. Such review may entail peer review conducted within government and/or by respected outside experts. Retrospective assessments of analyses should be undertaken periodically by independent researchers.
- 9. All analyses use the same common core set of assumptions such as the social discount rate, the value of reducing risks of accidents and premature death (expressed as number of life-years extended), and the value of other improvements in health. Where alternative values appear more suitable, the analyses indicate how outcomes differ from those that emerge using the common core values. Future benefits and costs are discounted to present values using a range of discount rates chosen to reflect how individuals trade off current for future consumption rather than the rates of return on private investment. Values used to monetise risk reductions are based on tradeoffs that individuals can be observed making in voluntary transactions that yield small risk reductions at the expense of other amenities, goods or services.
- 10. A standard format is used to summarise each analysis, highlighting: the net present value of benefits and costs of both the preferred and the main alternative options; notable features of the stream of these benefits and costs; key assumptions employed, with a list of factors that have and have not been quantified; and incremental net benefits of each regulatory alternative.

Source: Hopkins 1997a based on Keith J. Arrow et al., Benefit-Cost Analysis in Environmental, Health, and Safety Regulation — A Statement of Principles (Washington, D.C.: American Enterprise Institute, 1996).

Sunsetting

Regulations often become anachronistic, with technological change, altered community attitudes and evolving markets. It is desirable to indicate when the regulation will next be reviewed, and the performance indicators on which the review will base recommendations to cease or continue the regulation. For example, what outcomes would mean the regulation had failed or succeeded? This represents a shift to 'evidence-based' regulation.

Changing incentives

While guidance on best-practice regulation, requirements for RISs and other mandated features of regulatory process may help to eliminate badly designed or unnecessary regulations, these strategies can be partly circumvented if regulatory agencies do not have incentives for proper regulatory appraisal.

There are a variety of strategies for increasing incentives for better regulatory process and outcomes:

- regulatory agencies often have excessively risk averse positions, with consequent over-regulation. Most (but not all) optimal systems should fail sometimes, because the costs of one hundred per cent success are too high. Specifying satisfactory failure rates may help to overcome the risk that a spectacular, but rare, failure sparks a new wave of costly regulation;
- remuneration of regulators could be related to their success in designing cost-effective regulations;
- efficacy and impacts of key regulations could be independently assessed, so removing the inherent bias of regulatory agencies. For example, in the US, the Regulatory Improvement Act is intended to ensure that agencies take their evaluations and risk assessments of new rules seriously by introducing a process of independent peer review (Nivola, 1998b);
- agencies which achieve best-practice in regulation could be held up as public examples to others¹¹, as could ones which fail to do so; and
- the costs of regulation could be assessed and published in an annual regulatory budget, as is now done in the US by the Office of the Management of Budget. This would increase awareness of regulatory costs and bring the same level of critical scrutiny to regulatory decision making that has traditionally been applied to budgetary decisions.

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¹¹ For example, the Treasury Board of Canada Secretariat (1993, 1994a) gives detailed examples of 'enlightened' practices in regulatory programs.

Australian governments have introduced machinery designed to cover some of the above points (section 8.7), such as the RIS process, service charters and one-stop regulatory advice — although with, as yet, unclear efficacy.

8.6 Regulation design principles

Regulations have a set of design characteristics (table 8.2). Effective and efficient regulations should make conscious analytical choices among the large number of design options which are available, rather than be based on past practice or expediency. While most of these design principles are commonsense, we expand on a few, illustrated, where possible, with examples.

Targeting

There are two broad issues relating to targeting.

First, under what circumstances should the regulation apply? Regulations tread a fine line between two failures. On the one hand, a measure may reduce the risk of some 'bad' to almost zero, but usually at the expense of costly over regulation (eg banning driving to stop road accidents). On the other hand, it may reduce the risk of superfluous regulation, but at the expense of the failure to curb the majority of cases where a problem occurs (eg almost no road rules). Appropriate regulation tries to find the most efficient compromise between these two.

For example, about 40 years ago, New York Congressman James Delaney inserted a 'zero tolerance, zero risk' clause into US food and drug legislation, at a time of rising consumer concern about the carcinogenic impacts of various contaminants. No detectable amount of any carcinogen was permissible. However, over time, ever more sensitive tests were able to isolate weaker levels of contamination. This threatened more costly processing or restrictions on what could be sold, even though the adverse health impact of the contaminants at these previously undetectable concentrations was effectively zero. In 1996, the law was changed from 'zero tolerance' to 'a reasonable certainty that no harm will result from aggregate exposure' (Nivola 1998a and Foreman, 1998).

Table 8.2: Regulatory design principles

Design issue	Comments
Targeting:	Does the regulation target the problem effectively, and apply to the right groups? Does the regulation apply too widely or narrowly?
Timely:	Does the regulation solve the problem in sufficient time?
Additionality:	Does the regulation have an impact on the problem the regulation is intended to target? Note that compliance might be high, but additionality low. Does it duplicate other regulations?
Duration	Does the regulation have the right duration?
Best-practice regulatory administration and delivery	Is it administratively efficient for government and for businesses? Is compliance and administration simple and low cost? Does the regulation increase uncertainty? Do the regulatory paperwork requirements fit in with standard commercial practices, and with those required by other regulations? Does the paperwork require information from firms that could be obtained from other existing records? Does the design of administrative and delivery systems of the regulation account for differences between firms? Are the reporting requirements for firms (in terms of frequency and detail) set appropriately? Is the administrative structure optimal for regulatory coordination, delivery and information provision to businesses? What systems are in place to ensure that the behaviour of regulators when dealing with the regulated are fair and appropriate?
Consistency	Does the regulation introduce inconsistencies and adverse interactions with other regulations and policies?
Accountability	Is the regulation clear, and processes for its application transparent and contestable?
Risk management	What are the risks posed by the regulation?
	 offsetting or adverse behaviour by firms, bureaucrats or others (including corruption);
	 are the regulations overly risk averse, or do they fail to deal with some high cost risks?; and
	 possible liabilities for governments or others.
International obligations	Does it breach Australia's international obligations?
Enforcement	Is the enforcement regime appropriate (monitoring, fines, sanctions, education)? Is any penalty in proportion to the seriousness of the offence?
Flexibility	Is the regulation likely to be effective as technology, market structures, firm conduct and other aspects of the business environment change? Is it likely to be effective for different sorts of firms and industries, or is it only effective for a subgroup? Is the regulation flexible enough that a firm has the freedom to search for lower cost ways of achieving the goals of the regulation?
Cost recovery	Who should pay for the government administrative and business compliance costs of regulation (business, taxpayers generally, a particular benefited group, the source of any externality)?

Table 8.2 continued:

Design issue	Comments
Distributional impacts	Does the regulation unintentionally transfer significant resources from one group to another? How can these transfers be avoided or reduced? Is the regulation unfair?
The business impact test	Does the regulation reduce competition and/or business innovation, with increased prices or reduced quality of goods and services? How much does it affect costs, quality or availability of inputs? Does the regulation require operational changes, including changes in personnel, or physical capital? Does it constrain business practices, for example, joint ventures?

Sources: ORR (1997), Better Regulation Taskforce (1998), and the Ontario Red Tape Review Commission (1997).

In part, effective targeting also implies that context should matter in regulation, especially where prescriptive regulations are invoked. For example, Sturgess (1994) reports the case of Australian Newsprint Mills which had to undertake archaeological and fauna surveys to plant half a million trees on farmland that had been cultivated for a hundred years. Similarly, another NSW venture aimed to create a wildlife sanctuary from an environmentally degraded site, but had to conduct a \$15 000 flora and fauna study, though most development consisted of rehabilitation. Presumably, the purpose of such surveys is to ensure that development does not compromise certain environmental values. But in a context where the residual values are likely to be low, the regulation appears redundant, and the net benefit of the regulation is negative. In that context, the businesses should have been exempt from the regulatory prescription. The example also highlights the dangers of prescriptive regulations. If the regulation had instead specified some standard of preservation of environmental values, neither business proposition could have been seen as in breach of the regulation, and neither an exemption nor any abatement action would have been necessary.

Second, to what businesses should it apply? For example, some regulations (and tax measures) either weaken regulatory requirements for some businesses, or exempt them altogether, because of high compliance costs. The appropriateness of such selective treatment depends on the nature of the regulations and markets — and should be examined on a case by case basis. We look closely at the rationale for such 'regulatory tiering' for small business in the next chapter.

Additionality

Regulatory additionality is the extent to which a regulation makes a difference to a problem, compared to the counterfactual of no regulation. A regulation may make no difference because there is no problem to be solved, the problem is already addressed by business, the regulation fails to target the problem adequately, the intent of the regulation is undermined by offsetting factors, the regulation is inefficient mechanism, or firms fail to comply with it. All of these mean that additionality would be low, and the regulation superfluous. It is critical, therefore, to assess the efficacy of the regulation in overcoming a problem, and to try to predict quantitatively how much of a difference it makes. For example, how many lives does an OH&S directive save? What reduction in severity or number of injuries is effected, compared to the counterfactual of no regulation or alternative options? It is possible that some regimes with lower compliance costs and lower standards achieve higher standards than regimes with higher compliance costs and notionally higher standards.

Administrative and delivery aspects of regulations

Often the major concerns of business, especially small business, is the way in which regulations are administered and delivered by the multiple regulatory agencies with which they have to deal, rather than the regulations themselves (Bickerdyke and Lattimore 1997, pp. 45-52). Businesses claim that regulators are often ignorant of the impact of their regulatory regimes on small business. What may seem to a bureaucrat to be a small piece of additional paperwork for one rule, creates centimetres of paperwork burden and potentially metres of regulatory 'guidance' when added across all rules. For example, the BIE (1996d, p. 23) found that the average firm needed a minimum of 8 to 9 licenses, most of which had to be applied for separately — this was on top of all other taxation and regulatory requirements.

If a firm operates across more than one state, then it can face even greater multiples of regulatory requirements. In part, this burden arises because each regulator sees the 'little picture' of their own regulation and does not need to take into account the 'big picture' impacts. This suggests better coordination and streamlined advice is needed. Innovations, such as the Business Entry Point (chapter 5), may partly ameliorate these problems, as may mediators for sensible implementation of regulations (like a regulation ombudsman).

Other things being equal, it is in society's interests to minimise the transaction costs of any given regulatory regime. Total transaction costs can be thought of as the sum of two components: government administration costs and private

sector compliance costs.¹² To some extent these two cost categories are substitutable — that is, lower public administrative costs can be obtained at higher compliance costs and vice versa. This raises some important questions.

What is the mix of administration costs borne by regulators, and compliance costs for small firms, and is it at the appropriate level? There is little evidence on the mix of administrative and compliance costs of Australian government taxation and regulatory measures, or on how these have changed over time. In the US, there is evidence that the ratio of compliance costs to administrative costs for social regulations is currently around 20, compared to 9 two decades ago, while the ratio for economic regulations is 71, *down* from 240 in 1977 (Douglass et al 1997). If Australia even roughly resembles the US, the administrative costs borne by regulatory agencies are a mere tip of the iceberg of overall regulatory transactions costs.

The fact that the ratio of administrative to compliance costs is high may not be inappropriate. For example, a regulator is able to spread the fixed costs of administering a regulation across all the firms on which it is imposed, but each firm must duplicate the fixed costs of compliance. Nevertheless, under most current arrangements a regulator has no incentive to increase its own administrative costs, even if that produces an overall saving in regulatory transactions costs.

What policy mechanisms would provide such incentives to government agencies? One such mechanism is to have an independent agency within government to assess the compliance burdens of existing and proposed regulations, and of alternative arrangements which may reduce such burdens. In some cases, such alternative arrangements may lower compliance burdens by more than they increase administration costs (ie an increase in the net benefits of the regulation). In those cases, the independent agency could advise government whether supplementary financial support to agencies which administer the regulations is warranted.

There is a range of other measures which may help to reduce compliance costs. Some of the burdens of regulation and tax may be mitigated through new technology (for example, software designed to automate complex tax calculations or to assess what regulations apply to a business, and information provided via the Internet on least cost measures of complying with OH&S or

of the Australian Tax Office.

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¹² It appears likely that firm compliance costs are higher, perhaps considerably so, than administrative costs. For example, in relation to taxation compliance costs, Rimmer and Wilson (1996) conclude that compliance costs are much higher than the administrative costs

emission standards). As discussed in chapter 5, there may be public good grounds for government-funded development of such technologies.

Regulatory agencies can publish and adhere to service charters which indicate how they deal with the regulated (the design of paperwork, the way in which enforcement is achieved, length of time to respond to requests, and complaint mechanisms). In 1997, the Commonwealth Government announced that Commonwealth departments, agencies and enterprises that deal with the public would be required to develop such service charters (Howard (1997a, p.54).

Regulatory mapping can be used to build up a picture of the interaction of regulations and overlapping responsibilities of different agencies. These 'maps' can then be used to remove inconsistencies, harmonise delivery and enforcement strategies, assign clear responsibility and negotiate regulatory simplification.

Consistency

One of the major criticisms of businesses of the regulatory regime is the inconsistency between competing and overlapping regulations. This often reflects the ad hoc way in which new regulations are formed, and the lack of coordination among regulatory agencies.

For example:

- in an application for a hard rock quarry in NSW, two departments set out different requirements for the construction of a creek crossing to prevent pollution (Sturgess 1994);
- in NSW, different requirements exist for the distance from a watercourse at which earthworks can be carried out. The Department of Conservation and Land Management states 60 metres; the Department of Water Resources state 20 metres and the new Department of Planning EIS guidelines propose 40 metres, allegedly because it was a compromise between the other two agencies (Sturgess 1994); and
- agriculture regulations required the Parks Sausage Company of Baltimore (US) to wash its floor repeatedly during the day, while occupational safety rules require that it be dry so that workers will not slip (Howard 1994).

The solution to regulatory consistency is two fold. First, it requires clarification of the roles and scope of regulations of different agencies, so as to identify where inconsistencies arise. Second, it requires an evidence-based assessment of appropriate requirements. For example, in the penultimate example, this would involve determining the relative hazards of pollution associated with differing distances and in differing contexts. If a prescriptive regulation was, for

some reason, regarded as necessary, the optimal distance would be specified. In fact, one of the advantages of generally eschewing prescriptive regulations is that it avoids many of the inconsistencies that inevitably arise when different bodies have diverging views about *how* a particular regulatory purpose is to be achieved, even if they agree on the desired outcome. It may, in the above example, be best to avoid the prescriptive distance-based regulation, but instead have one which requires that pollution be below some level, regardless of how the regulated achieves that outcome.

Regulatory enforcement: combat or persuasion?

Enforcement is also an important component of regulatory design. As the Bell Report notes, it is the behaviour of regulators, as much as the regulations themselves, which is of concern to small business — and no doubt to others as well.

Enforcement should reflect well thought out strategies, rather than simply arise in an ad hoc manner. In broad terms, such strategies can range from purely combative at one extreme, to purely cooperative at the other. In general, however, it seems likely that a *mixed* combative and persuasive enforcement strategy will offer the most cost-effective outcome.

A number of such strategies have been suggested:

- A 'tit for tat' strategy where the regulatory agency adopts a cooperative
 and persuasive approach until the regulated firm fails to cooperate or
 cheats on compliance. The regulatory agency then adopts a combative
 strategy until the regulated firm signals it is prepared to return to
 cooperation.
- An 'enforcement pyramid' strategy under which, if firms do not comply, regulators gradually increase their response from persuasion to severe penalties. A potential problem with this behaviour is that regulated firms may know or 'learn' the response pyramid and thus not modify their behaviour until the expected costs of non-compliance exceed the costs of compliance (IC 1995b, Ayres and Braithwaite 1992).
- The 'walk softly and carry a big stick approach' in which the regulatory agency has such strong punitive powers that it rarely has to use them. Examples in Australia include the Reserve Bank, the Australian Broadcasting Tribunal and the Life Insurance Commissioner (Ayres and Braithwaite 1992).

There is little recent empirical work on enforcement strategies of Australian regulatory agencies. In their major mid–1980s study, Grabosky and Braithwaite (1986 p. 1) conclude:

... Australian business regulatory agencies are of manners gentle. Not only is this reflected in the attitude of regulators, it also characterises their policies and regulatory outcomes such as prosecutions, licence suspensions, plant shutdowns, injunctions, or informal use of adverse publicity. Litigation or any kind of adversarial encounter with industry is commonly undertaken only as a last resort.

To the extent that small business concerns about the behaviour of regulators relate to enforcement strategies, the above discussion suggests that:

- Regulatory enforcement is likely to involve a combative stance in some circumstances and it would be unrealistic to expect a regulatory agency to always adopt a persuasive and cooperative strategy. Indeed, failure to adopt a combative strategy on at least some occasions would raise questions of regulatory 'capture'.
- The empirical evidence that is available (which is not up-to-date) does not suggest that Australian regulatory agencies adopt an overly combative approach to regulatory enforcement. However, further research into regulatory enforcement regimes in Australia is needed before any firm conclusions can be drawn.

The cost-benefit and superiority test

It is increasingly recognised that regulations should pass some public benefit test. If the costs (including all relevant costs — not just the administrative costs of the regulatory agency) exceed the benefits to the community as a whole, the regulation should be dropped or modified, unless there is some other constraint which requires the regulation to be in place.¹³

Hahn and Litan (1998) contend that 57 per cent of the US Government's regulations would fail a strict cost-benefit test using the Government's own numbers. Unfortunately, there has been no equivalent systematic examination of Australian regulations to see how many pass the cost-benefit test.

In fact, good regulations need to pass more than a cost-benefit analysis. They must be superior, in the sense that no change in any facet of their design produces a better outcome.

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¹³ In the latter case, the ultimate criterion for best-practice regulation is the least cost design which meets the minimum regulatory standard.

8.7 Recent measures to improve regulation

In recent years, Australian governments have become increasingly conscious of the potential negative impact of business regulation on productivity and national competitiveness. Deregulation has been undertaken in a number of areas, including financial and labour markets, international trade (tariff reductions) and interstate and intrastate commerce. The Commonwealth, State and Territory governments have also introduced programs of reform of existing regulation. Further, they have adopted measures aimed at ensuring that new regulations will only be introduced if they are the most appropriate way of addressing the objective, and are also efficient in terms of compliance and administrative costs.

A major initiative in this area was the 1995 Competition Principles Agreement signed by Commonwealth and State and Territory governments. This agreement commits the governments to implement programs for the review of existing legislation which restricts competition. The reviews are to take account of the costs and benefits of regulation, with particular attention to its economic impact, and must also consider other approaches which could achieve the same objectives without using legislation.

Equally important is the scrutiny of proposals for new regulations. At the Commonwealth level, the Government has had procedures for a number of years requiring agencies to prepare Regulation Impact Statements (RISs) which are examined by an independent body, the Office of Regulation Review (ORR). The key elements of a RIS are outlined in Box 8.3. Appendix F provides further information on both the reviews to be undertaken under the Competition Principles Agreement and the Commonwealth's processes for scrutiny of proposed new regulations.

However, it appears that these procedures have not been widely followed. The Bell Report (1996) noted that many Commonwealth bureaucrats were unaware of the requirements to undertake RISs. Moreover, the requirements could be ignored with relative impunity as the Commonwealth's review machinery did not include effective sanctions. In a similar vein, Coghlan (1995) noted that there had been ineffective scrutiny of bureaucrats when they develop new ways of implementing subordinate legislation, regulations and administrative fiats. More recently, the ORR found that of the 121 Bills introduced into Federal Parliament in 1996–97, adequate RISs were prepared for only 'around a dozen' (IC 1997h, p.xii).

Box 8.3: Key elements of regulation impact statements

Regulation Impact Statements analyse:

- the perceived problem and the related objective of the proposed regulation;
- alternative approaches or options for dealing with the problem; and
- assessment of the expected benefits and costs to the community of various alternatives, usually including a breakdown of these impacts on government, business, consumers and other groups.

They also provide information on:

- the recommended option;
- the process and results of consultation about the proposed regulation; and
- enforcement and review mechanisms.

Source: IC 1996b.

Reflecting these inadequacies, there have been further recent changes to increase the disciplines on regulation making. In March 1997, the Government announced changes to its regulation scrutiny procedures designed to improve the quality of its regulation-making (Howard 1997a). Appendix F describes these changes in some detail.

These, and other recent reforms by both the Commonwealth and States and Territories, hold the promise of improving both the stock of current regulation, and the quality of new regulations. But this outcome is not assured. There is a tendency for bureaucracies to provide 'in principle' support for the objective of minimal efficient regulation, while not practicing its requirements in their own operations. Halting what has been termed the regulatory 'Titanic' requires heightened regulatory awareness within government, and commitment to the intent of reforms. A substantial implementation task is involved, as is recognised in Australia (Banks 1996) and other countries (Nesterczuk 1996; Hopkins 1997ab, and Foreman 1998). Moreover, there are many practical pitfalls in regulatory reform which can frustrate progress (box 8.4).

Some progress in regulatory reform has, nevertheless, been made. The IC (1998) documents many significant regulatory reforms over the last two decades in Australia, including financial deregulation, rationalisation of licensing provisions and key reforms to major regulations such as OH&S. For example, in 1991 the governments of Victoria, NSW, Queensland and ACT introduced a uniform set of essential requirements regarding plant safety, replacing disparate previous codes (IC 1998, p.148). Under the Victorian License Simplification Program, 130 out of 482 licenses existing in Victoria before 1992 will be repealed (IC 1998, p.189).

Box 8.4: Common failures in regulatory reform

In 1992, the Business Regulation Review Unit in Queensland assessed the reasons why regulatory reform initiatives have so often failed. Its assessment set the stage for broad reform of the state's reform programme. The Unit found that common pitfalls include:

Review Strategy

- Trying to solve intractable problems rather than those that can be dealt with.
- Failing to define a comprehensive administrative strategy for achieving desired outcomes.
- Allowing Ministers to exempt their own rules from review.
- Attempting regulatory reform without reference to policy objectives, thereby disenchanting all
 participants.

Winning Support

- Not realising that to tamper with regulations is to change the relationship between business and Government.
- Embittering business groups by removing protections they value.
- Relying on the business community to support reform when the economy is growing.
- Failing to win the support of Cabinet, individual ministers and senior public servants, and relying too heavily on Ministerial support in specific cases.
- Failing to recognise that regulatory review should become part of the public sectors management
 and administrative processes, and that a fundamental change in the training and education of civil
 servants is needed to bring this about.

Review Focus

- Allowing the focus of review to dwell on obviously outdated sets of regulations or administrative
 efficiency rather than on deeper questions of the intrinsic merits of regulation and underlying
 policies.
- Considering only regulatory costs and not benefits.
- Pursuing regulatory reform as a political strategy rather than as a socio-economic imperative.
- Focusing on the efficiency and effectiveness of regulations, rather than on the need for their existence.
- Considering only lower-level regulations rather than laws.

Cultural Change

- Failure to inculcate different attitudes among public servants who carry out regulatory processes.
- Failure to recognise and deal with the resistant culture of the public sector and of business communities.

Consultation

- Failing to consult with all stakeholders, even if that would mean a long and messy debate.
- Allowing regulators the discretion to decide when to consult.

Timeframes and Workloads

- Demanding that review take place within an unreasonable timeframe.
- Failure to guard against "reform fatigue".
- Failure to recognise that the quality of resources is as important as quantity.
- Failing to recognise the real difficulties of good consultation, benefit-cost analysis and other reforms.

Source: Summarised in OECD 1996.

Actions to reduce compliance costs for smaller businesses

Apart from these broader programs to reduce and improve regulation where possible, the Commonwealth Government has in recent years undertaken other initiatives to assist smaller businesses in regulatory and tax compliance.

An important example is the Australian Taxation Office's (ATO) efforts to reduce compliance costs and improve its provision of information to SMEs to assist them in compliance. The ATO established a Small Business Consultative Group to facilitate discussions with small business organisations about tax issues. In 1994, it sponsored a study into compliance costs in two industry sectors, which recommended a number of changes to reduce compliance costs, particularly for smaller businesses. Most of these recommendations were implemented (Rimmer and Wilson 1996).

More recently, the Government has announced that it will require the ATO to consult with small business groups and suitable business advisers 'in developing and disseminating information specifically relevant to small business' (Howard 1997a).

In addition, a number of specific changes to reduce compliance costs for SMEs were announced in the Government's response to the Bell Report. These included:

- A new exemption from keeping records for FBT purposes for businesses whose liabilities would be quite small. In addition, all taxi travel to and from the place of work, and parking provided by small businesses on their premises, was exempted from FBT liability. These changes addressed some of the specific complaints about taxation.
- New employees of small businesses with 15 or fewer employees will not be covered by Commonwealth unfair dismissal laws until they have one year's continuous service.
- Commonwealth and State/Territory governments will review workers' compensation arrangements to develop a consistent approach to OH&S and provide OH&S assistance for small business.
- The development of a program, to be implemented with the States and Territories, to streamline government requirements and information services at a cost of \$23 million over four years.

 The development of a national business information service by building onto the existing business licence information service and Bizlink services.¹⁴

The Government's response also noted that Commonwealth and State and Territory governments had agreed to accelerate national reviews of regulations covering a number of areas, including food products, agricultural and veterinary chemicals, building, occupational health and safety, and environmental regulation (Howard 1997 a).

Moreover, the Commonwealth Government has decided that taxation proposals should be subject to an adapted version of the RIS process — the Tax RIS (Rimmer 1998).

The Tax RIS is a systematic evaluation of the design and impact of major taxes and includes four components:

- specification of the policy objective of the tax measure;
- identification of implementation options (including transitional arrangements, alternative administrative arrangements within the ATO, options for ensuring compliance and the provision of information to taxpayers);
- assessment of the impacts of each implementation option (including consideration of the financial, economic, compliance, administrative and social consequences); and
- a conclusion and recommended option (with the rationale for the choice).

Australia is the first country to implement such a process. As they have been operating for less than a year, it is too early to determine the impact of Tax RISs on the design, implementation and compliance costs of taxes. However, the use of Tax RISs is potentially very important because most of the compliance costs facing small business are for taxes rather than regulations (chapter 7). Better scrutiny of prospective measures should reduce compliance burdens.

¹⁴ An important element of the integrated information service will be a national phone hotline for information on how to resolve regulatory difficulties and problems.

9 HOW SHOULD REGULATIONS TAKE ACCOUNT OF SMALL BUSINESS?

9.1 Introduction

This chapter has two broad functions. First, it sets out the circumstances in which regulators might want to treat small businesses differently when designing and implementing regulations (sections 9.2 to 9.6). Second, it draws together the main findings from the three chapters on regulations into a set of conclusions (section 9.7).

9.2 Is different treatment warranted?

Many of the keystones of regulatory reform — such as elimination of unnecessary regulations, more simple compliance, easier access to information on regulatory requirements, strict tests of public benefit for new regulations, and eradication of inconsistencies in regulations between jurisdictions and/or agencies — benefit all sizes of firm. For this reason, it is likely that the biggest gains from regulatory reform for small businesses will come from across-the-board reform, rather than reform that is particular to small firms. Even so, some commentators argue that it is important to give particular attention to small business. This may be by:

- raising awareness of regulators about the impacts of regulation on small business;
- flexible delivery of regulations to small business;
- collecting better information about the varying impacts of regulation on different firms;
- providing information to small businesses about how to best comply with regulations; and
- regulatory tiering providing small business with more lenient regulatory treatment or exemptions.

We examine these varying strategies in the following sections.

9.3 Awareness raising

Small firms may be disadvantaged in regulation-making because the processes which shape regulatory formulation, administration and enforcement may sideline their interests, compared to other influential groups such as large business.

Why is this the case? A number of factors influence the organisational effectiveness of an interest group including:

- *Membership size* the transaction costs of organising the group, per member, are likely to be smaller for larger groups since the fixed costs of formation are spread over increased membership.
- The degree of internal homogeneity other things being equal, the more homogeneous the group's preferences, the easier and less costly it is to reach a stable internal consensus.
- Whether the group also has other purposes for its existence if so, some of the fixed costs of group formation may be avoided or reduced. In this respect trade unions, trade and industry associations and churches have advantages over other interest groups.
- The extent to which the organisation is able to avoid 'free rider' problems—that is, the extent to which all beneficiaries of the organisation's actions can be required to contribute to the costs of the group's actions (Noll 1989).

SMEs face more difficulties than larger firms in organising an effective interest group because they are heterogeneous, there is no pre-existing group with extensive coverage of SMEs, and the sheer number of businesses makes it likely that the free rider problem will be severe.

A number of US studies have found support for the prediction that regulations can benefit well-organised economic interests, over others. For example, a study of water pollution regulations found that weaker standards applied to industries with higher profits and better-financed trade organisations. The study suggested that regulation by the Environmental Protection Agency represented an outcome of three competing forces: efficiency, equity (in the sense of equalising costs across industries) and bias in favour of industries that had greater resources to fund the presentation of their case to government. Also, in environmental, health and safety regulations there is evidence that big business gains at the expense of unorganised small business (Noll 1989, SBA 1995 and Bartel and Thomas 1985). Certification requirements, such as for IT, can also be a substantial barrier to entry for SMEs (BIE 1995c, p.67).

Unfortunately, we found no empirical studies which have examined the extent to which Australian SMEs may have been disadvantaged or advantaged by the way in which interest groups can affect regulation making.¹

If regulation is strongly shaped by large-firm dominated interest groups, then small business may have grounds for concern. This concern is magnified if the regulators, who tend to work in large agencies, see compliance through the lens of big, well resourced and complex organisations. Certainly, there is a strong perception among small businesses that regulatory agencies are ignorant of how small businesses operate, and that, therefore, regulations tend to be written as if all businesses were large and sophisticated (Bell 1996). As one small business operator put it:

It is very hard to start a small business. A big problem for me has been trying to produce work and settle down to the paperwork. Tax, superannuation and workcover are just three areas that seem "grey" to me. I just do my best and hope I am doing it right. The problem is that where big business has people to do this, a small business owner has to do all the same things but with no one to help?.

Governments around the world have increasingly required regulators to think about their impact on small business. For example, the US Small Business Regulatory Enforcement Fairness Act of 1996:

- created a small business regulation ombudsman to ensure regulatory fairness for small business
- required regulators to provide "small entity compliance guides" and regulatory information to small businesses; and
- introduced a host of other measures intended to increase awareness by regulators of the impact of their decisions on a group they might otherwise ignore.

Australian governments have also introduced mechanisms during the last several years which may act to protect small business interests, including the requirement for consultation with them in the making of new regulations. These were discussed in chapter 8.

9.4 Flexible delivery

Flexible delivery takes account of the varying receptiveness and capabilities of the different types and sizes of firms. Flexible delivery means that firms face

Sieper (1982) and Makkai and Braithwaite (1992) have conducted empirical studies in other settings.

² Survey addendum to the ABS Business Growth and Performance Survey, 1994–95.

the same ultimate regulatory obligations, but that the way regulation is delivered takes account of their differences. Box 9.1 provides some examples of recommended elements of flexible delivery for small business in a Canadian context.

Box 9.1: Flexible delivery of regulations

IME (1995) suggested that the Canadian Government could lower its costs to small business by:

- consolidating individual departmental reporting for related firms;
- consolidating federal government reporting (eg, GST returns and tax instalments);
- consolidating federal/provincial reporting;
- redefining the information requirements for some regulations (eg the Record of Employment);
- improving communication on who qualifies for annual filing of some tax measures (eg the Canadian GST);
- improving communication of options such as automatic deposit/debit of accounts and electronic data interchange;
- improving file/case management tracking within government departments;
- increasing access to telephone information systems;
- improving flexibility for different types of companies; and
- reducing frequency of reporting for small business.

Governments may vary the delivery to different sizes or types of businesses in a number of ways. First, they may provide information and advice to certain sorts of businesses to ease compliance costs, increase possible actual compliance and ensure that complex legislation is understood. Bickerdyke and Lattimore (1997) and the Bell Report (1997) suggest, for example, that simple and practical guidelines to small business for implementing OH&S standards are likely to be both more effective and less costly than extremely detailed prescriptions, many of which may be irrelevant to many businesses.

Second, they provide forms and paperwork — perhaps delivered via software — which suit the circumstances of the business, instead of providing one complex form that meets the needs of the most difficult case. The advantage of software as a means for regulatory reporting is that it can hide complex

reporting requirements from those firms to which it does not apply, can automate some reporting (eg by setting up a template that means a business owner does not have to re-input business names, taxpayer identifiers or other material that is used in every reporting period or across different regulations), and can provide comprehensive and accessible help to businesses about how to comply. It is possible that some software could be designed to interact with standard accounting software to reduce the costs of providing financial information to the government. The major limitation of such software solutions is that many very small firms are not computerised, although that is rapidly changing.

Third, governments may introduce reporting and timing requirements for regulations and taxes which take into account firms' transactions costs in meeting them.

Finally, they can allow flexibility in regulatory contracts, such as negotiated rule making and self-regulation (as discussed in the previous chapter) — though this probably has greater relevance to larger firms, or coalitions of small firms, than individual small firms.

Arguably one of the biggest challenges for flexible delivery is the creation of incentives for regulators to discover more innovative, lower cost ways for firms to meet regulatory requirements. There are probably a multitude of ways in which regulatory compliance costs could be eased for small (and large) businesses, but few rewards for regulators to look for them. The problem is akin to that of appropriability for private sector innovation. The regulator has little incentive to innovate if they bear the costs, yet outsiders (businesses, large and small) get most of the gains. What is needed is a way in which regulators can take account of the overall social benefits of innovative delivery when deciding how much to spend on regulatory administration — an issue we discussed in chapter 8.

9.5 Information collection and provision

Evidence about the burdens of all regulations and taxes on different sizes and types of business in Australia is both fragmentary and inconsistent. The compliance costs of federal tax measures has been most closely analysed, but there are significant divergences in the estimated costs (chapter 7). Little information has been published about the distribution in compliance burdens across different firms of the same size, and why these might arise. This suggests that there may be scope for better data collection about the impacts of all federal state and local government taxes and regulations on firms.

As well, there may be scope for regulators and businesses to learn from best practice compliance by some firms. Empirical evidence such as the Yellow Pages Small Business Index (1996b) shows that the median tax compliance costs are less than half of the average tax compliance costs.³ To the extent that this represents more than respondent biases, it suggests that some firms have learned much better how to minimise the transactions costs of dealing with government tax and regulatory obligations. There may be gains from finding out how these firms have reduced compliance burdens and disseminating that information.

For example, in a Canadian context, IME (1995) suggested that small firms could lower compliance costs by automating the methods used to track information and to calculate required information, and shifting from higher cost sources (such as the owner/manager's time) to that of lower cost labour (eg, a bookkeeper) to track and report information.

9.6 Regulatory tiering

The strategies of awareness raising, flexible delivery and information provision do not dilute the regulatory requirements for small business, but seek to deliver the regulation to small businesses in an optimal way. The grounds for such approaches appear to be strong. However, the grounds for the more radical measure of regulatory tiering — typically based on the observation that compliance burdens are proportionately more severe for small relative to larger businesses — are less clear cut.

There are a large number of regulations in the US which provide statutory exemptions and relaxed enforcement for small business (SBA 1995). The application of tiering appears to be less extensive in Australia, though there are key examples, such as the payroll tax exemption for small firms.

The key question is under what circumstances should such tiering be considered. Two sets of reasons are advanced:

- the bigger burden posed on smaller businesses is unfair; and
- there may be efficiency gains from recognising the heterogeneity of businesses in their responses to regulation.

We examine these arguments in turn.

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³ A quarter of proprietors reported less than 20 hours of tax compliance burden per year.

Who bears the burden and 'fairness'

SMEs face more compliance costs as a share of turnover than do larger businesses. Many small firm operators work extremely long hours (ABS 1993, p.164). Regulatory compliance burdens further increase those hours, and to a greater extent for SME proprietors than CEOs of large companies (Yellow Pages Small Business Index 1996b, p.8). It is, therefore, unsurprising that there is a widespread perception of unfairness of regulations among small business operators (eg, Bickerdyke and Lattimore 1997, p.55).

There are many ways of looking at fairness. Here, we concentrate on two aspects.

- Horizontal equity (Stiglitz 1988, pp. 399-401): is the present regulatory environment unfair in the sense that people who are the same in all relevant aspects (small business owners compared to large business owners), are treated differently?
- Vertical equity: does the regulatory environment redistribute income away from higher income people to lower income people (vertical inequity)?

Horizontal equity

In one sense, horizontal equity requires that all businesses face the same regulatory regime, without exemptions or lightened regulations for any group. On the other hand, compliance burdens under such a uniform regulatory regime represent a larger share of income for small versus large enterprises. In this case the regime may be equal between firm sizes, but the impacts of the regime are not. Many would still regard this as unfair, but it depends on the frame of reference for making such judgements.

The issues are even more fuzzy than this, because it is important to distinguish between the short run and long run, and between returns to assets and returns to entrepreneurship.

In the short run, if changes in regulations increase the burden on small businesses relative to larger ones, this may lead to windfall losses for small businesses, through the revaluation of their assets. Significant losses of this type could be a cause for concern when policy changes are contemplated. They may invite demands for compensation by the people affected, just as other groups are sometimes compensated when a policy change produces a net social benefit, but a loss for that group.

On the other hand, apparent differentials in compliance costs may have little effect on the *long-run returns on assets* to business operators. This is because businesses may be able to pass on some or all of these costs to their customers,

in the form of higher prices.⁴ Secondly, even where costs are not passed on, a higher level of costs does not necessarily depress the rates of return on the assets invested in the affected businesses. Over time, investors will tend to shift resources out of sectors with lower rates of return into ones with higher rates of return. This implies that compliance costs would lower the value of assets employed in the affected businesses,⁵ until newcomers would just get a standard return on funds employed. Given these dynamic effects, new regulations will tend to have more adverse impacts on existing small business operators than those who subsequently enter.

Differences in compliance costs may also depress the returns to productive factors which are used most heavily in the sectors bearing the higher imposts. For the small business sector, this suggests that compliance cost differentials may reduce the returns to entrepreneurial effort.

In summary, regulations may, at least initially, lower small relative to large business income, reduce returns to entrepreneurship and adversely affect present incumbents.

Vertical equity

Some of the literature on differential regulatory compliance refers to the 'regressive' impact of regulations on small business — with the connotation that those with a lower ability to pay are unfairly forced to bear more. It is true that compliance burdens represent a larger proportion of turnover or profit for small versus large enterprises. But the use of the term 'regressive' in this context is somewhat misleading because it ignores the ultimate incidence of compliance burdens and fails to consider the overall distribution of income among competing claimants (consumers, people on different incomes etc). As noted in Bickerdyke and Lattimore (1997, pp. 55-56):

Regulatory tiering cannot effectively shift income from shareholders of large enterprises to small business owner managers. What it does 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 lower standards, So any attempts to alleviate the apparently unfair burden on small business owner-managers occasions other re-distributions, which may also be regarded as unfair.

⁴ The extent to which this can be done varies considerably, depending on factors such as the elasticity of demand for the business' output, the extent of competition with other suppliers and the other opportunities available to entrepreneurs.

⁵ If economic agents observe that high returns are being earned in certain types of business, they will respond by moving into those areas until changes in asset values and input and output prices have brought the rates of return into line.

Other facets of unfairness

The goal of ameliorating the adverse income effects from regulations is only one facet of unfairness. Fairness has other dimensions, including:

- the notion of reasonable treatment of different groups;
- ability to obtain information about relevant regulations;
- advance warning of, and consultation about, large regulatory changes; and
- a process of appeal and recompense for badly affected groups.

Business regulations may well have ignored many of these aspects — for example, through poor consultation and provision of information by regulatory bodies. One of the major roles of the RIS approach to regulation policy is to deal with some of these dimensions (eg, the differential impacts on different groups and the process of consultation). Disciplined appraisal of regulation and simple compliance regimes are more likely to tackle these problems of unfairness than regulatory tiering.

Economic efficiency

At an intuitive level, the notion that regulations should be tailor-made for different sized firms to avoid unnecessary compliance burdens seems plausible. Imagine a world with just two businesses, a small one (with sales of one million dollars) and a large one (with sales of one billion dollars). A new regulation is introduced. Suppose it costs the small business \$5000 to comply and the big business \$200 000. But while the big business pays a lot more, the proportionate burden is much smaller (at 0.02 per cent compared to 0.5 per cent).

Suppose that the benefits produced by the regulation are equal to 0.4 per cent of sales for each firm (or \$4 million for the large business and \$4000 for the small firm). The net benefit of the new regulation is clearly negative for the small firm, and large and positive for the large firm. It seems obvious that regulatory tiering, say a regulatory exemption for the small firm, will make this artificial world better off.

In fact, this is not necessarily so. Suppose these firms tend to produce similar goods, and customers are quite responsive to small price differences between the two firms. In that case, an exemption would shift demand to the smaller firm, create barriers to firm growth and erode some of the net benefits conferred by the regulation on the big firm. A static analysis which ignores how demand

and supply shifts in response to regulation can provide a misleading picture of the impact of regulatory tiering.⁶

In the real world — with hundreds of thousands of firms, uncertainties over the exact magnitude of firm compliance and government regulatory administration costs for different firms, the presence of rent seeking and many different possibilities for consumer responsiveness to price differences between firms — the question of whether (and what degree or type of) regulatory tiering is likely to produce a net benefit becomes much more difficult. Figure 9.1 lays out the decision process for considering whether tiering should be introduced (Bickerdyke and Lattimore 1997).

A key prerequisite for tiering is that there is a sufficient difference in unit costs between small and large firms brought about by a regulation. If the cost difference is only slight, then the administrative effort required to set appropriate regulatory thresholds and to administer a more complex regulation almost certainly outweighs the potential benefits.

As discussed in chapter 7, the average differential between the compliance cost share of sales of small and bigger businesses does not create a large gulf in their relative unit costs. Such a difference is not likely to have marked impacts on the competitiveness of small firms, or to warrant the costs of complexity entailed by regulatory tiering. However, other survey evidence suggests that this average figure may conceal significant variations between industries (Bickerdyke and Lattimore 1997).⁷ That leaves open the possibility that tiering may be appropriate where the cost differences are more marked.

In what precise circumstances would that possibility arise? Working backwards from box 7 in figure 9.1, we see there are two cases where tiering could be considered.

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⁶ For example, in the US there are a large array of size cutoffs for regulations, often operating at different thresholds, which may create growth traps for small businesses (Weidenbaum 1996).

It is also likely that there are quite large variations between small firms within industries, depending on factors such as the age and size of firms and the abilities of their managers in dealing with regulatory compliance.

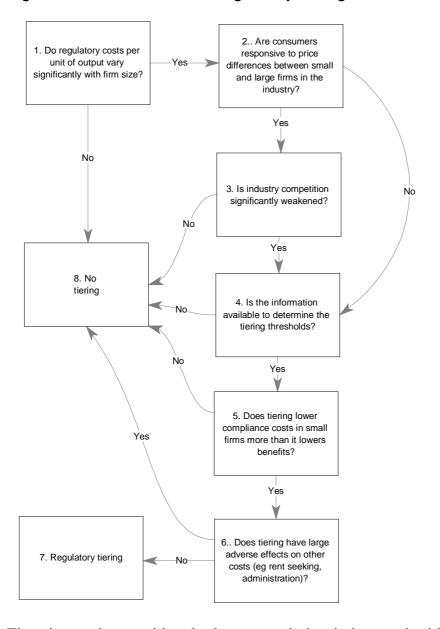


Figure 9.1: The criteria for regulatory tiering

First, it may be considered when a regulation is imposed with disproportionate compliance burdens, the size of the small firm sector falls significantly and large firms are able to behave anti-competitively (eg price fixing). It does not seem likely that this would be a common problem in Australia.

Second, tiering may be warranted where consumers are not very responsive to price differences between small and large firms in a given industry. Regulatory tiering would not, therefore, shift demand from large firms (which are efficient at dealing with the regulation) to small firms. Tiering would then be beneficial, so long as it lowers compliance costs in smaller firms by more than it erodes

their regulatory benefits. This might occur in industries where consumer preferences strongly favour smaller businesses for reasons of service quality or locational convenience — for example, in restaurants or personal services such as hairdressing.

Where government and regulatory agencies have good information (eg about compliance costs between different sized firms and about how firms and consumers respond to price and cost differences) and all the other critical preconditions in figure 9.1 have been met, then tiering of regulations and taxes could be considered.⁸ Each regulation (or tax) would need to be considered on a case-by-case basis.

While regulatory tiering may have some applications, its biggest risk is that it may circumscribe overall regulatory reform. Rather than adopt broad-based approaches aimed at easing compliance and other regulatory burdens for all businesses, policymakers may sometimes adopt the easier strategy of limiting reform to small business. A better strategy is to first introduce general reforms for all businesses, and then secondly to see if there are any further gains by tiering.

9.7 Concluding comments

While regulations may serve a number of important functions in our society, they can also impose significant costs. These costs need to be taken into account when designing or redesigning regulations in order to achieve a more efficient regulatory regime. Even more fundamentally, the costs of regulation need to be measured against their benefits and, if appropriate, governments should reduce or abandon regulation in certain areas.

Compliance with regulations generally poses greater burdens for small businesses than it does for larger ones. In part, this appears to reflect the existence of substantial fixed costs in establishing systems for compliance — for larger businesses, these costs are spread over much greater turnover. In some circumstances, this cost differential may provide a reason for changing regulations in order to reduce compliance burdens for small business.

⁸ Lattimore (1998) suggests that state and territory government payroll tax exemptions for small business may represent appropriate tiering. This is because the compliance costs of extending the tax to smaller firms, plus the risk of unemployment for workers employed in low pay small businesses, are likely to outweigh the inefficiencies created by shifting the size distribution of firms.

Recent evidence shows that businesses' main concerns with regulation relate to the complexity of taxation rules and the frequency of changes to them, and obtaining information about which regulations apply to their activities. This is true for businesses in all size categories. Lack of coordination between different regulatory agencies has also been identified, at least by smaller businesses, as leading to unnecessarily high compliance burdens.

The nature of these concerns suggests that present compliance burdens could be substantially eased by simplification or other redesign of existing regulations, and by better administration of regulations by the relevant agencies.

Getting the national stock of regulation 'right' means attempting to maximise the net social benefits for all Australians, not just the interests of small business or any other particular group. More explicitly, getting government regulation 'right' can be thought of as comprising two parts: identifying when, in principle, governments should intervene to alter market outcomes; and, where intervention is justified, working to achieve the most effective and efficient form of regulation or regulatory alternative.

The 'in principle' criterion for government intervention is deceptively simple: governments should intervene where there are clear market failures and where intervention will bring net benefits to society; or to address equity or fairness objectives. By comparison, achieving good regulatory design involves a careful analysis of many different issues, in particular a consideration of alternative approaches.

In seeking to minimise the transaction costs of regulations, government agencies should consider a range of options for the design and enforcement of regulations. Common past regulatory practice can be best described as 'government imposed prescriptive', and Australia's still limited experience with alternative regulatory regimes points to potential gains from exploring less prescriptive alternatives.

Australian governments have increasingly recognised the need to put their regulatory houses in order and have introduced a number of measures aimed at improving the quality of both existing, and new, regulations. Regulation Impact Statement procedures which apply to proposals for new regulation cover the points just discussed, such as a clear specification of the objectives of the regulation and an analysis of alternative approaches.

But the resources available to regulatory agencies to undertake these analyses are limited. In addition, it takes time for the cultures of agencies to change. At the Commonwealth level, it appears that government agencies have yet to achieve a standard of compliance consistent with these requirements.

A PROMINENT SMALL BUSINESS PROGRAMS

As discussed in chapter 3, the government provides direct assistance to SMEs through a number of business programs. This appendix provides a more detailed description of the more important programs. A full coverage would require a much larger document, since — including programs provided by Federal, State and Territory governments, and relevant measures operated by industry associations and other bodies, in some cases with government funding — there are altogether hundreds of forms of assistance available to SMEs. The programs discussed in the appendix are grouped in five categories:

- improving the efficiency of businesses;
- export assistance;
- encouraging R&D;
- government purchasing; and
- creation of new small businesses.

A.1 Improving the efficiency of business operations

A wide range of programs to assist firms, principally SMEs, to improve their operations is provided by the Commonwealth and State/Territory governments. Most are provided through a joint service agency known as AusIndustry. AusIndustry delivers business support programs, including the provision of business advice directly by its staff, and also refers businesses to programs delivered by other organisations. Programs delivered by AusIndustry include the Enterprise Development Program, the Business Networks Program, and schemes which are formally administered by the IR&D Board such as the 125 per cent R&D tax concession. It also provides business information services such as 'Bizlink' and 'Hotline'.

AusIndustry notes that it is difficult to give an exact figure for the value of the support provided to Australian businesses through these programs, because it includes non-financial support such as the advice and information provided by AusIndustry staff. However, AusIndustry estimates that the government partners provide direct financial assistance, through the programs it administers, of more

than \$100 million per year. Indirect support is put at up to \$500 million per year.¹

In 1996–97, Commonwealth expenditure on programs delivered by AusIndustry was \$81.5 million and the office had running costs of approximately \$18 million (DIST 1997a). These figures do not include the tax revenue forgone through the R&D tax concession which is estimated at \$740 million in 1995-96 (IC 1997a).

The programs provided through AusIndustry can be classed as measures to improve the efficiency of SMEs' operations, assistance for SMEs which are starting to export, and assistance for business R&D. These are considered below and in the next subsection.

The Enterprise Development Program (EDP) replaced the former National Industry Extension Service (NIES). This program makes available the services of business advisers to help businesses review their operations and improve their performance. The advisers, who work in AusIndustry, may also help the businesses to access a range of government programs to assist them in areas such as business planning, strategic and financial planning, human resources, marketing and quality management (AusIndustry 1997a). SMEs may also be referred to suitable private sector business advisers. In some cases, EDP provides subsidies of up to 50 per cent of the cost of using these advisers.

Eligibility requirements vary between States, but generally this program is available to SMEs in the manufacturing or traded service industries which are exporting or have the potential to export or replace imports. The businesses must also be assessed as financially viable, with a potential for growth and the commitment and capacity to implement change. The program is generally available only to firms with an annual turnover of at least \$500 000, and employing at least five people, although exceptions may be made for smaller firms with a significant growth potential. Individual State requirements are outlined in appendix B.

In 1996–97, the Commonwealth provided \$15.6 million to the States and Territories for this program, including \$10.6 million for subsidies to firms. Until 30 October 1996, the Commonwealth also contributed to the States and Territories operational costs (DIST 1997a).

A related measure is the *Technology Support Centres Program*, which has the objective of improving access to technology for industry, especially SMEs. The program is intended to encourage research bodies to form coordinated networks

¹ http://www.ausindustry.gov.au/

of technology support centres, which will respond to specific industry needs and enhance industry's access to technology, including new and key technologies.

Funding is provided in three separate categories to research institutions, or other organisations, to provide technology support to industry:

- grants for institutions to upgrade or expand technology diffusion facilities and services;
- grants to institutions or firms for demonstration projects which raise awareness of, demonstrate the application of or encourage the uptake of, new technology among SMEs; and
- grants for feasibility studies for projects to improve industry's access to technology support facilities.

All grants are awarded as a result of a competitive selection process, and cover up to 50 per cent of the project costs. Projects selected are expected to provide benefits to the Australian economy in the near term. Preference is given to projects that serve industry broadly, are consistent with their State or Territory government's industry priorities and have the support of the appropriate government agency.

Some \$48 million has been allocated to this program between 1996–97 and 1999-2000. Expenditure in 1997–98 is expected to be \$16.9 million (Mortimer 1997).

A different type of assistance, also with the objective of increasing SMEs' efficiency and competitiveness, is the *Business Networks Program* (BNP), announced in the *Working Nation* statement in 1994. BNP is intended to help firms improve their capabilities through the formation of networks. This is based on the idea that 'networking helps firms develop joint solutions to problems that are beyond the capacity of a single company, and also allows mutual strengths to be exploited' (http://www.ausindustry.gov.au/).

BNP provides subsidies, initially for eligible SMEs to engage an accredited network broker to undertake a feasibility study of the proposed network (so called stage 1). If the network proceeds, subsidies are available for the development of a business plan (stage 2). Additional financial assistance may also provided as an operational subsidy for the network in its early stages (stage 3). The maximum assistance available is \$108 000 per network. The program, however, is largely intended to demonstrate the potential benefits of networks, which are not presently in common use in Australia. Accordingly, financial assistance is provided only to selected projects rather than to all that meet the eligibility criteria.

The program is targeted at SMEs with an annual turnover of less than \$50 million, and less than 200 employees; networks must have at least three independent firms of which two are SMEs on this definition, while the third may be a larger business. Foreign enterprises may participate in the networks. By 30 June 1997, 227 networks had received support from the program (table A.1). Commonwealth expenditure on this program is expected to be \$8.54 million in 1997–98 (Mortimer 1997).

Table A.1: Business networks by stages and states, as at 30 June 1997

	Stage 1	Stage 2	Stage 3	Total
NSW/ACT	19	10	12	41
Victoria	21	27	25	73
Queensland	20	11	8	39
SA/NT	16	9	16	41
WA	10	11	2	23
Tasmania	4	2	4	10
TOTAL	90	70	67	227

Source: DIST 1997a.

A.2 Assistance for firms commencing exports

Assistance for exporting is available through a number of programs, but the major one targeted at SMEs is the Export Market Development Grants (EMDG) scheme. EMDG reimburses eligible businesses for up to 50 per cent of certain export marketing costs in excess of a threshold of \$15 000 per year, with a maximum grant of \$200 000 per year. Eligible expenditures include the use of marketing consultants, representation in overseas markets, communications costs, product promotion, and the costs of literature, advertising and attendance at trade fairs. To be eligible for the scheme, a company must spend \$20 000 per year on export marketing (until 1997 this threshold was \$30 000), have turnover of less than \$50 million per year and have export earnings of less than \$25 million per year.

In 1997–98, government expenditure under this program is expected to be \$173 million (IC 1997a).

Another SME program addressing perceived disadvantages facing SMEs which wish to commence exporting is *Export Access*. This program is funded principally by government, but delivered by industry associations.

The program largely funds the provision of advice and assistance directly to eligible SMEs by staff of the industry associations. The assistance may range from general counselling about issues in commencing exports, to assistance with making contacts or developing an itinerary in order to seek export sales. The program is targeted at SMEs which are assessed as financially sound and having potential to sustain export sales in the longer term. Up to June 1997, almost 2000 SMEs had been assisted by the program.

Government funding for Export Access was \$3 million in 1996–97 and \$4 million in 1995–96 (IC 1997a).

A.3 Encouraging research, development and innovation

The 125 per cent tax concession for eligible expenditure on R&D, is the major R&D promotion scheme in Australia. The cost of this scheme, in revenue forgone, amounted to \$795 million in 1996–97. The expected revenue cost for 1997–98 is \$425 million (IC 1997a). The scheme 'aims to encourage increased investment in R&D by Australian companies in order to make them more innovative and increase the international competitiveness of Australian industry' (AusIndustry 1997b).

All companies incorporated in Australia can make use of the 125 per cent tax concession for eligible expenditure on R&D and, as shown in table A.2, many SMEs do in fact use the concession. In recent years, at least twice as many SMEs as larger firms have registered for the concession. However, since about 95 per cent of all firms are SMEs, this also indicates that SMEs are underrepresented among users. This may be largely because a smaller proportion of SMEs perform eligible R&D; this could be a result of a range of factors including the fact that many SMEs in the service sector have little or no need to perform R&D in order to be competitive. However, it is also true that many newer SMEs have small or negative profits. Firms in this position which were performing R&D would gain little benefit from using the concession.

Partly for this reason, the government also provides R&D Start, an 'umbrella program' offering various forms of assistance for firms to undertake R&D. The objectives of R&D Start are to:

- increase the number of private sector R&D projects with high commercial potential;
- foster greater commercialisation of outcomes from R&D projects;
- foster collaborative R&D and related activities both within industry and between industry and research institutions; and

• increase the level of finance-sector funding of R&D and its commercialisation.

The program aims to support only those projects which could not proceed without financial support from the government. Companies seeking assistance must provide evidence that this is the case. Total funding for the program is \$739 million for the four years to June 2002 (Howard 1997b). Commonwealth funding under this program, excluding the Investment Innovation Fund, is expected to be \$128.8 million for 1997–98 (Mortimer 1997).

Table A.2: Number of SMEs registered for R&D tax concession and eligible expenditure (\$m)

	1992-93	1993-94	1994-95	1995-96
Number of Registered SMEs	1 835 (67.0) ^a	2 202 (67.2)	2 522 (68.1)	2 766 (69.8)
Total (all firms)	2 738 (100)	3 277 (100)	3 704 (100)	3 963 (100)
Eligible R&D expenditure by SMEs (\$m)	789.8 (29.0)	754.3 (22.7)	1106.8 (27.7)	1 187.4 (26.4)
Total (all firms) (\$m)	2 723.3 (100)	3 324.5 (100)	4 000.9 (100)	4 489.6 (100)

a Figures in parentheses are percentages. SMEs are defined here to include non-manufacturing firms with up to 20 employees, and manufacturing firms with up to 100 employees.

Source: Information provided by AusIndustry.

As an umbrella program, R&D Start has a number of subsidiary programs. *Grants for R&D Projects in SMEs* provides grants to SMEs 'to support projects which aim to develop internationally competitive products, processes or services with significant commercial potential'. The program is available to firms with an annual turnover of less than \$50 million in each of the three previous financial years. Grants may cover up to 50 per cent of the project costs for a period of up to three years, and are typically in the range from \$50 000 to \$5 million.

The second subsidiary program, *R&D Start-Plus*, provides grants of up to 20 per cent of project cost to companies ineligible for grants in the Grants for R&D Projects in the SMEs component, that is, for groups with turnover of more than \$50 million. *R&D Start-Premium*, the third subsidiary program, with grants of up to 56.25 per cent of project cost, provides a higher degree of assistance than either of the first two components (Howard 1997b).

All three R&D grants programs are competitive, applications are assessed by the Industry Research and Development (IR&D) Board on the basis of: the management capabilities of the company; the commercial potential of the project and the applicant's ability to exploit that potential; the technical strength of the project; and the benefits of the project to Australian industry and the wider community.

The *Graduate-based R&D-related Projects* element provides support for companies to employ a graduate, based in a research institution, on R&D or a related activity which is designed to improve the performance of the company. This program also aims to foster new links between companies and research institutions. Grants can cover up to half of eligible project costs over a period of two years, with a maximum grant of \$100 000.

As with the Grants for R&D Projects in SMEs, eligible firms are those with a turnover of less than \$50 million in each of the three previous financial years. Applications are assessed on a competitive basis using the same criteria.

Assistance in the forms of loan finance may be provided under *Concessional Loans for the Commercialisation of Technological Innovation*. This program targets SMEs (here defined as companies with up to 100 employees) engaged in the early commercialisation of technological innovation. Loans cover up to half of the eligible project cost, and carry a concessional interest rate equal to 40 per cent of the Commonwealth Bank Index Rate. Loans are for a maximum period of six years. No interest accrues during the first three years, and the principal and interest are to be repaid during the last three years.

Again, this program element is competitive. Applications are assessed by the IR&D Board using criteria based on the market potential of the innovation, the company's capabilities in relation to the commercialisation, and the national benefits associated with the project. In addition, the company must be unable to obtain adequate funds for its project through commercial loans.

A fourth element of R&D Start, *Grants for Collaborative R&D Projects*, is targeted at larger scale R&D projects, rather than at SMEs. This program provides funding for projects involving collaboration between Australian companies and research institutions. It is aimed at R&D with high technical risk which, if successful, will produce substantial national benefits. Companies of any size may apply for funding for projects undertaken jointly with any research institution. Funding may cover up to half of project costs, up to a maximum grant of \$1 million. Applications are assessed on a competitive basis, using the same criteria as for the other elements.

The final element of R&D Start is the *Innovation Investment Fund (IIF)*, a new initiative targeted at technology-based SMEs with growth potential. This

program is discussed below with the other programs relating to SMEs' access to finance.

A.4 Programs to improve SMEs' access to finance

The *Pooled Development Fund Program* (PDF) aims to encourage the provision of 'patient' equity capital to Australian SMEs, excluding those whose main activities are retail trade and land development. The rationale for the scheme's introduction was that it addressed capital market failures which adversely affected SMEs. These were described as follows:

- suppliers of capital are risk averse and often have a short-term investment outlook; and
- adverse economic conditions have encouraged investors to concentrate on established larger businesses (Free 1992).

The program operates by promoting the establishment of private sector investment funds known as Pooled Development Funds (PDFs). Incentives are provided in the form of generous tax concessions for the funds and their shareholders. The PDFs must invest in newly issued ordinary shares in Australian companies with total assets of less than \$50 million; a maximum of 30 per cent of the fund's capital is to be invested in any one company. Advisers in the PDFs assist the development of investee companies by providing them with managerial skills and financial advice.

Up to 30 June 1996, PDFs had invested a total of \$80.5 million in 89 SMEs. PDF is open ended in the sense that any number of applicants can be registered and therefore be eligible for the scheme's taxation concessions. However, estimates of the revenue forgone from the scheme are less than \$1 million per year (IC 1997a). The scheme also has running costs of \$300 000 per year (Mortimer 1997).

Under the *Innovation Investment Fund (IIF)*, the government will provide up to \$173 million, to be matched on a 2:1 basis with private sector capital, for investment in small technology-based companies. AusIndustry states that 'the Fund's objectives are to:

- develop a self-sustaining Australian early stage, technology-based venture capital market;
- establish, in the medium term, a 'revolving' or self-funding scheme at zero net cost to Government:

- encourage the development of New Technology Based Firms (NTBFs) and their commercialisation of research through addressing capital and management constraints; and
- develop fund managers with experience in the venture capital industry.

The initial capital of approximately \$260 million (government and private sector) will be used to establish specific investment funds similar to venture capital funds, which will be managed by private sector fund managers selected by the government. These funds will be able to invest only in NTBFs which are commercialising technology, and which have had an average annual revenue of no more than \$4 million averaged over the preceding two years, with a maximum of \$5 million in any one year. Although the objective is to stimulate the financing of the early stages of technology commercialisation, in order for the funds' portfolios to be commercially viable they will need to invest in both early and later stage projects. The program rules will require that 40 per cent of the investments are in early stage projects.

A.5 Government purchasing

Government agencies in total are important purchasers of goods and services, and it is Commonwealth Government policy that agencies in their purchasing decisions should seek to promote the development of Australian and New Zealand industry, where this is consistent with achieving value for money. This policy includes a special focus on SMEs:

The Government is particularly concerned to improve the opportunities for small business to participate in the government marketplace. Doing business with government can give small businesses an enhanced profile and credibility when seeking to enter other markets (Minister for administrative Services 1997).

In addition to a general requirement to consider Australian and New Zealand products, Commonwealth Procurement Guidelines require Commonwealth agencies to ensure that they provide opportunities for Australian and New Zealand industry, (including SMEs) to compete; and to ensure they do not apply selection criteria that might discriminate against small business. The Procurement Guidelines also require agencies to be aware of the competitive advantages of SMEs, including their ability to provide tailor-made products and their flexibility in the kinds of services they provide.

In addition, DIST has introduced the *Supplier Access to Major Projects Program* (SAMP) to facilitate access by competitive Australian suppliers, at the pre-tender stage, to major private and public sector projects. The introduction of SAMP reflected the Government's view that project managers have difficulties

in identifying Australian firms, especially SMEs, that are capable of fulfilling project requirements. The program works with both contract managers and potential suppliers to encourage competition and the formation of new business relationships. Delivery of the program is through ISONET Limited, a Commonwealth funded organisation with State/Territory and Commonwealth representation. ISONET will receive funding of \$2.2 million over four years commencing with an allocation of \$0.8 million in 1997-98 (Commonwealth of Australia 1997).

A.6 Creation of new small businesses

SMEs benefit like all other businesses from the Commonwealth Government's range of employment programs. One employment program targeted specifically at the SME sector is the *New Enterprise Incentive Scheme* (NEIS), which assists unemployed people to establish new SMEs. NEIS, which has operated since 1985, provides training in business skills (including small business management) and assistance with the development of a business plan. Support from a mentor is also provided for the first year of the business' operation.

The proposed business must be new and assessed as commercially viable by a NEIS Advisory Committee. In addition it must not compete with existing businesses unless there is evidence of unsatisfied demand or unless the new business will deliver the product or service in a novel way. The program is delivered through management agents operating on contract to the Commonwealth.

Job seekers who are accepted into the program must operate their business in accordance with their approved business plan and for a minimum of 20 hours per week. They are paid an allowance equivalent to adult Job Search Allowance for up to the first 12 months of operating the business.

Places available on the program expanded from 467 in 1989–90 to 7000 in 1996–97. Total expenditure on the program amounted to \$421 million over the same period (table A.3).

Table A.3: NEIS program places and budgets, 1989-90 to 1996-97

Year	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Program Places	467	1 134	2 752	3 349	4 890	5 914	10 190	7 000
Budget (\$m)	5.25	12.18	28.17	44.15	59.97	80.73	104.06	86.46

Source: DEETYA 1997.

B COMMONWEALTH AND STATE/TERRITORY SMALL BUSINESS PROGRAMS

The purpose of this appendix is to provide a compendium of Commonwealth and States/Territories small business programs. As such, it complements chapter 3 and appendix A.

Table B.1: Commonwealth Government assistance to small business

Program	Form of assistance	Description and eligibility
NIES/ Enterprise development program	Commonwealth provides funding to the States and Territories for what	<u>Description:</u> Delivery of business advice and business consultancy services (sometimes subsidised) to eligible enterprises.
program	Territories for what is a joint Commonwealth/ States and Territories initiative.	Eligibility: Varies from state to state but generally the program is aimed at SMEs (but not the very small or 'micro' firms) in the manufacturing and traded goods sectors which are exporting or have export potential. Firms must generally be able to demonstrate financial viability and have turnover of at least \$500 000.
Technology Support Centres Program	Grants, usually up to 50 per cent of total project value, are made available to technology centres selected on a competitive basis.	<u>Description</u> : Aims to improve industry access to technology, especially by SMEs. Program encourages research bodies to form networks of technology support centres able to respond to firms technology needs. Grants to technology centres are available to upgrade or expand existing technology transfer services to firms. The latter services include provision of technical information and advice, technical problem solving, applied research and development and related training.
Business Networks program	Financial assistance to eligible networks which expand the capabilities of SMEs.	<u>Description:</u> Networks must involve at least three firms. Assistance is provided in three stages: network feasibility study, network business plan and financial assistance for the network's first year of operation. The first two stages require the use of an accredited broker who assist participating firms to formalise the network.
		<u>Eligibility</u> : Focus is on SME private sector firms in the traded goods and services sector, but eligible networks may include research oriented public bodies.

Table B.1: Commonwealth Government assistance to small business (continued)

Program	Form of assistance	Description and eligibility
Government procurement	Commitment to purchase at least 10 per cent of purchases from local SMEs	Eligibility: None other than must be local SMEs.
Export Market Development Grants Scheme (EMDG)	Eligible businesses are reimbursed up to 50 per cent of eligible export marketing costs.	Eligibility: To receive reimbursement, firms' export marketing expenditures must exceed a threshold of \$15 000 per year and their turnover must be less than \$50 million in the grant year. The maximum grant is \$200 000 per year and grants for a particular market are available for a maximum of 8 years. Firms must spend \$20 000 per year on export marketing, have turnover of less than \$50 million and export earnings of less than \$25 million per year.
Export Access Program	Provision of export 'managers' at no cost to the participating firms to provide export advice and related training.	Description: Although funded by the Commonwealth, the program is delivered by industry associations. The export managers draw upon Austrade and private sector associations to establish export contacts. Eligibility: Firms must have an annual turnover greater than \$300 000 and less than \$20 million; have export sales less than \$3 million over the last 3 years and less than \$1 million in the last year; have a business track record of at least 1 year; be able to demonstrate that its development of export markets would be substantially enhanced by the program; and have over 50 per cent Australian ownership or if lower, be able to demonstrate net benefits to Australia through participating in the program.

Table B.1: Commonwealth Government assistance to small business (continued)

Program	Form of assistance	Description and eligibility
R&D Start: Innovation Investment Fund	The Commonwealth provides capital, on a 2:1 basis with private sector investors, to approved 'funds' (companies).	<u>Description:</u> The Innovation Investment Funds (IIF) are restricted to investing (acquiring equity) in companies which are commercialising technology. When the Fund's investments are realised, the Commonwealth has first claim on returns to the extent they do not exceed the long term bond rate. Returns in excess of the long term bond rate are divided 90 per cent/10 per cent between the fund's management and the Commonwealth.
		Eligibility: IIF managers are required to satisfy assessment processes before being registered for the scheme. As well as being involved in commercialising technology, companies in which they invest must have an annual revenue of \$4 million or less, averaged over the past two years, with a maximum of \$5 million in any one year.
R&D Start: Concessional loans for the commercialisation of technological innovation	Concessional interest rate loans.	Description: Program is administered by the IR&D Board with financial advice from the Commonwealth Development Bank on applications. Loans are for a maximum of 6 years, with interest calculated daily at 40 per cent of the Commonwealth Bank Index Rate, accruing 3 years from the data of issue of the loan agreement. Activities which may be supported include product and design processes, trial production runs and tooling up costs, protection of intellectual property, product documentation and trial and demonstration activities.
		<u>Eligibility</u> : Companies must have 100 employees or less and must be unable to adequately fund their commercialisation project through commercial lending sources.

Table B.1: Commonwealth Government assistance to small business (continued)

Program	Form of assistance	Description and eligibility
R&D Start: Grants for R&D Projects in SMEs	Grants of up to 50 per cent of eligible project costs over a project life of 3 years.	Description: Eligibility for the grants is assessed by the IR&D Board. Grants are awarded to companies to support projects which aim to develop internationally competitive products, processes or services with a significant commercial potential. Eligibility: Companies must be incorporated in Australia, not have tax exempt status and have an annual turnover of less than \$50 million in each of the previous three years.
Business Incubators	Provides funding for the establishment and development of business incubators (property developments providing premises and business services to small businesses).	Description: Aim of the program is to create employment by assisting both the employed and unemployed to establish self-employed ventures. Commonwealth funding for individual incubators has to be approved by the relevant Area Consultative Committee. However, final approval for a grant resides with the Secretary of the Department of Employment, Education, Training and Youth Affairs. Grants of up to \$500 000 over 3 years are available for new incubators and grants of up to \$300 000 are available for existing incubators. Eligibility: Restricted to micro-businesses (5 or less employees).
Pooled Development Funds	Taxation incentives (concessions) for equity investment by private sector investment companies (Pooled Development Funds) in eligible SMEs.	Description: Pooled Development Funds are newly established investment companies which have been accepted by the Pooled Development Funds Registration Board as meeting certain criteria, primarily as having personnel with the necessary investment skills and having no individual owner with more than 30 per cent ownership of the Fund. Provided they meet the investment eligibility criteria set out below, company tax on income from eligible investments by the Funds is at highly concessional rates. The taxation of dividends and capital gains from the sale of shares in Pooled Development Funds is also at concessional rates in the hands of individual owners. Eligibility: Pooled Development Funds are required to invest in companies with total assets less than \$50 million. They must acquire at least 10 per cent of the company they invest in but can acquire up to 100 per cent ownership. However, no single investment can represent more than 30 per cent of the Fund's committed capital. They may also not invest in companies whose primary activity is in retailing or property development.

Table B.1: Commonwealth Government assistance to small business (continued)

Program	Form of assistance	Description and eligibility
New Enterprise Incentive Scheme (NEIS)	Provides training in business skills and income support for unemployed establishing new businesses.	<u>Description:</u> NEIS provides income support for small business training, a taxable income allowance for up to one year, rental assistance for up to 26 weeks and income support for dependant children. Training is provided in small business skills and management and in the preparation of a business plan.
		Eligibility: Individuals must be at least 18 years old and below age pension age, be receiving an eligible Department of Social Security allowance or pension, be available to work more than 20 hours per week in the business for the period of NEIS assistance, not be a discharged bankrupt and not have received a NEIS allowance in the previous two years or previously for the same business activity.
		Businesses must be new and never have operated commercially on a full-time basis; be independent and based within the area indicated by the applicant's business plan; not competing with an existing business unless it can be shown that there is unsatisfied demand for the product or service, or that the product/service will be provided in a new way; and be financially viable (the applicant's business plan must show that the business will earn at least as much as the NEIS allowance after a year of business.
Bizstart Seminars	Information and guidance seminars offered by the Australian Tax Office (ATO) to small business operators.	<u>Description:</u> Seminars are designed to help new and existing small business operators understand their obligations under the Australian tax system. Topics covered include income tax, record keeping and PAYE tax, the prescribed payments system and sales tax. <u>Eligibility</u> : All prospective or existing businesses.

Table B.2: State Government assistance to small business, New South Wales

Program	Form of assistance	Description and eligibility
Business Expansion Program (part of the Cwth/ States Enterprise Improvement Program)	Subsidy, on a dollar for dollar basis, for cost of engaging consultants: max. subsidy for existing businesses, \$5000; max. subsidy for start-up situations, \$3000. Limit of two consultancies for each business in any two year period.	Description: Assists small business to improve their potential to be competitive and grow by subsidising the cost of independent expert consultants to study the activities of an individual business and advise management. Target clients are existing businesses wanting to expand or diversify, or which are experiencing management problems; and new enterprises and startup situations. Eligibility: Small businesses which are value adding in manufacturing or traded services. Must be exporting or have export potential or import replacement potential. Their turnover must be between \$0.5 million and \$30 million.
First Base	Information, education and advice.	<u>Description</u> : Provides specialist assistance to people going into business through a self-help information resource centre. <u>Eligibility</u> : Anyone going into owner-operated business.
Management of Skills Training	Training workshops.	<u>Description</u> : Provides training programs on business management skills to intending and existing small business owners and managers. <u>Eligibility</u> : Anyone interested in setting up, buying or currently in a small business.
Partnerships With Associations	Training, information and consultancy to smaller industry associations.	<u>Description</u> : Aims to improve awareness and takeup of Office of Small Business programs and improve the programs themselves. <u>Eligibility</u> : NSW trade and industry associations that have a predominantly small business membership.
Small Business Advisory Services/Business Enterprise Centres	Information , counselling and advice.	<u>Description</u> : Aims to improve the success of small businesses by improving management skills through counselling and advisory services. Small Business Advisers help existing and intending business owners to establish a business, develop a business plan and identify opportunities; provide information about marketing, financial management, franchising and applying for a loan. Delivery is through some 60 Business Enterprise Centres throughout the State. <u>Eligibility</u> : Existing business owners or managers, or people with firm intentions to establish a business.

Table B.3: State Government assistance to small business, Victoria

Program	Form of assistance	Description and eligibility
Trade Fairs and Missions	Financial and facilitative assistance.	<u>Description</u> : This program assists small to medium sized Victorian businesses, from key industry sectors, to enhance their export potential through participation in targeted trade fairs and missions which aim to improve their access to overseas markets. The department provides financial, organisational and promotional support to participating companies.
		<u>Eligibility</u> : Small to medium sized Victorian businesses from key industry sectors with export potential.
AusIndustry/ National Industry Extension	Subsidies and information.	<u>Description</u> : Provides subsidy of up to half the costs of consultancy services, workshops and other services, in order to assist small businesses to improve their international competitiveness.
Service (NIES) (part of the joint Cwlth/ States Enterprise Development Program)		Eligibility: Until relatively recently this program had an SME orientation. However, as at January 1998 firms must have 20 or more employees or turnover of \$1 million and operate in the Victorian minerals, energy, manufacturing or services sectors. There is no particular emphasis on targeting traded activities.
— Business Planning	Subsidies.	<u>Description</u> : Assistance is provided to enhance business planning processes.
		Eligibility: As above.
— Design	Subsidies.	<u>Description</u> : Assistance to integrate the design of products and services with corporate goals.
		Eligibility: As above.
— Diagnostics	Subsidies.	<u>Description</u> : The analysis of business which identifies priority areas which require attention and change.
		Eligibility: As above.
— Finance	Subsidies.	<u>Description</u> : Assistance with the attainment of sources of finance.
		Eligibility: As above.
— Export Market Planning	Subsidies.	<u>Description</u> : Assists in developing a practical export market plan which integrates export activity into the firm's business plan.
		Eligibility: As above.

Table B.3: State Government assistance to small business, Victoria (continued)

Program	Form of assistance	Description and eligibility
— Manufact'g	Subsidies.	<u>Description</u> : Manufacturing industry studies.
		Eligibility: As above.
— Marketing	Subsidies.	<u>Description</u> : Assistance for the development of strategic marketing plans.
		Eligibility: As above.
— Networking	Subsidies.	<u>Description</u> : Funding is provided to assist in the development of strategic business networks.
		Eligibility: As above.
— Quality	Subsidies.	<u>Description</u> : Assistance to improve firm's competitive position through implementing quality management and continuous improvement techniques.
		Eligibility: As above.
— World Competitive	Subsidies.	<u>Description</u> : Studies to identify access routes to overseas markets.
Marketing		Eligibility: As above.
— World Competitive	Subsidies.	<u>Description</u> : Identification of world services requirements.
Service		Eligibility: As above.
Technology Diffusion	Research study.	<u>Description</u> : Initial funding of \$350 000 was committed to the undertaking of a technology diffusion study to survey a representative sample of small to medium sized enterprises from selected industry sectors to determine how they satisfy their technology needs and to identify where there are deficiencies in accessing technology requirements. Assistance is directed at small to medium sized enterprises who are seeking to transfer and assimilate technology into their operations.
		<u>Eligibility</u> : Small to medium sized companies from selected industry sectors.

Table B.3: State Government assistance to small business, Victoria (continued)

Program	Form of assistance	Description and eligibility
Innovation Victoria - Promotion and Technology Awareness Program	Marketing and information services.	<u>Description</u> : The objectives of this program are to promote Victoria overseas and within Australia, as an attractive location for firms wishing to boost their competitiveness through research and development and other forms of innovation. The program also aims to raise awareness of technology and Victoria's research and innovation facilities. The Department seeks to establish Victoria as an innovation hub by marketing its research and development strengths, and through the program attract investment and promote innovation to firms.
		<u>Eligibility</u> : The program is targeted at small to medium sized enterprises, potential investors and the scientific, research and development community servicing the business sector.
Cooperative Research Centres	Research and development.	<u>Description</u> : Main funding from the Commonwealth Government. Conduct research programs for various industries. The purpose of this initiative is to assist Victorian based cooperative research centres to commercialise and export their research and development. Commercialisation of research and development is a key objective of the government's innovation policy.
		Eligibility: Assistance is available to cooperative research centres headquartered in Victoria or Victorian organisations that are core participants in cooperative research centres that are headquartered outside Victoria. Up to \$25 000 per project will be made available with preference given to projects which involve small to medium sized enterprises.
Marketing Victorian Technologies	Facilitation and financial assistance.	<u>Description</u> : A pilot program is to be instigated in 1995–96 to assist in the marketing of Victorian technologies overseas. Assistance is to be provided to small to medium sized Victorian firms and to research and development organisations, to enable them to package technology projects for joint marketing.
		<u>Eligibility</u> : Small to medium sized Victorian firms and to research and development organisations.

Table B.3: State Government assistance to small business, Victoria (continued)

Program	Form of assistance	Description and eligibility
Executive Counselling Service	Advice and information, free service.	<u>Description</u> : Small Business Victoria funds the operation of the executive counselling service which consists of a team of retired and semi-retired business executives who provide advice on a broad range of industry and commercial matters affecting small to medium sized Victorian firms.
		Eligibility: Small to medium sized Victorian firms.
Small Business Awards	Awards.	<u>Description</u> : Small Business Victoria, the Victorian Government and Telstra make awards which recognise Victorian small businesses that demonstrate success through improved business performance, the pursuit of excellence, innovation and effort.
		Eligibility: Small to medium sized Victorian firms.

Table B.4: State Government assistance to small business, Queensland

Program	Form of assistance	Description and eligibility
Enterprise Development Assistance (part of the joint Commonwealth/ States	Provision of subsidised consultancy advice and other products and programs.	<u>Description</u> : Assists small business to improve their potential to be competitive and grow by subsidising the cost of independent expert consultants to study the activities of an individual business and advise management.
Enterprise Improvement Program		<i>Eligibility</i> : Target firms must be value adding and have potential to generate economic benefits for Australia by exporting or import competition. Firms supplying essential goods or services to an exporter may also be eligible. Firms must have \$0.5 to \$50 million turnover or 4 to 500 employees.
Business Development	Information and advice.	<u>Description</u> : Involved in coordinating and running a number of different seminar and workshop activities targeted at small businesses.
		Eligibility: Small businesses.
Business Plus Incentive Scheme	Subsidising the cost of consultancy services.	<u>Description</u> : Provides financial assistance to small businesses for professional guidance and support in creating a Business Plan. Subsidises 50 per cent of the cost of the business planning consultancy, up to a maximum of \$2500.
		Eligibility: Small businesses.
Queensland Small Business Corporation	Advice, training, information and financial assistance.	<u>Description</u> : A statutory corporation which provides assistance to small businesses in Queensland. <u>Eligibility</u> : Small businesses.

Table B.5: State Government assistance to small business, Tasmania

Program	Form of assistance	Description and eligibility
Enterprise Improvem't Program (part	Subsidies.	<u>Description</u> : Offers services to improve international competitiveness through subsidising the cost of consultancy services, workshops and other services.
of the joint Cwlth/States Enterprise Development Program)		<u>Eligibility</u> : Small and medium businesses which are financially sound; demonstrate commitment to change; have growth potential; are involved in internationally traded manufacturing or providing inputs to these activities. Guidelines are flexible but firm must usually have \$0.5 to 50 million turnover.
— Enterprise Improvem't Program –Design	Subsidies.	<u>Description</u> : Jointly funded by the State and Commonwealth Governments and under the Business Services Output Group. Provides assistance to firms to integrate the design of products and services with corporate goals.
		Eligibility: As above.
— Enterprise Improvem't Program – Quality	Subsidies.	<u>Description</u> : Jointly funded by the State and Commonwealth Governments and under the Business Services Output Group. Provides assistance to firms to improve their competitive position through implementing quality management and continuous improvement techniques.
		Eligibility: As above.
— Environ'l Managem't	Subsidies.	<u>Description</u> : Jointly funded by the State and Commonwealth Governments and under the Business Services Output Group. Assists firms to reduce costs through better resource management and cleaner production. The program is offered as part of an enterprise improvement plan for the firm.
		Eligibility: As above.
— Export Market Planning	Subsidies.	<u>Description</u> : Jointly funded by the State and Commonwealth Governments and under the Business Services Output Group. Assists firms to examine whether they are ready for export or to undertake a review of export activities through an export plan.
		Eligibility: As above.

Table B.5: State Government assistance to small business, Tasmania (continued)

Program	Form of assistance	Description and eligibility
Small Business Tasmania	Information, advice, contacts and referrals.	<u>Description</u> : Aims to facilitate small business by providing business information, advice, contacts and referrals (includes Business Licence Information Centre).
		<i>Eligibility</i> : Any existing or prospective business and the general public.
Small Business Tasmania:	Training.	<u>Description</u> : Training workshops in the areas indicated held in all areas of the State.
— Marketing, Introduction to Small Business and Small Business Bookkeeping Workshops		Eligibility: Small to medium sized businesses.
Business Enterprise Centres/ Local Employment Initiatives (LEIs)	Advice and counselling.	<u>Description</u> : Combined state/local government and private sector service which provides low cost or free counselling and other practical support, including information on government services, business training and networking opportunities, to small business. State financial support is on \$ for \$ basis.
		Eligibility: No specific criteria.

Table B.6: State Government assistance to small business, Western Australia

Program	Form of assistance	Description and eligibility
AusIndustry/ National Industry Extension Service	Subsidies and information.	<u>Description</u> : Jointly funded by the Commonwealth Government. Provides subsidy of up to half the costs of consultancy services, workshops and other services, in order to assist small to medium sized businesses to improve their international competitiveness.
(NIES) (Part of the joint Cwlth/ States Enterprise Development Program)		<u>Eligibility</u> : WA-based manufacturer or service firms with less than 100 employees and less than \$20 million in turnover. Must be involved in exporting or have export potential. Must have been in existence and trading for at least two years and be less than 10 per cent owned or funded by government or a government agency.
— Business Planning	Subsidies.	<u>Description</u> : Assistance with business planning.
1 mining		Eligibility: As above.
— Design	Subsidies.	<u>Description</u> : Assistance to integrate the design of products and services with corporate goals. <u>Eligibility</u> : As above.
— Diagnostics	Subsidies.	Eligibility: As above.
— Export Market Planning	Subsidies.	<u>Description</u> : Assists in developing a practical export market plan which integrates export activity into the firm's business plan. <u>Eligibility</u> : As above.
— Finance	Subsidies.	Eligibility: As above.
— Manuf'ing	Subsidies.	Eligibility: As above.
— Marketing	Subsidies.	Eligibility: As above.
— Networking	Subsidies.	Eligibility: As above.
— Quality	Subsidies.	<u>Description</u> : Assistance to improve firm's competitive position through implementing quality management and continuous improvement techniques.
		Eligibility: As above.

Table B.6: State Government Assistance to small business, Western Australia (continued)

Program	Form of assistance	Description and eligibility
— World Competitive Marketing	Subsidies.	Eligibility: As above.
Business Enterprise Centres (BECS)	Advice and counselling.	<u>Description</u> : Combined state/local government and private sector service which provides low cost or free counselling and other practical support, including information on government services, business training and networking opportunities, to small business.
		Eligibility: No specific criteria.
Regional Enterprise Development Initiative Scheme	Grants.	<u>Description</u> : Grants of up to 15 per cent of total funds required for developing or expanding a small to medium sized business in regional WA. Principally for capital acquisitions, with some provision for working capital. Grants ranged from \$3000 to \$45 000 in 1994–95.
(REDIS)		<i>Eligibility</i> : Small to medium sized businesses wishing to expand in regional WA.
Regional Enterprise Funding Scheme (REFS)	Loan guarantees.	<u>Description</u> : Succeeded REDIS in 1994–95. Provides loan guarantees to small start-up and expanding country businesses. Guarantees for loans of \$2000 to \$5000 are decided locally. Businesses are first helped to prepare a business plan. Administered by BECs.
		<u>Eligibility</u> : Country businesses with difficulty raising loans.
Small Business Improvement Program	Grants and subsidies.	<u>Description</u> : Jointly funded by Commonwealth Government. Assistance to eligible companies seeking quality certification.
		<i>Eligibility</i> : All companies with less than 100 employees and which have been in business for at least 12 months.
Business Health Assessment Program	Information and advice.	<u>Description</u> : Appraisal of key financial accounts; 'Goalfix' software to look at future for company; and provision of information and advice.
		<i>Eligibility</i> : All WA small business operators at fee set by participating accountants.

Table B.6: State Government assistance to small business, Western Australia (continued)

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Program	Form of assistance	Description and eligibility
Business Information and Licence	Information.	<u>Description</u> : Provision of licence and general information, taxation information and licensing packages.
Centre		<u>Eligibility</u> : Persons in all industry sectors starting or developing a small business.
Business Opportunities Expo	Information and advice.	<u>Description</u> : The third Business Opportunities Expo was held in June 1995. Aimed to encourage and support Western Australians in buying or starting their own business, or running an existing small or medium sized business.
		Eligibility: All Western Australians.
Government Liaison Service	Advice and liaison.	<u>Description</u> : Assistance with arranging meetings with government officers. Advice on government purchasing procedures.
		<u>Eligibility</u> : All small business operators, groups or associations.
Institute for Small Business Research	Information and research and development.	<u>Description</u> : Access to low cost market research and business planning. Broad issue research. Survey of small business opinion in WA. Awards for tertiary students undertaking related research.
		Eligibility: All industries within small business sector.
Regulation Review Panel	Removal of impediments.	<u>Description</u> : Assistance to small business to remove impediments caused by unnecessary, onerous or complex regulations or regulatory procedures.
		Eligibility: All small businesses.
Small Business Advisory Service	Advice.	<u>Description</u> : Provision of advice on managing a business.
		<u>Eligibility</u> : Any person who is starting or developing a small business in WA.
Small Business Awareness	Information.	<u>Description</u> : Staff participate in speaking engagements and special events to increase awareness of support services available to small and medium sized businesses.

Table B.6: State Government assistance to small business, Western Australia (continued)

Program	Form of assistance	Description and eligibility
Small Business Investigations and Reports	Information.	<u>Description</u> : Monitors and reviews changes to legislation. Report analyses information and research relevant to small business sector.
		Eligibility: All industry sectors.
Small Business Training, Information and Advisory Service	Information.	<u>Description</u> : Assistance with selection of trainers and courses for small business training. Information workshops and specialist seminars. <u>Eligibility</u> : Anyone involved in small business.

Table B.7: State Government assistance to small business, South Australia

Program	Form of assistance	Description and eligibility
Business Plan Development Scheme	Subsidies — up to 50 per cent, to a maximum of \$5000, of the cost of having an external private consultant write the plan.	Description: Provides assistance for business planning to support businesses breaking into export, value-adding to agriculture or import replacing. Eligibility: Firms, in the traded goods and services sector, which employ under 25 employees and show potential and commitment to the expansion.
New Exporters Challenge Scheme	Subsidies — 50 per cent of the costs of market exploration, up to a maximum of \$12 500.	<u>Description</u> : Reduces the risk of South Australian businesses developing overseas markets for South Australian goods and services. <u>Eligibility</u> : Registered SA businesses or industry groups which are too small to access Austrade's EMDG scheme. The total SA content must be at least 50 per cent of the free-on-board value of the goods being exported.
Business Growth Through Quality	Training subsidy.	<u>Description</u> : A Business Improvement program capable of providing an appropriate externally certified quality system endorsed by the Australian Quality Council. <u>Eligibility</u> : No restriction, but designed for small businesses employing less than 20 people.
Export Forums – The World Series	Training subsidy.	<u>Description</u> : Gives small and medium sized businesses a unique briefing and overview of 10 major export regions. Eligibility: No restriction.
Strategic Planning Process – A Self Guided Approach	Training subsidy.	<u>Description</u> : Specifically tailored for small and medium sized enterprises wanting to create an effective and affordable strategic plan. <u>Eligibility</u> : No restriction.

Table B.7: State Government assistance to small business, South Australia (continued)

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Program	Form of assistance	Description and eligibility
AusIndustry - Enterprise Improvement Program (part of the joint Cwlth/ States Enterprise Development	Subsidies —to meet up to half the costs of consultancy services, workshops and other services.	<u>Description</u> : Offers a range of services to assist small to medium sized enterprises to improve their international competitiveness — for example, it assists firms to: assess their current position and future needs; develop strategic, business and export market plans; and implement improvements in their business in areas such as quality, design, benchmarking, environment issues and advanced technology.
Program)		Eligibility: Enterprises must be in the manufacturing sector with a turnover of at least \$1 million or a minimum of 15 employees, or in the traded services sector with a turnover of at least \$500 000 or a minimum of 8 employees. In addition, the enterprise must be: financially viable and have the capacity to implement change; produce innovative products and services; involved in exporting, supplying exporters, or have the potential to export and/or replace imports.
AusIndustry - Environmental	Subsidy—to meet up to half the costs of consultancy services, workshops and other services.	<u>Description</u> : Helps firms to reduce costs through better resource management and cleaner production.
Management		Eligibility: Overall, the enterprise needs to be: financially sound, able to demonstrate a commitment and capacity to implement change, and have the potential for growth; involved in either the manufacturing or traded services sectors; a small to medium sized enterprise involved in exporting directly or as a supplier to an exporter, or have the potential to export and/or replace imports.
AusIndustry - Export Market Planning	Market up to half the costs	<u>Description</u> : Helps firms to examine whether they are ready for export, or, if they are already exporting, to provide a review of their export activities.
J		Eligibility: As for 'AusIndustry - Environmental Management'.
AusIndustry - Enterprise	up to half the costs	<u>Description</u> : Assistance to firms to integrate the design of products and services with corporate goals.
Improvementof consultancyProgram -services, workshopsDesignand other services.	<i>Eligibility</i> : As for 'AusIndustry - Environmental Management'.	

Table B.7: State Government assistance to small business, South Australia (continued)

Program	Form of assistance	Description and eligibility
Business Enterprise Centres/Busines s Advisers in Regional Areas	Networking counselling and advice.	<u>Description</u> : State/local government and private sector service which provides low cost or free counselling and other practical support, including information on government services, business training and networking opportunities, to small business.
		Eligibility: No restriction.
Consultancy Grants Scheme	Financial grants.	<u>Description</u> : Subsidy is granted small businesses for the consultancy advice involving the transfer of skills to them. <u>Eligibility</u> : Applying businesses must demonstrate that they are established; that they have a need; if funded, the project will benefit SA; there is a commitment to implement the recommended actions; and the project is not one which would ordinarily be part of business operations.

Table B.8: State Government assistance to small business, Northern Territory

Program	Form of assistance	Description and eligibility
Enterprise Improvement Program (part of the joint Cwlth/ States Enterprise Improvement Program	Provision of subsidised consultancy advice and other products and programs.	<u>Description</u> : Assists small business to improve their potential to be competitive and grow by subsidising the cost of independent expert consultants to study the activities of an individual business and advise management. <u>Eligibility</u> : Target firms are exporting or export potential SME's and are in activities consistent with the NT Government's strategic priorities. Firms with import replacement potential or supplying essential goods or services to an exporter are also eligible. Firms are expected normally to have turnover of \$250 000 and three or more employees.
Enterprise Improvement Program: — Environmental management	Subsidies.	<u>Description</u> : The program aims to assist firms to reduce costs through better resource management and cleaner production by integrating environmental management considerations into their operations. <u>Eligibility</u> : As above.
— Export Market Planning	Subsidies.	<u>Description</u> : Program offers assistance to develop an export plan. Subsidies are available up to half the cost of consultancy services, workshops and other services. <u>Eligibility</u> As above.
— Workplace Issues	Subsidies.	<u>Description</u> : Program offers a range of services to improve firms' efficiency through the involvement and development of people. Subsidies are available up to half the cost of consultancy services, workshops and other services. <u>Eligibility</u> : As above.
Business Development Consultancy Scheme	Subsidies.	<u>Description</u> : Subsidised access to professional consulting services for SMEs. Program aims to aid the smaller (micro) businesses that meet the same general criteria as the Enterprise Improvement Program but which are ineligible for assistance under that program. <u>Eligibility</u> : Business must be registered in the NT, be viable and have long term growth potential. Businesses are expected to demonstrate benefits to the NT. The applicant must have the skill, resources and willingness to consult with the consultant and implement the recommendations.

Table B.9: State Government assistance to small business, Australian Capital Territory

Program	Form of assistance	Description and eligibility
Enterprise Improvement Program (part of the joint Cwlth/ States Enterprise Improvement Program	Subsidies.	Description: Assists small business to improve their potential to be competitive and grow by subsidising the cost of independent expert consultants to study the activities of an individual business and advise management. Eligibility: Target firms must be value adding and have potential to generate economic benefits for Australia by exporting or import competition. Firms supplying essential goods or services to an exporter may also be eligible. There is no size criterion for this program in the ACT.
— Workplace Issues	Subsidies.	<u>Description</u> : Program offers a range of services to improve firms' efficiency through the involvement and development of people. Subsidies are available up to half the cost of consultancy services, workshops and other services. <u>Eligibility</u> : As above.
— Export Market Planning	Subsidies.	<u>Description</u> : Program offers assistance to develop an export plan. Subsidies are available up to half the cost of consultancy services, workshops and other services. <u>Eligibility</u> : As above.
— Environment Management	Subsidies.	<u>Description</u> : The program aims to assist firms to reduce costs through better resource management and cleaner production by integrating environmental management considerations into their operations. <u>Eligibility</u> : As above.
New Future in Small Business	Training.	<u>Description</u> : The program provides a 5 week training course in small business management, a business experience placement in an ACT business and mentoring support for up to 12 months.
		<u>Eligibility</u> : The program targets unemployed ACT residents aged 40 or over with priority given to those recently made redundant or retrenched and are contemplating establishing a small business in the ACT.

C RECENT REFORMS TO THE FAIR TRADING LAW

Notions of fairness and unfairness are reflected in much government policy and statute and common law. For example, along with the promotion of economic efficiency, they underpin competition and consumer protection legislation, such as the Trade Practices Act. The purpose of this appendix is to provide background to recent Commonwealth initiatives which seek to proscribe certain business practices regarded as 'unfair'.

C.1 The Trade Practices Act and unfair behaviour: background to the changes

The Trade Practices Act (TPA) has the dual aims of promoting competition and protecting consumers and business from 'unfair' practices (Trade Practices Commission 1991, *Unconscionable Conduct and the Trade Practices Act*). There has been an ongoing debate on the extent to which the Act (coupled with other avenues of legal redress) has adequately reflected society's concerns in relation to the fairness of practices between firms and individuals. In particular, this was centred on the adequacy of the Act's unconscionable conduct provisions to address small business interests.

The term 'unconscionable conduct' refers to transactions where one party has taken advantage of another's inability to protect its own interests. Unconscionable conduct has its origins in common law. Prior to the amendments made in 1998, an action was considered unconscionable conduct only if:

- one party had a 'special disadvantage' relative to the other (such as lack of understanding or the absence of legal advice);
- the weakness of one party was exploited by the stronger party in a morally culpable manner; and
- the transaction that resulted was judged oppressive.

Where these conditions were found, the law placed the onus on the party seeking to uphold the transaction to show that its actions were fair, just and reasonable (TPC 1991, DIST 1997b). The mere presence of inequality of bargaining power (as a 'special disadvantage') was not sufficient to establish unconscionable conduct. The inequality would have to be such that the weaker

party suffered from an inability to protect its interests and the stronger party took advantage of the situation. As the TPC noted, taking action under the unconscionable conduct doctrine was rendered difficult by the presumption that parties to a commercial agreement are always capable of protecting their own interests (TPC 1991).

The latter assumption was questioned, particularly in relation to small business, and there were a number of suggestions to strengthen the unconscionable conduct provisions of the TPA with a view to protecting small business from what were seen as unfair practices. In particular, the House of Representatives Committee on Industry, Science and Technology in its 1990 report, *Small Business in Australia: Challenges, Problems and Opportunities*, (Beddall Report) recommended expansion of section 52A of the TPA, which prohibits unconscionable conduct in consumer transactions, to include commercial transactions where small business in its dealings was disadvantaged in the same way as consumers might be (TPC 1991).

The (then) government asked the TPC to examine the Beddall report's proposed extension of the Act. The TPC reported on the matter in 1991, noting that it received numerous complaints from small business alleging unfair or unconscionable conduct. It stated that these complaints were largely left unresolved, as they tended to fall outside the scope of the Act (TPC 1991). The TPC considered that extension of the Act to cover unconscionable conduct in commercial transactions was warranted, but that this was best achieved by adding a new part to the Act, rather than extension of section 52A (TPC 1991, *Unconscionable conduct and the Trade Practices Act: possible extension to cover commercial transactions*). Reflecting the TPC's position, the Government introduced the *Trade Practices Amendment Act 1992* which established Part IVA of the Act. This Part provides for different treatment of unconscionable conduct against consumers (S51AB, formerly 52A) as opposed to cases involving firms (S51AA) (DIST 1997b).

However, the change did not satisfy small business organisations who considered that it was impossible to bring a satisfactory test case under the new provisions. Small business continued to voice complaints on 'unfair' business conduct, for example, at national small business fora in 1994 and 1995 (DIST 1997b). As a result, the then government introduced the *Better Business Conduct Bill* to Parliament in 1995, but this Bill lapsed due to the election in March 1996.

C.2 The fair trading inquiry

In June 1996, the Minister for Small Business and Consumer Affairs asked the House of Representatives Standing Committee on Industry, Science and Technology to investigate business relations between large and small firms. The Committee's report, *Finding a balance: Towards fair trading in Australia*, included a special focus on business relations in the areas of:

- franchising;
- retail tenancies in shopping centres;
- petroleum retailers and distributors; and
- the financial policies of banks and other financial institutions in relation to small business.

The recommendations of the report were far-reaching. On general legislative provisions relating to unfair conduct, the Committee recommended that the existing section 51AA of the TPA should be replaced with a new section dealing exclusively with corporations engaged in trade or commerce. On the face of it, the interpretation of what constitutes 'unfair practice' would essentially be up to the Court, with the only restriction being that the Court take into account any circumstances which were not reasonably foreseeable at the time the alleged contravention took place.

On franchising, the Committee's main recommendation was for the Commonwealth to enact specific franchising legislation providing for compulsory registration of franchisers, and to ensure franchisers comply with codes of practice. Similarly, its main recommendations in relation to small business finance were relatively low key: that the Commonwealth take account of small business interests in the establishment of any client protection and dispute resolution programs resulting from the Financial System Inquiry (Wallis Inquiry); and that the Commonwealth, along with State and Territory governments, examine the laws dealing with repossession and mortgagee sales.

However, the Committee had a considerable number of recommendations on retail tenancies. The recommendations reflect the weight the Committee gave to evidence indicating that relations between shopping centre tenants and landlords were characterised by combative behaviour and victimisation of tenants (House of Representatives Standing Committee on Industry, Science and Technology 1997).

To overcome these problems, the Committee envisaged a code of conduct between retail tenants and landlords which would be incorporated into the new 'unfair conduct' provisions of the TPA. The Committee also had a number of specific recommendations in relation to the retail tenancy code. These included:

- *minimum* lease terms of five years;
- sitting tenants to have the option of lease renewal for a further five year term, and the right of first refusal for subsequent five year periods;
- lessees who wished to assign their leases to prospective buyers of their businesses should provide disclosure statements showing all relevant information on the financial position of the business and the rights and obligations of the business as a tenant, including information on any financial incentives applying at the time of assignment or in the previous five years;
- lessors should be able to withhold consent to the assignment of a retail lease only on specified grounds, and the purchasers of a retail outlet should be given a new lease by the property managers when all parties agree, or (as a fall back option) all rights and responsibilities pursuant to the lease pass to the new tenant on assignment of the lease, unless otherwise agreed in writing between the assignor and assignee;
- for the purpose of valuing retail property or providing advice on market reviews, accredited retail property valuers should have access (on a nondisclosure basis) to relevant tenancy schedules of shopping centres, showing the total occupancy costs for each tenant in the centre and the value of any concessions or rebates given;
- disclosure statements should set out clearly the method by which rent is to be calculated for the term of the lease, without provision for review or for unpredictable increases;
- market review of rents should be permitted only on renewal of the lease, and the level of market rent on renewal should be determined by an independent accredited valuer, with costs being shared between the parties; and
- merchants' associations in shopping centres should be consulted in relation to tenancy mix, and lessors should include in disclosure statements provided prior to the signing of a retail lease the tenancy mix of the shopping centre and whether or not there are any provisions for rent reduction to apply if the turnover of the lessee falls owing to the introduction of a new competitor or competitors (House of Representatives Standing Committee on Industry, Science and Technology 1997).

C.3 Government response to the fair trading report

In September 1997, the Government announced its response to the fair trading report (Reith 1997, New Deal: Fair Deal — giving small business a fair go). The Government's package comprised the following elements:

- extension of the unconscionable conduct provisions of the TPA to cover small business. The new provisions go further than 'the traditional limits of the law', in that the courts would have to consider the relative bargaining strengths of the parties;
- amendments to allow for voluntary business codes of practice to be 'prescribed' (made mandatory) under the TPA. A breach of a prescribed code would then become actionable. The Australian Competition and Consumer Commission (ACCC) would enforce and provide information on the prescribed codes;
- bolstering the ACCC by having small business Commissioners, increased funding, establishment of a unit with responsibility for enforcing ACCC codes of conduct, and having the ACCC undertake representative legal actions for small business;
- working with the States to establish a uniform standard of minimum protection for retail tenancies, backed by legislation. The Commonwealth has suggested some initial guidelines for this standard (see below);
- support for alternative dispute resolution mechanisms available to small business. The Government noted that legal action is often prohibitively expensive for small businesses, and that reaching a judicial decision may take so long that even a favourable decision does not bring any advantage. To mitigate these problems, the Government promoted alternative mechanisms, where possible, including in the franchising, retail tenancy and finance areas;
- support for extension of the Banking Industry Ombudsman Scheme, and
 other banking industry dispute resolution mechanisms, to small business.
 This initiative reflects a Fair Trading report finding that more than 25 per
 cent of complaints to the Banking Industry Ombudsman were outside its
 current terms of reference, as they came from incorporated (mainly small)
 businesses; and
- measures to provide for small business education and information. The
 Government's initiatives in this area (in cooperation with the States and
 the private sector) includes provision of information to small business on
 their legal obligations, access to legal and dispute resolution procedures
 and what to look for when buying a franchise or entering a lease.

Amendments to the Trade Practices Act were passed in 1998. The new Act now includes detailed criteria for establishing unconscionable conduct, such as:

- the relative bargaining strengths of parties;
- a (small) business having to comply with conditions which were not reasonably necessary for the protection of the legitimate interests of the supplier or buyer;
- whether the business was able to understand any documents relating to supply or acquisition of goods and services;
- the existence of undue pressure or unfair tactics;
- the price for which the business could have obtained identical goods or services from another supplier or customer;
- inconsistency of treatment between similar business clients;
- the requirements of any applicable industry code;
- insufficient disclosure by parties;
- the willingness to negotiate terms; and
- the extent to which the parties acted in good faith.

Minimum protection standards for retail tenancies

As well as increasing the ambit of the TPA's unconscionable conduct provisions, the Government is working with the States and Territories to develop uniform legislation that will work better for small business involved in retail tenancies. To this end, it has developed a number of 'key principles' for discussion with governments and industry. Briefly, they are:

- full disclosure of important information by landlords in their negotiations with tenants and prospective tenants;
- elimination of ratchet clauses (lease clauses which prevent rents from falling);
- landlords to be responsible for 'reasonable' relocation costs. For example, many leasehold agreements provide for tenants to be compulsorily relocated during building refurbishment or alteration;
- adequate information for rent reviews. This principle argues for a fuller disclosure of landlord information to independent valuers involved in rent reviews, including information on rents paid by other tenants in the centre;
- greater transparency of landlord retail centre expenditures. This principle would allow tenants to judge whether they are getting value for various

charges collected by the landlord to, for example, promote the retail centre as a whole;

- greater certainty of lease assignment to purchasers of existing retail business. At present many lease agreements allow landlords to refuse to assign existing or provide new leases to prospective buyers of shopping centre retail businesses. The Government proposes to limit clauses of this nature;
- access to turnover figures. While recognising the information importance
 of turnover figures in setting rents, the Government notes that turnoverbased rents can be regarded as a tax on entrepreneurial effort by small
 businesses. The Government considers turnover figures could be made
 available on a restricted basis; and
- the introduction of dispute resolution procedures outside the court system. In keeping with its general stance of encouraging dispute settling procedures outside the judicial system, the Government suggests retail tenancy tribunals be established to settle landlord-tenant disputes (Reith 1997).

Possible review questions

As any legislation incorporating the above principles is likely to be reviewed in due course under the Commonwealth/States Competition Principles Agreement (appendix F) to see whether it is in the public interest, it is useful to chart some of the issues and questions that such a review might address. These are set out below.

- What is the fundamental underlying problem the legislation aims to address? Is it essentially informational? For example, are tenants adequately informed and aware of commercial realities and/or is there an asymmetry in information between landlords and retail tenants? Or does it relate to anti-competitive practices and landlords' market power and ability to skim off some of the tenants' returns (for example, some of the goodwill value accruing to particular retail sites within shopping centres)?
- What specific unfair practices are being addressed by the legislation, how widespread in reality are the alleged practices, and what factors lie behind their occurrence? For example, is there a systematic relationship between the occurrence of any 'unfair' practices and the training and experience of the lessor/retailer, or are they essentially random occurrences?
- Do the alleged unfair practices vary systematically between types of shopping centre developments? For example, are they more common in local or 'strip' shopping centres, where both landlords and retail tenants

- may be facing increased competition and declining returns relative to larger regional or single supermarket shopping centres?
- What social groups is the legislation seeking to benefit? Is it just established retailers or are prospective retailers also included? If the latter, does the legislation achieve its intentions or are prospective retailers being disadvantaged relative to retailers with existing leases?
- Does the legislation have unintended consequences? For example, does it weaken the incentive to invest or refurbish shopping centres? Does it establish unnecessary barriers to landlords' ability to establish optimal shopping centre retailing mixes? If so, what are the long run impacts on consumers and small businesses (including shopping centre retailers)?
- Does the legislation achieve its fundamental objectives and if so, are there alternative ways of achieving these objectives which involve less economic costs? If the legislation does not achieve its objectives, are there alternative mechanisms which would improve on the fairness of market outcomes in this instance and what are the economic costs of these alternatives?

D THE BENEFITS OF THE R&D TAX CONCESSION

In chapter 5 we showed how a generic program may deliver different net benefits depending on its constituent firms.

The model we use for making these calculations is as follows:

$$Induced_i = \frac{100 - \widetilde{R}_i}{100} \times R_i$$

$$Revenue_i = 0.5 \frac{\tau}{1+r} (1 - Taxadj_i) \times R_i$$

 $Spillover_i = S \times Induced_i$

 $Compliance_i = \Theta \ C_i \times R_i$

 $Leak_i = \Omega Foreignshare_i \times Revenue_i$

Bang for the $buck_i = Induced_i / Revenue_i$

Net benefits_i = Spillover_i - $MEB \times Revenue_i$ - $Compliance_i$ - $Leak_i$ - Admin

Rate of $return_i = Net benefits_i / Revenue_i$

Admin = 1500, $\Omega = 0.6$, S = 0.7, $\Theta = 0.5$, $\tau = 0.39$ and r = 0.08

where i is the ith firm. The different terms are defined as follows:

Induced The amount of R&D that is induced by the tax concession (ie that wouldn't have

been done otherwise);

 \tilde{R}_i The amount of R&D that the ith firm believes they would do in the absence of

the tax concession;

 $R_{\rm i}$ the amount of R&D that the ith firm does with the tax concession;

Revenue The revenue costs of the tax concession for an individual firm;

Spillover The estimated value of R&D spillover benefits from induced R&D;

S The spillover rate (assumed to be 70 per cent — see BIE 1993b);

Taxadj The value of the tax concession which is lost due to deferral in companies with

tax losses;

r the discount rate (set at 8 per cent). This is applied to take account of the delay in

claiming the tax concession;

τ the corporate tax rate (39 per cent at the time of the collection of the data)'

Compliance the compliance costs of claiming the tax concession and meeting any

administrative requirements;

C_i the compliance costs as a share of R&D from survey returns of firms;

 Θ a parameter which scales down the variable C_i due to concerns that the

compliance costs were overstated.

Leak leakages of subsidies to foreign shareholders;

Foreignshare The percentage of the company which is owned by foreign shareholders;

 Ω a parameter which determines how many benefits flow to overseas shareholders;

Bang for the a measure of the induced R&D per dollar of revenue forgone on the tax

buck concession;

Net benefits an overall measure of the welfare gain (loss) of the tax concession;

Rate of return the ratio of the net benefits to the revenue forgone;

Admin the administrative costs of dealing with any single registrant to the concession;

Having completed these calculations for each firm, it was then possible to aggregate firms into their various size groupings and compare results across these categories.

E IMPACTS OF THE NEW ENTERPRISE INCENTIVE SCHEME

Estimating the fiscal cost per job created of labour market programs like NEIS involves a range of complex challenges. We develop a methodology for estimating the effectiveness of the program, derive some key parameters, and indicate how the fiscal cost varies as we change assumptions. We also describe some empirical methods for increasing the precision of our estimates.

E.1 Analytical framework

At the start of a given year (year 1) the government provides funding for NEIS. We look at the results for 100 representative new enterprises set up under NEIS in year 1. We follow this cohort of new businesses for a period of 30 years to capture long run effects.

We simplify the analysis in a number of ways. First, we assume that participants in the scheme have only two options: they are either in a job or receiving social security benefits. This ignores the relatively small number of people who leave the workforce and are not recipients of any government payment. Second, we exclude one apparently 'successful' outcome from NEIS in our analysis — sometimes NEIS participants leave self-employment and obtain jobs as employees elsewhere. We do not count these as jobs generated by the NEIS scheme on the grounds that NEIS probably had little or no impact on their ability to obtain such a job. ¹

We analyse the impact of the program on jobs and costs in a number of steps:

- how long do NEIS businesses survive?
- how many people are employed per NEIS business?
- how many jobs are truly additional?
- how big are displacement effects?
- what is the net present value of jobs created? and
- what are program costs?

-

¹ Though there may be some learning advantages from operating a business, which then increases the probability of gaining other forms of employment.

Given uncertainty over key variables, such as the rate of survival, we adopt the approach of Piggott and Chapman (1995) and specify ranges of parameters that we suspect encompass the true values (table E.1). The 'neutral' scenario is our best guess. The 'pessimistic' scenario represents a reasonable but lower bound in terms of program effectiveness, while the 'optimistic' scenario represents a reasonable higher bound.

Table E.1: Possible parameters

Parameter	Description	Neutral	Optimistic	Pessimistic
K	Determines starting survival rate of businesses	0.65	0.42	0.64
λ	Determines the pace of convergence to the long run business survival rate	0.5	0.5	0.2
$\mathbf{E}_{_{1}}$	Average number of owner managers per NEIS business	1.33	1.33	1.33
α	Annual growth rate in employees per surviving business	0.5	0.6	0.35
Θ	Determines starting value of additionality	1.284	1.93	0.55
μ	Determines the pace of convergence to long run additionality	0.25	0.25	0.25
Ω	A scalar which scales down additionality for secondary job creation in NEIS firms	0.5	0.7	0.3
$\delta_{_1}$	Displacement factor for the self- employed	0.6	0.5	0.7
$\delta_{_2}$	Displacement factor for other employed	0.90	0.85	0.95
DC	Direct costs of NEIS	1 994 600	1 994 600	1 994 600
TR_1	Tax revenue from NEIS businesses for the first year	2 000	2 500	1 500
ζ	The long run value of taxable income	38 000	46 000	30 000
UBEN	Unemployment benefits (forgone) per NEIS participant	10 000	10 000	10 000
r	Discount rate	0.05	0.05	0.05

Entrepreneurial survival

After a given time, how many NEIS participants are still in their own businesses after completing the program, rather than unemployed or working as an employee? We refer to this as entrepreneurial survival, rather than business survival. This is because there is a distinction between exit rates for businesses

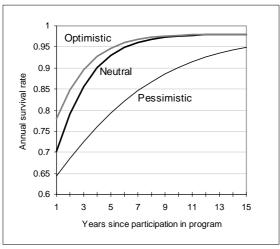
and failure rates for entrepreneurs. Firms may close over time (because there is a better business opportunity, poor performance or failure) while the business owner goes onto another business. For example, DEET's evaluation of NEIS (1993, p.8) found that 7.4 per cent of NEIS participants that were still self-employed after the program² were in a business other than the original NEIS business.

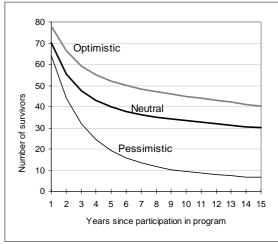
We consider entrepreneurial survival as a logistic function (figure E.1):

$$B_t = B_{t-1} \times \frac{0.98}{1 + Ke^{-\lambda t}}$$
 with $B_0 = 100$ {1}

where B_t is the number of businesses at time t in which NEIS participants are employers. We have assumed that, in the long run, 2 per cent of entrepreneurs give up running their own business each year. The term K determines the starting survival rate, while λ determines the speed at which the survival rate converges on its long run value. We now consider evidence that will help to indicate possible values for these parameters.

Figure E.1: Entrepreneurial survival





The 1990 DEET evaluation revealed that about 2 years after starting their business, 43 per cent of participants were still in a business. This had changed to 54 per cent in the 1993 evaluation (table E.2), possibly reflecting different economic circumstances. As discussed in Revesz and Lattimore (1997) self-employment rates vary anticyclically. When jobs are hard to get, people look more to self-employment. This may explain why retention rates in NEIS businesses appears to be greater when unemployment is higher.

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² Eleven to sixteen months after completion of the one year NEIS program.

However, more recent post-program monitoring by DEETYA suggests higher success rates (table E.2). But we caution that earlier evaluations tend to underestimate probable survival rates, while DEETYA's current monitoring methods probably overstates real survival rates (see notes to table E.2).

Under the neutral scenario, we assume that about 70 per cent of businesses survive after 12 months (ie at the cessation of the NEIS funding), but that this has fallen to 40 per cent after 5 years (based on K = 0.65 and $\lambda = 0.5$). This is similar to the results and assumptions used by Storey (1994) in his analysis of the Enterprise Allowance Scheme (EAS), the UK equivalent of NEIS.

In the optimistic scenario, 78 per cent of businesses survive the first year and half are still in business five years later, while in the pessimistic scenario, the relevant numbers are 64 and 19 per cent.

Table E.2: NEIS participants still in self-employment

	3 month group ^a	12 month group ^b
	% in self-employment	% in self-employment
1990 DEET evaluation ^c	na	43
1993 DEET evaluation ^c	64	54
Year ending December 1994	73	na
1996 Post Program Monitoring ^d	70	58

The 3 month group are those who ceased receiving the NEIS allowance between 3 and 5 months before the survey.

Sources: DEET(1993) and material provided by DEETYA.

People employed per business

Each NEIS business may have a number of owner-managers and also hire some staff (so called secondary job creation). We assume that the average number of owner-managers per NEIS business (E_{1t}) remains fixed over time, but that business expansion leads to growth in the number of employees per business (E_{2t}) of about 5 per cent each year.

$$E_{2t} = \alpha e^{0.05t}$$
 {2}

b Those who ceased receiving the NEIS allowance between 11 and 16 months before the survey.

c Assumes that participants who could not be contacted were not self-employed. This suggests that the data are lower bounds for survival rates.

d This assumes that the respondents to the survey and non-respondents are similar. It is probable that survival rates are lower for non-respondents. Therefore these data probably overstate survival rates.

The gross number of jobs (GJ) 'created' by NEIS is therefore

$$GJ_{t} = (E_{1t} + E_{2t}) B_{t}$$
 {3}

The value of E_{1t} is 1.33 for all time. This is derived from the 1996–97 annual report of DEETYA which noted that 7492 people commenced self-employment with 5625 NEIS businesses. We have assumed that all of the self-employed positions are full time.

α determines the degree of secondary job creation. In the 1993 evaluation, secondary job creation was estimated at 0.2 full time employees per surviving NEIS business³, and 0.3 part time employees — roughly equivalent to 0.35 full time equivalent jobs per surviving business, if two part time jobs equals one full time one. More recently, information from DEETYA for 1995–96 suggests that there were 0.11 full time employees per surviving business (3 months after cessation of NEIS subsidies) and 0.34 part time employees. There were also 0.3 non-NEIS spouses or business partners per business. We assume that half of the latter worked on a full time basis. This implies that secondary job creation is around 0.5 full time jobs per NEIS business — the value we have used in our neutral scenario. In the optimistic and pessimistic scenarios we have presumed secondary job creation of 0.6 and 0.35 respectively.

Additionality

Not all self-employed jobs apparently created by NEIS are really new. Some people would have started their own businesses anyway, or gone into other employment. Storey (1994) indicates that the UK Employment Department originally estimated that about 50 per cent of people entering self-employment under the EAS would have done so without the program. The department subsequently revised additionality downwards to 33 per cent.

Unfortunately, no data are available for NEIS. However, we can use data on the characteristics of participants, and their likelihood of getting a job next period without a job subsidy to infer the possible magnitude of additionality (table E.3).⁴

In businesses 24 months after the start of their participation in the scheme.

⁴ This assumes that the people applying for NEIS are representative of the stock of unemployed, which may not be the case.

Table E.3: Characteristics of participants in NEIS (1991–92)

	Proportion of NEIS participants	Probability of getting a job in the next year ^a
	proportion	%
DEETYA figures July 1994 – May 1995		
< 6 mths unemployed	0.321	
6–11 months unemployed	0.231	
12-17 months unemployed	0.136	
18 months or more unemployed	0.311	
Estimated rates using Piggott and Chapman (1995) unemployment categories ^b		
Short term unemployed (< 9 months)	0.4365	80.1
Medium term unemployed (9 – 18 months)	0.2515	67.0
Long term unemployed (> 18 months)	0.311	29.0

The data from Piggott and Chapman relate to probabilities of a transition to a job over the next nine months. Because our analysis is based on a year for each period we have modified their data. If the probability of getting a job does not decline with unemployment duration, then the probability of getting a job in the next 12 months for each category of unemployed is:

$$p* = \{1 - (1 - p)^{4/3}\}$$

where p is the relevant probability of getting a job in the next nine months. However, job transition probabilities decline with unemployment duration. We have made a slight downward correction to correct for this bias, so that we calculate p* as:

$$p* = 0.95 \times \{1 - (1 - p)^{4/3}\}$$

Sources: DEET (1993) and Piggott and Chapman (1995).

Most NEIS applicants appear to be short term unemployed and most short term unemployed people get a job in the next period without assistance. We can calculate the overall proportion of people we would expect to get a job next period using the data in table E.3 as:

$$P = \sum_{j=1}^{3} p^*_{j} \times s_{j}$$
 {4}

where p^*_j is the probability of getting a job in the next 12 months, s_j is the share of NEIS participants in that unemployment category and j=1 to 3 denotes parameter values for the short, medium and long term unemployed. We find that P is around 60 per cent, which is consistent with additionality of 40 per cent.

b It was assumed that half of the people unemployed for 6 to 11 months were employed from 6 to 9 months.

... data are unavailable.

Because there is some targeting by managing agents of the NEIS we have used somewhat higher rates of additionality than is suggested by the above analysis.⁵ Under the neutral scenario, we have assumed that about 50 per cent of self-employment under the NEIS scheme is (initially) additional. The other scenarios assume that initial additionality is 60 per cent (the optimistic scenario) or 30 per cent (the pessimistic scenario).

The degree of additionality is very likely to fall over time. This is because while any given unemployed person may not have good job prospects in the short run, they have far better prospects in the long run. Moreover, the process of firm failure tends to drive out the worst performers first, leaving higher quality businesses. It seems probable that the employers of such higher quality businesses are more likely to have got a job in the absence of the scheme than those employers who fail early. Analysis by Gray (1990) of the UK equivalent of the NEIS confirms that participants who intended to set up a business regardless of the program had a higher survival probability than other participants. As in the case of entrepreneurial survival, we characterise additionality (A_t) as a logistic function, with long run additionality of zero (ie effectively everyone attracted to NEIS would get a job sometime in 30 years):

$$A_{t} = 1 - \frac{1}{1 + \Theta e^{-\mu t}}$$
 {5}

where the parameters Θ and μ determine respectively the starting value and speed of convergence to the long run.

Much of secondary job creation is also not additional, simply because some workers join an enterprise which would have started anyway. Moreover, secondary job creation mostly occurs in a very few businesses — presumably the most successful.⁶ It is likely that the most successful businesses are run by entrepreneurs who would have gone into business anyway. Accordingly, the extent of truly *additional* secondary job creation is probably modest. We have assumed that secondary job additionality is equal to Ω x A_t , where $0 < \Omega < 1$. We set $\Omega = 0.3$ (pessimistic), 0.5 (neutral) and 0.7 (optimistic).

⁵ Though notably self-selection biases may operate to provide a bias the other way, so that actual additionality is lower.

⁶ DEET (1993) found that 78 per cent of the 12 month group of surviving NEIS businesses did not employ additional staff in their business. In the UK equivalent to NEIS, 60 per cent of the jobs created in surviving firms after three years were in 4 per cent of those businesses which originally started (Storey 1994, p. 283).

Displacement

Even apparently additional jobs may drive down employment elsewhere in the economy. As the new businesses set up, they tend to displace other existing or incipient businesses. Even if the new businesses are not in direct competition with other businesses, there are supply constraints in the economy. Displacement effects are likely to be different for the self-employed and secondary job creation, reflecting their diverging characteristics.

Job displacement for the self-employed

Piggott and Chapman (1995, p. 322) cite a number of studies about the likely levels of displacement for labour market programs providing employment subsidies. These studies suggest that about 20 per cent of jobs created by job subsidies represent net job creation. However, in this case, displacement mainly refers to employers deciding to recruit someone with a wage subsidy rather than someone else. In the context of NEIS, it refers to general equilibrium effects in employment in other businesses. It is extremely hard to enumerate the scale of such effects. Storey (1994) used 50 per cent as the displacement measure in his assessment of the UK small business employment scheme — but indicated that it was an arbitrary choice. Friedlander et al (1997, p. 1846) indicate that there is 'virtually no research quantifying the magnitude of displacement'. Katz (1994) argues that training may allow the unemployed to leave slack labour markets for tight ones, creating negative displacement effects.

Layard, Nickell and Jackman (1991) point out some of the pitfalls in considering displacement:

Discussions of displacement normally involve a profound misconception. They assume that demand is limited, so that if someone gets a job there is one less job for others. If demand is limited, that is of course true, and there would be no point in having any labour market policies. However, in fact, demand can easily be changed. What puts a limit on feasible demand is feasible supply. Labour market policy works only if it affects the economy's supply potential. And if it does that it cannot fail to have an effect, since in the long run the supply side rules. (p. 477)

NEIS unquestionably does affect the supply side by:

- increasing the incentive (via the subsidy) for unemployed people to get a job through a business start-up;
- overcoming mismatch (between the characteristics of the unemployed and the jobs on offer) which may affect hiring in existing firms; and
- providing training and learning on the job, which increases human capital (and reverses de-skilling associated with longer term unemployment).

Layard, Nickell and Jackman (1991, pp. 479ff and pp. 549ff) cite some empirical methods for assessing the impact on unemployment of active manpower programs. In the absence of pre-existing empirical studies for NEIS (and the data to do them), we have made assumptions about displacement of 60 per cent (neutral), 50 per cent (optimistic) and 70 per cent (pessimistic).

It may be fruitful for future evaluations of NEIS (and other labour market programs) to undertake econometric analysis of unemployment outflow equations of the sort described by Layard, Nickell and Jackman (1991).

Secondary job displacement

NEIS provides wage subsidies and training to the self-employed, not the employees of the NEIS businesses. NEIS employers will presumably have to offer standard rates to attract workers. Some of the new enterprises will attract formerly unemployed labour (an outflow from the unemployment pool), but other existing enterprises will downsize or not appoint an unemployed person (an inflow into the unemployment pool). The net result is a shift in the size distribution of employing businesses, rather than a higher aggregate number of employees.⁷ The reason for the probable impunity of unemployment to an increase in enterprise numbers, is that nothing fundamental has happened on the supply side to deviate unemployment from its equilibrium level (ie no wage subsidies, no increased searching or changes in the quality of labour, regulatory or industrial relations environment). As soon as incipient unemployment dropped, wage pressure would rise, restoring equilibrium unemployment (Layard, Nickell and Jackman 1991).

Empirical evidence bears this out. It shows that there is no association between the firm size distribution of the economy (or the number of enterprises) and unemployment rates (Revesz and Lattimore 1997). Storey (1994), commenting on the UK experience says:

...in areas of high unemployment, such as the county of Cleveland where in the 1980s more than 40 per cent of those starting businesses were unemployed, the net effects in terms of job creation has been extremely modest. Whilst the county experienced a major rise in rates of new firm formation, firms which were established were much smaller than those established in the pre-EAS period. This suggests a rise in business volatility but little identifiable increase in net employment. In short, there is a rise in the quantity of firms, but there is a virtually compensating reduction in their quality (p. 284).

287

We also note that many NEIS businesses appear to be operating in what is known as the 'secondary' labour market, where the wages of employees are relatively low as are skill levels. In these markets, there are usually no queues for jobs.

For this reason it is likely that displacement for secondary labour creation is likely to be very high — close to 100 per cent. However, it is possible that a shift in the size distribution of firms may increase competition or wage flexibility in some local markets, which may generate small employment gains at the margin. We have assumed that secondary job displacement is 90 per cent under the neutral case, 85 per cent under the optimistic scenario and 95 per cent under the pessimistic scenario.

Once displacement factors are estimated it is possible to calculate the number of net jobs (NJ) generated at time t:

$$NJ_{t} = \{(1 - \delta_{1}) \times E_{1t} + (1 - \delta_{2}) \times E_{2t} \times \Omega\} \times A_{t} B_{t}$$

$$\{6\}$$

where δ_1 and δ_2 are the displacement factors for the self-employed and employees respectively.

The net present value of jobs created

The jobs created by NEIS do not last forever. We must therefore examine jobyears rather than jobs. Moreover, jobs today are worth more than jobs tomorrow, so we must discount job years that accrue in the future. The net present value of jobs (NPVJ) is defined as:

$$NPVJ = \sum_{t=1}^{30} \frac{NJ_t}{(1+r)^{t-0.5}}$$
 {7}

where r is the discount rate in this calculation (set at 5 per cent).

Program costs

So far we have an estimate of the jobs created by the scheme, but no indication of the costs (and benefits) to revenue. These costs and benefits are:

- the direct costs of the scheme per NEIS business;
- less savings in unemployment benefits; and
- less tax revenue from any new jobs.

Direct costs

The direct costs (DC) is simply the average cost per NEIS business times the number of starting businesses (set at 100 in our simulations). The value of DC is calculated from the 1995–96 annual report of DEETYA (noting that \$112.2 million was spent on 5625 businesses).

Savings in unemployment benefits

The savings in unemployment benefits (BEN) is equal to the average value of the social security payment a NEIS participant would have received in the absence of program participation (UBEN), times the number of net jobs created.

$$BEN_{t} = UBEN \times NJ_{t}$$
 {8}

NEIS participants receive income support roughly equal to their benefit entitlement if they were unemployed. The 1993 evaluation found the income support component of NEIS was 71 per cent of total program costs, which equates to about \$10 600 per self-employed participant for 1995–96. The savings in unemployment benefits for those workers acquiring jobs through secondary job creation are likely to be somewhat less per person, which is why we have used a round figure of \$10 000 for UBEN.

Tax benefits

NEIS participants — if successful — will contribute taxes from their income, which offsets the initial cost of the program.

On the one hand, we expect that tax revenues earned from the average NEIS participant would be higher than that of some other labour market programs — such as the JOBSTART program analysed by Piggott and Chapman (1995). This is because JOBSTART participants are drawn from the long term unemployed, who tend to have lower skills and lower average earning capacity than the unemployed in general. Moreover, those people attracted to NEIS probably have other attributes (greater entrepreneurial ability and motivation) which earn higher returns.

On the other hand, DEET (1993) found that NEIS participants who had been in long term unemployment prior to starting their business had a much greater likelihood of having continuing income support than those who had been in short term unemployment. Since it is likely that businesses started by the short term unemployed are less likely to be truly additional than those started by the long run unemployed, this will tend to depress the level of additional tax revenue gained from the program.⁸

In the first year of business — the set-up and training phase — business incomes tend to be low. We have assumed tax revenue offsets (TR_1) of \$2000 per net job created. The corresponding values for the optimistic and pessimistic cases are \$2500 and \$1500 respectively. In subsequent years, we assume that

289

In terms of evaluation, therefore, it is important to look only at the business income (and tax revenues) generated by businesses which are truly additional (and non-displacing).

taxable income (Y) rises to a plateau (ζ) of \$38 000 (neutral), \$46 000 (optimistic) and \$30 000 (pessimistic) — with the time path determined by a logistic function:

$$Y_{t} = \frac{\zeta}{1 + e^{-0.3t}} \quad \text{calculated for } t > 1$$
 {9}

Tax revenue for each year (TR_t) after the first is calculated by reference to the personal taxation schedule for the relevant value of Y. This produces long run tax revenue each year of \$8942, \$12 382 and \$6222 respectively per net job created.⁹ Overall tax receipts are estimated as:

$$TAX_{t} = TR_{t} \times NJ_{t}$$
 {10}

The overall cost

As with jobs, the net present value of the costs and subsequent benefits (COST) is calculated as:

$$COST = \frac{DC}{(1+r)^{0.5}} - \sum_{t=1}^{30} \frac{(TAX_t + BEN_t)}{(1+r)^{t-0.5}}$$
 {11}

We can then calculate the long run budgetary cost per job:

$$JOBCOST = COST/NPVJ$$
 {12}

E.2 Results

The implications of the various scenarios on failure rates and additionality are shown in table E.4, E.5 and E.6. Two overall indicators of the performance of the program are shown at the bottom of the table. The preferred measure is the ratio of the net present value of new jobs created to the net present value of the costs of doing so (JOBCOST as defined above) — the measure used by Piggott and Chapman (1995). An alternative measure is the apparent cost of creating a net job after one period ($DC/(E_1.B_1)$ — the performance measure used by DEET in its 1993 evaluation.

Under the neutral scenario, each new job costs about \$14 400 compared to about \$10 000 per job for JOBSTART (which has a different target group) as found by Piggott and Chapman (1995, p. 327). The estimated cost per job is

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⁹ These tax revenue estimates ignore a major issue — the distribution of taxable income among participants. Because the tax system is progressive and has a tax free threshold, the actual tax collected for a group is not a simple multiple of the average income for that group.

about 30 per cent less than that suggested by the DEET (1993) measure of performance (\$21 300).

Under the optimistic scenario, the program actually generates a fiscal saving of \$2 800 per job created — reflecting savings in unemployment benefits and increased tax revenue. The DEET performance measure still shows a substantial cost of \$19 200 per net job.

Finally, under the pessimistic scenario, the fiscal cost per net job is about \$95,400, reflecting assumptions about low additionality, pronounced entrepreneurial failure rates and high displacement. The DEET performance measure is \$23,300 — about one quarter of its true value.

We emphasise that the fiscal cost is not the economic cost of providing a job. The net economic benefit of the program is:

- any positive impacts on earnings of previously unemployed people;
- less the distortionary burden of raising taxes to finance job subsidies the marginal excess burden of tax. These are probably around one quarter of the fiscal costs (Lattimore 1997); and
- less any operating costs of running the program (including training expenses and administrative overheads).

Tax payments to fund the program, and welfare savings are, apart from the marginal excess burden element, merely transfers, not economic costs.

The three scenarios produce a wide range of possible fiscal costs. The program would probably fail cost-benefit tests if the pessimistic scenario best described reality. But regardless of the relevant scenario, there may be big gains from targeting the program at people who were not going to go into business otherwise (see the next section). Moreover, the range of outcomes from these illustrative numbers underline the need for more refined measures of additionality, business failure rates, displacement and other parameters in order to better gauge the success or failure of the program.

Table E.4: The 'neutral' results^a

Period	1	2	3	4	5
Survival rate	0.703	0.791	0.856	0.901	0.930
Number of businesses	70.3	55.6	47.6	42.9	39.9
Full-time owners per business	1.33	1.33	1.33	1.33	1.33
Other employees of the business (FTEs)	0.50	0.53	0.55	0.58	0.61
Apparent jobs	128.8	103.3	89.7	82.0	77.5
Additionality					
Additionality factor	0.500	0.438	0.378	0.321	0.27
Owners (number of new jobs)	46.8	32.4	23.9	18.3	14.3
Employees (number of new jobs)	8.8	6.4	5.0	4.0	3.3
Total additional jobs	55.6	38.8	28.9	22.3	17.6
Effect of displacement					
Net additional jobs	19.6	13.6	10.1	7.7	6.0
NPV	19.1	12.6	8.9	6.5	4.8
Sum NPV of jobs	66.4				
Costs (\$'000)					
Direct Outlays	1994.7				
Tax revenue from new jobs	39.2	59.4	52.4	46.0	39.8
Savings in unemployment benefits	196.0	136.1	100.7	77.2	60.4
Net cost per year	1759.4	-195.4	-153.1	-123.2	-100.2
NPV	1717.0	-181.6	-135.5	-103.9	-80.4
Total NPV of costs	959.2				
Cost per job	14.4				
Cost per net job (DEET method)	21.3				

a The net present values are calculated using a 30 year horizon, but we do not report figures past 5 years.

Table E.5: The 'optimistic' results^a

Period	1	2	3	4	5
Survival rate	0.781	0.849	0.896	0.927	0.947
Number of businesses	78.1	66.3	59.4	55.1	52.2
Full-time owners per business	1.33	1.33	1.33	1.33	1.33
Other employees of the business (FTEs)	0.60	0.63	0.66	0.70	0.73
Apparent jobs	150.9	130.1	118.5	111.8	107.7
Additionality					
Additionality factor	0.600	0.539	0.477	0.415	0.36
Owners (number of new jobs)	62.5	47.6	37.7	30.5	24.7
Employees (number of new jobs)	19.7	15.8	13.1	11.2	9.5
Total additional jobs	82.2	63.4	50.9	41.6	34.3
Effect of displacement					
Net additional jobs	34.2	26.2	20.8	16.9	13.8
NPV	33.4	24.3	18.4	14.3	11.1
Sum NPV of jobs	137.4				
Costs (\$'000)					
Direct Outlays	1994.7				
Tax revenue from new jobs	85.5	160.2	148.8	136.0	121.6
Savings in unemployment benefits	341.9	261.8	208.4	169.1	138.0
Net cost per year	1567.3	-422.0	-357.2	-305.0	-259.6
NPV	1529.5	-392.2	-316.2	-257.1	-208.5
Total NPV of costs	-390.1				
Cost per job	-2.8				
Cost per net job (DEET method)	19.2				

a The net present values are calculated using a 30 year horizon, but we do not report figures past 5 years.

Table E.6: The 'pessimistic' results^a

Period	1	2	3	4	5
Survival rate	0.643	0.686	0.725	0.761	0.793
Number of businesses	64.3	44.1	32.0	24.3	19.3
Full-time owners per business	1.33	1.33	1.33	1.33	1.33
Other employees of the business (FTEs)	0.35	0.37	0.39	0.41	0.43
Apparent jobs	108.2	75.0	55.0	42.3	34.0
Additionality					
Additionality factor	0.300	0.250	0.206	0.168	0.14
Owners (number of new jobs)	25.7	14.7	8.8	5.5	3.5
Employees (number of new jobs)	2.0	1.2	0.8	0.5	0.3
Total additional jobs	27.7	15.9	9.6	6.0	3.8
Effect of displacement					
Net additional jobs	7.8	4.5	2.7	1.7	1.1
NPV	7.6	4.2	2.4	1.4	0.9
Sum NPV of jobs	18.0				
Costs (\$'000)					
Direct Outlays	1994.7				
Tax revenue from new jobs	11.7	12.5	8.8	6.4	4.7
Savings in unemployment benefits	78.1	44.7	26.7	16.6	10.7
Net cost per year	1904.9	-57.2	-35.5	-23.0	-15.3
NPV	1859.0	-53.1	-31.4	-19.4	-12.3
Total NPV of costs	1718.2				
Cost per job	95.4				
Cost per net job (DEET method)	23.3				

a The net present values are calculated using a 30 year horizon, but we do not report figures past 5 years.

They also show that the indicator used in the DEET (1993) study can be a poor guide to the program's effectiveness. An even more graphic illustration of this is provided by the following experiment. Suppose that the scheme is re-designed to increase additionality by targeting assistance at unemployed people who are less naturally inclined to form their own businesses (setting $\Theta = 5$). This increases additionality, but it also decreases business survival rates (setting K = 1.0) because the new target group is less able than the old one. With all other settings at their neutral value, the NPV cost per job decreases from

\$14 400 to \$4500, while the DEET measure of cost per job rises from \$21 300 to \$24 600. Thus, the DEET indicator can increase even when the true cost per job has fallen.

E.3 A new approach for appraising NEIS

Precision in evaluating labour market programs like NEIS will probably remain elusive because of the profound measurement problems. Even so, there are a range of strategies that can be used to reduce uncertainty over the impact of such programs:

- displacement effects may be better measured using econometric studies;
- longitudinal studies of firms involved in NEIS can be used to calculate survival rates much more accurately;
- other impacts of programs like NEIS, such as its effect on earnings (less social welfare benefits) could be modelled using a range of econometric, matching and experimental approaches (see Friedlander et al, 1997 for a review of present methodologies); and
- additionality may be better measured using survey and econometric methods.

All bar the second involve substantial difficulty. Here, we examine specific strategies for dealing with additionality — which may also have relevance to measuring other program impacts. There are at least three methods that could be used to better measure additionality.

Survey method

First, one simple method is to ask a NEIS participant if they would have started a business in the absence of the NEIS subsidy. This is open to subjective bias, and possibly to strategic response by participants, ¹⁰ but would probably still be a useful indicator of one aspect of additionality.

Its chief drawback is that a major alternative to self-employment for NEIS participants is a job as an employee — and participants often will not know whether they would have got such a job in the absence of the program. ¹¹

Though notably once a NEIS participant has received their subsidy they are unlikely to participate in the scheme again — and so don't have any self-interest in distorting their answers.

¹¹ It is possible that some statistical and survey methodologies could deal with this problem — though they would be costly to implement. For example, an initial study of NEIS applicants

Exit probabilities

Secondly, another possibility is to first collect information about the characteristics of a representative sample of the unemployed (their age, gender, unemployment duration, ethnicity, previous work experience, assets, past training, regional unemployment rate, attitude to setting up their own business). The probability of not getting a job next period could then be modelled as a function of these characteristics using regression techniques. Second, when a person became a NEIS participant the same set of information about characteristics could be collected, and the probability of not getting a job calculated using the regression. An average probability could be computed for all NEIS participants — as a proxy for additionality. The major problem here is the possibility of sample selection bias. This could be ameliorated by collecting data on variables likely to influence the choice of self-employment as a job.

Experimental approach

Finally, a control group approach may be possible. In this approach, the program is initially conducted as a pilot program first. Funds are limited. Participants are asked to apply for entry to the program. Then each potential participant is tested for eligibility, and any failing the requirements are rejected from the pilot. Then acceptance to the program is randomly assigned to the residual eligible group, until program funds are exhausted, leaving a group who are eligible and who were interested in applying for the program, but did not obtain funds. This is a natural control group. The employment outcomes for both the control group and the pilot participants are then monitored. This provides a test for program impact which accurately measures additionality.

could be used to work out what sort of unemployed people are likely to apply for participation in NEIS. Then a sample would be taken of unemployed people, excluding any current NEIS applicants. As a sampling efficiency measure, the sample design would use the modeling to target groups of unemployed which were likely to include NEIS applicants at some stage in the future. Respondents to the survey would be asked to assess the probability of getting a job (including self-employment) over the next 12 months. NEIS records could be examined 12 months later to determine which respondents did in fact join the scheme. Assuming unbiasedness of the survey-based subjective probabilities, a measure of additionality would simply be:

$$A = \sum_{i=1}^{N} (1 - P_i) / N$$

where P_i is the subjective probability of getting a job, and N is the number of respondents who join NEIS. A further elaboration of this approach could include sophisticated techniques for substantiating and correcting subjective biases.

There can be problems in using a pilot approach to experimental evaluations (Heckman and Smith 1995) if the pilot is conducted in only a few, perhaps not fully representative sites, or attracts a different group of participants than a much bigger program.

Experimental approaches do not have to be implemented only at the pilot stage. All that is needed is that demand for places in the program outstrips supply, and that there is random assignment of eligible people to 'treatment' under the program.

Experimental approaches are increasingly used in the US as part of the evaluation of training programs for the disadvantaged. For example, the US Department of Labor have run an experimental evaluation of the Job Training Partnership Act (Friedlander et al 1997, pp. 1828-1829). At least seven other voluntary US training programs have been evaluated experimentally, while almost all of the evaluations of mandatory training programs have followed an experimental approach.

The experimental approach is probably the best method for appraising program impacts. It is likely to have a much narrower confidence band around estimates than non-experimental methods because it directly controls for selection bias.

How to use the results

Collection of data on additionality can not only be used to help properly evaluate the program, but to better target assistance. In figure E.2 the large rectangle (ABCD) represents the people who currently participate in the NEIS program. The rectangle EGHI represents the sub-group which would not have set up a new business in the absence of the program. And an even smaller sub-group, FGHI, represent the sub-sub-sample of businesses which survive for any reasonable length of time. Ideally, if they shared a small group of observable characteristics, it would be possible to better target the program towards individuals occupying this sub-sub-group. The appropriate methodology is in five stages:

• use a method to appraise the probability that a person would not have set up a NEIS business anyway;

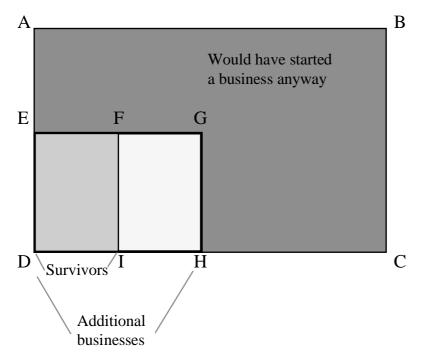
297

Our preoccupation is with genuinely new businesses which survive. While not its purpose, NEIS may also have incidental benefits for businesses which were going to set up anyway. For example, NEIS training, the business plan, mentoring and the access to liquidity provided by the income support component of the subsidy may improve their performance. We have ignored these possible benefits.

- collect information about the characteristics of the participants (skills, performance in a business aptitude test), program attributes (training intensity, mentor use, loan guarantees) or business characteristics (industry, region);
- collect information longitudinally about the performance of the business and particularly its survival;
- model the characteristics (identified in the second point above) which increase the likelihood that an individual is in a surviving business which would not otherwise have been established; and
- use the model above to set new eligibility criteria and program designs.

This approach obviously involves some costs associated with data collection and monitoring, as well as the pragmatic problems presented by targeting. However, only small efficiency gains in the program would be needed to meet such costs.

Figure E.2: Better targeting



F GOVERNMENT REGULATION REVIEW MACHINERY

As foreshadowed in chapter 8, this appendix provides further information on the Commonwealth's regulation review measures.

Reform of government regulation-making machinery falls into two categories: review of the existing **stock** of regulation; and review of regulatory initiatives. A full discussion of the stock and flow of regulation in Australia would encompass regulations and regulatory reform action by Commonwealth, State, Territory and local governments and the Council of Australian Governments. For reasons of tractability, the following discussion concentrates on Commonwealth regulatory review and scrutiny arrangements. By and large the States and Territories have introduced similar regulation review and scrutiny mechanisms. Changes at the Commonwealth level are broadly indicative of changes overall. Indeed, indications are that the Commonwealth has followed rather than led the States in this regard (OECD 1996).

F.1 Review of existing regulations

Reviews of existing regulations, on a more or less ad hoc basis, have always been part of government practices. For example, the Commonwealth Government has recourse to references to the Productivity Commission and its predecessors, as well as requiring agencies to evaluate their programs regularly. However, in recent years the extent of such reviews appears to have increased and been placed on a more systematic basis. As the OECD (1996 p. 24) puts it:

In the past ten years, the stock of Australian regulations has been reviewed more often and more thoroughly than in any other OECD country. Staged repeal processes for old regulations were launched at state levels throughout the country in the 1980s and 1990s, becoming progressively more systematic, rigorous and open (OECD 1996).

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¹ These reviews cover the need for the programs, and their effectiveness and efficiency. They therefore implicitly review the legislative and other regulatory backing of the programs and policies.

The OECD goes on to note that staged reviews have been supplemented by 'sunsetting' programs, in which regulations are automatically repealed each seven or ten years unless replaced through normal rule-making processes.

The trend to legislation and regulation review was given impetus by the 1995 *Competition Principles Agreement* between the State, Territory and Commonwealth governments. One element of this agreement committed the signatory governments to develop a four-year program of legislation reviews. Another required the reform of all existing legislation which restricted competition by the year 2000, unless it could be demonstrated that the legislation was in the public interest (criteria for assessing 'the public interest' were specified in the agreement).

Reviews under the agreement are to:

- clarify the objectives of the legislation and identify and analyse the nature of the restriction on competition and on the economy more generally; and
- assess and balance the costs and benefits of the restriction and consider alternative means for achieving the purposes of the regulation, including non-legislative approaches (IC 1995b, 1996b, 1997h and ORR 1997).

Financial incentives for State and Territory governments to adhere to the agreement are provided by special competition payments from the Commonwealth which are conditional on, amongst other factors, meeting the deadlines for regulatory review.

Transparency — that is openness to public scrutiny — is important in ensuring adherence to the letter and spirit of inter-government agreements. The *Competition Principles Agreement* includes measures to promote transparency:

- progress in developing review timetables, carrying out reviews and implementing reforms is monitored by the National Competition Council (NCC);
- signatory governments are required to publish an annual report on progress; and
- the NCC publishes an annual consolidated report.

At the end of June 1996, the Commonwealth made public its review schedule under the agreement. As well as the commitment to review legislation that restricted competition, the scope of the Commonwealth's review was extended to include legislation which confers costs or benefits to business. A total of 98 separate reviews are identified in the schedule. The review machinery the Commonwealth has put in place has the following features:

• a specific timetable for the commencement of reviews;

- amongst other matters, the reviews must take account of the compliance and paper burden on small business;
- draft terms of reference for the reviews are jointly developed between the
 responsible departments or agencies and the Commonwealth's regulation
 review body, the Office of Regulation Review (ORR). As well as
 satisfying the requirements of the agreement, the terms of reference must
 meet the Commonwealth's own transparency requirements of normally
 being open for public consultation;
- final approval of the terms of reference is a matter for the government; and
- depending on the importance of the legislation, the review bodies vary from being composed of independent members, such as the Comprehensive Review of the Regulatory Framework of the Financial System (Wallis inquiry), through independent government organisations, such as the Productivity Commission, to largely in-house reviews by officials for less significant regulations.

Another major Commonwealth regulation review initiative is the *Legislative Instruments Bill 1996*, currently before Parliament. If this Bill is passed in its present form, a significant portion of the stock of Commonwealth regulation will either automatically sunset or be subject to review. Regulations which are legislative instruments (ie rules and regulations that, while not contained in Acts of Parliament, still have the force of law) would be placed on a register to be kept by the Commonwealth Attorney-General's Department. Legislative instruments not so registered would have no legal standing. Those instruments that are registered would automatically sunset after five years, unless they are renewed as 'new' legislative instruments which would require them to pass through a comprehensive review process (the Bill's review requirements are discussed below).

F.2 Review of new regulatory proposals

The Commonwealth and State and Territory governments have established processes and organisations to scrutinise or review proposals involving new regulations. The objective of these processes is to raise the *quality* of regulations – for example, by requiring agencies to determine whether the proposed regulation is the most cost-effective means of achieving the desired objective.

The organisations involved in this scrutiny usually have a degree of independence from regulators; are accountable to Cabinet, top level Ministers or to Parliament; and have a special expertise in regulatory quality. The reviews

they conduct, promote or oversee are based on explicit criteria and often utilise regulation impact statements (RISs) as standardised frameworks for evaluating the merits of proposed regulation (OECD 1996). As well as a 'gatekeeping' role in relation to new regulations, the agencies tend to have strong advisory and educative roles to other areas of the relevant bureaucracy.

Specialist regulation review agencies have been in place amongst Australian governments since approximately the mid 1980s. This raises the question of how successful they have been to date. Certainly, it appears that some progress has been made. As the OECD points out, in the early 1980s there was evidence that few agencies in Australia were aware of, or concerned with, the costs imposed by their regulations, whereas now most States have mandatory regulation analysis, including regulation impact statements and public consultation (OECD 1996). The OECD also notes, however, that there have been significant difficulties with the quality of analysis, and resistance from regulators to the procedures.

Compared to at least some of the States, at the Commonwealth level there is evidence of a degree of inertia. For example, as the Bell Report notes, the Commonwealth is one of the last national jurisdictions to enact legislation requiring analysis of the advantages and disadvantages of subordinate legislation (Bell Report, 1996). This report also notes that while detailed legislative and other regulatory scrutiny requirements had been laid down, many Commonwealth bureaucrats were unaware of the requirements to undertake regulation impact studies. Moreover, the requirements could be ignored with relative impunity, as the Commonwealth's review machinery did not include effective sanctions. There may also have been a lack of political commitment.

In a similar vein, Coghlan (1995) noted that there had been an absence of effective scrutiny of proposed legislation and of bureaucrats in their development of new ways of implementing subordinate legislation, regulations and administrative fiats (Coghlan 1995).

Nevertheless, successive Commonwealth governments have recognised the need to have effective scrutiny of regulatory proposals and have progressively tightened regulation review requirements. Regulation has been defined widely, to include not only law, but any government rule which influences the way people behave. It is now mandatory for Commonwealth departments and agencies to prepare RISs in most circumstances.

Incentives for agencies to adhere to regulation review procedures by Commonwealth agencies have been strengthened by giving the Assistant Treasurer special responsibility for regulatory best practice, with support from the Prime Minister and the Treasurer. In addition:

- the ORR will report to Cabinet on compliance with RIS requirements and the Productivity Commission will report on compliance levels in its annual report;
- RISs will be tabled in Parliament; and
- the effectiveness of the ORR will be reviewed by the Government to ensure that the needs of small business are given sufficient priority (Howard 1997a).

REFERENCES

- AATS&E (Australian Academy of Technological Science and Engineering) 1994, *The Competitiveness of Australian Industry, Report No. 1, The Processed Food Industry*, Brown Prior Anderson Pty Ltd., Burwood, Victoria.
- ABS (Australian Bureau of Statistics) 1988, *Small Business in Australia 1983-84 to 1986-87*, Catalogue No. 1321.0, AGPS, Canberra.
- ____ 1993, Small Business in Australia 1993, Catalogue No. 1321.0, AGPS, Canberra.
- ____ 1995, *Innovation in Australian Manufacturing 1994*, Catalogue No. 8116.0, AGPS, Canberra.
- ____ 1996a, Small Business in Australia 1995, Catalogue No. 1321.0, AGPS, Canberra.
- ____ 1996b, 1995 Characteristics of Small Business Australia, Catalogue No. 8127.0, AGPS, Canberra.
- ____ 1996c, Research and Experimental Development, Business Enterprises, 1994-95, Catalogue No. 8104.0, AGPS, Canberra.
- _____ 1997a, Small and Medium Enterprises, Business Growth and Performance Survey, Catalogue No 8141.0, AGPS Canberra.
- _____ 1998, Characteristics of Small Business Australia, Catalogue No 8127.0, AGPS Canberra.
- Acs, Z.J. and Audretsch, D. B., 1987, 'Innovation, Market Structure and Firm Size', *Review of Economics and Statistics*, Vol. 69, No. 4, pp 567-574.
- _____ 1988, 'Innovation in Large and Small Firms: An Empirical Analysis', American Economic Review, Vol. 78, No. 4, pp 678-690.
- Aitken, B., Harrison, A.E. and Hanson, G.H. 1994, 'Spillovers, Foreign Investment and Export Behavior', NBER Working Paper 4967, December, Washington DC.
- Akerlof, G.A. 1970, 'The market for "lemons": Quality uncertainty and the market', *Quarterly Journal of Economics*, 84, 488-500.

- AMC (Australian Manufacturing Council) and McKinsey and Co. (1994), *The Wealth of Ideas: How Linkages Help Sustain Innovation and Growth*, Melbourne.
- ANAO (Australian National Audit Office) 1992, Audit Report No 39, 1991-92, Project Audits: Department of Employment, Education and Training, New Enterprise Incentive Scheme (NEIS), Technical and Further Education (TAFE) Recurrent Grants, Skillshare, AGPS, 1992.
- _____ 1994a, Audit Report no 29, Department of Industry Technology and Regional Development: National Industry Extension Service (NIES).
- _____ 1994b, Audit Report No 33, 1993-94, Australian Trade Commission, The Export Market Development Grants Scheme-Its Efficiency and Effectiveness, AGPS.
- _____ 1996[sic], The Auditor General Audit Report No 3, 1997-98, *Program Evaluation in the Australian Public Service*, AGPS, (September 1997).
- Anglo-German Foundation 1991, Small Business Policy in Europe, Britain, Germany and the European Commission, Anglo-German Foundation, London.
- Arnott, R., Greenwald, B and Stiglitz, J. 1993, 'Information and Economic Efficiency', National Bureau of Economic Research Working Paper: 4533, November 1993, pp 14ff.
- Atkinson, J and Meager, N. 1994, 'Running to Stand Still: The Small Business in the Labour Market, in J Atkinson and D.J. Storey (eds.), *Employment, The Small Firm, and the Labour Market*.
- AusIndustry 1997a, AusIndustry Fact Sheet, Canberra.
- _____ 1997b, *R&D Tax Concession Scheme*, (brochure), Canberra.
- Austrade (Australian Trade Commission) 1994a, Helping to Meet the Export Challenge: An Evaluation of the Export Market Development Grants Scheme and the International Trade Enhancement Scheme, Commonwealth of Australia.
- _____ 1994b, Austrade Annual Report 1994-95, DFAT, Canberra.
- _____ 1996, Australian Trade Commission Annual Report 1995-96, Sydney.
- Australian Government 1990, Response to the Beddall Report.
- Ayres, I. and Braithwaite, J. 1992, Responsive Regulation, Transcending the Regulation Debate, Centre for Oxford Socio-Legal Studies, Oxford.

- Bailey, J. and Royston, S. 1980, *Small Business Education and Training in Australia*, Training Development series, AGPS, Canberra.
- Banks, G. 1996, *Regulatory Reform and National Productivity*, Paper presented to the Fifth Annual Microeconomic Reform Conference, Sydney 9-10 September 1996.
- Barber, J. Metcalfe, J.S. and Porteous, M. (eds) 1990, *Barriers to Growth in Small Firms*, Routledge, London.
- Bartel, A. P. and Thomas, L.G. 1985, 'Direct and Indirect Effects of Regulation: A New Look at OSHA's Impact' *The Journal of Law and Economics*, 28 (1), April, 1-25.
- Beddall Report (House of Representatives Standing Committee on Industry, Science and Technology) 1990, *Small Business in Australia: Challenges, Problems and Opportunities*, AGPS, Canberra.
- Bell Report (Bell, C.) 1996, *Time For Business*, Report of the Small Business Deregulation Task Force, Department of Industry, Science and Technology, (037/96), Canberra.
- Berryman, J.E. 1993, 'Small business failure and bankruptcy: What progress has been made in a decade?', *Small Enterprise Research The Journal of SEEANZ*, 2, 5-27.
- Best, M.H. *The New Competition: Institutions of Industrial Restructuring*, Polity Press, Cambridge.
- Better Regulation Task Force 1998, *Consumer Affairs: Review*, UK Central Office of Information, May.
- Bickerdyke, I. and Lattimore, R. 1997, *Reducing the Regulatory Burden: Does Firms Size Matter?*, Industry Commission Staff Research Paper, AGPS, Canberra.
- BIE (Bureau of Industry Economics) 1987, *Small Business Review 1987*, AGPS, Canberra.

1988a, Review of the Export Market Development Grants Scheme, Program Evaluation Report 5, AGPS, Canberra.
1988b, Report on NIES Penetration Survey 1986-87, BIE, Canberra.
1988c, Report on NIES Penetration Survey 1987-88, BIE, Canberra.
1991a, Small Business Review 1990-91, AGPS, Canberra.
 1991b, <i>International Comparisons of Plant Productivity</i> , Research Report No. 38, AGPS, Canberra.

1992a, Recent Developments in the Theory of Economic Growth: Policy Implications, Occasional Paper 11, AGPS, Canberra.
1992b, Small Business Review 1992, AGPS, Canberra.
1992c, The National Industry Extension Service (NIES) and Industry Development, Occasional Paper 9, AGPS, Canberra.
1993a, Structural Adjustment Assistance: An Evaluation of the Metal-Based Engineering Program, Research Report 51, AGPS, Canberra.
1993b, <i>R&D</i> , <i>Innovation and Competitiveness</i> , Research Report 50, AGPS, Canberra.
1994a, A Report on Small Business Innovation, Small Business Review 1993, AGPS, Canberra.
1994b, Beyond the Innovator: Spillovers from Australian R&D, Occasional Paper 16, AGPS, Canberra.
1994c, Information Technology and Telecommunications Industries: An Evaluation of the Partnerships for Development and Fixed Term Arrangements Programs, Research Report 63, AGPS, Canberra.
1994d, Energy Labelling and Standards: Implications for Economic Efficiency and Greenhouse Gas Emissions: A Case Study of Motors and Drives, Research Report 57, AGPS, Canberra.
1995a, Beyond the Firm: An Assessment of Business Linkages and Networks in Australia, AGPS, Canberra.
1995b, Encouraging SME Investment In Environmental Technology, BIE, Canberra.
1995c, Quality and Standards in Information Technology: An Evaluation of the Vendor Qualification Scheme, Research Report 64, AGPS, Canberra.
1995d, SMEs in an Open Economy: The Australian Experience, Briefing Paper, AGPS, Canberra.
1995e, From Solar Cell to Hard Sell: An Appraisal of Investments by the Energy Research and Development Corporation, Occasional Paper 32, AGPS, Canberra.
1996a, Energy Efficiency for SMEs, Research Report 96/14, AGPS, Canberra.
1996b, Lessons From BIE Evaluations, unpublished.

- 1996c, Evaluation of the Investment Promotion and Facilitation Program, Report 96/4, March 1996, AGPS Canberra.
 1996d, Business Licenses: International Benchmarking, Report 96/9, June, AGPS Canberra.
 1996e, Business Licenses and Regulation Reform, Report 96/10, June,
- AGPS Canberra.
- Binks, M.R., Ennew, C.T. and Reed, G.V. 1992, *Small Business and their Banks*, Forum of Private Businesses, Knutsworth, Cheshire.
- Black, J., de Meza, D. and Jeffreys, D. 1996, 'House Prices, the Supply of Collateral and the Enterprise Economy', *Economic Journal*; 106(434), January, pages 60-75.
- Blanchflower, D. and Oswald, A. 1990, 'What Makes a Young Entrepreneur?', National Bureau of Economic Research Working Paper: 3252, February.
- Bolton, J.E. 1971, Report of the Committee of Inquiry on Small Firms, HMSO, London.
- Brewer III, E. and Genay, H. 1995, 'Small Business Investment Companies: Financial Characteristics and Investments', *Journal of Small Business Management*, July, pp. 38-56, JSBM, Morgantown, WV, USA.
- Brock, W. A. and Evans, D. S. 1986, *The Economics of Small Businesses: Their Role and Regulation in the U.S. Economy*, Holmes Meier, New York.
- _____ 1989, Small Business Economics, 1 (1989) pp. 7–20, Kluwer Academic Publishers.
- Burgess, I. G. 1994, *A Review of the Commonwealth's Enterprise Improvement Programs*, report to the (then) Prime Minister the Hon P J Keating November.
- Cabalu, H., Doss, N. and Dawkins, P. 1996, 'Employers' Compliance Costs, Discussion Paper 96/10, Centre for Labour Market Research, Curtin University of Technology, November, Perth.
- Campbell, H.F. and Bond, K.A. 1997, 'The Cost of Public Funds in Australia', *Economic Record*, 73(220), pp. 22-34.
- Carlino, G. and DeFina, R. 1997, 'The Differential Regional Effects of Monetary Policy: Evidence from the U.S. States', Working Paper 97-12, Federal Reserve Bank of Philadelphia.
- Carlton, D.W. and Perloff, J.M. 1994, *Modern Industrial Organisation*, Harper Collins College Publishers, New York.

CBA (Commonwealth Bank of Australia) 1994, Commonwealth Bank Annual Report 1994, CBA, Sydney. _____ 1995, Commonwealth Bank Annual Report 1995, CBA, Sydney. ____ 1996, Commonwealth Bank Annual Report 1996, CBA, Sydney. Coalition 1996, Small Business Policy. Coghlan, P. 1995, 'Curbing Regulatory Inflation: A View From Australia', OECD Paris, PUMA/REG (95) 13, Meeting on Curbing Regulatory Inflation Commonwealth of Australia 1996, Budget Papers 1996–97, circulated by Honourable Peter Costello, M.P., Treasurer of the Commonwealth of Australia, and Honourable John Fahey, M.P., Minister for Finance. Commonwealth of Australia 1997, Budget Papers 1997-98, circulated by Honourable Peter Costello, M.P., Treasurer of the Commonwealth of Australia, and Honourable John Fahey, M.P., Minister for Finance. Commonwealth of Australia 1998, Budget Papers 1998-99, circulated by Honourable Peter Costello, M.P., Treasurer of the Commonwealth of Australia, and Honourable John Fahey, M.P., Minister for Finance. Cowling, M. and Clay, N. 1995, 'Factors Influencing Take-up Rates on the Loan Guarantee Scheme', Small Business Economics, 7(2), 141-152. Cressy, R. 1992, 'Loan Commitments and Business Starts: An Empirical Investigation on UK Data', SME Centre Working Paper No. 12, Warwick Business School. _ 1996, 'Are Business Startups Debt-Rationed?', Economic Journal, 106 (September), 1253-1270. Deane P. and Flahvin A., 1998, Trade Practices changes to cause more uncertainty, The Australian Financial review, 6 March. DEET (Department of Employment, Education and Training) 1992, NEIS Evaluation: Intergovernment Component of NEIS, Commonwealth of Australia. 1993, Evaluation of the New Enterprise Incentive Scheme, EMB Report, 10/93. DEETYA (Department of Employment, Education, Training and Youth affairs), 1996, Annual Report 1995-96, AGPS, Canberra. 1997, New Enterprise Incentive Scheme, An Overview (unpublished

mimeo).

- de Meza, D. and Webb, D.C. 1987, 'Too Much Investment: A Problem of Asymmetric Information', *Quarterly Journal of Economics*; 102(2), May, pp. 81-92.
- de-Meza, D. and Southey, C. 1996, 'The Borrower's Curse: Optimism, Finance and Entrepreneurship', *Economic-Journal*; 106(435), March 1996, pages 375-86.
- Dempster, P. 1993, Estimates of the Marginal Excess Burden of Taxation, unpublished paper.
- Dennis Jr., W.J., Dunkelberg, W.C. and Van Hulle, J.S. 1988, *Small Business and Banks: The United States*, The NFIB Foundation, Washington.

DIST (Department of Industry Science and Technology) 1992, Small business

- in Australia (Second annual report), AGPS, Canberra.

 1994, Fourth Annual Review: Small Business in Australia, DIST, Canberra.
- ____ 1995a, Department of Industry Science and Technology Annual Report 1994-5, DIST, Canberra.
- _____ 1995b, Fifth Annual Review: Small Business in Australia, DIST, Canberra.
- ____ 1997a, Department of Industry Science and Technology Annual Report 1996-7, DIST, Canberra.
- ____ 1997b, Submission to the House of Representatives Industry, Science and Technology Committee, Inquiry Into Fair Trading, DIST, Canberra.
- _____ 1998a, *Science and Technology Budget Statement*, circulated by the Hon. John Moore, Minister for Industry Science and Tourism, DIST, Canberra.
- _____ 1998b, Stats. Electronic Commerce in Australia, DIST, April, Canberra.
- _____ 1998c, Getting Business On Line, DIST, May, Canberra.
- DITARD (Department of Industry, Technology and Regional Development) 1993, *Third Annual Review: Small Business in Australia*, DIST, Canberra.
- DTI [Department of Trade and Industry, UK] 1992, Checking the Cost to Business: A Guide to Compliance Cost Assessment, Central Deregulation Unit.
- DTSBI [Department of Tourism, Small Business and Industry] 1996, Impact of the Cost of Compliance with Government Regulations, Taxes, and Charges on Small Business in Queensland, August.

- DWRSB (Department of Workplace Relations and Small Business) 1998a, Annual Review of Small Business 1997, Canberra.
- _____ 1998b, *Business Entry Point High Level Design*, Business Entry Point Management Branch, Office of Small Business, April, Canberra.
- Douglass, C., Orlando, M. and Warren, M. 1997, 'Regulatory Changes and Trends: An Analysis of the 1998 Budget of the U.S. Government', Policy Brief No. 182, Center for the Study of American Business, August.
- Dunlop, W.C. 1992, 'Small vs Large Firms in Australian Manufacturing', *Small Business Economics*, Vol 4, pp. 45-58, Kluwer Academic Publishers, Netherlands.
- Dunne, P. and Hughes A. 1992, *The Changing Structure of Competitive Industry in the 1980s*, Small Business Research Centre, University of Cambridge, UK.
- EPAC 1986, Some features of small business and its policy environment, Council Paper No. 12.
- Ergas, H. and Wright, M. 1994, 'Internationalisation, firm conduct and productivity', Paper presented at the Conference on the international integration of the Australian economy, Reserve Bank of Australia, 11-12 July, Sydney.
- Ernst & Young and the Centre for Innovation and Enterprise 1997, *Investment Readiness Study*, A Report for the Department of Industry, Science and Tourism, AGPS, Canberra.
- ESBO (Entrepreneurship and Small Business Office of Industry, Science and Technology Canada) 1991, *Small Business in Canada 1991*, Minister of Supply and Services, Canada.
- Evans, C., Ritchie, K., Tran-Nam, B. and Walpole, M. 1997a, *A Report into the Incremental Costs of Taxpayer Compliance*, A report prepared for the Revenue analysis Branch of the Australian Taxation Office, January, AGPS, Canberra.
- _____ 1997b, A Report into Taxpayer Costs of Compliance, November, AGPS, Canberra.
- Feldman, R. 1997, 'Credit Scoring and Small Business Loans', *Community Dividend*, Federal Reserve Bank of Minneapolis, Spring, (http://woodrow.mpls.frb.fed.us/banking/develop/cd/97sp-1.html).

- Ferris Committee Report (National Export Marketing Strategy Panel) 1985, Lifting Australia's Performance as an Exporter of Manufactures and Services, Canberra, AGPS.
- Findlay C. C. and R. L. Jones (1982), 'The Marginal Cost of Australian Income Taxation', *Economic Record*, 58(162), pp. 253-262.
- Fitzroy, F.R. 1991, 'Firm Size, Efficiency and Employment Revisited: A Review Article', *Small Business Economics*, Vol 3, pp. 321-323, Kluwer Academic Publishers, Netherlands.
- Flam, H. and Staiger, R. W. 1989, 'Adverse Selection in Credit Markets and Infant Industry Protection', National Bureau of Economic Research Working Paper: 2864, February, Washington DC.
- Fölster, S. 1991, *The Art of Encouraging Invention; A New Approach to Government Innovation Policy*, Almqvist and Wiksell International, Stockholm.
- Foreman Jr, C.H. 1998, 'Congress and Regulatory Reform', *The Brookings Review*, 16(1), 10-13, Winter.
- Forsaith, D.M. 1993, "Economic Thought and Small Enterprise", Chapter 2 in *Small Enterprise Financial Management: Theory and Practice*, Harcourt Brace, Sydney.
- Free, Hon R. 1992, *Pooled Development Funds Bill 1992*, Second Reading Speech, House of Representatives.
- Friedlander, D., Greenberg, D.H. and Robins, P.K. 1997, 'Evaluating Government Training Programs for the Economically Disadvantaged', *Journal of Economic Literature*, 35(4), December, pp. 1809-1855.
- Fry, K. 1997, 'Credit assessment in retail banking A portfolio management perspective', in Reserve Bank of Australia, *Credit risk in banking*, Proceedings of a conference at H. C. Coombs Centre for Financial Studies, Bank Supervision Department, Reserve Bank of Australia, Sydney.
- Gabbitas, O. and Eldridge, D. 1998, *Directions for State Tax Reform*, Productivity Commission Staff Research Paper, AusInfo, Canberra, May.
- Gallagher, M. 1991a, *Innovation, management skills and employee training in small businesses*, Bureau of Industry Economics Working Paper No. 66, AGPS, Canberra.
- ____ 1991b, *Barriers to Formal Training for Small Businesses*, Bureau of Industry Economics Working Paper No. 65, AGPS, Canberra.

- GAO (General Accounting Office) 1993, Small Business: Financial Health of Small Business Investment Companies, Report to the Chairman, Committee on Small Business, US Senate, GAO, Washington.
- Gome, A. 1997, 'Tax break gives small business room to move', *Business Review Weekly*, May 12.
- GORR [Governor's Office of Regulatory Reform, New York State] 1997, *Office Profile*, New York, January.
- Grabosky, P. and Braithwaite, J. 1986, Of Manners Gentle, Enforcement Strategies of Australian Business Regulatory Agencies, Oxford University Press.
- Gray, C. 1990, 'Some Economic-psychological Considerations on the Effects of the Enterprise Allowance Scheme (EAS)', *Piccola Impresa*, 1, pp. 111-24.
- Grossman, G.M. 1990, 'Promoting new industrial activities: A survey of recent arguments and evidence', *OECD Economic Studies*, Spring, 87-125.
- Hahn, R.W. and Litan, R.E. 1998, 'A Congressional Office of Regulatory Analysis', joint testimony before the Subcommittee on National Economic Growth, Natural Resources and Regulatory Affairs, Committee on Government Reform and Oversight, U.S. House of Representatives, March 11, Washington DC.
- Hall, A.P. 1993, *The High Cost of Tax Compliance for US Business*, Special Report No. 25, Tax Foundation, November.
- Hawtrey, K. 1997, 'Finance for Australian SMEs: Policy issues', *Economic Papers*, 16(2), June.
- Heckman, J. and Smith, J.A. 'Assessing the Case for Social Experiments', Journal of Economic Perspectives, 9(2), 85-110.
- Holmes, S., Dunstan, K. and Dwyer, D. 1994, 'The cost of debt for small firms: evidence from Australia', *Journal of Small Business Management*, January, 27-35.
- Holmes, S., Butler, G. and Lennon, J. 1995, 'Small Business: A Review of Training Needs', in the Karpin Report, *Enterprising Nation*, Research Report, Vol. 1, AGPS, Canberra.
- Holtz-Eakin, D., Joulfaian, D. and Rosen, H.S. 1994a, 'Sticking It Out: Entrepreneurial Survival and Liquidity Constraints', *Journal of Political Economy*, 102(1), February, 53-75.

1994b, 'Entrepreneurial Decisions and Liquidity Constraints', Rand Journal of Economics; 25(2), Summer, 334-47. Hopkins, T.D. 1995, A Survey of Regulatory Burdens, Report to the US Small Business Administration, June, Washington DC. _ 1996, 'Regulatory Costs in Profile', Policy Study No. 132, Center for the Study of American Business, August. 1997a, 'An International Comparison of Regulatory Analysis Standards', Working Paper No. 164, Center for the Study of American Business, May. 1997b, 'OMB's Regulatory Accounting Report Falls Short of the Mark', Policy Study No. 142, Center for the Study of American Business, November. House of Representatives Standing Committee on Finance and Public Administration 1991, A Pocketful of Change: Banking and Deregulation, AGPS, Canberra. House of Representatives Standing Committee on Industry, Science and Technology (Fair Trading Report) 1997, Finding a Balance, Towards Fair Trading in Australia, AGPS, Canberra. Howard, P. K. 1994, The Death of Commonsense: How Law Is Suffocating America, Random House, New York. Howard, The Hon. J. 1997a, More time for business, Statement by the Prime Minister, 24 March, AGPS, Canberra. _____ 1997b, Investing for Growth, The Howard Government's Plan for Australian Industry, AGPS, Canberra. Hughes report (Committee for Review of Export Market Development Assistance) 1989, Australian Exports. Performance, obstacles and issues of assistance, AGPS, Canberra. Hughes, A. and Storey, D.J. 1994, Finance and the Small Firm, Routledge, London. IAC (Industries Assistance Commission) 1977, Export Incentives, IAC Report No. 156, AGPS, Canberra. 1982, Export Incentives, IAC Report No. 300, AGPS, Canberra.

IC (Industry Commission) 1991, Availability of capital, Report No. 18, AGPS,

Canberra.

1992, Review of Overseas Export Enhancement Measures, AGPS, Canberra.
1994, Defence Procurement, Report No. 41, AGPS, Canberra.
1995a, Research and Development, Report No 44, 15 May, AGPS Canberra.
1995b, <i>Regulation & Its Review 1994-95</i> , Annual Report Series 1994-95, Commonwealth of Australia.
1996a, State, Territory and Local Government Assistance to Industry, Report No 55, 29 October, AGPS, Canberra.
1996b, <i>Regulation & Its Review 1995-96</i> , Annual Report Series 1996-97, Commonwealth of Australia.
1996c, Submission to the National Supply Group Review of the Government Procurement Agreement 1991, Industry Commission, November 1996.
1997a, <i>Trade and Assistance Review 1996-97</i> , annual report series, AGPS, Canberra.
1997b, <i>The Textiles, Clothing and Footwear Industries</i> , Report No 59, 9 September, AGPS Canberra.
1997c, <i>Informal equity investment</i> , Information Paper: Small Business Research Program, AGPS, Canberra.
1997d, A Full Repairing Lease, Inquiry Into Ecologically Sustainable Land Management, Draft Report, AGPS, Canberra.
1997e, Industry Commission Submission to the Review of Business Programs, February, Canberra.
1997f, Telecommunications Equipment, Systems and Services, Draft Report, AGPS, Canberra.
1997g, Annual Report 1996–97, AGPS, Canberra.
1997h, Regulation & Its Review 1996-97, Annual Report Series 1996-97, Canberra.
1997i, Role of Economic Instruments in Managing the Economy, Staff Research Paper, July, Canberra.
1997j, Industry Commission Submission to the Review of Higher Education Financing and Policy, July, Canberra.

- _____ 1998, Microeconomic Reforms in Australia: A Compendium from the 1970s to 1997, Research Paper, January, Canberra.
- IC and DIST (Industry Commission and the Department of Industry Science and Tourism) 1997, *A Portrait of Australian Business, Results of the 1995 Business Longitudinal Survey*, Small Business Research Program, AGPS, Canberra.
- IME [Information Management and Economics Inc.] 1995, Federal Information Costs for a Panel of Small & Medium Enterprises, study conducted for the Treasury Board Canada Secretariat, Toronto, Canada.
- James, D. 1997, Environmental Incentives, Australian Experiences With Economic Instruments for Environmental Management, (Consultancy prepared by Dr David James, Ecoservices Pty Ltd for Environment Australia), Environmental Economic Research Paper No. 5, Environment Australia, Canberra.
- Janissen, B., Lattimore, R. and Pearson, K. 1996, 'Encouraging SME Investment in Environmental Technology', Bureau of Industry Economics, Working Paper 96/5, April, Canberra.
- Jarmin, R. 1997, Evaluating the Impact of Manufacturing Extension on Productivity Growth, June, Center for Economic Studies, US Bureau of the Census, Washington DC.
- Johns, B.L., W.C. Dunlop and W.J. Sheehan 1989, *Small business in Australia: Problems and prospects* (third edition), Allen & Unwin, Sydney.
- Johnson, S. 1989, 'Employment change in small business results from a follow-up survey', Institute for Employment Research, Warwrick University, Report to the UK Department of Employment.
- Jones, M 1991, 'Employment Change in Small Firms: A Cohort Analysis from 1985, 1988 and 1991 Survey Findings', paper presented to the 14th Small firms Policy and research Conference, Blackpool, UK, 20-2 November, 1991.
- Karpin, D.[Industry Task Force on Leadership and Management Skills] 1995, *Enterprising Nation*, 1995, AGPS, Canberra.

- Katz, L.F. 1994, 'Active Labour Market Policies to Expand Employment Opportunity', in *Reducing Unemployment: Current Issues and Policy Options*, Federal Reserve Bank of Kansas Symposium, August.
- Koning, de A. and Snijders, J. 1992, 'Policy on Small- and Medium-Sized Enterprises in Countries of the European Community', *International Small Business Journal*, Vol. 10, No. 3.
- Lattimore, R. 1996, *Evaluation of the Syndicated R&D Program*, Department of Industry, Science and Tourism, Commonwealth of Australia.
- _____ 1997, Research and Development Fiscal Incentives in Australia: Impacts and Policy Lessons, paper presented to the OECD Conference on Policy Evaluation in Innovation, Paris 26 to 27 June.
- _____ 1998, 'The Tax Treatment of Small Business', paper to be presented at the SEEANZ Conference, 13-15 September, Burnie.
- Layard, R., Nickell, S. and Jackman, R. 1991, *Unemployment*, Oxford University Press, Oxford.
- LEK 1994, Intelligent Exports...and the Silent Revolution in Services, Austrade.
- Mackay, K. 1996, *The Institutional Framework For Evaluation in the Australian Government*, Paper delivered to a World Bank seminar on Australia's program evaluation framework: Institutionalising the Process, Washington DC, 30 April, unpublished mimeo.
- Makkai, Toni and Braithwaite, John 1992, 'In and Out of the Revolving Door: Making Sense of Regulatory Capture'. *Journal of Public Policy*, Vol 12.
- Mandell, A.S. 1992, 'Small Business, Banks and SBA Loan Guarantees: Comment', *Small Business Economics*, Vol 4, pp. 169-170, Kluwer Academic Publishers, Netherlands.
- Marsden Jacob Associates 1995, Financing Growth: Policy Options to Improve the Flow of Capital to Australia's Small and Medium Enterprises, Commonwealth of Australia, Canberra.
- Minister for Administrative Services 1997, *Commonwealth Procurement Guidelines* (gazetted by the Minister for Administrative Services on 16 July).
- MITI (Ministry of International Trade and Industry of Japan) 1995, White Paper on Small and Medium Enterprises in Japan.
- Mortimer, D. 1997, Going for Growth: Business Programs for Investment, Innovation and Export, Review of Business Programs, Commonwealth of Australia.

- National Business Bulletin (various issues) on the NBB website.
- National Performance Review 1993, From Red Tape to Results. Creating a Government that Works Better and Costs Less: Report of the National Performance Review, Report by Albert Gore to the President of the United States, Washington DC.
- NBEET [National Board of Employment, Education and Training, Employment and Skills Formation Council] 1994, *The Shape of Things to Come: Small Business Employment and Skills*, August, AGPS, Canberra.
- Nesterczuk, G. 1996, 'Reviewing the National Performance Review, Regulation Magazine: The Cato Review of Business and Government, 19(3).
- Nicholas Clark and Associates 1995, *Target Market Segments and Client Needs*, Report to AusIndustry, unpublished.
- Nivola, P.S. 1998a, 'Lifting the Heavy Hand: The Challenge of Reforming America's Regulatory State', *The Brookings Review*, 16(1), 4-5, Winter.
- ____ 1998b, 'The New Pork Barrel', *The Brookings Review*, 16(1), 6-9, Winter.
- Noll, 1989, 'Economic Perspectives on the Politics of Regulation', in (eds.) Schmalensee Richard and Willig Robert D, *Handbook of Industrial Organisation*, North Holland.
- OECD (Organisation for Economic Co-operation and Development) 1982, Innovation in Small and Medium Firms, Paris.
- ____ 1992, Industrial Support Policies in OECD Countries, 1986-1989, OCDE/GD (92)126, Paris.
- _____ 1994, Small and Medium Sized Enterprises (SMEs) and Job Creation: Strategic Issues for Business and Government, (Synthesis report of the conference organised by the Australian government under the auspices of the OECD), OECD Directorate for Science, Technology and Industry, Paris, March.
- _____ 1996, Regulatory reform: a country study of Australia, Paris OECD.
- _____ 1997, Small Business, Job Creation and Growth, Facts, Obstacles and Best Practices, Paris OECD.
- Ogus, A. 1997, *Deregulation and Regulatory Appraisal*, British Council Governance Briefing, Issue No. 3.
- Ontario Red Tape Commission 1997, Cutting the Red Tape Barriers to Jobs and Better Government, Final Report, Queen's Printer for Ontario, February.

- ORR [Office of Regulation Review] 1997, *A Guide to Regulation*, October, Industry Commission, Canberra.
- Palmer, K., Oates, W.E. and Portney, P.R. 1995, 'Tightening Environmental Standards: The Benefit-Cost or No-Cost Paradigm?', *Journal of Economic Perspectives*, 9(4) 119-132.
- Pattinson, W., Ovington, J. and Finlay, E. 1995, Innovation in Australian Industry Does it Happen? Is it Important?, Paper prepared by the Australian Bureau of Statistics for the Conference on Technology Adoption and Skill Level, Wages and Employment, Washington, USA, April 30 to May 2.
- Pavitt, K., Robson M., and Townsend J. 1987, 'The Size Distribution of Firms in the UK: 1945-1983', *Journal of Industrial Economics*, 35(3), pp. 297-316.
- Pearson, G. 1995, 'Business Incentives and the GATT Subsidies Agreement', Australian Business Law Review, Vol. 23, pp. 368-396.
- Phillips, R. 1997, *Innovation and Firm Performance in Australian Manufacturing*, Industry Commission Staff Research Paper, AGPS, Canberra, September.
- Piggott, J. and B. Chapman 1995, 'Costing the Job Compact', *Economic Record*, 71(215), 313-328.
- Poon, S. and J. Strom 1997, Small Business Use of the Internet some realities, Swinburne University of Technology and Manchester Metropolitan University, available on http://www.smallbiz.swin.edu.au/inet97.htm.
- Pope, J., Fayle, R., Chen, D.L. 1993, *The Compliance Costs of Employment-Related Taxation in Australia*, Research Study 17, Australian Tax Research Foundation, Sydney.
- _____ 1994, The Compliance Costs of Companies' Income Taxation in Australia, Research Study 23, Australian Tax Research Foundation, Sydney.
- Pratten, C. 1991, *The Competitiveness of Small Firms*, University of Cambridge, Department of Applied Economics, Occasional paper 57, Cambridge University Press, Cambridge.
- Price Waterhouse 1992, National Evaluation of the NIES Program, Canberra.

- _____ 1996, The Longer Term Impacts of Participation in AusIndustry Enterprise Improvement Program, Report to AusIndustry, September, Canberra.
- QCCI 1996, Regulatory Compliance Costs and Other Burdens, A Survey Report, Queensland Chamber of Commerce and Industry, Brisbane, July/August.
- Rajan, A. and Pearson, R 1986, *UK Occupation and Employment Trends to* 1990, Institute of Manpower Studies, Butterworths Press, London.
- Ratnapala, S., 1996, 'Administrative Regulation in Australia', *IPA Backgrounder*, (IPA stands for the Institute of Public Affairs) February 1996, Vol. 8/1.
- RBA (Reserve Bank of Australia) various issues, *Bulletin*, Sydney.
- _____ 1994, 'Bank Lending to Small Businesses', *RBA Bulletin*, April, pp. 29-37.
- _____ 1997a, 'Recent Developments in Small Business Finance', *RBA Bulletin*, April.
- _____ 1997b, 'Small Business Lending', RBA Bulletin, October.
- Reith, The Hon. Peter (Minister for Workplace Relations and Small Business, Leader of the House of Representatives) 1997, *New Deal: Fair Deal, Giving Small Business a Fair Go*, various announcements, September.
- Revesz J. and Lattimore, R. 1997, *Small Business Employment*, Industry Commission Staff Research Paper, AGPS, Canberra.
- Reynolds, P. D. and Miller B. 1988, '1988 Minnesota New Firms Study: An Exploration of New Firms and their Economic Contributions', Centre for Urban and Regional Affairs, Minnesota.
- Rhyne, E. 1988, *Small Business, Banks, and SBA Loan Guarantees*, Quorum Books, New York.
- Rimmer, S. and Wilson, S. 1996, *Compliance Costs of Taxation in Australia*, Staff Information Paper, Office of Regulation Review, Commonwealth of Australia.
- Rimmer, S. 1998, 'Regulatory best practice and taxpayer compliance costs', paper delivered to the Third International Conference on Tax Administration, 16/17 April, Holiday Inn, Coogee Beach, Sydney.

- Rothwell, R. 1984, 'The Role of Small Firms in the Emergence of New Technologies', *OMEGA*, *The International Journal of Management Science*, Vol. 12, No. 1, pp. 19-29, Pergamon Press, UK.
- _____ 1989, 'Small Firms, Innovation and Industrial Change', *Small Business Economics*, Vol. 1, No. 1, pp. 51-64.
- Sandford, C., Godwin, M., Hardwick, P. 1989, *Administrative and Compliance Costs of Taxation*, Fiscal Publications, Bath, UK.
- Santarelli, E. and Sterlacchini, A., 1990, 'Innovation, Formal vs Informal R&D, and Firm Size: Some Evidence from Italian Manufacturing Firms', *Small Business Economics*, Vol. 2, No. 3, pp 223-8.
- SBA (Small Business Administration, US) 1990, US Small Business Administration Annual Report, SBA, Washington.
- _____ 1995, The Changing Burden of Regulation, Paperwork and Tax Compliance on Small Business, A report to Congress, Washington DC by the Office of the Chief Counsel for Advocacy, October.
- SBCICJ (Small Business Credit Insurance Corporation of Japan), 1991, Small Business Credit Insurance Corporation of Japan, Tokyo.
- Schumpeter, J.A. 1934, *The Theory of Economic Development*, Harvard University Press, Cambridge.
- Segal Quince Wicksteed (1989) *Evaluation of the Consultancy Initiatives*, Department of Trade and Industry, HMSO, London
- Shah, A.(ed.) 1995, Fiscal Incentives for Investment and Innovation, World Bank, Oxford University Press.
- Sieper, E 1982, *Rationalising Rustic Regulation*, Centre For Independent Studies (CIS) (Australia), CIS Research Studies in Government Regulation No 2.
- Simon, H.A. 1979, 'Rational Decision Making in Business Organisation', *American Economic Review*, 69(4), September, pp 493-513.
- Small Business Council 1989, Taxation and small business in Australia: Major taxation issues affecting the small firm, Discussion Paper, AGPS, Canberra.
- Stanworth, J. and Gray, C. (eds) 1991, *Bolton 20 Years On: The Small Firm in the 1990s*, Paul Chapman Publishing, London.
- Stiglitz, J.E. 1988, *Economics of the Public Sector*, 2nd Ed., Norton & Co., New York.

- ____ 1996, 'Some Lessons from the East Asian Miracle', World Bank Research Observer, 11(2), 151-77. Storey, D.J. 1983, 'Small Firms Policies: A Critique', Journal of General *Management*, Vol. 8, No. 4, pp. 5-19. 1989, 'Firm Performance and Size, Explanations from the Small Firm Sectors', Small Business Economics, Vol 1, pp. 175-180, Kluwer Academic Publishers, Netherlands. _____ 1994, *Understanding the Small Business Sector*, Routledge, London. ____ and Johnson, S. 1987, Job Generation and Labour Market Change, Macmillan, Basingstoke. Sturgess, G.L. 1994, Thirty Different Governments, The Report of the Commission of Inquiry into Red Tape, NSW, 31 January. TPC (Trade Practices Commission) 1991, Unconscionable Conduct and the Trade Practices Act, Possible Extension to Cover Commercial Transactions, Report of the Trade Practices Commission to the Attorney-General and the Minister for Small Business and Customs, Canberra. Treasury Board of Canada Secretariat 1993, Enlightened Practices in Regulatory Programs, Volume 1, May. ____ 1994a, Enlightened Practices in Regulatory Programs, Volume 2, **February** 1994b, Assessing Regulatory Alternatives, May. 1995a, Benefit/Cost Analysis Guide for Regulatory Programs, August. _____ 1995b, *Regulatory Policy*, November 1995. Varian, H.R. 1978, *Microeconomic Analysis*, 2nd. edition, W.W. Norton & Co.,
- Varian, H.R. 1978, Microeconomic Analysis, 2nd. edition, W.W. Norton & Co., New York.
- Vedder, R.K. 1996, 'Regulation's Trillion-Dollar Drag on Productivity, Policy Brief, 165, Centre for the Study of American Business.
- Vogel, D. 1998, 'Social Regulations as Trade Barriers', *The Brookings Review*, 16(1), 33-36, Winter.
- Weidenbaum, M. 1996, 'Government Regulation and Medium-Sized Businesses', *Contemporary Issues*, Center for the Study of American Business, No. 77, 8-9, March.

- Wendy Tubman and Associates 1994, Report of the Evaluation of the Export Access Program for the Department of Industry, Science and Technology.
- Williams, A.J. 1991, 'Small Business Survival: The Roles of Formal Education, Management Training and Advisory Services', in BIE, *Small Business Review 1990–91*, AGPS, Canberra.
- Williams-Wynn, M, 1996, Enhancing Australia's Competitiveness: The Impact of Government Regulations, Committee for Economic Development of Australia (CEDA).
- Wiltshire Committee 1971, Report of the Committee on Small Business, Canberra.
- Wood, C. 1997, 'Big Business puts the squeeze on suppliers', *Business Review Weekly*, p34, 21 July.
- World Bank 1993, *The East Asian Miracle: Economic Growth and Public Policy*, Oxford University Press.

Yellow Pages Australia (various issues) Small Business Index, Melbourne.	
1995a, Finance and Banking Issues, September.	
1995b, Technology in the Small Business Sector, July.	
1996a, Technology in the Small Business Sector, July.	
1996b, The Paperwork Burden on Small Business, October.	
1997, Technology in the Small Business Sector, July.	
1998, Survey of eCommerce in Australian Small and Medium Busines April.	55