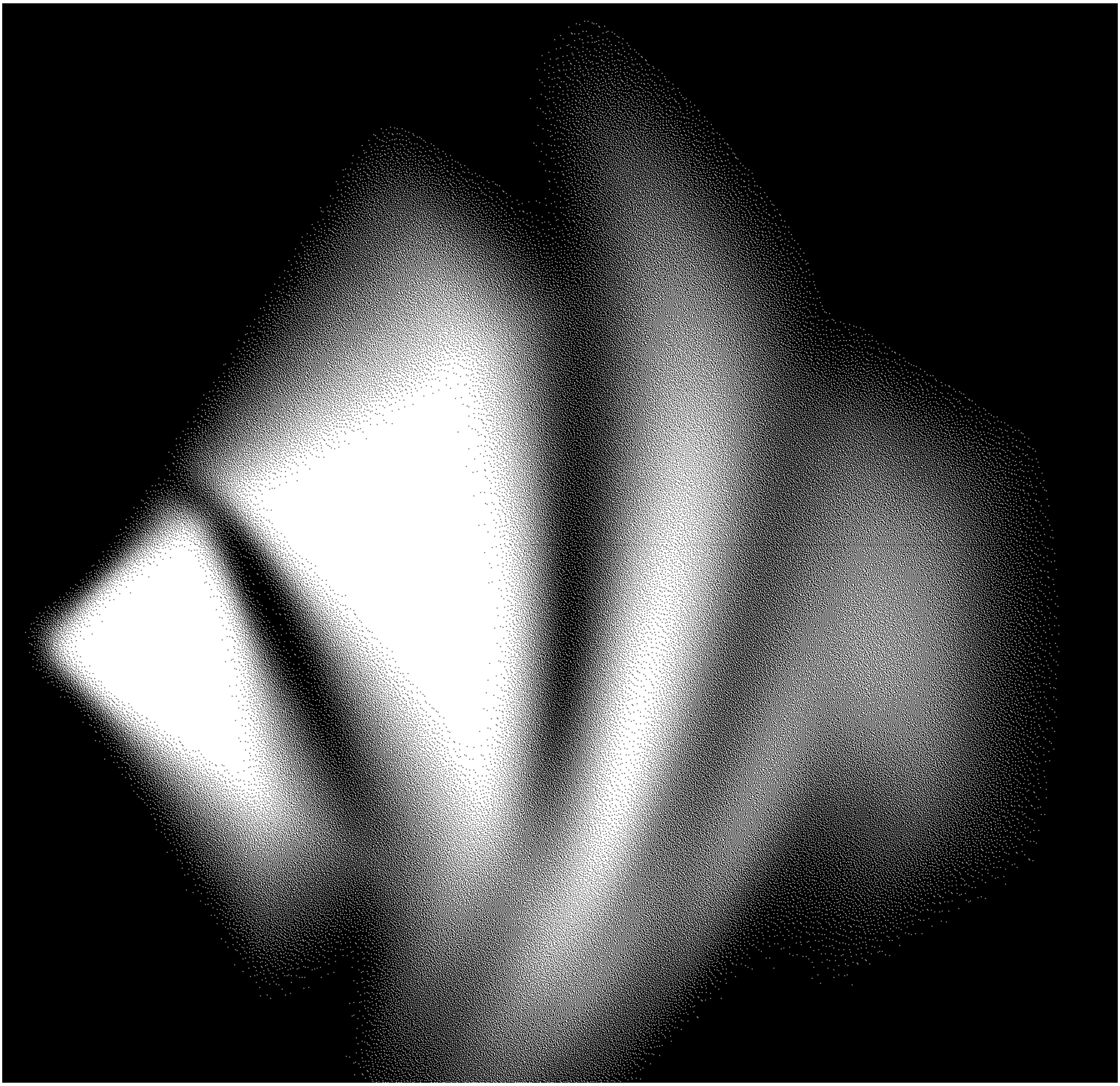
Australian Government
Productivity Commission

Trade & Assistance Review 2006-07

Productivity Commission
Annual Report Series



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The Productivity Commission

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

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

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

Preface

The Productivity Commission is required under its Act to report annually on industry assistance and its effects on the economy. *Trade & Assistance Review 2006-07* contains the Commission's latest quantitative estimates of Australian Government assistance to industry. It also examines recent developments in assistance in various sectors of the economy over the year or so prior to the commencement of the caretaker period in October 2007, and outlines some recent international policy developments affecting Australia's trade.

Several factors, including the announcement of a number of reviews, make it timely to take stock of the principles that should guide the design of effective and efficient industry assistance. Chapter 6 of this edition of *Trade & Assistance Review* discusses such principles, and points to some additional areas of assistance that warrant examination from a community-wide perspective.

In preparing this document, the Commission received helpful advice and feedback from officials from several Australian Government departments and agencies. The Commission is grateful for their assistance.

Gary Banks
Chairman

March 2008

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Abbreviations

AAA	Agriculture – Advancing Australia
ABS	Australian Bureau of Statistics
ABARE	Australian Bureau of Agricultural and Resource Economics
ACIS	Automotive Competitiveness and Investment Scheme
ACS	Australian Customs Service
ACT	Australian Capital Territory
AIC	Assistance for Isolated Children
ANAO	Australian National Audit Office
ATO	Australian Taxation Office
AWBI	Australian Wheat Board International
AWI	Australian Wool Innovation
AWS	Australian Wool Services
CET	clean energy target
CIE	Centre for International Economics
CRC	cooperative research centres
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAFF	Department of Agriculture, Fisheries and Forestry
DIISR	Department of Innovation, Industry, Science and Research
DITR	Department of Industry, Tourism and Resources
EC	exceptional circumstances
EFIC	Export Finance and Insurance Corporation
EMDG	Export Market Development Grants
ERA	effective rate of assistance
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GST	goods and services tax
IC	Industry Commission

ICT	information and communications technology
IT	information technology
LPG	liquefied petroleum gas
MFN	most favoured nation
MVP	motor vehicles and parts
NFIS	National Food Industry Strategy
NLP	National Landcare Program
NSW	New South Wales
OECD	Organisation for Economic Cooperation and Development
PC	Productivity Commission
PDV	post, digital and visual effects
PIIP	Pharmaceutical Industry Investment Program
PIRSA	(Department of) Primary Industries and Resources of South Australia
PTA	preferential trading agreement
PVRP	Photovoltaic Rebate Program
QAPE	qualifying Australian production expenditure
R&D	research and development
RRPGP	Renewable Remote Power Generation Program
SME	small and medium-sized enterprise
TCF	textiles, clothing and footwear
TFES	Tasmanian Freight Equalisation Scheme
TPR	trade policy review
TSA	tourism satellite account
WA	Western Australia
WEA	Wheat Export Authority
WTO	World Trade Organization

Key points

- The Australian Government assists industries through an array of mechanisms, including tariffs and regulatory restrictions on imported goods and services, as well as subsidies and tax concessions for domestic producers.
  - Assistance generally benefits the industry that receives it but can penalise other industries, as well as taxpayers and consumers.
  - Some types of assistance, such as R&D funding, may deliver net community benefits if well designed; others entail net costs to the community.
- While industry assistance has declined greatly over recent decades, assistance provided by the Australian Government remains significant.
  - In 2006-07, the government measures covered in this report provided assistance to industry equivalent to $15.7 billion in gross terms, and $8 billion in net terms.
  - The automotive, textiles, clothing and footwear and dairy industries received the highest rates of assistance within manufacturing and agriculture.
  - Services industries typically attract negative assistance because tariffs inflate their input prices.
- Several factors make it timely to take stock of the principles that should guide the design of effective and efficient industry assistance.
  - These include concerns about skills shortages and capacity constraints, heightened budgetary pressures and the recent announcement of several key reviews.
- Assistance should be beneficial for the community as a whole, rather than just for a narrow groups of recipients.
  - Industry assistance measures are more likely to yield a net pay-off when targeted at significant market failures. However, many assistance proposals are not based on sound rationales.
- Assistance measures need to be designed carefully and evaluated, both before and after implementation, using sound data and rigorous methodologies:
  - Particular attention is needed to ensure that assistance induces new activity, rather than dissipating funding on much activity that would have occurred anyway.
  - Given the interests at stake, evaluations of significant measures should have independent panels and adequate scope for public consultation.
- The Commission has identified several areas of assistance that may warrant review, including drought relief, defence procurement, and ethanol and renewable energy.
  - Consideration could also be given to instituting a more systematic program of reviews of assistance measures, including at the State level.

1 Introduction

The *Productivity Commission Act 1998* defines government assistance to industry as:

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

Assistance thus takes many forms. It extends beyond direct government subsidies targeted to particular firms or particular industries, and includes tariffs, quotas, anti-dumping measures and regulatory restrictions on imported goods and services, as well as tax concessions and subsidies for domestic producers. Assistance also arises from the provision of underpriced services by government agencies and from government procurement policies.

Although assistance generally benefits the firms or industries that receive it, it typically comes at a cost to other sectors of the economy. For example, direct business subsidies increase returns to recipient firms and industries, but to fund subsidies governments must increase taxes and charges, cut back on other spending, or borrow additional funds. Similarly, while tariffs provide some price relief to domestic producers, they result in higher input costs for some local businesses and higher prices for consumers, who then have less money to spend on other goods and services.

In some cases, particular types of industry assistance — most notably R&D funding — can deliver net community benefits. Similarly, some policies that have industry assistance effects may be justified on other grounds, such as the achievement of social, environmental or equity objectives.

However, in view of the many costs that industry assistance can entail, government measures that provide assistance need to be monitored and regularly reviewed. One of the Productivity Commission's functions is to review industry assistance arrangements. It also has a more general statutory obligation to report annually on assistance and its effects on the economy.

This edition of *Trade & Assistance Review* contains the Commission's latest estimates of assistance to industry (chapter 2). The estimates cover the years 2001-02 to 2006-07, and cover assistance resulting from tariffs, and budgetary outlays and tax concessions provided by the Australian Government.

2 Assistance estimates

Each year the Commission publishes estimates of the assistance to industry provided by a range of government programs and measures. Typically the estimates cover:

- tariff assistance, which assists mainly the manufacturing sector;
- Australian Government budgetary assistance applying to all sectors; and
- agricultural pricing and regulatory assistance.

As well as providing estimates for each of these categories, the Commission provides estimates of the 'combined' assistance for all sectors, and effective rates of combined assistance for the manufacturing, primary production and mining sectors.

The estimates do not aim to capture all Australian Government support for industry (box 2.1); nor, apart from some minor agricultural assistance, do they include State government assistance. Quantification constraints also limit the precision of some of the estimates, and care is needed when drawing inferences from them.

Box 2.1 **Coverage of the Commission's estimates**

The Commission's assistance estimates cover only those measures which *selectively* benefit particular firms, industries or activities, and which can be quantified given practical constraints in measurement and data availability. Exclusions from the annual estimates include:

- for agricultural industries, any assistance effects that may be associated with quarantine restrictions, the pricing of water resources or the impact of measures to address land degradation resulting from farming practices;
- government programs affecting a range of service industries, mainly relating to the provision of health and welfare, where funding predominantly benefits consumers and individual citizens;
- capital depreciation subsidies and the impact of tariffs on capital items;
- various tax arrangements, including in relation to excises, the GST and particular arrangements affecting the mining sector where resource rent taxation issues make it difficult to determine assistance impacts;
- the effects of government purchasing preferences — for example, as they affect the manufacturing sector and IT industries; and
- various Australian Government budgetary outlays on defence, health, education, sport, the arts and the labour market.

The estimates reported in this chapter extend the '2001-02' series of estimates, introduced in last year's *Trade & Assistance Review,* to cover the six years from 2001-02 to 2006-07. More detailed estimates of budgetary assistance by government program are also presented in appendix A. Guidance on the derivation and interpretation of the estimates is provided throughout this chapter and in the *Methodological Annex* accompanying this publication.

2.1 Tariff assistance

Tariffs have direct effects on the returns received by Australian producers. Tariffs on imported goods increase the price at which those goods are sold on the Australian market, and thus allow scope for domestic producers of similar products to increase their prices. On the other hand, tariffs also increase the price of goods that are used as inputs and thus penalise local industries. This 'penalty' is reduced if tariff concessions are available to Australian producers. These effects are captured in the Commission's estimates of tariff assistance.

The Commission estimates that the gross dollar value of tariff assistance for domestically produced outputs was around $9.1 billion in 2006-07 (table 2.1). This compares to an estimate of around $8.4 billion in 2005-06 and, at the start of the series, $7.6 billion in 2001-02. For 2006-07, the increase in tariff assistance largely reflects growth over the year in domestic production of tariff assisted items.

Table 2.1 **Total tariff assistance, 2001-02 to 2006-07**

$million

	2001-02	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*
Output assistance	7594.8	8279.1	8932.6	8637.5	8417.5	9051.8
Input assistance	-6434.0	-6963.4	-7600.5	-7521.9	-7069.5	-7658.4
Net assistance	1160.7	1315.7	1332.2	1115.6	1347.9	1393.4

Source: Commission estimates.

Net tariff assistance to industry was estimated to be around $1.4 billion in 2006-07. Since 2001-02, net tariff assistance has fallen in *real* (that is, price-adjusted[1]) terms by around 1 per cent.

[1] The 'real' estimates in this chapter have been calculated by deflating the current value series to a 'real value' series, indexed to the reference year 2001-02, using the GDP deflator.

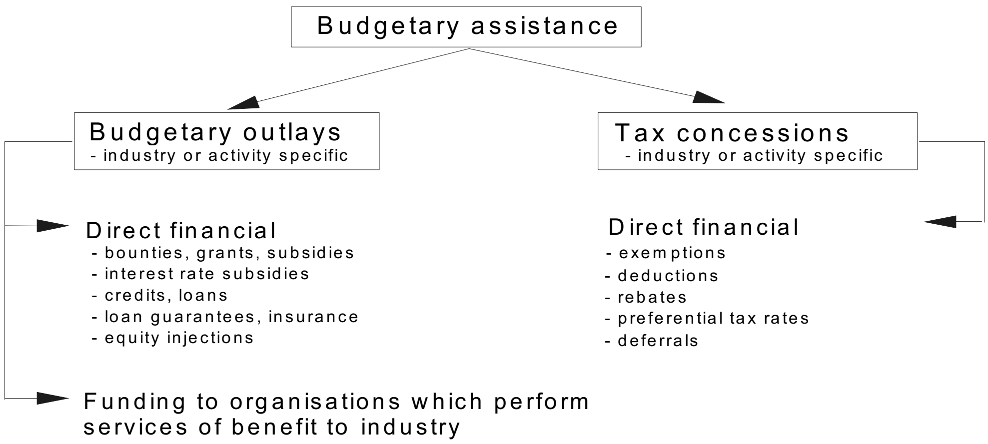
Most tariff assistance is directed towards industries in the manufacturing sector (table 2.2, on pages 2.4 and 2.5). Indeed, the sector derives around three-quarters of its total measured assistance from this source.

Mining and primary production industries receive little tariff assistance on outputs, and tariffs cannot be levied on services. On the other hand, because of their cost-raising effects on inputs, tariffs impose net penalties on all industries in these sectors, other than *Horticulture & fruit growing* and *Forestry & logging* (final column, table 2.2b).

2.2 Australian Government budgetary assistance

Budgetary assistance comprises a range of outlays and tax concessions (figure 2.1). Recipients include individual firms, including those undertaking or utilising particular activities such as R&D, as well as particular industries or sectors.

Figure 2.1 **Forms of budgetary assistance**



As well as reporting its budgetary assistance estimates in the aggregate, *Trade & Assistance Review* also reports on:

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

The assistance estimates in this section and in appendix A are derived primarily from the Australian Government Budget Papers and Treasury's 2007 Tax Expenditures Statement. The estimates incorporate revisions to outlays and tax concessions for previous years.

Table 2.2a **Net tariff assistance by industry grouping,[a] 2001-02 to 2005-06**
$ million

Industry grouping	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*
Primary production	**-22.3**	**-13.9**	**-16.9**	**-11.2**	**3.2**
Dairy cattle farming	-4.1	-2.8	-3.0	-3.4	-3.1
Grain, sheep and beef cattle farming	-25.6	-18.2	-22.4	-20.5	-16.9
Horticulture and fruit growing	27.3	23.5	26.6	28.2	30.8
Other crop growing	-6.4	-5.5	-6.0	-5.6	-4.6
Other livestock farming	-3.2	-2.9	-2.9	-3.0	-2.6
Fisheries	-22.2	-21.3	-21.3	-18.8	-14.9
Forestry and logging	23.1	22.2	22.2	21.7	22.8
Other primary production[b]	-11.1	-8.9	-10.2	-9.9	-8.3
Mining	**-146.8**	**-147.5**	**-139.2**	**-176.8**	**-219.7**
Manufacturing	**4544.3**	**4957.4**	**5343.9**	**5218.0**	**5339.5**
Food, beverages & tobacco	905.3	978.6	1007.9	1026.9	1077.6
Textiles, clothing, footwear & leather	548.0	569.4	641.4	525.5	390.4
Wood & paper products	355.4	418.2	443.1	436.6	495.0
Printing, publishing & media	195.4	214.0	232.9	237.9	263.0
Petroleum, coal, chemical & ass. products	560.9	615.5	667.2	700.4	750.9
Non-metallic mineral products	142.9	168.7	191.1	176.0	188.9
Metal product manufacturing	682.0	729.2	787.4	807.2	840.0
Motor vehicles & parts	625.1	689.6	755.6	676.5	613.6
Other transport equipment	30.1	33.2	36.4	39.8	47.9
Other machinery & equipment	275.7	312.5	332.9	344.8	416.2
Other manufacturing	223.6	228.5	248.1	246.3	256.0
Services	**-3214.5**	**-3480.3**	**-3855.6**	**-3914.4**	**-3775.0**
Electricity, gas & water supply[c]	-70.5	-76.5	-80.0	-79.4	-73.5
Construction	-911.6	-1022.8	-1188.7	-1279.3	-1288.3
Wholesale trade[c]	-151.4	-168.7	-180.4	-175.6	-153.5
Retail trade[c]	-530.6	-568.8	-616.5	-574.0	-510.2
Accommodation, cafes & restaurants	-306.3	-315.6	-355.9	-366.6	-369.9
Transport & storage	-211.2	-224.9	-245.7	-242.2	-216.2
Communication services	-146.8	-155.9	-162.9	-160.3	-141.0
Finance & insurance	-21.7	-22.8	-24.9	-26.9	-28.5
Property & business services	-256.0	-272.6	-290.6	-296.4	-291.2
Government administration & defence	-265.7	-280.5	-304.6	-304.1	-304.1
Education	-65.3	-70.1	-73.9	-76.9	-77.4
Health & community services	-85.9	-92.6	-100.9	-99.8	-98.2
Cultural & recreational services	-114.1	-129.6	-146.1	-145.6	-140.6
Personal & other services	-77.3	-78.9	-84.4	-87.2	-82.3

[a] Tariff assistance estimates are derived using ABS Industry Gross Value Added at current prices data. This information is subject to periodic revision by the ABS. Totals may not add due to rounding. [b] Other primary production includes *Services to agriculture* (including *Hunting & trapping)* and *Poultry farming*. [c] Due to ABS industry-of-origin classification conventions, a small amount of output tariff assistance is recorded for these service industries.

Source: Commission estimates.

Table 2.2b **Tariff assistance by industry grouping,[a] 2006-07**

$million

Industry grouping	*Output assistance*	*Input assistance*	*Net tariff assistance*
Primary production	**74.2**	**-68.8**	**5.4**
Dairy cattle farming	0.0	-3.1	-3.1
Grain, sheep and beef cattle farming	0.1	-16.6	-16.5
Horticulture and fruit growing	37.7	-7.4	30.3
Other crop growing	0.0	-4.4	-4.4
Other livestock farming	0.0	-2.5	-2.5
Fisheries	0.0	-18.4	-18.4
Forestry	36.4	-8.2	28.2
Other primary production[b]	0.0	-8.2	-8.2
Mining	**3.7**	**-256.8**	**-253.1**
Manufacturing	**8656.1**	**-2891.5**	**5764.6**
Food, beverages & tobacco	1549.8	-387.3	1162.4
Textiles, clothing, footwear & leather	545.0	-134.1	410.9
Wood & paper products	696.4	-183.6	512.8
Printing, publishing & media	413.9	-141.4	272.5
Petroleum, coal, chemical & ass. products	1080.0	-302.1	777.9
Non-metallic mineral products	270.2	-64.8	205.5
Metal product manufacturing	1427.8	-399.6	1028.2
Motor vehicles & parts	1358.6	-724.4	634.2
Other transport equipment	121.7	-72.2	49.5
Other machinery & equipment	728.5	-284.4	444.1
Other manufacturing	464.0	-197.5	266.5
Services	**317.9**	**-4441.3**	**-4123.5**
Electricity, gas & water supply[c]	6.1	-80.2	-74.0
Construction	0.0	-1469.7	-1469.7
Wholesale trade[c]	136.3	-299.1	-162.8
Retail trade[c]	175.5	-709.8	-534.3
Accommodation, cafes & restaurants	0.0	-386.5	-386.5
Transport & storage	0.0	-247.5	-247.5
Communication services	0.0	-146.6	-146.6
Finance & insurance	0.0	-31.2	-31.2
Property & business services	0.0	-323.3	-323.3
Government administration & defence	0.0	-326.7	-326.7
Education	0.0	-82.9	-82.9
Health & community services	0.0	-105.5	-105.5
Cultural & recreational services	0.0	-146.6	-146.6
Personal & other services	0.0	-85.8	-85.8

[a] Tariff assistance estimates are derived using ABS Industry Gross Value Added at current prices data. This information is subject to periodic revision by the ABS. Totals may not add due to rounding. [b] Other primary production includes *Services to agriculture* (including *Hunting & trapping)* and *Poultry farming*. [c] Due to ABS industry-of-origin classification conventions, a small amount of output tariff assistance is recorded for these service industries.

Source: Commission estimates.

Aggregate estimates

Estimates of the assistance in *nominal* terms provided by the budgetary measures covered in this *Review*, for the period 2001-02 to 2006-07, are shown in table 2.3 and figure 2.2. That assistance totalled around $6.5 billion in 2006-07, compared to $5.9 billion in 2005-06 and, at the start of the series, $4.7 billion in 2001-02. This represents an increase in *real* terms since 2001-02 of 15 per cent.

Factors contributing to the increase in budgetary assistance over the last year include:

- increases of around $270 million in 'exceptional circumstances' drought relief (to $657 million in 2006-07), and of around $70 million in the offshore banking unit tax concession (to $160 million in 2006-07);
- the introduction in 2006-07 of the 25 per cent entrepreneurs' tax offset and the LPG vehicle scheme, with funding of $130 million and $122 million, respectively; and
- the full implementation of the fisheries structural adjustment package ($160 million in 2006-07, compared to $1.3 million spent towards the end of 2005-06).

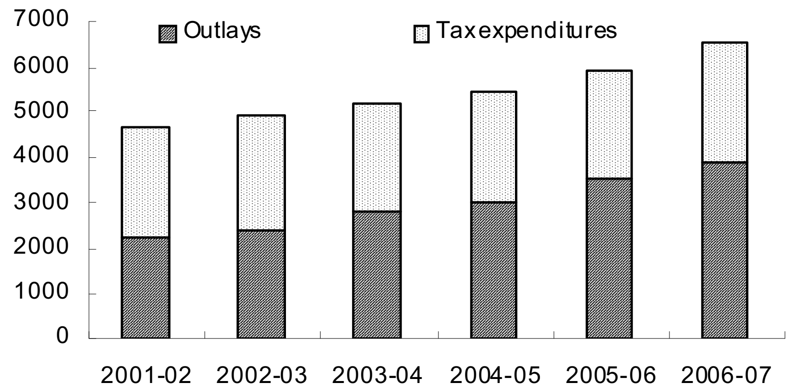
Outlays constituted three-fifths of estimated budgetary assistance in 2006-07.

Table 2.3 **Total estimated budgetary assistance, 2001-02 to 2006-07**
$million

	2001-02	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*
Budgetary outlays	2225.5	2359.2	2824.2	3043.3	3528.1	3877.2
Tax concessions	2450.6	2572.8	2387.3	2400.9	2354.7	2631.9
Total	4676.1	4932.0	5211.5	5444.1	5882.8	6509.0

Source: Commission estimates.

Figure 2.2 **Total estimated budgetary assistance, 2001-02 to 2006-07**
$million



Data sources: Australian Government Budget Papers; Treasury (2008); Commission estimates.

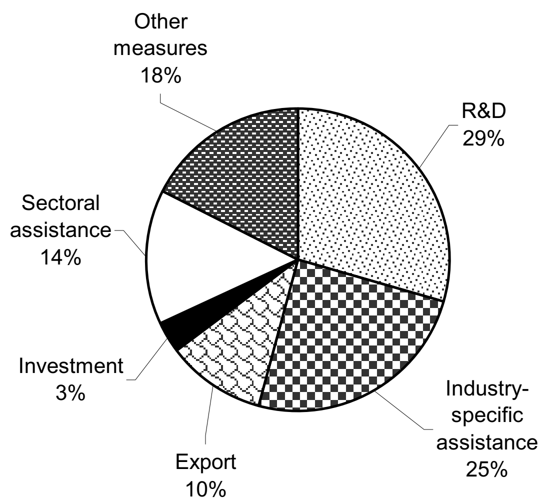
Activities targeted

Budgetary assistance is often designed to encourage particular activities undertaken by firms across various industries or sectors. To provide an indication of the distribution of assistance among activities, the Commission classifies its estimates of Australian Government budgetary assistance into several categories: R&D, export, investment, and sectoral assistance, as well as industry-specific assistance and a residual 'other' category.

A degree of caution is required in interpreting these estimates because particular programs may be designed to encourage more than one type of activity. In such cases, the Commission has allocated the program's total funding to the activity deemed to be the main target of the assistance. A further qualification is that the extent to which an activity that appears to be targeted by a program actually benefits from the assistance is not always clear.

As shown in figure 2.3, the largest share of budgetary assistance is provided for R&D activities.

Figure 2.3 **Estimated budgetary assistance by activity,[a] 2006-07**



[a] The assistance categories include general as well as specific schemes targeting an activity within an industry. For example, the *R&D assistance* category includes broad-based measures (such as the general R&D tax concession) as well as industry-specific measures (such as government funding for the Grape and Wine R&D Corporation). The *sectoral assistance* category covers programs specifically benefiting producers in a sector or facilitating adjustment. The other general assistance category covers measures (such as the regional assistance program) not already included in the above categories.

Source: Commission estimates

Sectoral and industry distribution

The Commission estimates the incidence of budgetary assistance by the initial benefiting industry. It reports the incidence using a four sector classification of the Australian economy and a multiple 'industry grouping' classification. While reporting of budgetary assistance by broad sectors and industries helps highlight the incidence of assistance and facilitates comparisons, the estimates of the sectoral and industry distribution of assistance included in this edition of *Trade & Assistance Review* are subject to a number of qualifications (box 2.2).

Box 2.2 **Sectoral and industry distribution estimates: the need for caution**

The methodology for allocating budgetary assistance among the sectors and industry groupings is discussed in Methodological Annexes to earlier editions of *Trade & Assistance Review* (PC 2000a, 2002a, 2006a). While the Commission has used detailed information to make these allocations, the need for judgment means that there remains some scope for imprecision.

A further consideration for the estimates presented here is that the assistance provided by a number of the programs introduced into the new series has not been allocated among sectors and industry groupings. Rather, they have been assigned to the 'unallocated' category.

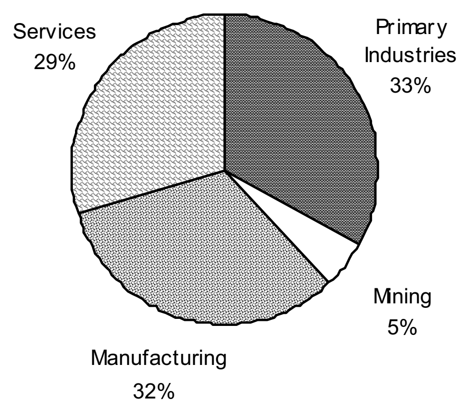
There can be significant variations in assistance between firms within a sector or industry grouping. Indeed, many firms do not make any use of government programs. For example, a study by Commission staff (Revesz and Lattimore 2001) found that the use of R&D and certain export programs between 1994 and 1998 ranged from 2 to 23 per cent of firms in the targeted activities.

Finally, the various sectors and industry groupings are of course not equivalent in size. The Commission's 'effective rate' estimates (section 2.4) give an indication of the assistance received by different sectors and industries relative to their size.

As figure 2.4 shows, manufacturing, primary production and the (much larger) services sector each received around one third of estimated budgetary assistance.

Table 2.5 (on pages 2.10 and 2.11) details the incidence of estimated budgetary assistance by the Commission's 'industry grouping' classification. These estimates indicate that *Grain, sheep & beef cattle farming* received the most budgetary assistance in 2006-07, mainly in the form of 'exceptional circumstances' payments and various R&D assistance schemes. The *Motor vehicles & parts* (MVP) industry grouping also received substantial budgetary assistance.

Figure 2.4 **Estimated budgetary assistance by sector, 2006-07**



Source: Commission estimates

2.3 Agricultural pricing and regulatory assistance

Historically the bulk of measured assistance to the agriculture sector has been maintained through a range of statutory marketing arrangements, regulations and price support schemes.

While many of these schemes were dismantled in the 1980s, up to 1997 the Commission's estimates still incorporated assistance derived from statutory marketing arrangements for dairy, sugar, rice and eggs, a local content scheme for tobacco leaf and loan guarantees for borrowings by the wheat and wool boards.

However, over recent years, the assistance included in this category has been limited to just three measures, namely:

- the ongoing payments to dairy farmers under a structural adjustment package introduced in conjunction with the deregulation of the industry in 2000, which are funded by a levy on milk;
- some payments to sugar producers under the Australian Government's 2002 Sugar Industry Reform Program, which was to be funded by a levy of 3 cents per kilogram on domestic sugar sales;[2] and
- assistance to rice farmers through statutory marketing arrangements which allowed the NSW Rice Growers Co-operative to vest and market all rice grown in the state, enabling the domestic price of rice to be maintained at higher levels than would otherwise prevail.

With the cessation of assistance from the latter measure on 1 July 2006, estimated assistance in this category in 2006-07 derived solely from dairy adjustment payments, and totalled $124 million (table 2.4).

Table 2.4 **Agricultural pricing and regulatory assistance by industry grouping, 2001-02 to 2006-07**
$million

	2001-02	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*
Dairy cattle farming	261.2	170.3	150.4	143.5	136.6	124.3
Grain, sheep and beef cattle farming (inc. rice)	6.6	8.4	6.4	5.2	4.1	-
Other crop growing (inc. sugar)	-	17.6	9.1	-	-	-
Total	**267.8**	**196.3**	**165.9**	**148.7**	**140.6**	**124.3**

Source: Commission estimates.

2 Assistance provided under the new Sugar Industry Reform Program, announced in 2004, is included in the Commission's budgetary assistance estimates.

Table 2.5a **Total estimated budgetary assistance by industry grouping, 2001-02 to 2005-06**

$ million

Industry grouping	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*
Primary production	**1015.6**	**1402.2**	**1358.7**	**1295.8**	**1451.4**
Dairy cattle farming	70.8	136.3	142.0	116.7	152.2
Grain, sheep and beef cattle farming	475.3	720.9	664.8	482.8	598.2
Horticulture and fruit growing	111.7	157.3	136.2	135.9	143.2
Other crop growing	91.0	77.4	148.5	191.5	213.6
Other livestock farming	28.6	40.4	31.6	23.2	27.0
Fisheries	81.6	70.9	73.4	129.2	111.4
Forestry and logging	41.4	95.0	35.6	93.8	84.4
Other[a] & unallocated primary production[b]	115.2	103.9	126.7	122.7	121.3
Mining	**238.4**	**198.0**	**200.8**	**236.4**	**253.5**
Manufacturing	**1955.1**	**1814.4**	**1888.0**	**1734.4**	**1732.8**
Food, beverages & tobacco	80.4	79.1	103.9	107.4	124.7
Textiles, clothing, footwear & leather	258.5	209.3	202.9	198.9	209.8
Wood & paper products	43.7	42.2	40.9	47.7	52.8
Printing, publishing & media	24.3	25.6	31.9	18.7	23.5
Petroleum, coal, chemical & ass. products	180.5	212.7	176.9	135.6	169.5
Non-metallic mineral products	20.7	9.1	8.6	8.6	10.6
Metal product manufacturing	120.6	138.3	185.8	138.8	95.9
Motor vehicles & parts	750.0	682.1	696.8	652.9	581.9
Other transport equipment	101.7	41.1	34.8	19.3	27.1
Other machinery & equipment	181.3	154.6	128.3	122.1	140.6
Other manufacturing	53.5	56.6	129.2	120.2	135.2
Unallocated manufacturing[b]	139.9	163.7	147.8	164.4	161.3
Services	**909.7**	**916.7**	**1074.6**	**1330.7**	**1387.8**
Electricity, gas & water supply	55.1	53.4	52.6	38.4	67.3
Construction	17.8	19.5	21.7	20.1	22.1
Wholesale trade	51.7	45.1	53.3	61.8	68.4
Retail trade	10.0	20.7	22.7	29.1	33.6
Accommodation, cafes & restaurants	14.9	24.9	24.1	22.4	22.5
Transport & storage	69.0	74.6	73.4	69.4	64.6
Communication services	77.0	89.3	123.6	133.3	137.3
Finance & insurance	104.6	95.0	153.6	206.9	222.0
Property & business services	159.5	197.0	239.6	276.8	309.2
Government administration & defence	1.2	7.2	6.4	3.6	1.7
Education	12.3	11.3	12.4	11.1	16.1
Health & community services	34.1	29.1	42.6	69.4	62.0
Cultural & recreational services	92.5	111.3	128.2	212.7	183.4
Personal & other services	5.4	5.0	5.3	7.4	9.3
Unallocated services[b]	204.5	133.5	115.0	168.3	168.1
Unallocated other[b]	**557.3**	**600.7**	**689.4**	**846.9**	**1057.4**

[a] Other primary production includes *Services to agriculture* (including *Hunting & trapping)* and *Poultry farming*.
[b] Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

Table 2.5b **Estimated budgetary assistance by industry grouping, 2006-07**
$ million

Industry grouping	*Budgetary outlays*	*Tax concessions*	*Total assistance*
Primary production	**1602.8**	**192.0**	**1794.8**
Dairy cattle farming	195.0	20.4	215.4
Grain, sheep and beef cattle farming	662.1	98.0	760.2
Horticulture and fruit growing	97.8	36.9	134.7
Other crop growing	152.0	16.8	168.8
Other livestock farming	21.3	6.4	27.7
Fisheries	296.6	8.1	304.7
Forestry and logging	63.3	-5.2	58.0
Other[a] and unallocated primary production[b]	114.7	10.6	125.3
Mining	**139.6**	**131.1**	**270.7**
Manufacturing	**798.4**	**963.3**	**1761.7**
Food, beverages & tobacco	102.8	28.2	131.0
Textiles, clothing, footwear & leather	119.5	69.0	188.6
Wood & paper products	27.5	25.5	53.0
Printing, publishing & media	17.4	6.9	24.4
Petroleum, coal, chemical & ass. products	154.5	25.7	180.3
Non-metallic mineral products	4.9	8.4	13.3
Metal product manufacturing	78.5	25.6	104.1
Motor vehicles & parts	13.6	607.2	620.8
Other transport equipment	10.5	8.4	18.9
Other machinery & equipment	100.1	44.9	145.0
Other manufacturing	124.4	9.5	133.9
Unallocated manufacturing[b]	44.5	103.9	148.4
Services	**1034.0**	**560.0**	**1594.1**
Electricity, gas & water supply	45.5	11.9	57.4
Construction	11.5	15.0	26.5
Wholesale trade	24.4	49.8	74.2
Retail trade	129.9	30.2	160.0
Accommodation, cafes & restaurants	5.1	21.1	26.2
Transport & storage	36.2	21.6	57.8
Communication services	122.3	23.2	145.6
Finance & insurance	35.0	252.9	288.0
Property & business services	208.6	115.6	324.2
Government administration & defence	4.4	0.2	4.6
Education	12.2	3.0	15.2
Health & community services	87.2	8.1	95.3
Cultural & recreational services	157.5	-1.2	156.3
Personal & other services	6.4	4.6	10.9
Unallocated services[b]	147.8	4.0	151.8
Unallocated other[b]	**302.3**	**785.5**	**1087.8**

[a] Other primary production includes *Services to agriculture* (including *Hunting & trapping)* and *Poultry farming*.
[b] Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

2.4 Combined tariff, budgetary and agricultural pricing and regulatory assistance

The Commission compiles 'combined' estimates of the various forms of assistance covered in this chapter, namely:

- tariff assistance;
- Australian Government budgetary assistance; and
- agricultural pricing and regulatory assistance.

The combined estimates exclude State budgetary assistance and assistance provided through restrictions on services trade and anti-dumping measures, as well as other forms of assistance that are not captured in the Commission's estimates (as outlined in box 2.1).

Measures

Tables 2.6 and 2.7 set out the dollar value of estimated combined assistance in current dollar terms, both in total and for different industry groupings, for the six years to 2006-07. This *net subsidy equivalent* is a measure of the net assistance to the land, labour and capital resources used in a particular industry or activity. It measures the transfers of income to benefiting producers from consumers, taxpayers and other firms, although it does not indicate the 'economic welfare' costs to the community of the assistance.

Table 2.8 reports estimates of the *effective rate of assistance* (ERA) for the manufacturing, primary production and mining sectors for the six years to 2006-07.[3] Technically, ERA are a measure of the net assistance to an industry divided by the industry's unassisted value added. They can provide an indication of the extent to which assistance to an industry allows it to attract and hold economic resources. That is, where there is some competition between industries for resources, those industries with relatively high effective rates of assistance are more likely, as a result of their assistance, to be able to attract resources away from those with lower rates.

[3] ERA have not been published for the services sector. Among other things, this reflects technical matters associated with the treatment of services in transportable goods sectors. Because of these technical issues, ERA for services would involve double-counting of services value added in the formation of economy-wide ERA measures.

Aggregate estimates

The total assistance to industry covered by the estimates in gross terms was $15.7 billion in 2006-07. With the deduction of the negative effects of tariff assistance on industry inputs, estimated net assistance amounted to around $8 billion (table 2.6).

While relatively stable in the middle years of the series, gross assistance has on average increased since 2001-02, by around 25 per cent in *nominal* terms and 3 per cent in *real* terms.

Estimated net assistance to industry has increased since 2001-02, by more than 30 per cent in *nominal* terms and 9 per cent in *real* terms.

Table 2.6 **Estimated combined assistance, 2001-02 to 2006-07**
$million

	2001-02	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*
Tariff output assistance	7594.8	8279.1	8932.6	8637.5	8417.5	9051.8
Budgetary outlays	2225.5	2359.2	2824.2	3043.3	3528.1	3877.2
Tax concessions	2450.6	2572.8	2387.3	2400.9	2354.7	2631.9
Agricultural marketing and pricing assistance	267.8	196.3	165.9	148.7	140.6	124.3
Total gross assistance	**12538.7**	**13407.3**	**14310.0**	**14230.3**	**14440.9**	**15685.1**
Tariff input assistance	-6434.0	-6963.4	-7600.5	-7521.9	-7069.5	-7658.4
Total net assistance	**6094.8**	**6443.9**	**6709.5**	**6708.4**	**7371.4**	**8026.7**

Source: Commission estimates.

Sectoral results

At the sectoral level, the estimates in tables 2.7 and 2.8 indicate that, in 2006-07:

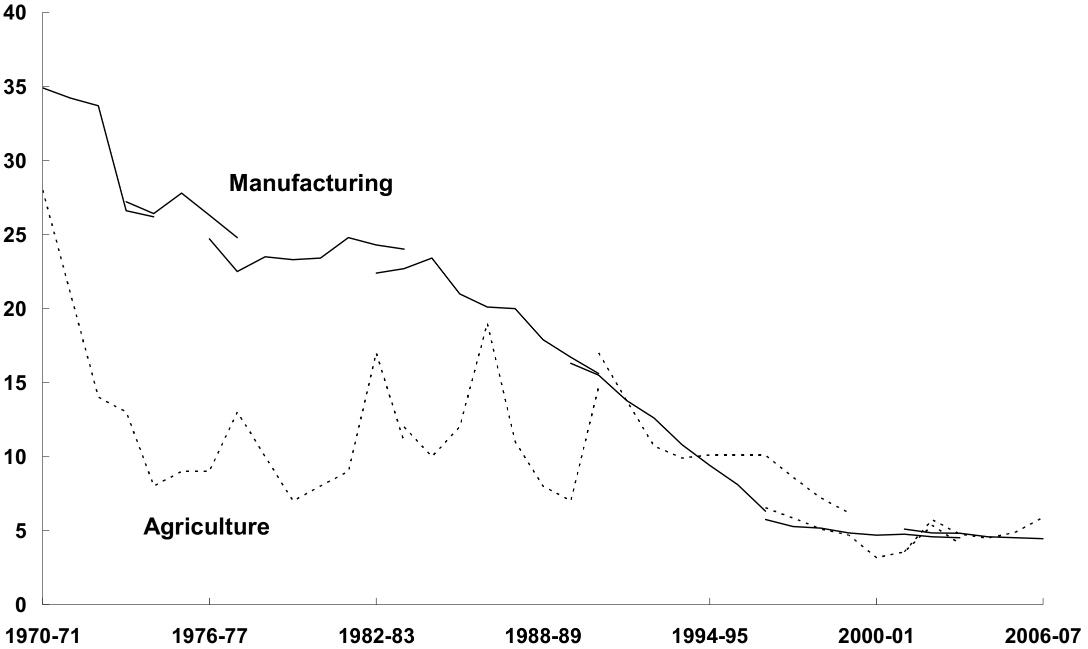
- the manufacturing sector attracted the most estimated assistance in absolute dollar terms;
- primary production recorded the highest rate of measured effective assistance;
- mining received virtually no net measured assistance;
- combined assistance as measured to the services sector was negative; and
- compared to the levels of assistance to manufacturing and agriculture recorded in earlier periods, these sectors recorded low average rates of assistance (see box 2.3).

Box 2.3 Estimated effective rates of assistance to manufacturing and agriculture since 1970

The Commission has estimated assistance to the manufacturing and agricultural sectors since the early 1970s. The estimates have been derived in several 'series', each spanning a number of consecutive years. Each series retains a common methodology, coverage of measures and data sources across those years. However, caution is required in comparing estimates from the different series, as there can be changes in the coverage of assistance measures, methodologies and data sources between them. That said, taken together, they do provide a broad indication of directions and trends in assistance at the sectoral level over time.

The chart below presents estimates from the different series from 1970-71. Breaks in the series are represented by gaps in the chart, and overlaps are included to show the effects, for particular years, of the changes made in moving between series.

The estimates indicate that there has been a significant decline in measured assistance to the manufacturing and agricultural sectors over the last 35 or so years. For example, the estimated effective rate of assistance for manufacturing (as calculated in the first series) was around 35 per cent in 1970-71, whereas since 2000, the rate (as calculated in the new 2001-02 series, as well as in the previous 1996-97 series) has been around 5 per cent. This decline has been driven in particular by the 25 per cent across-the-board tariff cut of 1973, the abolition of tariff quotas and the broad programs of tariff reductions that commenced in the late 1980s. For agriculture, the estimated effective rate of assistance (as calculated in the first series) was over 25 per cent in 1970-71, whereas today the estimate for primary production is in the order of 5 per cent.



Industry estimates

These sectoral averages hide significant variation in assistance between industries. At the high end are *Textiles, clothing and footwear* (TCF) and parts of MVP. The ERA for these industry groupings are around 13 and 12 per cent, respectively. It should be noted that the MVP industry grouping covers a broader range of activities than just passenger motor vehicle production. Some of the activities in this industry grouping receive relatively low assistance; others attract high levels of assistance. That said, reflecting a series of reforms, assistance to both these industry groupings has declined significantly over recent decades.[4]

The dairy industry continues to record the highest level of assistance among agricultural industries, with an effective rate of around 15 per cent in 2006-07. However, this represents a significant decline compared with the level that prevailed prior to the industry's deregulation in July 2000, when the effective rate of combined assistance was estimated to exceed 30 per cent. Further, under the new arrangements, assistance to dairy farmers has been 'decoupled' from dairy output and farm activity levels, thus diluting its effects on production incentives.

All other industry groupings covered in the estimates, apart from fisheries (see below), recorded an effective rate of less than 10 per cent in 2006-07, with most recording a rate of less than 5 per cent.

While mining recorded a negligible ERA and fisheries and forestry recorded ERA of around 13 and 6 per cent respectively, the forms of assistance covered in the 'combined' estimates are likely to play a relatively minor role in these industries compared with other government measures. Specifically:

- the mining industry is more affected by environmental regulation, prescribed royalty levels and accelerated depreciation provisions. Native title legislation can also affect land access and tenure; and
- key government measures affecting forestry and fisheries relate to resource management issues, such as the pricing of forest products, and certain tax provisions relating to investments in plantation forestry by managed investment schemes, and the use of mechanisms such as quotas and licenses to control fisheries harvesting rates to protect the resource stock.

The assistance implications of these measures, whether positive or negative, are not captured in the Commission's estimates.

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4 Whereas today automotive tariffs are at 10 per cent, and tariffs on TCF are at 17.5 per cent or lower, in the late-1980s automotive tariffs were 45 per cent, and the highest tariff rate for any one TCF line item (inclusive of the effect of tariff quotas) was 125 per cent. The effective rates of assistance for the automotive industry and TCF (as estimated in the 1983-84 series) were 140 per cent and 157 per cent, respectively, in 1984-85.

Table 2.7 **Combined[a] assistance by industry grouping, 2001-02 to 2006-07**
$ million

Industry grouping	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*
Primary production[b]	**1261.1**	**1584.5**	**1507.7**	**1433.2**	**1595.2**	**1924.4**
Dairy cattle farming	327.9	303.7	289.4	256.9	285.6	336.6
Grain, sheep and beef cattle farming	456.3	711.1	648.8	467.5	585.4	743.7
Horticulture and fruit growing	138.9	180.8	162.8	164.1	174.0	165.0
Other crop growing	84.6	89.5	151.6	185.9	209.0	164.3
Other livestock farming	25.4	37.5	28.7	20.1	24.4	25.2
Fisheries	59.4	49.6	52.0	110.4	96.6	286.3
Forestry and logging	64.5	117.2	57.8	115.5	107.3	86.2
Other primary production[c]	13.1	13.3	14.9	13.7	17.1	18.0
Mining	**91.7**	**50.5**	**61.5**	**59.6**	**33.8**	**17.5**
Manufacturing[b]	**6489.5**	**6771.8**	**7231.9**	**6952.4**	**7072.3**	**7526.3**
Food, beverages & tobacco	985.7	1057.7	1111.8	1134.3	1202.3	1293.4
Textiles, clothing, footwear & leather	796.7	778.7	844.3	724.4	600.2	599.5
Wood & paper products	399.1	460.4	484.0	484.3	547.9	565.9
Printing, publishing & media	219.7	239.6	264.8	256.6	286.6	296.9
Petroleum, coal, chemical & associated products	741.4	828.2	844.1	836.0	920.4	958.2
Non-metallic mineral products	163.6	177.8	199.7	184.6	199.4	218.8
Metal product manufacturing	802.5	867.4	973.2	945.9	935.9	1132.3
Motor vehicles & parts	1375.1	1371.8	1452.4	1329.4	1195.5	1255.0
Other transport equipment	131.8	74.3	71.2	59.1	75.0	68.4
Other machinery & equipment	457.0	467.1	461.2	466.9	556.8	589.1
Other manufacturing	277.1	285.0	377.3	366.5	391.1	400.5
Services[b]	**-2304.8**	**-2563.6**	**-2781.0**	**-2583.7**	**-2387.3**	**-2529.4**
Electricity, gas & water supply	-15.4	-23.1	-27.4	-41.0	-6.2	-16.6
Construction	-893.8	-1003.3	-1167.0	-1259.2	-1266.2	-1443.3
Wholesale trade	-99.7	-123.6	-127.1	-113.8	-85.1	-88.6
Retail trade	-520.7	-548.1	-593.8	-545.0	-476.6	-374.3
Accommodation, cafes & restaurants	-291.4	-290.7	-331.8	-344.2	-347.4	-360.3
Transport & storage	-142.2	-150.3	-172.3	-172.8	-151.6	-189.7
Communication services	-69.8	-66.6	-39.3	-27.0	-3.7	-1.1
Finance & insurance	82.9	72.2	128.7	180.0	193.5	256.8
Property & business services	-96.4	-75.6	-51.0	-19.6	18.0	0.8
Govt. administration & defence	-264.5	-273.3	-298.1	-300.6	-302.4	-322.1
Education	-53.0	-58.9	-61.5	-65.7	-61.3	-67.7
Health & community services	-51.8	-63.5	-58.3	-30.3	-36.2	-10.2
Cultural & recreational services	-21.6	-18.3	-17.9	67.1	42.8	9.7
Personal & other services	-71.9	-73.9	-79.1	-79.8	-73.1	-74.9
Unallocated other	**557.3**	**600.7**	**689.4**	**846.9**	**1057.4**	**1087.8**

a 'Combined assistance' comprises budgetary, tariff and agricultural pricing and regulatory assistance. **b** Sectoral totals include assistance to the sector that has not been allocated to specific industry groupings. **c** Other primary production includes *Services to agriculture* (including *Hunting & trapping*) and *Poultry farming*.

Source: Commission estimates.

Table 2.8 **Effective rate of combined[a] assistance by industry grouping, 2001-02 to 2006-07**
per cent

Industry grouping	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*
Primary production[b]	**3.6**	**5.7**	**4.8**	**4.5**	**4.9**	**5.9**
Dairy cattle farming	13.2	17.8	16.3	12.0	12.8	15.1
Grain, sheep and beef cattle farming	2.6	5.7	4.3	3.2	3.9	5.0
Horticulture and fruit growing	3.3	5.0	4.0	3.9	4.0	3.8
Other crop growing	2.9	3.6	5.6	6.9	7.7	6.3
Other livestock farming	2.0	3.4	2.6	1.6	1.9	2.1
Fisheries	3.0	2.6	2.7	6.0	5.3	12.7
Forestry and logging	5.1	9.7	4.8	10.0	9.3	6.0
Other primary production[c]	0.3	0.4	0.4	0.4	0.4	0.5
Mining	**0.2**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**
Manufacturing[b]	**5.1**	**4.9**	**4.8**	**4.6**	**4.5**	**4.5**
Food, beverages & tobacco	3.5	3.5	3.6	3.6	3.7	3.7
Textiles, clothing, footwear & leather	18.7	17.6	17.0	15.1	14.1	13.3
Wood & paper products	4.8	4.7	4.7	4.8	4.9	4.9
Printing, publishing & media	1.8	1.7	1.8	1.7	1.8	1.8
Petroleum, coal, chemical & associated products	4.2	4.3	4.0	3.7	4.0	4.0
Non-metallic mineral products	3.0	2.7	2.7	2.7	2.7	2.8
Metal product manufacturing	3.5	3.6	3.7	3.6	3.6	3.5
Motor vehicles & parts	17.8	16.1	15.5	13.7	12.0	12.2
Other transport equipment	4.2	2.1	1.9	1.5	1.8	1.6
Other machinery & equipment	3.8	3.4	3.2	3.2	3.6	3.6
Other manufacturing	5.0	5.0	6.1	6.1	6.7	6.6

a 'Combined assistance' comprises budgetary, tariff and agricultural pricing and regulatory assistance. **b** Sectoral estimates include assistance to the sector that has not been allocated to specific industry groupings. **c** Other primary production includes *Services to agriculture* (including *Hunting & trapping*) and *Poultry farming*.

Source: Commission estimates.

3 Recent developments in general industry assistance

This chapter documents a number of recent developments in industry assistance that have ramifications for Australia's assistance structure generally or for particular sectors or industries. The coverage is generally restricted to areas where new assistance measures were introduced or foreshadowed, or where there were policy reviews or changes to existing arrangements, by the (then) Australian Government following the last edition of *Trade & Assistance Review* and prior to the commencement of the caretaker period on 17 October 2007. Following the election of a new Government on 24 November 2007, some of the measures reported here have been or may be changed or at least reviewed. As such, the material in this chapter does not necessarily represent the policies or intentions of the current Government.[1]

A key development during the reporting period was the release, in May 2007, of the Industry Statement *Global Integration: Changing Markets, New Opportunities*, with funding of more than $1.4 billion over ten years. The statement's measures included assistance to improve firm performance, to increase business research and development (R&D) and its commercialisation, and to increase the level of exports. While most of the funding was for new programs, the statement also extended some existing programs. The measures were to be implemented by the industry, education, primary industry and trade portfolios, and details are provided throughout this chapter.

Together with the measures contained in the Industry Statement, the assistance developments reported here relate to:

- R&D and its commercialisation;
- development and application of new technologies;
- export marketing and international business integration;
- specific industries, including energy, tourism, automotive and film;
- regional adjustment;
- small business; and
- anti-dumping activity.

[1] Changes to the policies and initiatives reported here made since the election, together with new initiatives, will be reported in the 2007-08 edition of *Trade & Assistance Review*.

3.1 Research and development and its commercialisation

Australian Government support for business R&D and its commercialisation accounted for around one third of total budgetary assistance to industry in 2006-07 (chapter 2). The R&D Tax Concession is a major element of this support.

In its May 2007 Industry Statement, the (then) Australian Government announced a number of measures aimed at increasing business R&D and its commercialisation.

Several reports with ramifications for future assistance in this area have also been released recently. These include the Productivity Commission's study on *Science and Innovation*, an Australian Government evaluation of 'new elements' of the R&D tax concession, and an Australian National Audit Office (ANAO) audit of the Pharmaceutical Partnerships Program.

The details of these developments are set out below.

R&D Tax Concession

The R&D Tax Concession was introduced in 1985, providing a 150 per cent concession on eligible expenditure incurred on R&D activities. In 1996, the rate was reduced to 125 per cent. In 2001, two new elements were introduced:

- an R&D Tax Offset, which gives small firms, in tax loss, the option of receiving an early cash payment based on their eligible R&D expenditure (rather than a future entitlement to a deduction). The offset is available to companies with an annual group turnover of up to $5 million, and an R&D expenditure threshold of less than $1 million; and
- a 175 per cent Premium R&D Tax Concession for labour-related expenditure above the average of a firm's previous three-year expenditure.

The 125 per cent concession provides assistance at the rate of 7.5 cents per dollar of eligible R&D expenditure, whereas the 175 per cent concession equates to an assistance rate of 22.5 cents per dollar spent (based on Australia's 30 per cent corporate tax rate). In 2006-07, the combined budgetary assistance of the 125 per cent and 175 per cent concession was $570 million, and assistance through the tax offset was $245 million[2] (Treasury 2008, ATO 2007). As at 30 June 2007, over 6000 firms were registered for the tax concession (Innovation Australia 2007).

[2] Offset payments include the tax value of the normal 30 cents in the dollar deduction for business expenses as well as the additional assistance provided by the R&D tax concession.

As part of its 2007 study into *Public Support for Science and Innovation* (box 3.1), the Commission found public support for business R&D may be justified where the R&D activity has high social benefits beyond the firm (spillovers) and is additional to the level of such activity that would have occurred without public support. However, it also found that current business programs were likely to generate smaller net returns than publicly conducted research.

The Commission proposed a set of changes to the tax concession that could induce more R&D and generate more spillovers:

- allowing only small firms access to the 125 per cent concession;
- changing the thresholds for the tax offset to address perverse incentives;
- changing the base for the 175 per cent concession, to a firm's ratio of R&D-to-sales at a given, fixed date[3]; and
- adopting a narrower, more appropriate, definition of R&D (PC 2007b).

The Commission also noted that the 'beneficial ownership requirement' for the tax concession effectively prevented subsidiaries of foreign-owned companies from accessing the concession, and proposed relaxation of the requirement, although only for the 175 per cent concession (PC 2007b).

At the time, there was no formal Government response to the Commission's report. However, in the May 2007 Industry Statement the (then) Australian Government announced that it would make the recommended change to the beneficial ownership provisions, to extend access to the 175 per cent tax concession to Australian subsidiaries of multinational enterprises that do their R&D in Australia but hold the intellectual property overseas (Australian Government 2007b). This measure is expected to cost, in terms of tax revenue foregone, in the order of $50 million in 2007-08 and subsequent years (Australian Government 2007a). Legislation to implement this change was passed in September 2007.

[3] In 2007, the (then) Department of Industry, Tourism and Resources (DITR) released a report *High variation in R&D expenditure by Australian firms*, which found that 75 per cent of Australian firms examined had moderate to highly variable patterns of year-to-year R&D expenditure and 92 per cent had moderate to highly variable R&D intensity. The report assessed this as limiting the incentive effect of a concession based on increases in R&D expenditure in 12 month intervals (DITR 2007). The Commission took these considerations into account in its report, but noted that: "it is simply not possible to design a program that will treat all firms consistently at all times and in all circumstances. The aim is to improve on the current arrangement — one where robust evidence exists questioning its effectiveness" (PC 2007b, p. 409).

Box 3.1 **The Commission's *Science and Innovation* Study**

In March 2006, the Government asked the Productivity Commission to undertake a research study on *Public Support for Science and Innovation*, including evaluation of the decision-making principles and program design elements that influence the effectiveness and efficiency of Australia's innovation system and that guide the allocation of funding. The Commission's final report was released in March 2007.

Public support of science and innovation includes direct assistance to firms (such as the R&D tax concession); some public sector activity (such as CSIRO) and multi-sector support (such as for the cooperative research centres and the rural R&D corporations).

Overall, on the basis of the available evidence, the Commission concluded that the level of public support for science and innovation is not notably inadequate or excessive, and that the benefits of Australia's $6 billion funding of science and innovation are likely to exceed the costs. However, it also found scope for significant improvements in net benefits, and in program evaluation and governance.

Underlying these assessments, the Commission concluded that there are two strong rationales for public funding of science and innovation: to provide research relevant to government's own activities, and to ensure that research is undertaken where the benefits (*spillovers*) cannot be fully captured by the innovator — where ideas can be used, mimicked or adapted cheaply by others without payment.

The Commission emphasised, however, that many R&D investments that produce spillovers still provide a sufficient private return for business to invest without assistance. Public support is justified for investments that are *additional* (that is, investments that would not have taken place without public support), and where private and spillover returns exceed the total economic costs of the measure.

Considering these two principles — spillovers and additionality — the Commission concluded that existing assistance for business R&D was likely to have generated smaller net returns to Australia than publicly conducted R&D (such as by CSIRO), reflecting lower additionality and likely lower spillovers, and the disproportionate assistance to a few relatively declining sectors, such as the automotive industry.

While the Commission recognised that it is difficult to design policies that completely avoid subsidising some activities that would take place anyway, it proposed changes to the tax concession to increase spillovers and the amount of additional R&D.

The Commission also concluded that strong public support of rural R&D corporations with a public good orientation is justified, but that the level of subsidies for some narrower, industry-focused arrangements was likely to crowd out private activity and produce weaker external benefits outside the supported rural industry.

More generally, the Commission found shortcomings in existing program evaluation and governance including, at times, a lack of transparent and independent evaluation, and of rigorous methods to determine program effects.

Source: PC (2007b).

In July 2007, the Government released a report — *New Elements of the R&D Tax Concession: Evaluation Report* — which examined the 175 per cent tax concession and the tax offset. For the 175 per cent concession, the evaluation found that it was associated with additional R&D expenditure of $379 million a year, but that it was not possible at that stage to determine whether growth in R&D would be sustained, given the possibility that at least some of this growth represented planned R&D brought forward to take advantage of the new element.[4] For the offset, the evaluation found that it had resulted in about 1000 additional firms using the concession and was associated with an additional $310 million R&D expenditure a year, a doubling of the levels of R&D by eligible small firms. However, the additional R&D may not all be new to the economy — part of the additional R&D expenditure claimed under the concession may instead reflect the stronger incentive to register. The evaluation also found that the offset's $1 million cap on R&D expenditure was affecting the incentive provided by the offset to expand expenditure beyond this level (Australian Government 2007c).

Commercial Ready Program

In its 2007-08 Budget, the (then) Australian Government announced ongoing funding (of around $200 million per year) for the Commercial Ready Program (Macfarlane 2007d). This competitive grants program for small and medium-sized enterprises (SMEs) supports a wide range of project activities, extending from initial R&D, through proof-of-concept, to early-stage commercialisation activities. Under the program, grants of up to 50 per cent of project costs, and in value from $250 000 to $5 million, are available for projects of up to three years duration (AusIndustry 2007).

In its *Science and Innovation* study, the Commission noted that the program's objectives specify a national benefit test 'that is clearly and appropriately related to the spillover rationale' (PC 2007b, p. 91). However, the Commission found evidence of low inducement by the program, and uncertain spillovers, noting:

> There is robust evidence that the Commercial Ready program supports too many projects that would have proceeded without public support, and that the national benefits from the program are, at best, uncertain. This is unsatisfactory given the quantum of funding involved. (PC 2007b, pp. 371, 420)

While recognising the inherent trade-offs involved in administrative simplicity and program effectiveness, the Commission suggested that consideration be given to

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[4] Data published on the 175 per cent tax concession for the two years following the end of the evaluation period indicate continued growth in both business R&D and use of the 175 per cent concession (Innovation Australia 2007).

new funding arrangements for the program, to address the risk of firms applying for support they do not need to proceed with projects:

> The introduction of a repayment mechanism in the Commercial Ready program offers scope to improve the inducement rate associated with the program. (PC 2007b, p. 424).

Since then, in its Industry Statement, the Government announced the Commercial Ready Plus Program as a new element for the Commercial Ready Program. This measure aims to assist emerging companies and spin-offs from public research organisations with grants from $50 000 to $250 000 for up to 50 per cent of the cost of projects of up to 18 months duration involving R&D, proof-of-concept and early stage commercialisation (AusIndustry 2007; Australian Government 2007b).

Applicants for Commercial Ready Plus will not need to be an incorporated company until the stage of signing the grant contract, facilitating access for micro-businesses and commercial spin-offs from public research. Commercial Ready Plus is intended to provide greater flexibility in allowing investment in entrepreneurial skills training as eligible expenses. The application process has also been simplified to reduce the costs involved and provide faster access to funding (Macfarlane 2007h). The funding allocation for 2007-08 is $4.4 million (Australian Government 2007a).

Intermediary Access Program

As part of the May 2007 Industry Statement, a new five-year Intermediary Access Program was announced. The program aims to assist around 150 SMEs a year wanting to access new technologies and partnerships, through use of intermediaries to connect them with relevant researchers, other SMEs and large companies. Grants of up to 50 per cent of eligible costs are available up to a limit of $50 000. The funding allocation for 2007-08 is $1.1 million (Ausindustry 2007, Australian Government 2007a, 2007b).

The Government had previously provided assistance to firms for the transfer of technology through a $4 million intermediary access pilot program. The pilot program started on 31 December 2006 and will conclude on 30 June 2008 (AusIndustry 2007).

Australian Industry Productivity Centres

A further Industry Statement measure, the Australian Industry Productivity Centres, also addressed the application of new technologies. Announced as a 10-year program, this measure was aimed at assisting trade-exposed manufacturing and service firms to review their business performance and upgrade their skills or find solutions to technical or process issues, through provision of a free initial diagnostic service and, if recommended, eligibility to a grant, of up to 50 per cent of approved costs up to the value of $20 000, to undertake improvements or introduce new technologies and processes (Australian Government 2007b).

The total funding allocation for this measure in 2007-08 is $27.1 million (Australian Government 2007a).

Pharmaceutical Partnerships Program

The Pharmaceutical Partnerships Program commenced in 2004, following design changes to the forerunner program (the Pharmaceutical Industry Investment Program). The new program provides for $150 million over 5 years and aims to induce high-quality pharmaceuticals R&D in Australia and associated partnerships, and collaborations with multinational firms and local companies. Under the program, for each dollar spent on ‘additional’ eligible R&D activity, eligible companies receive 30 cents in Rounds 1 and 2 of the program, and 50 cents in Round 3.

A management audit of the program recommended improvements to compliance monitoring and risk management, which was agreed to by the (then) Department of Industry, Tourism and Resources (DITR). The audit also noted that current program reporting only covers expenditure, and that industry-wide data for future program evaluation does not address the quality of the R&D activity being undertaken (ANAO 2007a).

3.2 Development and application of new technologies

The Australian Government has provided various forms of assistance for the development of platform technologies like nanotechnology and biotechnology. According to DITR:

> Specific programs have been developed to promote each of these platform technologies [biotechnology, nanotechnology and ICT]. They are designed to overcome information failures impeding the uptake of these new technologies, establish a critical mass in R&D and commercialisation and attract leading edge researchers and companies to Australia. (DITR 2006, p. 54)

Nanotechnology

Nanotechnology is a group of emerging technologies in which the structure of matter is controlled at the nanometer scale — the scale of small numbers of atoms — to produce novel materials and devices with unique properties (Australian Nano Business Forum nd). In 2007, there were sixty-five nanotechnology companies and around ninety individual research groups, faculties, facilities and centres from research institutes across Australia (AzoNano.com 2007).

Previous Government assistance for the development of nanotechnology capability in Australia includes support for the CSIRO, which has undertaken over 70 nanotechnology-related projects, support for Australia's nanotechnology companies through Australian Government innovation programs, and support for research through the Australian Research Council and universities (DIISR pers. comm., 21 February 2008, Australian Government 2007b).

In the May 2007 Industry Statement, the (then) Australian Government announced several measures to further assist the development of nanotechnology capability and emerging industries using this technology:

- funding over four years for the National Nanotechnology Strategy, to address issues such as regulations and standards, with initial funding in 2007-08 of $3.7 million (Australian Government 2007a, 2007b);
- funding of $36.2 million for a new National Research Flagship for Niche Manufacturing within the CSIRO, which aims to 'help drive a new wave of niche industries based on nanotechnology' and 'assist existing niche high-value manufacturing industries which are currently flourishing' (Australian Government 2007b).

Biotechnology

As at the end of 2006, there were 427 biotechnology companies operating in Australia — with almost half in the human therapeutics field, 16 per cent in agriculture and 13 per cent in medical diagnostics (DIISR 2007a). Past Australian Government support for biotechnology includes: the $40 million Biotechnology Innovation Fund (BIF), a competitive grants program providing grants of up to $250 000 to firms; further assistance through its successor, the Commercial Ready Program, which provides grants across all sectors; and part-funding of the Biotechnology Centre of Excellence (DITR 2006).

In 2006-07, the (then) Australian Government called for applications for a one-off grant of $10 million to support the establishment of a small-scale mammalian cell production facility in Australia (Macfarlane 2007a). According to the Minister, 'biotech research and development worth around $35 million a year is undertaken in other countries … because there is no mammalian cell production facility here in Australia … The facility will help attract this R&D back to Australia and build upon our world-class medical research base.' (Macfarlane 2007a).

3.3 Export marketing and international business integration

The Australian Government has, over a number of decades, provided a range of support for Australian businesses exporting or attempting to secure export markets. This includes grants to firms under the Export Market Development Grants (EMDG) scheme, insurance and finance services through the Export Finance and Insurance Corporation (EFIC), and funding for Austrade.

Two additional measures in the May 2007 Industry Statement aim to support Australian SMEs in accessing international supply chains, and in accessing export opportunities arising from the Australia-US Free Trade Agreement.

Export Market Development Grants scheme

The EMDG scheme is the Australian Government's principal financial assistance program for Australian exporters. Established in 1974, the scheme focuses on SMEs and provides taxable grants to reimburse up to 50 per cent of designated export promotion expenses. Its purpose is '… [to provide] financial assistance primarily to small and medium enterprises as an incentive for them to seek out and develop export markets' (Parliamentary Library 1999b).

In 1997, the Government capped funding for the EMDG scheme at $150 million a year until 2005-06 (Parliamentary Library 2006). In the 2004-05 budget, the Government announced an additional $30 million for the scheme, to be provided for 2005-06 and 2006-07. Grants to the value of $146.6 million were provided under the scheme in 2006-07 (Austrade 2007).

The number of grant recipients has traditionally represented a relatively small proportion of Australian exporters. EMDG grants were provided to around 3800 eligible companies in 2006-07. In 2006-07, less than one-third of grant recipients were first-time recipients (Austrade 2007).

As reported in *Trade & Assistance Review 2004-05*, Austrade conducted a review of the scheme in 2004-05 (PC 2006c). While an examination of the scheme's effects, undertaken by independent consultants as part of the review, found that its net benefits were uncertain, Austrade noted that the scheme had several positive effects on exporting and recommended its continuation (box 3.2).

In January 2006, the (then) Australian Government announced that the scheme would continue until the end of 2010-11 (Vaile 2006). Legislation to continue the scheme was passed in June 2006 (Austrade 2006).

Box 3.2 **The Austrade review of the EMDG scheme**

As part of Austrade's 2004-05 review of the EMDG scheme, the Centre for International Economics (CIE) was commissioned to examine the scheme's effects on export activity and also its economy-wide effects.

Based on a survey of recipient firms together with economic modelling, the CIE (2005a) found uncertain results. While 63 per cent of the grant recipients surveyed considered that the scheme had either 'no' or a 'small' influence on their export marketing, 37 per cent of recipients indicated that the scheme was a 'major' influence. The CIE found that the EMDG scheme could induce considerable additional export marketing and exports by recipient firms, particularly when they are 'capital-constrained' and the returns from their exports are increasing. However, the CIE study also indicated that the scheme would displace non-EMDG exports, may not generate significant spillover benefits and that it is difficult to be categorical about the net benefits of the scheme.

In its report on the review, Austrade stated that:

> … the scheme is effective in increasing the number of SMEs that develop into new exporters, in increasing the number of SMEs that achieve sustainability in export markets, in generating additional exports, and in further developing an export culture in Australia. In arriving at this conclusion, Austrade took into account:
>
> – strong business and industry views, expressed in public submissions and through the review facilitation process
>
> – the independent survey of recent EMDG scheme recipients and analysis of the results
>
> – Austrade's own experience as the administrator of the scheme. (Austrade 2005, p. 9)

Austrade recommended that the scheme be continued, with some changes to the details of the scheme.

Export Finance and Insurance Corporation

The Export Finance and Insurance Corporation (EFIC) aims to assist Australian exporters by providing internationally competitive insurance and finance services in areas the commercial sector is unable or unwilling to cover due to risk or other factors (Parliamentary Library 1999a).

In its May 2007 Industry Statement, and following a review of EFIC's operations, the (then) Australian Government announced that it would grant EFIC additional powers to provide financial services to help Australian SME exporters to establish global supply and distribution chains (Australian Government 2007b, EFIC 2007).

International business measures

In the May 2007 Industry Statement, the (then) Australian Government announced the Global Opportunities Program to assist Australian industry to link into global supply chains and bid for work on major international projects worth over $500 million. As announced, the measure aimed to identify major off-shore opportunities and projects and to assist firms to realise these including by: facilitating the establishment of consortia, addressing impediments faced by Australian small and medium sized firms, and supporting the development of databases and directories of Australian capabilities and global opportunities. The program also aimed to encourage multinational enterprises already in Australia to make further investments, as well as partnering with Australian small and medium sized firms and research institutions. The total funding allocation for 2007-08 is $17.7 million (Australian Government 2007a, 2007b).

In the Industry Statement, the Government also announced funding of $11.1 million over two years to extend the appointment of 30 export facilitators — 23 located across the United States and seven based in Australia — to pursue export opportunities arising from the Australia–US Free Trade Agreement (Australian Government 2007a, 2007b, Austrade pers. comm., 6 March 2008).

3.4 Energy-related assistance

The Australian Government *Energy White Paper — Securing Australia's Energy Future* (Australian Government 2004), released in June 2004, has set the framework for energy-related industry assistance in recent years. The paper's focus included energy market reform and improved energy efficiency, ensuring the security of energy supply, and reducing greenhouse gas emissions through the development of new technologies (DITR 2005). The White Paper also foreshadowed new funding measures for the commercialisation of energy technologies, including greenhouse gas abatement measures (PC 2007d). These measures cover industries specialising in the production of existing energy resources (such as oil, gas and coal) as well as renewable energy sources (for example, solar and wind power).

As outlined in previous editions of *Trade & Assistance Review*, Government measures to implement the White Paper have provided assistance to petroleum exploration, ethanol production, the liquefied petroleum gas (LPG) industry and the recycling of oil. More recent measures are documented below.

Coal

Greenhouse gas abatement measures are particularly relevant to the coal industry. In its 2007-08 Budget, the (then) Australian Government announced two related measures:

- a new five-year program to reduce the emission of waste methane from underground coal mining activities, with funding of $18.5 million (partly drawn from the Greenhouse Gas Abatement program) (Turnbull 2007c); and
- the establishment over four years of a new regulatory system for carbon capture and storage, with funding of $18.2 million, to establish the methods for selecting storage sites and then regulating and monitoring the storage activity (covering the assessment and approval of proposed activities, risks and site analysis and the monitoring required for long-term storage and data analysis) (Australian Government 2007a, Macfarlane 2007f).

Alternative fuels

Government assistance for the development of alternative fuels has been driven by a range of concerns including regional development, environmental and health benefits, and reduced reliance on imported fossil fuels (Biofuels Taskforce 2005). Assistance has been provided in relation to various fuels including biofuels (in particular ethanol) and LPG, and has included support for production and distribution, and assistance for R&D.

As noted in the previous edition of *Trade & Assistance Review*, in 2001, the (then) Australian Government set an objective that ethanol and other biofuels would contribute at least 350 million litres to the total fuel supply by 2010.

In 2005, the Biofuels Taskforce reported that the estimated cost to the economy of meeting that objective, driven by the biofuels excise advantage[5], is around $90 million in 2009-10 reducing to $72 million a year (2004-05 dollars) after 2015 (Biofuels Taskforce 2005). The taskforce also found that subsidised grain ethanol plants have the potential to raise feed grain prices in the short and medium term.

[5] This excise advantage is provided by the Ethanol Production Grants, a production subsidy for ethanol produced domestically that exactly offsets the 38.143 cents per litre excise on ethanol, and the Cleaner Fuels Grants Scheme, under which grants are provided to offset the excise duty and excise-equivalent customs duty payable on certain renewable fuels (currently biodiesel and renewable diesel) (Australian Government 2007a).

The effects of such policies in Australia and overseas on world feed grain prices are already becoming apparent. The Productivity Commission's December 2007 accelerated report on safeguards measures for the pigmeat industry (see chapter 4) described recent increases in feed grain prices as 'extraordinary', and found that:

> Major factors behind recent price increases are bad weather (particularly the drought in Australia) and growing worldwide demand (and government support) for ethanol, and strong economic growth in China and India. (PC 2007c, p. 44)

In relation to LPG, in August 2006 the Government announced funding to support the conversion of private motor vehicles to use LPG through the LPG Vehicle Scheme. The scheme provides a grant of $2000 for an approved and fitted LPG conversion of a new or used motor vehicle, and $1000 for a factory-fitted LPG-dedicated vehicle. By September 2007, more than 81 000 motorists had received a grant under the scheme, claiming more than $162 million (DIISR pers. comm., 25 February 2008).

Renewable Energy

The White Paper's programs to develop renewable energy have been reported in previous editions of *Trade & Assistance Review*, and include:

- the $500 million Low Emissions Technology Development Fund, covering renewable energy projects, technologies to reduce the demand for energy, and 'carbon capture' technologies (PC 2007d). The fund is designed to address the technical risk and capital costs of demonstrating low emissions technologies to ensure they are commercially viable in the longer term (DCC 2007b);
- the $75 million Solar Cities Program, which among other things involves trials of solar energy applications in urban Australia by subsidising specific solar and energy efficiency technologies and their installation into residential and commercial buildings. These trials are intended to showcase the market viability of solar energy and energy efficiency technologies and their economic and environmental benefits, including the use of smart meters and energy pricing trials to reduce energy consumption and change consumer behaviour (DEWHA 2008);
- the $100 million Renewable Energy Development Initiative; and
- a $20.4 million program over five years to fund the development of Advanced Electricity Storage Technologies, to increase the contribution of renewable energy-based electricity generation to Australia's electricity supply system.

The (then) Australian Government also funded the Renewable Remote Power Generation Program (RRPGP), and the Photovoltaic Rebate Program (PVRP).

Further measures relating to these two programs were announced during the reporting period.

The RRPGP commenced in 2000-01 and provides financial support to increase the use of renewable generation, such as solar and wind power, in remote parts of Australia that presently rely on fossil fuel for electricity supply (Environment Australia 2000).

In August 2006, the (then) Prime Minister announced that the RRPGP would be extended from July 2007, with an additional $123.5 million over four years (Howard 2006b). Taken together with previous program funding, this would amount to around $328 million in assistance under this program (DCC 2007c).

In its 2007-08 Budget, the Government announced that the PVRP would be extended and expanded over 5 years, with additional funding of $150 million:

- the additional funding would support a doubling of the rebate for solar panels on homes; a new competitive grants scheme for schools and communities to install solar panels; a targeted scheme to support the design and installation of solar systems on commercial, industrial and iconic buildings; and training and accreditation of solar panel installers to meet the skills needs of the expanded program (Turnbull 2007a);
- this would bring the Government's total funding of photovoltaic rebates to $201.8 million (DCC 2007a).

In its 2007-08 Budget, the Government also announced an additional $12.7 million over six years for a range of energy market initiatives, including for the development of:

- a Geothermal Industry Development Framework, to identify the industry's R&D needs and deal with issues such as skills development, legislation, regulation and improving knowledge about geothermal resources (Macfarlane 2007i); and
- a technology roadmap relating to the development of hydrogen technologies (Macfarlane 2007e).

Other climate change measures announced in the 2007-08 Budget, which would directly or indirectly assist the alternative fuels and renewable energy industries, include $59.6 million over four years to accelerate the production of greenhouse friendly transport fuels, $52.8 million over five years to encourage greenhouse action by individual households and small businesses, and $7.9 million over five years to phase out energy-inefficient light bulbs (Turnbull 2007b).

In May 2007, the Government also announced initial funding under the Advanced Electricity Storage Technologies program of five projects, to the value of $17.6 million (Macfarlane 2007b).

In July 2007, the Government announced funding of $225 million over 5 years for the Solar Hot Water Rebate Program. The program will provide a $1000 rebate per household upgrading to a solar hot water system, with the aim of accelerating the domestic uptake of solar technologies and reducing household energy costs (Howard 2007d).

In addition to these budgetary assistance measures, in September 2007 the Government announced a new national Clean Energy Target (CET). The CET would require that 30 000 gigawatt hours each year come from low emissions sources by 2020, and would come into effect from 2010, replacing existing and proposed state and territory schemes. In announcing the target, the Prime Minister noted that 'The CET will drive additional investment in renewable and other low emissions electricity generation' (Howard 2007b).[6]

3.5 Assistance to tourism

Governments throughout Australia have traditionally provided significant support for tourist activities in the form of expenditures on tourism promotion, the maintenance of high profile sites, the funding of events that attract tourists and the provision of infrastructure services that benefit travellers more generally (as well as local residents). The 2003-04 and 2004-05 editions of *Trade & Assistance Reviews* have reported on various government initiatives to assist the tourism industry.

In its 2005 study *Assistance to Tourism: Exploratory Estimates* (PC 2005a), the Commission found that the bulk of assistance to tourism is provided by State and Territory Governments. It estimated that the assistance to tourism provided by these governments was around $780 million per year, for the three years to 2002-03

[6] In a further announcement, the (then) Prime Minister indicated that the target would complement his Government's proposed national emissions trading scheme, to commence in 2011 (Howard 2007c). The new Government has since announced a 2020 mandatory renewable energy target of 45 000 gigawatt hours (up from the current target for 2010 of 9500 gigawatt hours), with the expanded measure to be phased out between 2020 and 2030 as its proposed emissions trading scheme matures and itself drives the deployment of renewable generation technologies (DCC 2008).

covered by the study. This 'base line' estimate[7] was equivalent to some 7.5 per cent of the industry's 'gross value added' (as measured by the Commission[8]).

Alongside this assistance, the Australian Government appears to be providing increasingly substantial assistance to tourism. The Commission's base line estimates of net Australian Government assistance to tourism amounted to an average of about $145 million per year, equivalent to 1.4 per cent of the tourism industry's gross value added, for the three years from 2000-01. Moreover, in April 2007, the (then) Australian Government assessed that it had increased its funding for tourism by almost 60 per cent between 2000-01 and 2005-06 (Bailey 2007a).

In *Trade & Assistance Review 2004-05*, the Commission reported on (among other things) the development of the National Tourism Investment Strategy, and the Australian Government's interim response in March 2006 to a number of its recommendations (PC 2006c).

In January 2007, the Government gave its final response, indicating that it had accepted 34 of the 44 recommendations. In the response, the Minister identified a number of Government initiatives addressing these recommendations:

> Australian Government initiatives … include efforts to enhance natural experiences in national parks, the *Skills for the Future* initiative, extending the working holiday visa scheme, research into innovation, [and] making tourism statistics available online … (Bailey 2007d).

In its 2007-08 Budget, the Government announced that, over the next four years, it would invest a further $193.3 million in tourism, including:

- $34.9 million to extend and enhance the Australian Tourism Development Program, which offers grants of 50 per cent of the cost of projects that focus on providing or enhancing tourism projects and/or services, and grants for large-

[7] While the estimates were based on the Commission's normal assistance measurement methodology, the unusual nature of the tourism industry and the assistance it receives, in conjunction with data limitations, made measuring assistance to tourism more problematic than estimating assistance to conventional industries. Reflecting the difficulties entailed, the Commission presented both 'base line' and 'upper bound' estimates of tourism assistance, and cautioned that the estimates, particularly the State and Territory Government estimates, should be treated as 'exploratory' (see PC 2005a).

[8] In the study, the Commission estimated that the tourism industry accounted for between 1.6 and 2.2 per cent of GDP for the three years to 2002-03. The Commission's upper bound estimate is around half of the estimate contained in ABS Tourism Satellite Account (TSA) for those years (ABS 2004). The higher estimate in the TSA reflects the very broad definition of tourism used in most official tourism statistics (which includes the activities of people travelling for a variety of purposes, including for ordinary business travel, for family get-togethers and for personal appointments; not just for tourism), and the inclusion of value added from upstream industries, such as manufacturing, as tourism output (PC 2005a).

scale, multi-faceted, cross-regional activities towards strategies for tourism market development. The total funding allocation in 2007-08 is $5 million (Australian Government 2007a);

- ongoing funding of $46.4 million from 2008-09 for Tourism Australia; and
- $15 million to complete a new sunrise viewing area for Uluru-Kata Tjuta National Park (Bailey 2007c).

3.6 Automotive assistance

Although assistance to both motor vehicle producers and component suppliers has declined significantly since the mid-1980s, the automotive industry remains one of the most highly assisted manufacturing industries. This assistance derives largely from long-standing tariffs and tariff concession schemes, particularly the Automotive Competitiveness and Investment Scheme (ACIS). Assistance to automotive producers is also available from other sources, including government procurement programs and the luxury car tax that applies mainly to imported vehicles.

Tariffs and ACIS assistance

Automotive tariffs are currently at 10 per cent. Under legislated tariff reforms, automotive tariffs are scheduled to be reduced to 5 per cent in 2010 and remain at that level until 2015.

The ACIS Program commenced in 2001 to provide transitional assistance and encourage competition and innovation in the automotive industry during the move to a lower tariff environment (AusIndustry 2007, PC 2007b). Automotive producers are eligible for ACIS transferable duty credits based on their domestic production, investment and R&D activities, which can be used to reduce the customs duty payable on eligible imports (PC 2007b). In July 2007, the Government projected that, by 2015, ACIS will have provided $7.3 billion of assistance to the industry (Macfarlane 2007g).

During 2007, aspects of the ACIS program were examined in two separate studies.

First, as part of its *Public Support for Science and Innovation* study, the Commission examined the rationale and impact of the ACIS Program. It considered that the amount of R&D induced by the program was likely to be low:

> … the type of automotive ‘R&D’ activity that has been supported by public funding — modification of existing products, processes and production systems — is likely to have been undertaken without public support as the majority of benefits from this kind of

> development work are captured by either individual automotive firms or the wider automotive industry. (PC 2007b, pp. 439-440)

However, the study noted the complications in attempting to separate the impacts of the R&D subsidy from other elements of the ACIS package (such as the significant production subsidy provided to the vehicle producers) and the more competitive business environment as tariff protection has declined. This made it difficult to draw definitive conclusions about the extent of inducement.

Second, the administration of ACIS was subject to audit by the ANAO**.** While the ANAO found that its administration was generally effective, the report noted several areas for improvement. In particular, it noted that:

> … only limited information has been reported publicly for the benefit of external stakeholders, including the Parliament … the absence of performance information has limited the transparency of ACIS, which is the Government's key assistance measure for the automotive industry. (ANAO 2008, p. 20)

A related recommendation to address this has been accepted by DIISR.

Other assistance

In addition to formal tariff and ACIS assistance arrangements, ad hoc assistance has been provided to automotive producers. This assistance often involves project or firm-specific support by both the Australian and the relevant state governments. For example, as reported in last year's *Trade & Assistance Review*, the (then) Australian Government announced in October 2006 that it would provide $6.7 million over four years to General Motors Holden (with matching funding from each of the South Australian and Victorian Governments) (PC 2007d). This funding is for R&D and training for re-engineering on selected models, towards the introduction of improvements in safety and fuel management and reduced greenhouse gas emissions on Commodore vehicles. More recently, in addressing structural adjustment in the sector, in July 2007, the Government also announced a $15 million contribution to the Geelong Investment and Innovation Fund (see section 3.8).

3.7 Support for film and television production

In May 2007, the (then) Australian Government announced the Australian Screen Media Support Package, with funding of $282.9 million over the next four years, to assist both domestic and offshore television and film production. Part of the package includes the Australian Screen Production Incentive. Eligible productions under the scheme include feature films, documentaries, television series, telemovies and short form animation. The main elements of the package include:

- a producer offset to encourage Australian film and television productions;
- a location offset to attract large budget productions from offshore; and
- an offset for post, digital and visual effects production (PDV) done in Australia as part of large-budget productions, regardless of where the filming occurs.

All elements of the package take the form of a refundable tax offset where a portion of qualifying Australian production expenditure (QAPE) is refunded or offset against other tax payable.

For example, under the producer offset, companies producing feature films are entitled to a 40 per cent refund of expenditure, first offset against other tax payable, where a minimum of $1 million has been spent on the production. To qualify for assistance, feature films must have a genuine Australian cinema release, while documentaries, series, telemovies and short form animation may be for exhibition for media other than for cinema release, such as television. To be eligible for the producer offset, projects must first meet a test of significant Australian content or be an official co-production with another country. The producer offset replaces the Division 10BA and 10B schemes.

The location and PDV offsets are both designed to attract offshore film and television productions to locate to Australia. The two measures offer a refund of expenditure made in Australia.

- Under the location offset, eligible productions that spend at least $15 million in QAPE can receive either a 15 per cent refund of the QAPE, first offset against other tax payable. The location offset replaces the Refundable Film Tax offset scheme.
- For the PDV offset, a similar 15 per cent offset is available for PDV projects that spend at least $5 million in qualifying PDV production expenditure in Australia, regardless of whether the production is shot in Australia or not. Examples of eligible PDV activity include visual effects, audio and visual editing and mixing, and orchestration.

As part of the package, the Government also announced that a new Australian Screen Authority (to be known as Screen Australia) would be established on 1 July 2008 to replace the Australian Film Commission, Film Finance Corporation Australia and Film Australia Ltd (Australian Government 2007a, Coonan and Brandis 2007).

3.8 Regional adjustment assistance

Regional adjustment funds

During 2006-07, the (then) Australian Government and, in some cases, State Governments provided assistance to particular regions adversely affected by adjustment pressures:

- *Innovation and Investment Fund for South Australia.* In September 2006, the Prime Minister announced the establishment of the Innovation and Investment Fund for South Australia. This followed a decision by Electrolux to close some of its manufacturing operations in Adelaide (Howard 2006a). The fund consists of contributions of $25 million from the Australian Government and $5 million from the South Australian Government. Funding is available on a competitive-grants basis, for up to 50 per cent of the projected eligible capital costs for projects that support new investment that would not otherwise proceed and that will create additional sustainable jobs and contribute towards the diversification of the South Australian economy (Invest Australia 2007b).
- *Scottsdale Industry and Community Development Fund.* The fund, announced on 13 April 2007, has an allocation of $6 million over two years to support, on a competitive grants basis, a range of development initiatives in Tasmania's Dorset region that aim to create or retain long-term employment opportunities. Grants will cover up to 100 per cent of approved project costs (Australian Government 2007a, AusIndustry 2007).
- *Geelong Investment and Innovation Fund.* In July 2007, in response to Ford's decision to close its Geelong engine assembly plant in 2010, the Australian Government announced the joint Geelong Investment and Innovation Fund, with contributions of $15 million from the Australian Government, $6 million from the Victorian Government and $3 million from Ford Australia (Macfarlane 2007c). The fund's focus is on sustainable job creation in the Geelong region, and the subsidy rate and project evaluation criteria are similar to those for the South Australian Fund (Invest Australia 2007a).

Regional Partnerships Program

In February 2006, the ANAO commenced an audit of another major regional assistance program — the Regional Partnerships Program. The audit covered the three years to 30 June 2006 (ANAO 2007b).

The Regional Partnerships Program commenced on 1 July 2003 and is administered by the Australian Government Department of Infrastructure, Transport, Regional

Development and Local Government. Total expenditure between 2003-04 and 2006-07 was $327.9 million. The program allocation from 2006-07 to 2009-10 is $270.6 million (Vaile, Lloyd and Kelly 2007).

Under the program, projects are eligible for funding if they contribute to the objectives of strengthening growth and opportunities, improving access to services, supporting planning, and assisting structural adjustments for communities affected by major economic, social or environmental change. The range of projects funded includes community services (activities and facilities supported by non-profit organisations); regional tourism (business and skills planning and development); civic and community infrastructure works; commercialisation of new and emerging technologies; the initiation of new businesses or growth of existing businesses; and 'industry assistance' measures. Applicants and their other project partners (if any) are expected to make a financial contribution to the cost of the project.

An ANAO performance audit of the program was recommended in 2005 by the Senate Finance and Public Administration Committee, following its inquiry into several regional programs including the Regional Partnerships Program (Senate Finance and Public Administration Committee 2005).

The ANAO's report, released in November 2007, highlighted two dimensions of the administration of the Regional Partnerships Program:

- the flexibility in the application assessment and Ministerial approval processes creates challenges in ensuring transparent, accountable and cost-effective administration and in demonstrating the equitable treatment of applicants; and
- the manner in which the program had been administered over the three year period to 30 June 2006 examined by the ANAO had fallen short of an acceptable standard of public administration, particularly in respect to the assessment of grant applications and the management of funding agreements. (ANAO 2007b, pp. 19-20)

Specifically, the audit report noted inadequacies relating to:

- the Department's departures from the published guidance;
- Departmental assessments of applications against the published eligibility and assessment criteria;
- the application of Ministerial discretion and the distribution of funding;
- the Department's administration of funding agreements with successful applicants; and
- evaluations and departmental performance reporting (ANAO 2007b).

The ANAO noted that, during the course of the audit and in response to the audit findings and the observations of the administration of the program by the (then) Department of Transport and Regional Services, a number of changes to its administration were introduced, or proposed to (and agreed by) the Ministerial Committee responsible for funding decisions. Nevertheless, the ANAO made a number of further specific recommendations, including that the Department of Finance and Administration, as it then was, assess the merits of proposing amendments to the *Financial Management and Accountability Regulations 1997* that would require approvers to document the basis on which they are satisfied that the proposed expenditure represents efficient and effective use of public money, and is in accordance with the relevant policies of the Government.

The ANAO also considered that structured and competitive funding rounds, as opposed to the program's approach of continuous, non-competitive application and assessment processes, may benefit program administration.

3.9 Small business support

In recent years, Australian Government assistance to small business has included tax concessions, measures to reduce the burden of red tape, and specific programs to increase firm productivity. Some of these are outlined in *Trade & Assistance Review 2005-06*. In 2006-07, total support of this kind included in the Commission's budgetary assistance estimates exceeded $1 billion. In addition, certain small businesses have been the target of specific assistance programs such as those aiming to commercialise new technology.

In its May 2007 Industry Statement, the (then) Australian Government announced additional funding of $14.3 million for 2007-08 and 2008-09 to extend the availability of grants under the Building Entrepreneurship in Small Business Program. This program funds third-party service providers to deliver skills development, mentoring, succession planning and advisory services to small businesses (Bailey 2007b).

The Industry Statement also foreshadowed funding of $89.3 million, over ten years, to develop and maintain an online registration system for both Australian business numbers and business names. This initiative's potential benefits include reduced compliance costs and easier trademark searching (Australian Government 2007b). It is expected to be of particular value to small business.

3.10 Anti-dumping and countervailing measures

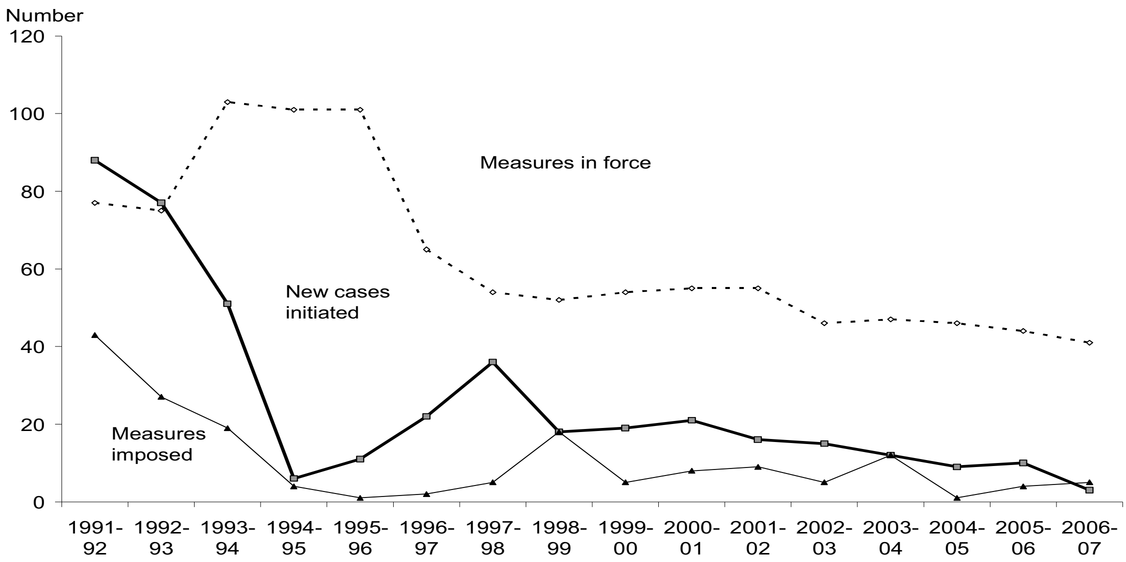
Dumping is said to occur when a foreign supplier exports goods at a price below the 'normal value' of the goods in the supplier's home market. Under Australia's anti-dumping rules, local companies can apply to have anti-dumping and countervailing measures — mainly special customs duties — imposed on 'dumped' imports if the imports cause, or threaten to cause, material injury to the local industry.

Recent activity levels

The number of new anti-dumping and countervailing cases *initiated* in Australia has been relatively low over recent years, compared with the early 1990s (figure 3.1). In 2006-07, three new cases were initiated. Two of these cases were in the chemicals and plastics industry, the other in the food and beverages industry. Over the ten years to 2006-07, the chemicals and plastics industry continued to be the largest initiator of anti-dumping and countervailing actions, accounting for more than one third of total initiations.

Five new measures were *imposed* by the Government in 2006-07, compared to four in the previous year, while nine measures expired. Overall, the number of measures *in force* dropped slightly, to 41 (figure 3.1).

Figure 3.1 **Anti-dumping and countervailing activity,[a] 1991-92 to 2006-07**



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

Source: ACS (2006, 2007), PC (2006d).

More detailed information on the number and nature of recent anti-dumping and countervailing cases in Australia and the level of such activity overseas is presented in appendix B.

Reviewing anti-dumping arrangements

Anti-dumping arrangements are intended to promote 'fair' trade and to guard against predatory pricing behaviour that may work against long-term efficiency in affected industries (PC 2005c). Anti-dumping and countervailing measures provide immediate relief for the protected industries, but, like other trade barriers, can also restrict competition and, through enabling higher prices, penalise consumers and domestic downstream industries. Here, as in competition law, distinguishing between normal competitive pricing behaviour and predatory behaviour is difficult.

Australia's anti-dumping and countervailing regime was scheduled for review by 2000 under the legislation review element of the 1995 National Competition Policy Agreement. However, such a review has not yet taken place.

In its *Review of National Competition Policy Reforms*, the Productivity Commission recommended that an independent review be undertaken as soon as practicable, noting that:

> … the potential for the inappropriate application of anti-dumping arrangements to jeopardise the benefits that wider trade and competition reform have delivered, makes this one of the more important remaining trade policy issues to be addressed. (PC 2005c, p. 261)

Following this, the Australian Customs Service and DITR jointly undertook an 'administrative' review of Australia's anti-dumping regime (the Joint Study), which recommended a number of changes to administrative procedures (PC 2007d).

In November 2006, the (then) Australian Government responded to the Joint Study, noting that it also intended to commission a comprehensive public review of both the policy and administration of Australia's anti-dumping system (Ellison and MacFarlane 2006). This intention had previously been announced by the Government in its response to the *Report of the Taskforce on Reducing Regulatory Burdens on Business*, with the findings of the Joint Study to form part of the input to this review (Australian Government 2006b).

4 Selected developments in assistance for rural industries

This chapter reports on recent developments in assistance to rurally-based industries and activities. The coverage is generally restricted to areas where new assistance measures were introduced or foreshadowed, or where there were policy reviews or changes to existing arrangements, by the (then) Australian Government following the last edition of *Trade & Assistance Review* and prior to the commencement of the caretaker period on 17 October 2007. Following the election of a new Government on 24 November 2007, some of the measures reported here have been or may be changed or at least reviewed. As such, the material in this chapter does not necessarily represent the policies or intentions of the current Government.[1]

The measures covered in the chapter relate to the following areas:

- drought relief;
- the Agriculture — Advancing Australia package;
- industry-specific assistance, including developments in relation to wheat marketing, pigmeat, wool, horses, forestry and food; and
- resource management issues.

While the chapter focuses on arrangements targeted at rurally-based industries and activities (and some closely related industries), it should be noted that many such industries also receive general forms of assistance, such as those discussed in chapter 3. For example, many rural-based businesses can receive assistance via small business programs, regional programs, R&D subsidies and assistance for exporting.

[1] Changes to the policies and initiatives reported here made since the election, together with new initiatives, will be reported in the 2007-08 edition of *Trade & Assistance Review*.

4.1 Drought relief

Drought affects a wide range of agricultural and agriculture-dependent activities, and has economic, environmental, social and political impacts. Its effects on primary producers depends on their production systems and management decisions, and access to inputs, as well as on the level and types of any government support provided.

A major drought event occurred in Australia in 2002-03, with on-going severe drought conditions still occurring in 2006-07 for large areas of agricultural land. Over the last 30 years, major droughts were also recorded during 1982–1983 and 1994–1995.

Australia's National Drought Policy, agreed to in 1992 and reaffirmed in 2005 by the Australian and state governments, recognises that drought is a natural feature of Australia's variable climate and needs to be managed accordingly. The key objectives of the policy, which among other things embodies the principle of self-reliance, are summarised in box 4.1.

Box 4.1 **Objectives of the National Drought Policy**

- Achieve self-reliance by farmers in managing the risks stemming from normal climatic variability by providing the focus on drought preparedness.
- Provide appropriate assistance to farmers experiencing “exceptional circumstances”.
- Ensure that the provision of this assistance is equitable, efficient and timely using [the] best science and information.
- Facilitate the maintenance and protection of Australia's agricultural and environmental resource base during periods of increasing climatic stress.
- Facilitate the early recovery of agricultural and rural industries consistent with long-term sustainable levels.

Source: PIMC (2005).

Reflecting the ongoing and significant nature of drought support in Australia, the Commission has reported on aspects of drought assistance in the previous five editions of the *Trade & Assistance Review*. This section outlines the key drought support measures, provides data on the extent of assistance provided by those measures, and describes recent policy changes in the area.

Australian Government assistance

The Exceptional Circumstances (EC) arrangements are the Australian Government's primary mechanism for assisting farmers and small business operators affected by drought.[2] There are two main strands to these arrangements: interest rate subsidies and income support (box 4.2).

Box 4.2 **The Exceptional Circumstances arrangements**

Under EC guidelines, a drought-affected region may be declared eligible for EC support if the drought event is rare (a one-in-20 to 25 year event), results in a severe downturn in farm incomes over a prolonged period, and is not predictable or part of the process of structural adjustment (NRAC 2006, App 1). Once an area is 'EC declared', assistance is available to eligible producers and certain small business operators, during the drought and recovery phase, through the following programs.

- *Business support*. EC interest rate subsidies of up to $100 000 per year, with a cap of $500 000 over five years, are available to eligible farm enterprises and small businesses. EC interest rate subsidies are funded jointly by the Australian Government (90 per cent) and state and territory governments (10 per cent).
- *Income support*. The EC relief payment provides eligible farmers and small business operators with a fortnightly payment at a rate equivalent to the Newstart allowance, including additional benefits (such as a healthcare card). The Australian Government funds all income support payments.

In addition, interim income support payments are available during the EC application assessment process. Under the arrangements, introduced in September 2002, the Australian Government may provide interim income support payments for areas experiencing severe drought conditions while a full EC assessment is undertaken.

Eligibility to receive EC interest rate subsidies, EC relief payments and interim income support is subject to an off–farm asset and income test. The test does not take into account assets essential to the running of the farm business nor some proceeds from the forced disposal of livestock and cash deposits under the Farm Management Deposits Scheme.

Sources: DAFF (2007a) and Howard (2007a)

Estimates of EC support provided to agricultural industries by the Australian and state governments are shown in table 4.1. The estimates indicate that, in total, Australian governments provided $145 million of EC drought relief in 2002-03, rising to $714 million in 2006-07. The latter figure is equivalent to about two fifths

[2] Other Australian Government mechanisms that assist drought-affected farmers include the Farm Management Deposits scheme, together with other elements of the Agriculture — Advancing Australia package (see section 4.2), and income-tax averaging provisions. These programs are discussed in detail in past editions of the *Trade & Assistance Review* (PC 2007d).

of the assistance for primary producers included in the Commission's assistance estimates for 2006-07. The main industries receiving drought support (in 2003-04) were *grain, sheep and beef cattle farming* (65 per cent) and *dairy cattle farming* (26 per cent).[3]

Table 4.1 **Estimates of EC assistance[a]**

$ million

	2002-03	*2003-04*	*2004-05*	*2005-06*	*2006-07*
Australian Government	**140.8**	**294.0**	**220.4**	**386.4**	**669.0**
– EC interest subsidy	39.7	92.5	99.2	232.5	408.2
– Interest rate relief – drought relief package of 2002	3.3	6.7	2.3	–	–
– EC relief payment	45.9	153.4	117.1	153.4	249.2
– Interim income support	52.0	41.5	1.9	0.5	11.6
State Government EC interest subsidy contribution[b]	**4.7**	**10.7**	**11.0**	**25.8**	**45.3**
TOTAL[c]	**145.5**	**310.3**	**237.4**	**420.4**	**714.3**

[a] Actual expenditure. [b] Estimates exclude State governments' other drought programs, such as transport, freight and fodder subsidies. [c] Sum of individual funding components may not add to total funding as the total amount includes program administration costs (except for 2002-03).

Sources: NRAC (various) and data provided by DAFF.

The take-up of EC assistance has increased significantly since the (then) Australian Government's announcement in October 2006 (reported in last year's *Review*) that it would extend EC assistance to all producers, and farm-dependent small businesses, within an EC declared region. On 20 June 2007, the Minister for Agriculture, Fisheries and Forestry indicated that government spending on EC income support and interest rate subsidies had increased from around $7 million per week in October 2006 to reach $26 million a week. The number of farming families in receipt of EC relief also increased from around 9700 to almost 22 000 over the same period, with more than 750 small businesses also receiving EC assistance (McGauran 2007h).[4]

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3 Information on the distribution of EC interest rate subsidies by agricultural commodities was provided by state rural adjustment authorities. For EC relief payments, estimates of the industry distribution of the funding were derived from ABARE farm surveys which contain data on farm characteristics and drought funding for 2003-04 (ABARE 2005).

4 Information provided by the Department of Agriculture, Fisheries and Forestry indicates that, during January 2008, around $20 million per week was provided in EC support, which is around the same as the average weekly level of support provided during June 2007. At the end of January 2008, more that 24 000 farming families were in receipt of EC relief payments, and some 1100 small businesses had received EC interest rate assistance at least once (DAFF, pers. comm., 17 March 2008).

In the 2007-08 Budget, the Government announced it would provide an additional $8 million to the Country Women's Association to help distribute emergency aid grants to fund community based activities and to meet immediate household needs of rural families in drought affected areas. The new funding is in addition to the $4 million already provided during the 2006-07 financial year. The new funding includes:

- individual grants of up to $2000 per household, including for eligible farmers, farming dependent contractors, service providers and local rural businesses, to meet essential household expenses and other basic necessities; and
- grants of up to $3000 for community groups, schools, and not-for-profit organisations to help meet the costs of holding events and providing support to drought-affected communities (McGauran 2007b and Howard 2007e).

In September 2007, the Government announced that it would provide additional drought assistance to extend EC declarations until September 2008 in 38 rural areas. EC assistance in these areas was due to expire in March 2008. The Government also announced that it would provide around $90 million in interim income support for eligible farmers in Western Australia's agricultural zone and remaining areas in New South Wales, South Australia and Tasmania that are not already EC-declared (McGauran 2007d and Howard 2007f).

As part of the September 2007 announcements, the Government introduced additional changes to existing drought assistance measures, estimated to cost $714 million (based on a number of programs lasting from one to two years (DAFF, pers. com., 17 March 2008)). The changes were designed to increase access to EC assistance for farmers and small businesses, provide grants to irrigators and help with social pressures facing farming families across rural and regional Australia (Howard 2007a). The new measures included:

- an increase to the off-farm salary and wages exemption for income support recipients from $10 000 to $20 000 — $33 million has been allocated from the package to fund this measure;
- an increase, for a period of 12 months, to the off-farm assets test limit for access to interest rate subsidies, from $473 000 to $750 000 — $143 million;
- extending the eligibility criteria for small businesses' access to EC assistance, to include all small businesses in towns with a population up to 10 000 that have a significant reliance on farmers for their income, and have suffered a downturn in business turnover due to the drought — $142 million;
- grants of up to $20 000 (GST exclusive) to Murray Darling Basin irrigators to implement on farm water management strategies in response to reduced water allocations — $66 million;

- information workshops for Murray Darling Basin irrigators to assist in managing their farm businesses with reduced water allocations — $7.5 million;
- an exit grant of up to $150 000 for farmers who have decided to leave the land, and an increase in the assets limit to access this grant to $350 000 — $150 million;
- further amounts of $10 000 are available for farmers who have successfully applied for the EC exit grant to obtain advice and retraining to assist in preparing for the transition away from farming, and to assist with relocation — $20 million;
- funding for up to an additional 13 rural financial counsellors, an additional 10 Centrelink rural support officers and five social workers — $8 million;
- additional social and emotional counselling through the establishment of 25 family support drought response teams — $11 million;
- an increase of $1000 to the Assistance for Isolated Children (AIC) scheme's additional boarding allowance and an ongoing supplementary allowance of $1000 for all students who receive an AIC distance education allowance — $8 million;
- up to an additional $10 000 per school in EC declared areas — $46 million; and
- additional moneys for the emergency relief program to fund community and charitable organisations to provide emergency assistance — $4.5 million (Howard 2007a).

State government assistance

As well as contributing to the EC interest rate subsidy scheme, State and Territory Governments have provided a range of assistance to help affected farming communities during recent drought conditions. The measures include transport subsidies for feed and livestock, the provision of financial and family counselling services, and electricity and water tariff rebates. Some State Government drought assistance measures have been discussed in previous editions of the *Trade & Assistance Review*.

Over the last year or so, State governments have made a number of further drought support commitments. The following are illustrative of the types of measures and amounts involved. However, the estimates of the total drought assistance provided by different State governments since the commencement of the drought may not be strictly comparable, in part reflecting the coverage of the various estimates.

- As at 30 November 2007, more than 80 per cent of New South Wales remained affected by the drought (with some areas entering their seventh consecutive year of drought conditions). Since the commencement of the current drought in 2002, the NSW Government estimates that it has committed more than $365 million to drought assistance measures, including $124 million for transport assistance (livestock, stockfeed and water) (Macdonald 2007, NSW Department of Primary Industries, pers. comm., 17 March 2008).

- In October 2007, the Victorian Government announced that it would spend a further $100 million on drought relief measures, as an addition to the $178 million spent over the previous two years. The commitment included $55 million to provide water rebates for irrigators and $10 million to help farmers undertake drought proofing works (Brumby 2007). Since 2002, the Victorian Government has allocated around $333 million for drought assistance (Victorian Department of Primary Industries, pers. comm., 20 March 2008).
- In December 2006, the Queensland Government committed to spending $32.5 million over two years to extend its drought assistance through continued contributions to the EC scheme, expanded eligibility for and increased size of livestock transport subsidies, and continued rebates on council rates for farmers and water levies for irrigators. In December 2006, the Queensland Government estimated that its drought assistance spending commitments over the period from 2001-02 to 2007-08 would total around $221 million (Mulherin 2006).
- In a series of announcements over the year to October 2007, the South Australian Government extended its drought assistance measures with funding commitments for business support schemes, rebates for the stamp duty on refinanced loans for primary producers, financial relief for irrigators and to fund South Australia's portion of the EC interest rate subsidy. Other measures included an apprenticeship retention scheme, funding for research into drought resistant crops and additional funding for rural community counsellors and drought response coordinators. (Rann 2007, McEwen 2006; 2007a; 2007b). Since 2002, the South Australian Government has allocated around $75 million for drought assistance (PIRSA, pers. comm., 12 March 2008).
- In August 2007, the Western Australian Government announced a funding commitment of $9.3 million for the 2007 Dry Season Assistance Scheme comprising grants to farmers and pastoralists and to community and social support services including rural counselling services (Carpenter 2007). Since 2000, the Western Australian Government has committed around $33 million for drought assistance (WA Department of Agriculture, pers. comm., 29 February 2008).

4.2 The Agriculture – Advancing Australia package

Introduced in 1997, the *Agriculture – Advancing Australia* (AAA) package comprises a number of sector-wide programs designed to facilitate structural adjustment. Since its inception, the package has provided assistance for farm business management, education and training, income support and land use planning. The main components of the most recent package include:

- Farm Help — provides support to farming families in financial difficulty and facilitates farming exits and re-establishment;
- Farm Management Deposits — provides taxation benefits designed to help primary producers handle income variability and reduce reliance on other forms of government support;
- FarmBis — provides assistance to develop business and natural resource management skills through funding for education and training activities;
- Rural Financial Counselling Service — provides free and impartial financial counselling to help clients make informed financial and business decisions and to better manage change and adjustment; and
- Advancing Agricultural Industries — assists primary producers to develop self-reliance, resilience and the ability to efficiently manage change.

Recent Developments

In the 2007-08 Budget, the (then) Australian Government announced that the AAA package would be extended for a further four years with additional funding of around $255 million. All existing programs within the package were to be continued. Some adjustments to the package were also announced, including:

- a doubling of support to $40 million over four years for the Advancing Agricultural Industries program (formerly Industry Partnerships);
- a new FarmBis program; and
- greater access to the Farm Help program (McGauran 2007m).

The Advancing Agricultural Industries program was intended to help agricultural, fisheries and forestry industries to develop self-reliance, resilience and an ability to efficiently manage change. The program also provides individual development opportunities for women, young people and indigenous Australians (DAFF 2008a).

The new FarmBis program included changes to ensure that farmers have equal and consistent access to funding support for education and training opportunities, regardless of their state or territory of residence. Previously, the availability of support and the types of training available depended on individual states providing financial support (McGauran 2007j).

Revisions to the Farm Help program were designed to provide easier access to assistance for farming families in severe financial hardship. Adjustments to the program include:

- allowing past recipients a second chance to obtain advice and training (up to $2500) and/or a re-establishment grant;
- a 50 per cent increase in the size of the re-establishment grant to $75 000; and
- an increase in the maximum asset limit for obtaining the full re-establishment grant from $100 000 to $150 000 (McGauran 2007j).

4.3 Industry-specific assistance

Wheat marketing

Wheat is the major grain crop grown in Australia with around 12.2 million hectares planted in 2007. Around three quarters of Australia's annual wheat crop is exported (DAFF 2008c). The current drought has significantly affected the wheat industry with production falling from around 25 million tonnes in 2005-06 to 10 million tonnes in 2006-07.

Wheat prices have increased dramatically in recent years, from $192 per tonne in 2005-06 to $240 per tonne in 2006-07, and are projected to increase further in 2007-08, to $370 per tonne (ABARE 2007). This has increased feed grain costs for industries such as pigmeat farming, which in turn has raised issues about quarantine restrictions on imported wheat and wheat marketing arrangements (PC 2007c).

The *Wheat Marketing Act 1989* (the Act) provided for the deregulation of the domestic wheat market through the removal of the Australian Wheat Board's compulsory acquisition powers. The previous domestic marketing arrangements provided for the domestic price of wheat to be set administratively and for there to be a minimum return to growers. The Australian Wheat Board's powers for 'single desk' export wheat were retained.

Amendments to the Act in the late 1990s modified the existing single desk arrangement. The statutory marketing of export wheat by the Australia Wheat Board ended on 1 July 1999 and government underwriting of borrowings also ceased. The commercial roles of the Australian Wheat Board were transferred to a grower-owned and controlled company, AWB Limited. The single desk was retained with AWB International (AWBI), a subsidiary of AWB Limited, permitted to exercise a statutory power to block applications by competing traders to export bulk wheat sales (the "veto power").[5] AWB Limited manages the national wheat pool for AWBI and has operated as a commercial company since its public listing in August 2001.

As noted in *Trade & Assistance Review 2005-06*, while the primary rationale for having the single desk is to attain higher prices for wheat exports and maximise returns to growers, the assistance implications of the arrangements are unclear. While Australian wheat exports tend to attract relatively high prices, these may be largely explained by factors independent of the single desk, such as quality and additional services provided to buyers. In the past, the Commission has found that any genuine price premiums that might exist are likely to be relatively small and confined to a limited number of markets (PC 2000b). At the same time, the Commission considered that the single desk was likely to become costly for some exporters, particularly those supplying new or specialised varieties, and create inefficiencies by discouraging innovation and the take-up of specialist services. Indeed, it is possible that the arrangements could provide negative net assistance to the industry, disadvantage other grain traders and be an impediment to higher exports.

In its *Review of the National Competition Policy Reforms* (PC 2005c), the Commission noted further evidence that introducing competition into wheat marketing could generate benefits for Australia, and recommended that an independent and transparent review of wheat marketing arrangements be undertaken as soon as practicable. It reiterated this recommendation in its 2007 report *Annual Review of Regulatory Burdens on Business: Primary Sector* (PC 2007a).

Recent Developments

In December 2006, the (then) Australian Government announced a temporary arrangement to facilitate alternative marketing of export wheat sales following the Cole Commission's *Report of the Inquiry into certain Australian companies in relation to the UN Oil-for-Food Programme*, released in November 2006. The temporary arrangements transferred the veto power on wheat exports from AWBI to the Minister for Agriculture, Fisheries and Forestry (McGauran 2006a, 2006b). This temporary measure was initially to operate until 30 June 2007.

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[5] Although the Act established the Wheat Export Authority (WEA) to control the export of wheat, sections 57(3A) and 57(3B) require the WEA to receive written approval from AWBI to grant applications by other exporters to market bulk wheat. In relation to non-bulk shipments, other companies could receive approval from the Authority to export wheat in bags and containers without AWBI consent (although the WEA is required to consult AWBI on such applications).

The Government subsequently assessed applications from entities seeking to export wheat. For the 2006-07 wheat harvest, of 46 applications submitted, only two export permits were issued for 800 000 tonnes of wheat or around 5 per cent of total export sales. The remainder of export sales of wheat were marketed by AWBI through the national pool.

In January 2007, the Government announced the creation of a Committee that would consult with the Australian wheat industry, particularly growers, to report on their views on future wheat marketing (McGauran 2007g). The Committee delivered its final report to the Government in March 2007. The report was not made public.

In May 2007, the Government announced that the single desk for wheat export sales would be retained. Wheat growers, however, would be given the opportunity to establish their own company, separate from AWB Limited, to take over the management of the single desk. The new body could take the form of a new company or a completely de-merged AWBI. The Government also announced that AWBI would continue to manage and market the 2007-08 wheat harvest (McGauran 2007p).

Under the arrangements, the Minister for Agriculture, Fisheries and Forestry would continue to hold the power to direct the Wheat Export Authority (WEA) to either approve or reject a bulk export application until 30 June 2008. Two permits were issued between June 2007 and November 2007. The (then) Minister also announced that the export of wheat in bags and containers would no longer need consent from the WEA, although its quality would need to be certified. As part of these changes, the WEA was replaced by the Export Wheat Commission on 1 October 2007.

In the event that growers were not able to establish a new entity, to market and manage the 2008–09 wheat harvest by 1 March 2008, the Government reserved the right to introduce its own wheat marketing arrangements.

Partly reflecting the uncertainty around wheat marketing arrangements, AWB Limited decided not to commence its hedging program for the 2007–08 wheat crop (AWB 2007), expressing concern about other export permits the Government may issue as a reason for not hedging the crop. In response, the (then) Minister for Agriculture, Fisheries and Forestry stated that AWB Limited's decision not to hedge the crop exposed wheat growers to price risks that they will have to manage themselves (McGauran 2007f).

Pigmeat

In recent years, the Australian pigmeat industry (both production and processing) has experienced structural change and become increasingly integrated into world pigmeat markets. In 2005, the Commission undertook a review of the need for government measures to improve the industry's competitiveness (PC 2005b). The Commission found that further industry-specific assistance was not warranted, a finding subsequently endorsed by the (then) Australian Government (McGauran 2005).

In October 2007, the Government asked the Commission to report on whether safeguard action, in accordance with the WTO Agreement on Safeguards, is warranted against imports of certain frozen pigmeat. Box 4.3 sets out the scope of this inquiry.

Box 4.3 **Safeguards Inquiry into the Import of Pigmeat**

In October 2007, the Productivity Commission was asked to report on whether safeguard action in accordance with WTO rules is warranted against imports of certain frozen pigmeat, falling within tariff subheading 0203.29. The Commission is Australia's 'competent authority' (as notified to the WTO) to investigate safeguards matters.

Safeguard action is temporary, 'emergency action' (typically employing tariffs, tariff-quotas or quotas) and may be taken by a member country of the WTO where a surge of imports causes or threatens to cause serious material injury to a domestic industry. It allows a country to respond to unexpected and unforeseen increases in imports which have caused serious material injury. The increase in imports must be 'recent enough, sudden enough, sharp enough and significant enough' to cause (or threaten to cause) serious injury.

In addition, and going beyond what is essential under the WTO, the Terms of Reference for the Commission's Inquiry require consideration (where measures are found to be justifiable under WTO rules) of whether safeguards measures *should* be implemented, given the Government's requirements for assessing the impact of regulation which affects business including all community-wide costs and benefits.

The Terms of Reference also required the Commission to provide an accelerated report by 14 December 2007, on whether critical circumstances exist where delay in applying measures would cause damage which it would be difficult to repair. If such circumstances were found to exist, and the preliminary determination was that this was due to increased imports, the Commission was to recommend what provisional safeguard measures (for up to 200 days) would be appropriate.

Source: PC (2007c).

In its accelerated report, released on 20 December 2007, the Commission found evidence of reduced profitability in the industry, but that this had been caused by factors other than increased imports:

> The Commission accepts that there is clear evidence that most pig producers are suffering serious injury in the form of reduced profitability or financial losses from a cost-price squeeze. … But this situation has been triggered by extraordinary increases

> in feed grain prices in Australia since the middle of 2007, not by increased imports significantly undercutting and pushing down domestic prices (PC 2007c, p. 48).

Accordingly, the Commission determined that the WTO criteria for the imposition of provisional safeguard measures had not been met.

The Commission also noted that its determination against provisional action does not rule out a recommendation for safeguard measures proper in the final report, to be completed by the end of March 2008:

> The current decision is based on preliminary analysis undertaken within the time available. Furthermore, since the commencement of the inquiry, policy changes have been announced by some foreign governments which could, directly or indirectly, affect prices of their exports to Australia and which, in turn, could directly impact upon competitive conditions in the Australian market. (PC 2007c, p. 49)

The final report will also consider whether other policy changes in Australia could help to reduce underlying cost pressures, reinforcing the efforts of the Pork Cooperative Research Centre and producers to reduce costs and become more competitive against imports.

Wool

Around 40 per cent of agricultural land in Australia is used for wool production, with the total clip, nearly all of which is exported, accounting for close to 30 per cent of global greasy wool production (DAFF 2007b). Like most agricultural industries, the wool industry has had a long history of government intervention. Among other things, this involvement has included price setting, assistance for wool promotion and export controls. Since 1990, however, most of these interventions have been dismantled.

More recently, in April 2007, the (then) Australian Government announced its support for the (re)integration of Australian Wool Innovation (AWI) and Australian Wool Services (AWS).[6] As part of this process, the Government injected $15 million into the wool industry 'to secure the Woolmark Company in Australian hands'. This involved purchasing a number of key AWS wool assets, including the

[6] In September 1999, the Australian Government announced that the Australian Wool Research and Promotion Organisation, the industry body then responsible for R&D and wool promotion, would be converted to a private company structure with woolgrowers as shareholders. The *Wool Services Privatisation Act 2000*, which came into effect on 1 January 2001, provided for the formation of a holding company, AWS, with two wholly owned subsidies, AWI and the Woolmark Company. As provided for in the legislation, AWI subsequently separated from AWS in April 2002 (DAFF 2007b).

Woolmark Company, wool product technologies and the AWS market intelligence business (McGauran 2007o).

Horse flu

An outbreak of equine influenza occurred in New South Wales in August 2007, the first recorded outbreak of the disease in Australia. Equine influenza is an acute, highly contagious, viral disease affecting horses, donkeys, mules and other equine species. The disease is not generally fatal, but fatalities may occur especially in old or infirm horses and young foals. In the event that the disease were to become established in Australia, it would be likely to have a substantial impact on the Australian horse industry (NPDO 2008).

In late August 2007, the (then) Australian Government announced the introduction of a $4 million fund to provide emergency grants to individuals suffering financial difficulty as a result of the outbreak and subsequent ban on horse movements in New South Wales and Queensland. Grants of up to $1500 were available for individuals in New South Wales, Queensland and the Australian Capital Territory whose livelihood is dependent on horses. The grants were delivered by racing industry peak bodies, Racing NSW and Queensland Racing (McGauran 2007a).

In September 2007, the Government announced the introduction of the $110 million Equine Influenza Assistance Package. The main elements of the package include:

- Equine Workers Hardship Wage Supplement Payment. Payments equivalent to the Newstart allowance for workers involved in horse-dependent activities who had lost their job or main source of income and sole traders whose incomes had effectively ceased (transport operators, riding coaches, farriers, etc). Applicants were subject to income testing, but no assets or activity tests.
- Equine Influenza Business Assistance Grants. A grant of $5000 for businesses which derived most of their income from the commercial horse industry and have experienced a significant downturn in income and/or increase in costs as a result of movement restrictions.
- Commercial Horse Assistance Payment. Payments to eligible primary carers whose racing, harness or professional equestrian competition horses were unable to undertake their normal activities and generate an income as a result of the quarantine measures.
- Grants for non-government, not-for-profit equestrian organisations. Grants of up to $200 000 to equestrian organisations that had incurred expenses directly

related to the outbreak of equine influenza and resulting quarantine restrictions (McGauran 2007c).[7]

Forests

As a climate change measure, in the 2007-08 Budget the Government announced new tax arrangements applying to the costs of establishing forests for the dedicated purpose of reducing greenhouse gas emissions. Under the arrangements:

- carbon sink forest operators would be allowed to depreciate the costs of establishing a qualifying carbon sink forest under the horticultural plant provisions, with effect from 1 July 2007; and
- as an additional enhancement to encourage the early establishment of carbon sink forests, there would be immediate deductibility for costs incurred in establishing a qualifying carbon sink forest during a five-year period commencing 1 July 2007, to take precedence over the general horticultural provisions during this period (Turnbull 2007d).

The estimated cost of this measure is $24.3 million to 2010-2011 (Parliamentary Library 2007).

Food

The food industry in Australia forms a significant component of the Australian economy accounting for over 20 per cent of manufacturing sales and services income, and employing around 200 000 people (DAFF 2008d). As measured by the Commission, the industry also receives substantial government assistance. In 2006-07, the *Food, beverages and tobacco* industry received around $1.3 billion in government support, including from tariffs as well as budgetary assistance (chapter 2).

National Food Industry Strategy

The National Food Industry Strategy (NFIS) commenced in July 2002 with the aim of ensuring a sustainable and profitable Australian food industry that would be a significant global player by 2007. In the five years to 30 June 2007, the (then) Australian Government committed $114 million to support the NFIS and fund a

[7] On 21 October 2007 (four days into the caretaker period), the Government announced that it would supplement the original Equine Influenza Assistance Package with a further $117 million of assistance. Under the original package, the assistance measures were to operate for 12 weeks. The announcement to extend the package was to enable the assistance measures to operate for a further 12 weeks (McGauran 2007i).

range of initiatives and programs, with a focus on innovation, export opportunities, increased competition and food safety.

In May 2007, the Government announced funding of around $76 million over four years to continue a number of programs and initiatives previously delivered under the NFIS. Similar to the previous NFIS, the Government indicated that its objective for the revised program was to improve the food industry's international competitiveness by promoting innovation, R&D, and to continue to ensure that market access and trading conditions are based on sound science rather than technical barriers to trade (McGauran 2007n). As announced, the program consisted of four main elements:

- Food Innovation Grants — matching grants to Australian food companies to undertake R&D that improves industry competiveness and performance and enhances local production;
- Technical Market Access — funding to maintain both overseas food and agriculture counsellor positions and Canberra-based technical officers, with the aim of eliminating and reducing technical barriers to trade;
- International Food Standards Initiative — funding to enable technical staff in the Department of Agriculture, Fisheries and Forestry to work in international government-to-government forums to ensure that international food standards are science-based and do not act as non-tariff barriers to trade; and
- Australian Food Industry Advisory Council — a forum for industry and government engagement and to provide food industry advice to the Government (McGauran 2007n).

'Australian Grown' logo

In June 2007, the Australian Government announced the launch of the 'Australian Grown' logo. The objective of the initiative was to help Australian consumers to quickly identify packaged foods that have been grown on Australian farms. Australian exporters would also be able to make use of the logo in overseas markets. An extension of the 'Australian Made' logo, the Government committed up to $1.7 million to support the initiative (McGauran 2007e).

4.4 Assistance for rural resource management

National Landcare

The National Landcare Program (NLP) is a natural resource management initiative that is intended to encourage farmers to adopt sustainable management practices, and improve their productivity, profitability and the condition of Australia's natural resources, both on and off farms. The NLP operates largely in rural areas, and involves 40 per cent of farmers, who manage 60 per cent of the land and 70 per cent of diverted water (DAFF 2008b). More than $700 million has been spent on the program since 1996 (McGauran 2007l).

In the 2007-08 Budget, the (then) Australian Government announced that the NLP would be extended for an additional three years at a cost of around $112 million. The Government indicated that it intended to retain the key components of the program, such as support structures, in order to maintain work momentum, while other program components would be improved to encourage greater industry links (McGauran 2007l).

Environmental stewardship

In the 2007-08 Budget, the (then) Australian Government announced the introduction of the Environmental Stewardship Program. The program would provide payments to farmers, and other landholders, to encourage them to undertake additional environmental work. Funded work would include fencing, replanting and restoring degraded areas, weed and pest management. As announced, the program would run for four years with funding of $50 million, with potential follow up payments for up to 15 years (McGauran 2007k).

5 Recent developments in trade policy

Although Australia is a major trading nation for only a select range of commodities, and even fewer services, it is an active participant in trade negotiations and more generally in trade policy reform. Australia has reduced its own barriers to international trade mainly through domestic industry assistance reform initiatives, reinforced by participation in multilateral trade agreements. In recent years, as well as engaging in the current 'Doha' round of multilateral negotiations under the World Trade Organization (WTO), Australia has been pursuing preferential trade agreements with a number of countries. Developments in international trade policy involving Australia over recent years have been discussed in previous editions of *Trade & Assistance Review.*

This chapter reports on developments since the last edition of *Trade & Assistance Review*, up to the commencement of the caretaker period of government on 17 October 2007. During that time:

- there was some limited progress in multilateral trade negotiations;
- the Australian Government continued negotiating several new preferential trade agreements, and commenced negotiations on three other agreements; and
- a WTO review of Australia's trade policy was conducted.

5.1 Trade agreements

For over 60 years, the WTO and its predecessor, the General Agreement on Tariffs and Trade (GATT), have provided a stable, rules-based system for the conduct of international trade (box 5.1).

The WTO performs two main roles in facilitating international trade.

- First, it provides a forum for the negotiation of new multilateral trade agreements to liberalise trade. Successive rounds of negotiations have facilitated substantial reductions in many trade barriers and underpinned the strong expansion of international trade and growth in living standards.
- Second, it has an ongoing role in the enforcement of existing rules and commitments. Members have agreed to use the WTO's dispute resolution

procedures to deal with perceived violation of trade rules, rather than take unilateral action. Under these procedures, members are encouraged to resolve their disputes bilaterally, but if this is not possible they can request adjudication by an expert panel. Either party may appeal. The whole process is subject to time limits, and rulings are binding. These features of the WTO's dispute resolution system have been central in providing security and predictability in the multilateral trading system (WTO 2007c).

Box 5.1 **The World Trade Organization**

The WTO is an international forum where sovereign governments negotiate and execute agreements — which include constraints on their own actions — to foster an open trading system. In the trade negotiations, decisions are generally taken 'by consensus' of all member governments.

In broad terms, the WTO agreements require all member governments to apply their trade rules in a consistent, transparent and essentially non-discriminatory way. Once a country's trade commitments have been agreed with other WTO members, the commitments are 'bound' and cannot be broken without risking sanctioned retaliation or other disciplines.

The multilateral trading system was established in 1947 when 23 governments — mainly from developed countries including Australia — signed the General Agreement on Tariffs and Trade (GATT). It has evolved through eight rounds of negotiations to cover goods, services, non-tariff trade barriers and certain trade-related issues, such as intellectual property protection. Since the GATT's inception, industrial country tariffs on industrial products have come down from an average of some 20 to 30 per cent to less than 4 per cent, while over the period since 1950, world trade has increased 27-fold (in volume terms), or three times faster than world output growth (WTO 2007d). There are now 151 members of the WTO, the overwhelming majority of which are developing nations. Governments can apply to join or withdraw from the WTO at any time.

As an organisation dealing with the rules of trade between nations, the WTO also handles disputes and monitors members' trade policies.

Doha Round

The latest round of multilateral negotiations (the Doha Round) has been underway for over six years, but progress has been limited. As reported in last year's edition of *Trade & Assistance Review*, talks on the Doha Round were suspended in July 2006, after a meeting of the G6 (Australia, Brazil, the European Union, India, Japan and the United States) failed to resolve divisions on how to cut farm subsidies and tariffs (PC 2007d). At the time, it was widely understood that unblocking the negotiations would require parallel progress on a 'triangle' of issues, two sides of which relate to agricultural trade liberalisation:

- the US would have to agree to deeper cuts to its domestic farm support;
- the European Union would have to agree to increased agricultural market access through greater tariff cuts in agricultural products; and
- developing countries, such as Brazil and India, would have to agree to lower tariffs on non-agricultural products.

Trade negotiations recommenced informally in November 2006, after signs that member countries' requests to resume negotiations were 'widespread and genuine', and across-the-board negotiations formally recommenced in February 2007 (PC 2007d). The Australian Government was engaged in this process, in particular through leadership of the Cairns Group of agricultural exporters and by participating in meetings of the G6 in April and May of 2007 (DFAT 2007).

In June 2007, an attempt by the G4 (the United States, the European Union, Brazil and India) to bridge the key gaps on agriculture and industrial products broke down. Members of the G4 attributed this outcome to inadequate negotiating offers by the other members, in each of the three areas noted above (ICTSD 2007).

Most recently, some of the world's leading economies have called for another push for a deal in the Doha Round (ICTSD 2008a). While negotiations are continuing, there has been no major breakthrough following the June 2007 meeting (ICTSD 2008b).

Preferential trade agreements

In part because of difficulties in achieving improved access for Australian exports through multilateral negotiations, Australia has in recent years negotiated preferential trade agreements (PTAs) with a small number of countries. Prior to 2003, Australia was party to only three agreements, with Papua New Guinea, South Pacific countries and New Zealand, but only the last was a reciprocal agreement. Since 2003, Australia has signed several more (reciprocal) PTAs, most notably with the United States but also with Singapore and Thailand. Negotiations for a number of additional agreements have been commenced or are in prospect.

Since the last edition of *Trade & Assistance Review*:

- the Australian Government continued to negotiate further bilateral preferential agreements, with China and Malaysia, and a regional preferential agreement encompassing the Association of South East Asian Nations and New Zealand;
- negotiations were commenced on preferential trade agreements with Japan, Chile, and the Gulf Cooperation Council; and

- the Government announced its intention to undertake studies to assess the benefits of a preferential agreement with each of the Republic of Korea, Indonesia and India. The Indonesian study has now commenced (DFAT website, February 2008).

5.2 WTO Trade Policy Review of Australia

In 2007, the WTO concluded a Trade Policy Review (TPR) of Australia as part of its regular systematic review of all WTO members. The TPR mechanism was established under the Uruguay Round of trade negotiations in 1988 (WTO 2007a). Previous TPRs of Australia were conducted in 1994, 1998 and 2002.

The TPRs aim to increase transparency and understanding of member countries' trade policies and practices, and may also take into account the country's wider economic and development policies. In addition to independent analysis by the WTO secretariat, the TPR process also incorporates submissions from other WTO countries and responses from the Government under review.

The WTO secretariat's final report commented on several areas of Australia's performance over the past four years including its economic performance, tariff reform and non-tariff assistance arrangements (WTO 2007b).

The TPR noted that Australia's economic performance had been 'impressive' since the last review in 2002. It also noted that trade liberalisation had been integral to the structural reforms that contributed to this performance. It highlighted Australia's high degree of transparency in the formulation and evaluation of economic policies. In this context, the report specifically noted the Commission's role, which it saw as enhancing government accountability and public debate on the merits of these policies and contributing significantly to the continuing process of reform. Trade liberalisation, much of it unilateral, has been integral to this reform process.

It was also observed that, although multilateral trade liberalisation remains Australia's trade policy priority, increased importance has been attached to preferential trade agreements. The TPR noted the Government's efforts to multilateralise, through WTO negotiations, some of the outcomes achieved in regional trade liberalisation.

Australia's foreign investment regime was seen as being generally transparent and liberal, although foreign equity restrictions in certain 'sensitive' sectors remain, and a screening process continues to be applied for 'national interest' reasons. It was noted that the Australia-United States Free Trade Agreement provided preferential treatment to United States investors compared with other trading partners.

Other findings from the report are summarised in box 5.2.

Box 5.2 **The WTO Trade Policy Review of Australia: other findings**

Tariffs

Australia grants at least most favoured nation (MFN) treatment to imports from all its trading partners. Its 2006 tariff has over 6000 lines, of which virtually all are *ad valorem*, ensuring a high degree of transparency. Despite reductions in tariffs applied to TCF and to passenger motor vehicle products, their rates are still considerably higher than the average applied MFN rate. Further, those non-ad valorem rates that do apply tend to conceal relatively high tariffs, with the $12 000 specific duty on used or second-hand vehicles being potentially prohibitive.

Sanitary and phytosanitary (SPS) measures

Although strict quarantine measures remain, changes to import risk analyses were seen as having achieved a more transparent, efficient, and timely process.

Export controls

Discretionary export licensing restrictions are maintained for reasons related to SPS, the environment, and alignment with international agreements. Certain export quotas remain. Despite reforms, the exports of certain agricultural products are still managed by state-trading enterprises and agricultural marketing arrangements.

Regional trade agreements

Australia's recently signed regional trade agreements changed various aspects of trade policy, including protection of intellectual property rights. The TPR was advised that these changes are applied on a MFN basis to all WTO Members.

Budgetary assistance

The TPR noted the further assistance provided to encourage the development of domestic industry in the form of tariff concessions, tax incentives, grants, or concessional loans, and observed that the apparent lack of cost-benefit analysis of some schemes, including tax measures, makes it difficult to determine whether the assistance has yielded net social benefits.

While local-content requirements were removed for the EMDG scheme in June 2006, the TPR noted that they remain for recipients of export assistance under the EFIC program.

Government procurement

It was observed that Australia has not become a party to the WTO Government Procurement Agreement, and in some areas such as motor vehicles, government procurement still incorporates local-content requirements.

Source: WTO (2007b).

6 Some issues in designing and reviewing industry assistance

As earlier chapters and previous editions of *Trade & Assistance Review* demonstrate, governments utilise an extensive array of measures to assist industry. Grants and tax concessions, tariffs and quotas, statutory marketing arrangements, and other measures are deployed to provide direct assistance to industries. Governments also provide support in less direct ways; for example, by funding public bodies such as CSIRO and Tourism Australia that provide services of benefit to certain industries. The Commission's assistance estimates for 2006-07 include well over 100 separate measures in the budgetary category alone. In total, Australian industries were estimated to have received the equivalent of around \$15.7 billion in assistance (in gross terms) from all the Australian Government measures covered in the 2006-07 estimates.

The nature and extent of assistance arrangements have changed considerably over time. In particular, there has been a substantial reduction in the use of trade restrictive devices such as tariffs over the last two decades or so. There has also been considerable 'churn' in the delivery of assistance, particularly budgetary programs, with particular measures frequently being amended, extended or repackaged. Such changes reflect reassessments of the merits of different forms of assistance as well as governmental priorities and external pressures.

After more than 16 years of economic growth in Australia, underpinned partly by reforms to industry assistance arrangements, pressures for further changes are emerging:

- The recent appreciation of the Australian dollar has directly affected the competitive position of businesses that export or compete against imports, prompting some calls for additional subsidies, or for a pause in scheduled reductions in protection, to provide relief.
- At the same time, concerns about skills shortages and capacity constraints are highlighting the 'opportunity costs' of assistance measures that enable inefficient and declining industries to hold resources, restricting the scope for more efficient industries to expand.
- Emerging inflationary pressures and a more difficult economic outlook internationally have led the new government to signal its intention to adopt a

stringent approach to fiscal policy, which implies a need for greater scrutiny of budgetary assistance measures, including the potential to rationalise programs.

- Looking longer-term, the goal of sustaining and lifting living standards while addressing issues such as climate change and the ageing of the population demands ongoing improvements in economic efficiency, to which industry assistance will need to contribute rather than to hold back.

The new government has already announced some revisions to assistance arrangements and has foreshadowed several reviews, including in relation to innovation, exports, and the automotive and textiles, clothing and footwear industries.

All this makes it timely to take stock of the principles that should guide the efficient development and application of industry assistance, and to consider areas where changes may be needed.

The Commission has examined a wide range of industry assistance over the years, including both industry-specific measures (such as tariffs and subsidies for the automotive industry) and more broadly-based measures (such as R&D and export assistance available to businesses generally). Most recently, its 2007 *Science and Innovation* study examined various business programs and made recommendations for modifications to improve their effectiveness.

Drawing on this work, in this chapter the Commission:

- outlines developments in approaches to promoting industry development;
- sets out some key requirements for government assistance to be effective and productive; and
- points to a number of areas of assistance warranting review.

6.1 The evolution of industry assistance

Mirroring an improved understanding over the past two or so decades of what constitutes appropriate macroeconomic policies and objectives, there has been an accumulation of experience and evolution in the understanding of which micro-economic policies are conducive to appropriate business and industry development.

Not all of these matters could be said to be ‘settled’; nor is it possible or even desirable for them to be considered so. Indeed, good public policy requires an ongoing openness to examine the implications of emerging theoretical developments, and to assimilate evidence of the success or failure of past policy approaches and ‘experiments’. That said, gaining an appreciation of the effects and merits of industry assistance and other microeconomic policies can be quite complicated. This can be compounded by the claims and influence of groups that have a strong stake in the outcomes. Accordingly, even if the weight of theoretical and practical evidence strongly supports particular policy approaches, wider acceptance of those approaches can sometimes be difficult to achieve.

Nevertheless, there has generally been a move away from a narrow and defensive conception of industry policy, founded on protecting firms and industries from competition. Taking its place has been a growing recognition that there is a need to get the broad economic environment right for all firms, and to facilitate adjustment to competitive market pressures rather than to resist it.

There has also been increasing recognition that assistance to one industry typically comes at a cost to other industries and to Australians generally. Indeed, in its 2002 report on automotive assistance, the Commission found that tariffs on imported cars restricted choice, inflated the price of cars for consumers and added to the costs of the many businesses that use motor vehicles as inputs. Together with direct taxpayer support, the total transfer to the industry from the then prevailing level of automotive assistance was estimated to be at least $1 billion per year, or some $2800 per vehicle.

Accordingly, sectional claims for assistance are now treated more critically. It is increasingly accepted that for assistance to be warranted, it is necessary to establish a sound rationale as to why government intervention would benefit the economy and the community at large, beyond the particular needs and interests of people in specific firms or industries.

Further, industry assistance has come to be recognised as just one facet of industry policy, which is itself increasingly seen as encompassing the broad range of policy-related factors that bear on the performance of industry generally. Those factors, which the Commission outlined a decade ago (box 6.1), include policy areas that historically have constituted impediments to industry performance (such as high cost government provision of infrastructure services) as well as areas of support targeted at market failures (such as R&D assistance).

Many of the economic reforms of the last two decades or so have addressed these areas, with a particular focus on removing obstacles to competition. The effect of many of the reforms has been to heighten the pressure on firms to be cost-conscious, innovative and productive, while increasing their capacity to perform effectively in these respects. Inevitably, not all economic reforms during this period have been appropriate or effective, and in some areas government policies appear not to have kept pace with the needs of workforce and industry. Emerging gaps in infrastructure are but one indicator that much more needs to be done. Even so, there has been considerable progress in most of the areas previously identified by the Commission (box 6.1) as central to securing a productive industry policy framework.

Box 6.1 **The dimensions of a 'productive' industry policy**

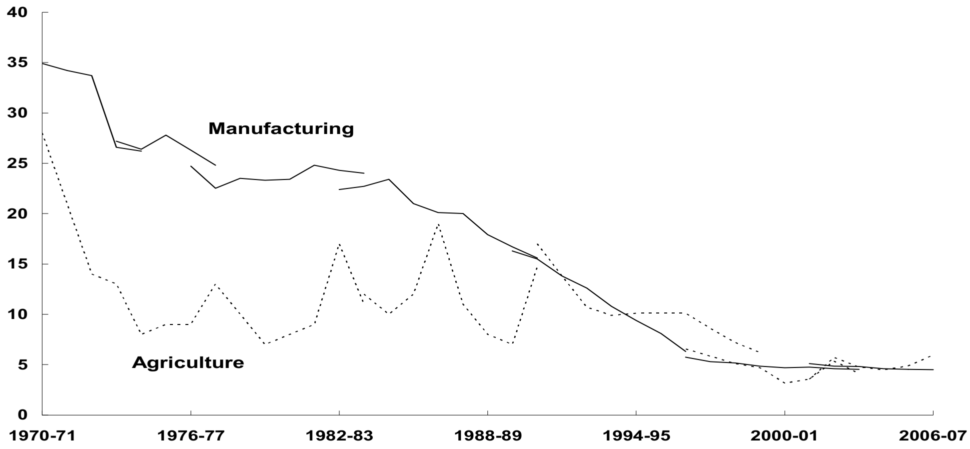
In its *Annual Report 1996-97*, the Industry Commission identified that, in addition to sound fiscal and monetary policy, an economic environment conducive to efficient and productive industry development must include the following elements:

- labour market regulation which facilitates flexibility and responsiveness within Australia's diverse enterprises and regions;
- education and training systems which can produce people with the mix of critical and applied skills that industry needs, and which facilitate the 'lifelong learning' necessary in the face of rapid change;
- a taxation system which can generate the revenue needed for government activities and social programs without distorting decisions on investment and work, or penalising production or trade;
- efficient, high quality infrastructure services — including transport, telecommunications and energy, all of which are critical determinants of industry performance in our large, remote country;
- competitive and efficiently regulated capital markets which provide access to debt and equity internationally at low cost;
- a regulatory framework which meets social, environmental and economic goals at least cost to business and the community generally;
- property rights which provide a secure foundation for investment and innovation;
- the removal of inappropriate barriers to competition both domestically and at our borders, as well as effective government participation in international forums directed at trade liberalisation in our foreign markets; and
- public support for research and innovation through basic research activities in universities, effective linkage mechanisms between the public and private sectors, and assistance to induce socially beneficial business R&D which otherwise would not be undertaken.

Source: IC (1997).

There has been particularly significant reform in the area of industry-specific assistance. While there was a significant one-off tariff cut in 1973, systematic reform commenced in the mid-1980s. This included the abolition of import quotas, local content schemes and the like, programs of phased reductions in virtually all tariffs to 5 per cent or less (from 1988 to 1996), and the progressive dismantling of agricultural price supports. Accordingly, by 2000, there had been substantial reductions in overall levels of assistance to agriculture and manufacturing (figure 6.1), as well as a closing of disparities in assistance to different industries. At the same time, there have been increases in budgetary assistance for activities such as enterprise adjustment and R&D.

Figure 6.1 **Assistance to manufacturing and agriculture**
Effective rate of assistance (per cent)



Data source: Commission estimates.

The microeconomic reforms of recent decades have generated or facilitated significant changes in the Australian economy, including:

- enhanced structural change, with resources shifting between sectors and industries more on the basis of market signals about consumer demand and relative returns;
- increasing business expenditure on R&D, which has roughly trebled as a proportion of GDP since the mid-1980s;
- strong growth in exports as well as imports following reductions in border protection; and, ultimately
- significantly higher productivity and incomes following a surge in labour productivity growth during the 1990s.

Overall, Australia's economic performance since the early 1990s has shown a marked improvement compared to earlier periods and the experience of many other developed countries, with stronger growth in per capita incomes, lower inflation and, more recently, lower unemployment. While many factors affect economic outcomes, a range of research and analysis (see, for example, OECD 2004, PC 2005c, Banks 2005) has confirmed that reforms to assistance, along with other structural reforms, have been an important element in improving economic performance.

6.2 'Productive' industry assistance

What lessons can be drawn from these experiences that can help guide Australia's approach to industry assistance going forward?

The most fundamental requirement is that assistance be shown to be beneficial for the community as a whole, rather than just for a narrow group of recipients. Although this may seem obvious, for most of Australia's history it was effectively disregarded in industry policy debates, and even today some claims for assistance implicitly presume that if one sector benefits from a measure, that makes it beneficial for the overall economy.

In fact, as outlined above, assistance enjoyed by one industry or activity typically comes at a cost to other industries and activities across the economy. These 'economy-wide' costs of assistance arise not just from the direct effects of, for example, tariffs on consumer spending power and subsidies on the budget, but also through diffuse but significant side-effects on economic variables such as input prices, relative wage levels and the exchange rate. Particularly in times of capacity constraints such as at present, assistance risks being a zero-sum game at best, and at worst can leave the community as a whole significantly worse off. This is not least because, in addition to its adverse effects on other industries, providing assistance can in itself entail substantial costs — including tax raising, administration and compliance costs.[1] Hence, calls for assistance need to be treated cautiously.

That said, there are various instances where market characteristics mean that appropriately targeted and designed assistance measures can yield a net pay-off for the community as a whole.

To ensure that any particular assistance measure does provide such a pay-off, rigorous analysis of policy proposals is needed. This entails a sequence of steps, commencing with an examination of the nature and causes of a policy problem and the associated rationale for government action. It concludes with a preferred policy measure, based on an assessment of its benefits and costs, relative to other feasible options, including as a baseline a 'no response' option. And after a measure has been in place for some time, there needs to be an evaluation of its effects and, where appropriate, a reformulation of the measure.

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1 The 'deadweight costs' of raising taxes alone are substantial, with most estimates lying between 20 and 50 cents in the dollar (CIE 2005a). The administrative costs of delivering budgetary assistance programs can vary widely. At the very low end, the Commission estimated the administration costs of the Pharmaceuticals Industry Investment Program to be less than 1 per cent of total program payments (PC 2003). On the other hand, in its last inquiry into State and local government assistance (IC 1996), it found that the delivery costs for a range of programs averaged 28 per cent of the assistance provided, and some exceeded 80 per cent.

Rationales for industry assistance

A sound rationale is a necessary (though not sufficient) basis for good policy. Various rationales are posited for assistance, but some are more defensible than others.

Market failure

In exploring a wide range of policy issues, the Commission has found that government intervention in the economy is most likely to generate net benefits when focussed on addressing *genuine* and *significant* market failures. The 'spillovers' from one firm's R&D to rival firms is a well known example of a 'market failure'; the 'information gaps' that hinder some businesses in determining whether it is worthwhile to invest in energy efficiency measures is another. Where market failures are significant and government measures can be devised that address them efficiently, such measures offer scope to generate net benefits.

In practice, much government intervention (for example, in relation to public utilities and financial markets) has been predicated on market failure and, over the years, the Commission itself has identified numerous instances where government interventions have been warranted on these grounds — including, for example, in relation to product liability, consumer protection, gambling, broadcasting, building standards, water supply, recycling, workplace safety, chemicals and plastics, access to infrastructure services and trade practices.

In relation specifically to industry assistance measures, in its recent study on *Science and Innovation* the Commission confirmed that there are significant market failures surrounding R&D and that a number of existing R&D assistance measures, while amenable to improvement, are likely to yield net benefits (PC 2007b). Commission research has also identified market failures that might warrant industry assistance in other areas including, for example, in relation to aspects of exporting and business networking (Lattimore et al. 1998). And the Commission has identified significant market failures in the context of some inquiries into particular industries, such as the automotive industry (PC 2002b).

That said, there is a tendency for proponents of assistance to co-opt the language of market failure — labelling ordinary inter-industry linkages as 'spillovers', for instance — or to assert that a particular market outcome represents a market failure and justifies a particular assistance measure. No market is without its imperfections but, for instance, the failure of particular commercial enterprises does not constitute market failure. Moreover, while market failures in a strictly technical sense can be pervasive, the task for policy making is to identify those instances *of sufficient significance* that 'corrective' government action (and its costs) are warranted.

'Second best' rationales

There can also be a 'second best' rationale for the provision of assistance — essentially, to counter the effects of distortions caused by other government policies. For example, profits and losses are treated differently under Australia's corporate tax system: profits are taxed immediately, whereas losses must be carried forward for tax purposes and thus lose some of their value (as a means of reducing tax payable) to the business. Often this loss is appreciable. In effect, governments generally share more of the gains of higher risk investments, compared to less risky ones, but considerably less of the losses. In this case, it is not feasible to address the problem through changes in current tax law without significant risk of abuse. Accordingly, there may be a case for compensating assistance measures to encourage riskier investments (PC 2007b, p.81).

Distributional issues

Distributional considerations provide a further rationale for some forms of industry assistance. Most clearly, assistance may sometimes be warranted to compensate producers for government decisions that lead to the loss of pre-existing 'property rights'. For example, when the dairy industry was deregulated in 2000, causing a decline in milk prices, the Government provided producers with compensatory payments, as well as exit assistance to those producers wanting to leave the industry.

Equity considerations may also be a factor underpinning the provision of retraining and adjustment assistance for workers displaced by reforms or structural change. Similar considerations may apply to the retention for a period, albeit at progressively lower rates, of tariffs and other pre-existing forms of assistance that would otherwise be clearly unjustified. Equally, it needs to be recognised that the special treatment for recipients inherent in the provision of assistance can itself be criticised on equity grounds.

Problematic pretexts

In contrast to the above circumstances in which assistance is potentially justified, a variety of propositions used to advocate assistance do not in themselves constitute valid rationales. These include arguments that assistance is necessary to boost exports, to protect jobs or increase employment, to enhance the viability or competitiveness of particular firms and regions, to promote the growth of 'strategic' sectors and transform industry structures, to reduce or rectify trade imbalances in particular sectors, to hasten business outcomes, or to counteract the effects of exchange rate appreciation or competition from low-cost foreign suppliers.

Box 6.2 **Problematic pretexts for assistance**

As noted in the text, it is sometimes proposed that assistance is necessary to boost exports, to reduce or rectify trade imbalances in particular sectors, to enhance the viability of particular firms and regions facing heightened competition from abroad, to maintain employment, and to hasten business outcomes and so on.

Among other things, some propositions of this type suggest confusion about the appropriate aims of economic policy. For example, exporting is not an end in itself because, while exporting brings benefits, the production, marketing and delivery of goods and services for export also uses Australian resources. For Australia to gain from any particular exporting activity, the benefit received needs to exceed the value that could have obtained by using the embodied resources to supply the domestic market (or, in some cases, by 'leaving them in the ground' to retain the option of future use). Thus, while most current exporting activity may well generate net benefits for Australia, it cannot be presumed that additions to exports, particularly if induced artificially by assistance, will automatically do so too. Economic policies should aim to enhance the net pay-off the Australian community gains from its resources; not to achieve particular levels of (or increases in) activities such as exporting.

Some also reflect misunderstandings of the mechanics of economic activity and policy. For example, the objective of rectifying trade imbalances in particular sectors presumes that such imbalances are bad. Yet the exploitation of sectoral trade imbalances allows economies to specialise in certain areas of production, export their surpluses and import other products. This is where many of the benefits of trade arise. Similarly, that some firms and industries are rendered less profitable or even viable by movements in the exchange rate is not a market failure; rather, it is a necessary aspect of the process of structural adjustment by which resources are induced to move between sectors within the economy in order to best exploit changing economic circumstances and emerging opportunities.

Some pretexts for support fail to recognise the strength and adequacy of private and commercial incentives in many facets of economic activity. For instance, certain R&D assistance schemes have been predicated on the basis that 'speed to market' is critical for an innovation's commercial success. However, business people have no shortage of incentives to take account of things that are known to be critical for commercial success, and to make appropriate judgments about whether it is worth devoting resources to hasten their speed to market.

And some relate to objectives, such as employment, that are best dealt with using other instruments. Of course, it may be possible to retain jobs in a particular sector by assisting that sector, at least in the short term. However, the provision of assistance can be costly and typically has adverse side-effects on other industries, reducing employment opportunities elsewhere in the economy. Employment levels within an economy are largely dependent on macro-economic phenomena and education, training and labour market policies, and are poorly dealt with via industry assistance.

The Commission has examined propositions of this type in a variety of contexts, and has generally found them to be insufficient on their own to justify industry assistance. This is not to say that benefits do not derive from exports, jobs, firm viability and so on; nor that rationales do not exist that would justify measures that would promote these. However, as self-standing rationales for industry assistance, such propositions have several limitations (box 6.2), and assistance measures based on them risk generating significantly more costs for Australia than benefits.

Ensuring net pay-offs

While the identification of a well-founded rationale is an important prerequisite, it is not enough to ensure that assistance measures will confer a material net pay-off to the community. Given the adverse side-effects and other costs of providing assistance, mentioned earlier, it remains necessary to consider whether the economic efficiency and/or distributional benefits of particular measures are likely to exceed those costs. Some matters relevant to such assessments are discussed later in this section.

A further consideration is whether a particular assistance measure is the best response available to address an identified market failure or a second best or equity concern. For example, in its report on automotive assistance, the Commission (2002b, p. 147) concluded that the automotive industry generates significant spillovers, but that it is preferable to support spillovers through generally available measures, such as general R&D support, rather than to provide compensatory industry-specific assistance. Similarly, the social security and tax systems, as well as generally available adjustment measures, will usually be the most appropriate vehicles for assisting the adjustment process and moderating adverse distributional impacts, including those induced by changes in government policy (PC 2001).

Careful design of assistance measures

The design of an assistance measure entails many choices. Some of these are threshold issues, such as what type of policy instrument to use; others are of a more detailed nature, such as how to define ‘small’ business or ‘eligible’ investment activity, for the purposes of delimiting access to the assistance.

Box 6.3 contains several principles and considerations that provide guidance for the design of efficient and effective industry assistance. These have relevance for the design of assistance measures generally, although the main focus of the following discussion is on the design of budgetary assistance programs.

In the Commission’s experience, the extent to which sound assistance policy and design requirements are met in practice varies greatly.

Box 6.3 **Key questions in designing assistance measures**

Scoping and targeting the problem

- What is the underlying market failure, distortion or distributional concern that may warrant intervention? What economic activity is considered to be 'undersupplied' by the market, and are there impediments to that activity that cannot be changed? Why are personal or commercial incentives insufficient to generate reasonable outcomes?
- How large and widespread is the problem? For how long may support be needed?
- Is there a clearly defined target/recipient for assistance that is closely linked to the problem? What types of measures would most directly correct the problem or counter its effects?
- What are the (measurable) outcomes by which to judge effectiveness?

Maximising induced activity (additionality) that has public benefit spillovers:

- Where relevant, what types of firms or activities are more likely to have high inducement rates together with high spillover effects? What design mechanisms could be used to target those and screen out activity that would have taken place anyway, without assistance? Are there risks that the assistance may 'crowd out' other activity (such as diverting resources from unassisted R&D to assisted R&D)? How can these be managed?

Minimising adverse behaviour and unintended (indirect) effects:

- Is there potential for inefficient strategic changes in activity to qualify for assistance or manipulation to inflate claims? Will cost subsidisation reduce the incentive to contain total costs and exercise sound project management? Is there potential for leakage of assistance to unintended beneficiaries (such as foreign shareholders or local service providers)?
- Could the assistance undermine the objectives of other economic and social policies (for example, by diverting land and labour and bidding up input prices)?

Eligibility:

- Should the assistance be selective (merit based) or generally open to all? Do the selection criteria reflect sound assistance principles (such as additionality and spillover benefits)? Is the selection process appropriately transparent, publicly accountable and cost efficient?

Quantum considerations:

- Is the assistance provided proportionate to the scale of the problem?
- Are there overlaps with other assistance measures, including State and Local Government measures? Will effective assistance fluctuate with variables outside of program control (exchange rates, tax rates)? Are there key design parameters which need regular updating, and can they be estimated precisely?
- Are the anticipated benefits of the amount of assistance to be provided (taking into account inducement rates, spillovers etc) sufficiently large to outweigh the costs (including the administration, compliance, and tax-raising costs)?

Targeting

Effective programs draw on sound rationales to target, as closely as possible, the underlying problem. For example, small business programs should address economic problems that are associated with firm size — such as informational market failures — rather than be aimed at supporting small business per se. Good targeting should translate into a capacity to articulate (measurable) objectives.

In turn, targeting the underlying problem has implications for the nature of the assistance measure adopted. For example, one rationale for export facilitation assistance is that firms may be ignorant of the benefits of exporting or not have the required know-how. However, this problem is probably only significant for smaller non-exporting firms in certain industries, and suggests an awareness raising program rather than the general provision of export subsidies (Lattimore et al. 1998).

Targeting of the problem can also have implications for the duration of assistance. For example, where a program is premised on a lack of awareness of the value of certain practices (such as improving energy efficiency) or of undertaking a particular activity (such as breaking into new export markets), the assistance should have a fixed life, with the important objective that the better practices and activities will continue once public support has ceased. In a similar vein, the intention of the forerunner of the current Tasmanian Wheat Freight Subsidy Scheme, which commenced in 1989, was to provide *transitional* assistance to Tasmanian bulk wheat users (such as flour millers and livestock farmers) to adjust to the deregulation of domestic wheat marketing and pricing arrangements. This implies a program of limited duration (whereas, in fact, the assistance remains in place today even though the original objective has been met.) (PC 2006b).

Inducing additional activity

A critical consideration for the design and effectiveness of many budgetary assistance programs is how to induce an increase in the level of the targeted activity, rather than just transferring taxpayers' dollars to firms for little or no public benefit.

Public funding does not necessarily translate into new dollars of activity. This is partly because some of the assisted activity may have taken place anyway. For instance, around half of the subsidies for R&D and value added activity under the (former) Pharmaceutical Industry Investment Program (PIIP) were estimated to have represented a 'free lunch' for the recipients (PC 2003); and, as reported in chapter 3, some 63 per cent of Export Market Development Grants (EMDG) recipients surveyed by the CIE indicated that the scheme had little or no influence on their export marketing. Further, a series of assessments of the basic (125 per cent) R&D tax concession strongly suggests that the majority of subsidised activity would have occurred anyway (BIE 1993, Lattimore 1997, CIE 2003, PC 2007b).

Even where recipients of assistance are induced to undertake some new activity, the assisted activity may 'crowd out' some unassisted activity. For example, assistance for exporting to 'new' markets may divert supply away from existing markets. Diversion effects (both within a firm and between firms, industries and regions) are more likely when there are capacity constraints on necessary inputs, such as skilled labour, that limit overall expansion.

Close attention to targeting can achieve higher rates of inducement. Thus, for example, inducement will tend to be higher where assistance is provided for activities that extend firms beyond their current skill sets (such as breaking into new, culturally different export markets). Inducement may also be higher than otherwise where eligibility criteria identify firms that are constrained (such as liquidity-constrained start-up firms, firms with tax losses, or firms with higher debt/equity ratios).

One challenge facing designers of assistance measures is that managers of firms have weak incentives to disclose to program administrators whether they were going to undertake some subsidised activity or not. When assistance eligibility conditions are not tight and compliance costs are low, firms will be more likely to apply for government subsidies, even though they were going to do the activity anyway.

Some program designs try to create incentives, or to ring-fence assistance, to avoid assisting activity that would have occurred anyway. These include schemes that tie assistance to increments in firms' activity levels, such as the premium (175 per cent) R&D tax concession. These and some other mechanisms for inducing additionality are discussed in box 6.4.

Box 6.4 Some options for improving additionality

Incremental schemes

Tying assistance to increments in firms' activity levels is one way to better ring-fence assistance to avoid assisting activity that would have occurred anyway. For example, the 175 per cent R&D tax concession is only payable for certain R&D expenditure exceeding the firms' average expenditure on such R&D for the previous three years. Similarly, under the Pharmaceutical Partnerships Program, assistance is provided only for incremental activity over a rolling average base. Incremental schemes put pressure on firms to keep lifting their activity level. To encourage such effort, incremental schemes tend to offer significantly higher subsidy rates than non-incremental schemes. That said, it is an empirical question as to whether a particular incremental or non-incremental scheme generates a better 'bang-for-public buck', as it depends on the actual inducement and subsidy rates.

Contingent repayable assistance

Repayable assistance schemes have been used in Australia (for example, as part of the R&D Start scheme) and overseas, partly as a means of limiting assistance to non-induced activity. If the targeted activity proves not to generate sufficient revenue for the firm to cover the costs it incurs (even though it may generate important spillovers), the firm retains the assistance. But where projects prove to be profitable in their own right, the assistance is returned to the government.

The incorporation of 'profit sharing' and 'stock option arrangements', contingent on commercial success, can further sharpen the incentives for firms to not seek assistance for projects that they were intending to do anyway. For example, if the government were to require a share of the royalties from any subsidised R&D projects that proved commercially successful, a firm that has a commercially attractive proposition will be reluctant to dilute its interest by agreeing to share the profits. Genuine "incentive compatible mechanisms" of this nature — along the lines proposed by Fölster (1991) — do not appear to have been applied widely in practice, but there are arguments for such experimentation.

Selection methods

Additionality is also likely to be affected by methods used to distribute assistance to applicants. The 'open to all' approach — where assistance is 'automatic' within the rules of the scheme (such as under the basic R&D tax concession) — is less likely to screen out activity that would have taken place without assistance. However, such simple and broadly-based rules can reduce resources devoted to wasteful lobbying and litigation. In contrast, allowing greater administrative discretion in decisions regarding assistance provision, using particular selection criteria, may be justified if the extent of social spillover benefits and/or the responsiveness to assistance (inducement rate) varies 'noticeably' from one 'target' (firm, industry, sector, type of activity) to another — the policy challenge is whether such differences can be reasonably known beforehand by decision makers.

Minimising strategic behaviour and unintended effects

Another important consideration for the design of some assistance measures is the risk that some firms may simply alter their reporting practices in order to qualify for additional assistance. Past examples of this phenomenon include:

- attempts by firms to have non-R&D activity pose as genuine R&D, as occurred in the case of core technology, feedstock in pilot plants and interest deductions in the R&D tax concession and syndicated R&D programs during the 1990s — in 1995-96 assistance claims for such 'other' R&D expenditure totalled over $2 billion, close to half of total R&D claims (Banks 2000); and
- manipulation of claims to increase assistance paid under the Tasmanian Freight Equalisation Scheme (TFES), where a quirk in the design allowed businesses to make inflated claims (PC 2006b, p. 102).

Further, the provision of some forms of assistance can dull incentives for good project management and cost control, such as where funding is made proportional to the recipient's costs. One design approach for preserving these incentives is a sliding scale of reducing assistance as costs rise. A more extreme approach is to decouple assistance from costs: for example, by providing assistance as a flat rate of subsidy per unit of output.

Assistance may also leak to unintended beneficiaries if, for example, service providers (say a business consultant or freight company) are able to increase their prices in the knowledge that clients are to be subsidised. The scope for such appropriation of assistance by third parties depends predominantly on the degree to which the input markets are competitive. Leakage of assistance can also occur where it is provided to foreign-owned firms, but the level of inducement of the targeted activity is less than 100 per cent. Some of the assistance in such cases is a pure transfer from Australian taxpayers to foreign shareholders and a loss to Australia. The Commission (2003, p. 6.20) estimated such leakage to foreigners over the first three years of the PIIP to amount to $35 million, after allowing for company and withholding tax.

The provision of assistance may also undermine other objectives. For example, the provision of assistance to ethanol production would be expected to increase demand for land and feedstock, thereby bidding up the price and/or diverting supply away from other agricultural activities.[2] Such impacts should be properly canvassed and weighed prior to the introduction of a measure.

More generally, efficient and effective assistance design needs to take account of potential interactions with other policies and programs. Areas where assistance is provided through multiple mechanisms include renewable energy technologies, regional assistance, emerging technologies and 'strategic' sectors, tourism, exports and R&D. Polices and programs in such areas may overlap, compensate for, complement or adversely affect each other. Whether they collectively exhibit a degree of redundancy or complementarity is an important consideration. In this context, the potential for (and impact of) double-dipping needs to be closely scrutinised. For example, during its TFES evaluation (PC 2006b, p. 102), the Commission found some Tasmanian companies were receiving both freight assistance and regional development assistance.

Trade-offs and strategic considerations

The various principles and considerations elaborated above are inter-related, and at times involve trade-offs. For example, merit selection can aid targeting and induce greater additionality but may reduce administrative efficiency and increase compliance costs. Thus, isolated criticisms of a particular scheme's design are just that; ultimately it is the total effectiveness and efficiency of a program or measure that counts.

At a broader strategic level, the provision of assistance can entail 'diminishing marginal benefits'. For example, the positive inducement effect of more assistance (such as via a higher rate of subsidy, wider coverage, or longer duration) is, at some point, likely to wane. Moreover, a proliferation of schemes spreads government analytical and administrative expertise more thinly. Further, political economy considerations need to be recognised: if, once in place, a measure may be difficult to withdraw due to lobbying, that risk of irreversibility is a basis for caution at the outset, both in regard to introduction of the measure and the initial quantum of assistance it provides.

At the same time, the complexities and uncertainties entailed in the design of assistance programs mean that a degree of policy experimentation is warranted. Some mechanisms that have been used to contain these risks while retaining the benefits of experimentation include pilot programs, duration sunsets and multiple merit selection rounds, which can provide opportunity for learning and reformulation as well as cater for new entrants who missed earlier rounds.

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2 Indeed, an Australian study (CIE 2005b) estimated that mandatory blending of ethanol with petrol and diesel would permanently increase the average price of grain in Australia by over 25 per cent. An OECD study (cited in Webb 2008) estimated that the biofuels production in the United States, Canada and the European Union needed to replace 10 per cent of fossil fuels in transport could require between 30 and 70 per cent of existing crop areas (other things equal). As noted in chapters 3 and 4, assistance to ethanol is one factor underpinning recent increases in the price of feed grains, which has adversely affected pig producers and other rural industries (PC 2007c).

In sum, the design of assistance measures is not amenable to a mechanical approach. Rather, the design principles and options elaborated above have to be applied in a nuanced way, taking account of each specific context. As such, continuing reflection and appraisal of the rationale, effectiveness and economy-wide value for money of assistance measures is paramount.

Performance evaluation and redesign

As noted, because it is difficult to anticipate all the effects that interventions may have, and because circumstances change over time, there needs to be periodic evaluation of assistance programs, feeding back into better design.

While this happens in some cases, the Commission's *Science and Innovation* study identified some gaps and deficiencies in current practices:

> Programs with significant budgetary implications are not always subject to routine, transparent and independent evaluation, nor always use rigorous methods to determine program effects. The results of evaluations are not always used to change programs that are not working well. There are some notable shortcomings in the arrangements for evaluating business programs, and most recently R&D Start, the predecessor to Commercial Ready. Reforms are needed. (PC 2007b, p. XXVI)

Three factors central to good post-implementation evaluations and reformulation are:

- structuring the review team and process to reflect the measure's significance and complexity;
- obtaining and using sound data and rigorous methodologies; and
- openness to sharing evaluation results and feeding sound assessment findings back into program design.

Appropriate structuring of review arrangements

While internal evaluations may be satisfactory for seeking ways of improving a program's administration and cost-effectiveness, more complex and significant cases are best addressed by review teams independent of program administration or policy. This is particularly so for evaluations that examine the fundamental question of a measure's appropriateness, which entails the assessment of its rationale, effectiveness and efficiency in an economy-wide sense. Inevitably, departmental officials may face mixed incentives when considering evidence that points to deficiencies in programs administered by their department or that could require the withdrawal of assistance to certain firms and industries within the portfolio's ambit.

While there are a variety of review arrangements entailing degrees of independence (Banks 2007), the robustness of a review is likely to be greater, and the risks of conflicts of interest minimised, where the review body is fully independent of both a program's administration and its direct beneficiaries.

Evaluation processes can also be bolstered by providing:

- scope for public consultation and the testing of policy options;
- appropriate terms of reference, encapsulating a focus on key principles such as rationales, economic spillovers and additionality; and
- sufficient time for thorough research, deliberation and reporting.

Sound methodology

Evaluations of assistance measures are fundamentally about assessing the impacts of a measure, including not only its direct effects on the recipients of assistance, but also its indirect effects on recipients and others. Empirical facts and analysis are a cornerstone of sound evaluations:

> Effective policy advice … must embody the highest standards of evidence-based analytical rigour. ... Analytical rigour demands soundness of empirical methods, analytical tools, models and frameworks. Analytical rigour should be the foundation upon which all advice is based; the ultimate assurance of its quality and credibility. (Henry, 2007)

There appears to be a good basis for internal and external quantitative program evaluation in Australia, including availability of reasonable data (departmental databases, ABS data, business records, international studies) and people with the relevant skills. Even so, data collection could be enhanced by setting appropriate and measurable performance indicators at the commencement of assistance programs, backed by the ongoing collection of relevant data and by limiting to the extent possible the confidentiality of data (PC 2007b; PC 2006b)

A stock-take of the many hundreds of evaluations undertaken across government programs would inevitably show a wide range in the methodologies and level of rigour applied. While in practice all evaluations are constrained to some extent by time, data and expertise, there are some aspects of the empirical component of program evaluations, and the appraisal of assistance measures generally, that often require closer attention (box 6.5).

Box 6.5 Empirical techniques and principles for evaluating assistance

A number of well-known empirical techniques are useful for evaluating the impacts of assistance measures. They are particularly relevant for 'ex-post' evaluations; although the underlying concepts can also be useful in policy development for helping to estimate, in advance, the potential impact of proposals. But the use of these techniques is mixed, and there are pitfalls to avoid.

- *Focussing on additionality* — This is typically paramount for determining a measure's effectiveness, but has at times been poorly measured.
- *Using control groups* — Comparison of outcomes achieved by assistance recipients with those of a control group (individuals or firms not in the program, but which are, in other respects, identical to the treatment group) can help distinguish the impact of the program from the many other influences affecting the behaviour of participants.
- *Distinguishing between correlation and causation* — For example, although there is a positive statistical relationship between export promotion expenditure and the size of EMDG grants, this does not indicate whether the grants cause promotion expenditure to increase: it is possible that firms that spend more on promotion qualify for larger grants.
- *Examining non-assistance influences on business outcomes* — Investigation of factors, aside from assistance, that may influence business outcomes (such as exchange rate changes, trade policies in overseas countries, and regulatory settings) can also help to isolate and understand the effects of the assistance, and may assist in better targeting.
- *Assessing the economy-wide benefits and costs* — In addition to measuring the gross benefits of assistance to recipients, assessments need to consider the type and scale of offsetting effects, such as from 'crowding out' that reduces the total inducement rate and any adverse effects on other firms, industries, consumers and the costs to taxpayers. For major assistance schemes, general equilibrium modelling can assist in gauging the more diffuse effects on variables such as exchanges rates, input costs and wage levels.
- *Using appropriate industry or activity data* — For example, the Commission's 2005 examination of tourism assistance found that official tourism statistics significantly overstate the size of the industry and do not provide a good basis for measuring the activity benefitting from, and potentially responding to, government support. Their use can cloud judgments about the impact of tourism assistance.
- *Avoiding the misuse of multipliers* — Gross input-output multipliers have been used in many studies to boost the estimated impact of assistance, in terms of jobs, income and tax revenue. While such multipliers are useful for understanding linkages between industries, they do not provide an appropriate measure of the impact of assistance. In particular, they do not measure spillover benefits and, by not considering the 'opportunity costs' of activity induced by assistance, they do not measure the economy-wide effects.

Post evaluation reporting and reformulation

Performance evaluation will only be useful if the findings are drawn on to enhance the future benefits of public support.

The timely and public reporting of the results of program evaluations should be expected as it increases transparency, reinforces the accountability of those designing and managing programs to act in the community's best interests and provides useful information to potential program participants. In practice, this has not always happened (PC 2007b pp. 420-421).

When sound evaluations identify assistance programs that do not pass an economy-wide net pay-off test, or recommend options that could improve effectiveness and value for money, it is reasonable to expect that the program will be reformulated or terminated. This occurred, for example, in response to the Commission's 2003 PIIP evaluation, which had found that additionality from assistance to pharmaceutical value added had been much lower (and had fewer spillover benefits) than from assistance to pharmaceutical R&D. The PIIP was replaced by the Pharmaceutical Partnerships Program in July 2004, with assistance tied solely to R&D.

However, there are also many cases where adverse evaluation findings have not been fed back into program design. These include the CIE's 2003 review of the R&D Start program and the Commission's March 2007 findings in relation to the basic R&D tax concession (although this program is within the scope of the new Government's innovation review). The release by the government of a statement of reasons for non-implementation is appropriate in such cases.

6.3 Areas of assistance for review

Notwithstanding the considerable reform of industry assistance over recent decades, there remain specific industry assistance measures, or broad areas that receive assistance from a number of measures, that prima facie warrant review. In some cases, this reflects apparent inadequacies in the policy processes used in establishing the measures, or in subsequent evaluations or reformulations, or concerns that have come to light since the measures were last examined. More generally, as noted above, with changing circumstances and improvements in the understanding of assistance, there is a need to periodically review the ongoing relevance and effectiveness of all programs, and interactions between them.

Recently announced reviews

The new government has already announced reviews in several areas of industry assistance (box 6.6), notably in relation to:

- the national innovation system;
- the automotive industry;
- the textiles, clothing and footwear industry; and
- exports policies and programs, including preferential trade agreements.

Other reviews announced recently that potentially cover some industry assistance matters include an independent review of quarantine and biosecurity arrangements (Burke 2008) and a parliamentary inquiry into coastal shipping (Albanese 2008).

National innovation system

The innovation review was announced on 22 January 2008. In releasing details of the review, the Minister for Innovation, Industry, Science and Research said:

> In today's economy, innovation policy is industry policy. … In particular, we need to find ways to increase innovation performance across the economy, to ensure that business has better access to new ideas and new technologies and to bridge the divide between industry and research (Carr 2008c).

Among other things, the review's terms of reference require examination of the scope for simplifying and reducing program duplication and ensuring that any support is well-targeted and easy to access. They specifically request examination of the R&D tax concession and the Cooperative Research Centres (CRC) program.

As noted in chapter 3, the Commission's 2007 *Science and Innovation* study made a number of recommendations to improve the design of the R&D tax concession and related programs, in particular to improve the extent to which the measures induce additional R&D activity and spillovers, rather than acting primarily to transfer money from taxpayers to R&D-intensive businesses. To date, only one of these recommendations has been implemented.

In relation to the CRC program, while collaboration between business and academic entities can generate significant benefits, the Commission found that current cost-sharing arrangements mean that the effective subsidy to business can potentially be very high compared with support provided by other science and innovation programs, and that such subsidies should be better aligned with the social benefits (PC 2007b, pp. 443, 455). The CRC program is geared toward large-scale, longer term research programs which are more suited to big research users. The Commission also found that CRCs are relatively cumbersome avenues for partners

Box 6.6 **Arrangements for recently announced reviews**

Innovation

The review is chaired by Dr Terry Cutler (Director of CSIRO and Chair of the Advisory Board for the Centre for Excellence for Creative Industries), supported by a panel comprising academics, business representatives and senior public servants. It is to consult nationally and provide a 'Green Paper' for public comment by the end of July 2008, before a Government 'White Paper' is released later in 2008.

The establishment of a panel to review the innovation system reflects a pre-election commitment made by the new government. The terms of reference also require the panel to have regard to the Productivity Commission's study on *Public Support for Science and Innovation*, among other studies.

Automotive and TCF

The automotive review is headed by Mr Steve Bracks (the former Premier of Victoria), supported by a panel, principally comprising current and former automotive industry and union representatives. The review is to consult stakeholders and call for public submissions. An interim report is to be provided to the Government by 31 March 2008, with a final report due by 31 July.

The TCF review is headed by Professor Roy Green (the Dean of the Macquarie Graduate School of Management), supported by a reference group principally comprising industry and union representatives and academics. The review is to consult stakeholders and call for public submissions, with a report to be provided to the Government by 31 August 2008.

The establishment of panels to review the automotive and TCF industries reflects pre-election commitments made by the new government. In announcing the reviews, in each case the Minister indicated that the Government would also request the Productivity Commission to undertake modelling on 'economy-wide effects' of future assistance options, with the modelling to be released publicly to inform the panel's examination of the industry, public debate, and the Government's deliberations.

Export programs and PTAs

The review is to be chaired by Mr David Mortimer AO (Chairman of Leighton Holdings, Australia Post, Crescent Capital Partners and the Defence Procurement Advisory Board), supported by Dr John Edwards (Chief Economist with HSBC Australia). The review is to report by 31 August 2008. It will consult with stakeholders and call for public submissions. As part of the review, research will be conducted on Australia's approach to 'free trade agreements', under the leadership of an expert reference group, with the results to be incorporated in the export review's final report.

Sources: Carr 2008a, 2008b, 2008c; Crean 2008.

to enter and exit a venture and entail a heavy compliance burden, concluding that there were complementary options for business collaboration with public sector research agencies and universities that could provide more 'nimble', less management-intensive, arrangements (PC 2007b, p. XXIX).

The automotive and textiles, clothing and footwear industries

In announcing the review of the automotive industry on 14 February 2008, the Minister for Innovation, Industry, Science and Research said:

> The automotive industry is strategically vital to Australia in terms of employment, exports and innovation. … The review will assist laying down a new set of principles to make the industry sustainable into the future. (Carr 2008a)

The automotive review's terms of reference require an evaluation of the key outcomes of the Automotive Competitiveness and Investment Scheme (ACIS), an assessment of the automotive tariffs (which are currently scheduled to fall from 10 per cent to 5 per cent in 2010), and an assessment of current and prospective trade obligations arising from Australia's multilateral and preferential trade agreements.

The review of the Australian textile, clothing and footwear (TCF) industries was announced on 8 March 2008, the Minister stating:

> The TCF industries have an important role to play in Australia's economic and social future. ... [The review's] task will be to develop practical and effective strategies to ensure Australia's TCF industries will be vibrant, innovative and competitive well into the future (Carr 2008b).

Among other things, the TCF review's terms of reference require an evaluation of the appropriateness and effectiveness of sector-specific assistance and trade measures, including TCF tariffs (which are scheduled to decline in 2010). It is also to examine the adequacy of existing structural adjustment assistance.

In announcing each review, the Minister indicated that the Productivity Commission would be requested to undertake and publish separately modelling on 'economy-wide effects' of future assistance options, to aid debate and deliberations in these areas.

The economy-wide effects of assistance to these industries include not only its effects on people in the industries but also its effects on the consumers, taxpayers and other industries that bear the costs of that assistance. They also include any spillover benefits to other sectors. Central to such an analysis are the effects of assistance on the allocation of Australia's labour, capital and other resources within the economy generally. Especially in times of skills shortages and capacity constraints, measures that enable favoured industries to hold or attract resources are likely to restrict the scope for other industries to expand, with the net outcome for the economy being dependent on the relative efficiency of the industries concerned and the burden imposed by the cost of the assistance.

Export programs and polices

The review of export policies and programs was announced on 21 February 2008 by the Minister for Trade, who stated:

> … Australian exports have underperformed in recent years. Across all major export categories, growth of export volumes in the past six years has been below the historical average since the floating of the Australian dollar in 1983…
>
> [the review] represents the Government's determination to develop an integrated approach to trade policy and ensure it is part of the broader economic policy settings … to ensure that our trade performance once again becomes a strong contributor to Australia's economic performance to sustain us beyond the resources boom. (Crean 2008)

The review's terms of reference include an examination of export policy and programs across all government portfolios and agencies and their linkages to State and Territory programs, and an examination of Australia's trade performance over the past two decades with a view to identifying measures to maximise Australia's export competitiveness potential. The review of the EMDG scheme, already required under legislation, will be brought forward and undertaken as part of this broader review.

Over the years, a variety of reasons — relating to trade balance considerations, export diversification, and the (perceived) higher value of income from exports — have been advanced as to why export support may be in the national interest. The Commission has undertaken research and made comment on various aspects of export assistance, including in the context of specific reviews (see, for example, Lattimore et al. 1998, PC 2000c, Gabbitas and Gretton 2003). In its submission to the 2000 Austrade review of the EMDG scheme, the Commission (PC 2000c) examined these rationales and concluded that 'it is very doubtful that some of [these] … provide a sound basis for assisting export activity.'

However, as mentioned in section 6.2, some rationales might form the basis for an export facilitation program — at least for small business — that could be justified on an economy-wide net benefit basis. These include spillover benefits to other Australian exporters from knowledge about new markets and the reputation built by 'trail blazers', ignorance of the benefits of exporting, and adverse business attitudes to exporting arising from an attitudinal legacy of tariff protection that focussed businesses on competing against imports rather than overseas expansion (Lattimore et al. 1998, table 4.4).

The appropriate policy response would depend on which of these problems applied, and whether the actual benefits of a particular measure exceeded the costs, taking into account the extent of spillovers and additionality induced by the measure.

The EMDG scheme itself has been in operation since 1974 and it has been reviewed and changed numerous times. However, the fundamental rationale for the scheme appears never to have been satisfactorily resolved, making it difficult to target assistance under the scheme, and to evaluate it.[3] In making specific recommendations about the continuation of the EMDG, as required under the review's terms of reference, the review will need to consider whether the scheme has a defensible rationale and is able to generate net benefits. As part of this assessment, the review will need to investigate the extent to which the scheme induces additional export marketing activity and the nature and extent of spillovers that arise from that additional activity, and to compare these to the benefits that might be obtained from more targeted export facilitation schemes. If it is deemed appropriate to retain the scheme in some form over the longer term, it will also be necessary to consider modifications to increase the level of exporting activity that it induces. Some design options were outlined in section 6.2.

Preferential trade agreements

As part of his February 2008 announcement, the Minister for Trade indicated that a research project on Australia's approach to 'free trade agreements' will be undertaken in parallel with the export policies and programs review, and its results will be incorporated in the export review's final report. Among other things, the research will assess the net benefits of Australia's most recent agreements, including the Australia-United States Free Trade Agreement, and will examine options for ensuring that any agreements Australia might negotiate in the future will strengthen the WTO multilateral trade system.

The Commission has commented on various aspects of what are more accurately labelled 'preferential trade agreements' (PTAs) in the last six editions of *Trade & Assistance Review*. A key message is that the effects of PTAs are significantly more

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[3] The 1989 review of EMDG (Hughes Committee 1989) endorsed the scheme on the basis that one legacy of protectionism was a business culture unused to international orientation. Clearly, such an environment is of the past. The current objective of the EMDG Scheme, set down in the *Export Market Development Grants Act 1997* is 'to bring benefits to Australia by encouraging the creation, development and expansion of foreign markets for Australian goods, services, intellectual property and know-how.' What is missing is account of the factors that may suppress exports below the socially beneficial level. The most recent review (Austrade 2005) did not assess the fundamental rationale for the scheme, instead focussing on the effectiveness of the assistance and changes that could be made within the current framework.

complex and uncertain than the effects of multilateral reform. Among other things, while offering scope to capture some of the well known benefits associated with trade liberalisation, PTAs can also divert trade from the most efficient supplier countries, entrench support for less ambitious multilateral reform from the beneficiaries of PTA discrimination, open the way for the inappropriate inclusion of 'non-trade' objectives in trade agreements, and divert skilled and experienced negotiating resources. Thus, depending on its scope and design, any particular PTA may either enhance or reduce economic welfare.

Much of the analysis of PTAs has involved modelling the potential impacts on trade and production in advance of the implementation of a PTA. Australia's recent PTA negotiations have typically been preceded by such 'in advance' modelling, which has generally indicated that a PTA with the partner country in question could generate significant net benefits for Australia. The Commission discussed some common limitations of such modelling in *Trade & Assistance Review 2004-05*.

One of the few empirical studies to assess the effects of PTAs *in place*, in various parts of the world, was conducted in 2003 by Productivity Commission staff (Adams et al. 2003). This analysis, while not definitive, suggested that a number of longer-standing PTAs may have diverted more trade than they created, potentially reducing welfare in the countries where this had occurred. However, the study also found evidence that some non-trade provisions could enhance international investment flows, particularly where the provisions were non-preferential in nature.

There are typically other considerations in developing PTAs that extend beyond traditional trade policy matters. The review will need to consider these, as well as how to balance the risks associated with PTAs with the risks of being left out in a world where trading blocs are proliferating.

Other areas that appear to warrant review

Beyond the reviews already announced, there are other assistance measures and programs that prima facie warrant review. As noted above, with changing circumstances and improvements in the understanding of market dynamics and the effects of assistance, there is a need to periodically review the ongoing relevance and effectiveness of all programs, and interactions between them. Indeed, there may be a case for developing a program of reviews, embodying robust processes, akin to those for reviewing restrictions on competition under National Competition Policy.

In assessing the need for such reviews and where the priorities might lie, relevant considerations include:

- whether the area in question receives high levels of assistance, and/or has received a recent increase in the level of assistance or changes in the form in which it is provided;
- whether the area receives assistance from a range of measures, which might offer scope for rationalisation;
- whether the relevant assistance measures were initially devised or previously reviewed in an appropriate way;
- whether there is a market failure or other rationale that, prime facie, would clearly justify the assistance;
- whether there have been significant changes in relevant markets or conditions that might affect the effectiveness of the measure; and
- whether previous evaluations have identified significant issues or raised questions about the appropriateness or design of the measure, and/or have recommended that it be reformed or reviewed.

A preliminary assessment against such criteria suggests that the following areas/measures be considered for inclusion in an initial tranche of reviews.

> *Drought relief* — State and Commonwealth Governments provide significant drought relief. There have been many changes to drought payment schemes, especially the Exceptional Circumstances (EC) and Farm Management Deposits schemes, and a sharp increase recently in the quantum of assistance. The 2003 Craik Review (DRP 2004) of the administration of the EC scheme recommended that there be a wider independent review. The prospect of significant climate change in the future adds to the desirability of such a review.

> *Defence procurement* — Defence procurement involves very large budget outlays, and purchasing preferences can provide substantial assistance to industries such as ship building, aerospace, electronics and engineering. Improvements in the efficiency and cost-effectiveness of the procurement function could yield large economic benefits. Australia's defence procurement arrangements were last examined (by the Commission) some 13 years ago.

> *Renewable energy assistance* — Assistance to renewable energy production, consumption and business R&D is significant, increasing, and characterised by considerable uncertainty. It is provided by both State and Commonwealth Governments and in many different forms. Particular concerns have been raised about effects of ethanol assistance on feed grain prices. A review could usefully consider the merits and effectiveness of assistance for renewable energy, including its links and interactions with other responses to greenhouse emissions.

Tourism assistance — State and Commonwealth governments provide significant assistance to tourism, and the quantum of assistance provided at the Commonwealth level has increased significantly in recent years (chapter 3), not always with robust justifications. There has been no recent independent review against best practice assistance principles.

Export marketing arrangements for wheat — Previous analyses of 'single desk' marketing have generally concluded that the potential benefits to the industry are likely to be small relative to the costs, and possibly involve net losses to the community as a whole. The most recent Wheat Marketing Review (Williams et al. 2004) lacked transparency and breadth.

Anti-dumping and countervailing duties — These measures are employed to promote 'fair' trade and to guard against predatory pricing behaviour. However, they also act as a barrier to imports and may result in higher prices that penalise consumers and user industries (including exporters). A scheduled National Competition Policy review of anti-dumping — which would examine whether the application of anti-dumping arrangements is appropriate — is now several years overdue.

Pharmacy restrictions — Restrictions on competition in the pharmacy sector are ostensibly in place to ensure consumer advice is safe, accessible and effective. As a by-product of the ways these objectives are targeted, pharmacy owners are specifically assisted and prices to consumers are higher. Previous reviews of pharmacy regulations have been piecemeal, and there have been concerns about some review analysis and government responses.

State, Territory and Local government assistance to industry — The Commission last reviewed the substantial assistance to industry provided by State, Territory and Local governments more than ten years ago (IC 1996). Since then, most States have signed a cooperative agreement to constrain inter-state bidding wars, although some rivalry continues. More generally, multiple jurisdictions and multiple assistance measures across all sectors provide a rich opportunity to identify and share what works 'best'. Equally, current capacity constraints in Australia increase the impetus to avoid assistance that predominantly shuffles labour and capital across regions with minimal net benefit at best.

Beyond these areas, there are several other government measures that, while addressing broader public policy goals, potentially provide considerable assistance to industry and may also warrant scrutiny. These include the private health insurance rebate, regional development programs, concessional treatment of small businesses, the 'three mines' uranium policy, and funding for elite sports and the arts.

Institutional processes for future reviews

In many of the above cases, the benefits of the assistance measures are concentrated in particular industries or sectors, while the costs are spread thinly across the broader community. This points to a need for wider public involvement in these reviews, independent review bodies, and terms of reference that emphasise an economy-wide perspective in examining the merits of the measures.

Looking more broadly, there may be merit in promulgating formal guidelines for the conduct of assistance reviews, taking account of the best practice assistance principles enunciated earlier. As noted above, there may also be a case for examining the merits of instituting a more systematic program of reviews of assistance measures, including programs at the State level.

Whether this is seen as warranted or not, in the Commission's view some matters from the above list need priority attention. These include drought relief, defence procurement, and assistance to ethanol and renewable energy policies. There is also a case for the government to undertake a stock take of recommendations from major recent reviews of industry assistance that have not been implemented — as is currently being done for the Regulation Taskforce's 2006 report, *Rethinking Regulation* — and to examine whether the considerations that led to non-implementation remain salient today.

A Detailed estimates of Australian Government budgetary assistance

Each year, the Commission calculates estimates of the Australian Government's budgetary assistance to industry and reports on the incidence of budgetary assistance. Prior to 2000, estimates had been reported only at the sectoral level — that is, for primary production, mining, manufacturing and services. To provide more detailed information on the incidence of this assistance, in 2000 the Commission disaggregated its estimates for the manufacturing and services sectors into 11 and 14 industry groupings, respectively. In 2002, further detail was provided by disaggregating the estimates for the primary production sector into 10 industry groupings. The Commission now reports estimates for 35 industry groupings (plus four 'unallocated' groupings).

The methodology used to allocate budgetary assistance to these industry groupings has been described in Methodological Annexes to previous editions of the *Trade & Assistance Review* (PC 2000a, PC 2002a and PC 2006a). For the estimates in this edition, the Commission has made new allocations for a number of new programs, for which expenditure first occurred in 2006-07. These allocations are listed in the Methodological Annex accompanying this edition of the *Review*.

The tables in this appendix contain detailed estimates of budgetary assistance to each industry grouping from 2001-02 to 2006-07. For each grouping, information is provided on:

- The programs classified as assisting the grouping and the extent of that assistance; and
- The activity that each program assists — such as exports and R&D.

The estimates are derived primarily from the Australian Government's budget papers, departmental annual reports and the Australian Treasury's Tax Expenditures Statements (TES). The estimates incorporate revisions to outlays and tax concessions for previous years.

Table A.1 **Estimated[a] Australian Government budgetary assistance to primary production, 2001-02 to 2006-07**

$ million

	01-02	*02-03*	*03-04*	*04-05*	*05-06*	*06-07*
Horticulture and fruit growing						
Industry-specific measures						
Assistance to the vegetable industry	-	-	-	-	0.3	1.0
Citrus Canker Eradication Programme	-	-	-	3.5	9.8	0.6
Citrus industry market diversification subsidy	0.7	-	-	-	-	-
Tax deduction for horticultural plantations	4.0	5.0	4.0	4.0	4.0	4.0
Tax deduction for grape vines	7.0	8.0	9.0	10.0	8.0	5.0
Sector-specific measures						
Agricultural development partnership	0.4	1.7	0.2	1.1	-	-
Drought Relief Package	-	<0.1	0.1	<0.1	-	-
Exceptional circumstances – interest rate subsidy	0.1	0.2	1.9	2.1	4.9	8.6
Farm Help	3.0	3.5	2.3	1.4	2.5	2.4
Farm Management Deposits Scheme	13.3	37.3	24.7	10.1	13.0	10.3
Farm Bis Program	1.9	4.0	3.8	2.7	1.1	0.9
Income tax averaging provisions	21.8	26.0	17.0	10.2	7.8	6.0
Industry partnerships program	-	-	-	3.5	2.7	3.0
Rural Financial Counselling Service	0.9	0.8	1.0	0.7	0.7	1.1
Skilling farmers for the future	0.4	0.5	0.4	-	-	-
Tax allowance on drought preparedness assets	<0.1	-	-	-	-	-
Tax deduction for conserving or conveying water	4.5	5.6	5.6	8.3	8.3	9.9
Rural R&D measures						
Grape and Wine R&D Corporation	5.9	7.6	6.9	8.1	12.0	14.5
Horticulture Australia Limited - R&D	26.3	29.6	28.4	32.9	33.6	34.6
Rural Industries R&D Corporation	1.9	1.9	2.0	1.9	2.3	2.3
General export measures						
Export Market Development Grants Scheme	1.7	1.7	1.7	1.4	0.9	0.9
TRADEX	0.1	<0.1	<0.1	<0.1	-	-
General investment measures						
Development allowance	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
General R&D measures						
Biotechnology Innovation Fund	-	-	0.1	0.1	0.1	<0.1
Commercial Ready Program	-	-	-	-	1.0	1.3
COMET Program	0.1	<0.1	<0.1	0.1	<0.1	0.1
Cooperative Research Centres	2.1	2.0	4.2	3.7	1.6	-
CSIRO	10.2	10.5	15.7	24.0	22.9	23.9
Major national research facilities	0.1	0.7	1.1	1.3	1.3	-
New Industries Development Program	1.4	1.3	1.1	1.2	0.9	0.6
Premium R&D tax concession	<0.1	0.1	0.2	0.2	0.2	0.3
Preseed fund	-	3.4	0.7	0.3	-	0.1
R&D Start	0.1	1.6	0.2	0.4	0.2	<0.1
R&D tax concession	0.3	0.7	0.8	0.5	0.5	0.6
R&D tax offset for small companies	-	1.4	1.9	1.6	2.0	1.9

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Other measures						
Eden Structural Adjustment	<0.1	<0.1	<0.1	-	-	-
Farm Innovation Program	3.1	0.7	0.1	-	-	-
Small business capital gains tax exemption	0.3	1.1	1.1	0.6	0.6	0.8
South West Forests Structural Adjustment	0.1	0.1	-	-	-	-
Wide Bay Burnett Structural Adjustment	0.1	0.1	-	-	-	-
Total	*111.7*	*157.3*	*136.2*	*135.9*	*143.2*	*134.7*
Grain, sheep and beef cattle farming						
Industry-specific measures						
Australian Wool Innovation grant	-	-	-	-	-	15.0
Beef Expo & Gracemere Saleyards	1.8	3.9	-	-	-	-
Lamb industry development program	11.8	-	-	-	-	-
National Livestock Identification System	-	-	-	5.0	5.0	5.0
Ovine Johnes Disease Control Programme	0.4	0.1	0.1	0.3	0.3	-
Tasmanian wheat freight subsidy	0.8	0.8	0.8	0.4	-	-
Tuberculosis Freedom Assurance Programme	-	-	1.0	0.6	-	-
Sector-specific measures						
Agricultural development partnership	0.2	0.7	0.1	0.5	-	-
Drought Relief Package	-	2.1	4.8	1.6	-	-
Exceptional circumstances – interest rate subsidy	6.9	25.2	66.1	70.9	166.2	291.8
Exceptional circumstances – relief payments	10.6	24.5	92.8	70.9	92.8	150.8
Farm Help	8.1	12.3	5.0	7.1	6.2	6.3
Farm Management Deposits Scheme	109.8	306.4	178.8	67.8	78.3	46.7
Farm Bis Program	11.6	17.7	14.2	6.9	6.5	5.5
Income tax averaging provisions	163.2	139.3	90.8	55.9	43.2	33.0
Industry partnerships program	-	-	-	0.1	0.3	0.4
Interim Income Support	0.3	27.8	25.1	1.1	0.3	7.0
Rural Financial Counselling Service	1.4	1.7	2.0	1.9	2.5	5.7
Skilling farmers for the future	2.3	2.3	1.6	-	-	-
Tax allowance on drought preparedness assets	0.8	-	-	-	-	-
Tax deduction for conserving or conveying water	7.3	10.0	10.0	8.5	8.5	10.2
Rural R&D measures						
Wool R&D	14.4	16.2	14.1	13.5	11.0	11.6
Grains R&D Corporation	40.8	39.2	42.4	35.7	43.1	35.8
Meat and livestock R&D	22.9	26.6	32.8	39.0	40.3	35.7
Rural Industries R&D Corporation	2.6	2.7	2.6	2.2	1.8	2.4
General export measures						
EFIC national interest business[b]	3.7	4.1	4.3	3.9	3.4	4.0
Export Market Development Grants Scheme	0.2	0.3	0.5	0.4	0.4	0.5
General investment measures						
Development allowance	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General R&D measures						
Biotechnology Innovation Fund	-	0.1	0.1	<0.1	-	-
Commercial Ready Program	-	-	-	0.2	-	-
COMET Program	-	<0.1	<0.1	-	0.1	<0.1
Cooperative Research Centres	6.2	8.2	9.0	8.7	10.7	11.4
CSIRO	43.3	44.4	61.4	71.3	69.9	72.8
Innovation investment fund	-	-	-	1.0	-	-
New Industries Development Program	0.3	0.3	0.2	0.3	0.2	0.1
Premium R&D tax concession	0.1	0.2	0.3	0.1	0.1	0.2
R&D Start	-	-	0.1	-	-	-
R&D tax concession	2.0	0.9	1.1	0.3	0.3	0.3
R&D tax offset for small companies	-	-	-	0.3	0.4	0.3
Other measures						
Farm Innovation Program	0.8	0.2	<0.1	-	-	-
Small business capital gains tax exemption	0.8	2.9	2.9	6.4	6.4	7.6
Total[c]	*475.3*	*720.9*	*664.8*	*482.8*	*598.2*	*760.2*
Dairy cattle farming						
Sector-specific measures						
Agricultural development partnership	0.2	0.7	0.1	0.5	-	-
Drought Relief Package	-	0.9	1.4	0.5	-	-
Exceptional circumstances – interest rate subsidy	3.0	11.0	19.7	21.2	49.6	87.1
Exceptional circumstances – relief payments	7.5	17.5	44.1	33.6	44.1	71.6
Farm Help	2.4	8.3	5.0	1.2	1.0	0.9
Farm Management Deposits Scheme	10.0	21.2	12.5	5.6	8.2	4.8
Farm Bis Program	1.3	2.4	1.6	0.5	0.3	0.4
Income tax averaging provisions	18.8	26.1	17.0	22.4	17.3	13.3
Interim Income Support	0.2	19.8	11.9	0.5	0.1	3.3
Rural Financial Counselling Service	0.6	0.6	0.6	0.4	0.4	1.4
Skilling farmers for the future	0.3	0.3	0.2	-	-	-
Tax allowance on drought preparedness assets	<0.1	-	-	-	-	-
Tax deduction for conserving or conveying water	0.6	1.2	1.2	1.4	1.4	1.7
Rural R&D measures						
Dairy Research and Development	15.4	15.3	15.4	14.5	15.4	16.0
General export measures						
Export Market Development Grants Scheme	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRADEX	-	-	-	0.4	0.5	0.6
General R&D measures						
CSIRO	10.1	10.4	11.1	13.7	13.6	14.1
New Industries Development Program	0.4	0.3	0.3	0.3	0.2	0.1
Other measures						
Farm Innovation Program	0.1	<0.1	<0.1	-	-	-
Small business capital gains tax exemption	<0.1	-	-	-	-	-
Total[d]	*70.8*	*136.3*	*142.0*	*116.7*	*152.2*	*215.4*

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	0607
Poultry farming						
Sector-specific measures						
Drought Relief Package	-	<0.1	<0.1	<0.1	-	-
Exceptional circumstances – interest rate subsidy	<0.1	0.1	<0.1	<0.1	0.1	0.1
Exceptional circumstances – relief payments	0.3	0.6	2.0	1.5	2.0	3.2
Farm Help	0.5	0.6	0.1	-	<0.1	0.1
Farm Management Deposits Scheme	0.3	0.6	0.5	0.3	0.4	0.3
Farm Bis Program	<0.1	0.1	0.1	<0.1	<0.1	<0.1
Income tax averaging provisions	1.8	1.5	1.0	0.6	0.4	0.3
Industry partnerships program	-	-	-	0.1	0.2	1.0
Interim Income Support	<0.1	0.7	0.5	<0.1	<0.1	0.2
Rural Financial Counselling Service	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Skilling farmers for the future	<0.1	<0.1	<0.1	-	-	-
Tax allowance on drought preparedness assets	<0.1	-	-	-	-	-
Tax deduction for conserving or conveying water	0.1	0.1	0.1	0.1	0.1	0.2
Rural R&D measures						
Egg Research and Development	-	0.4	1.1	0.8	1.0	0.8
Rural Industries R&D Corporation	2.8	1.7	2.0	2.1	2.0	1.8
General export measures						
Export Market Development Grants Scheme	-	-	0.1	<0.1	<0.1	<0.1
General R&D measures						
Cooperative Research Centres	-	-	3.2	3.5	3.4	3.4
CSIRO	-	-	1.2	1.2	1.2	1.3
New Industries Development Program	0.2	0.1	0.1	0.1	0.1	0.1
R&D tax concession	<0.1	-	-	-	-	-
Other measures						
Farm Innovation Program	0.4	0.1	<0.1	-	-	-
Small business capital gains tax exemption	<0.1	-	-	0.9	0.9	1.1
Total	*6.4*	*6.7*	*12.2*	*11.3*	*12.1*	*14.0*

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	0607
Other livestock farming						
Industry-specific measures						
Pigmeat processing grants program	1.6	-	-	-	-	-
Sector-specific measures						
Drought Relief Package	-	<0.1	0.1	<0.1	-	-
Exceptional circumstances – interest rate subsidy	0.1	0.5	1.2	1.3	3.1	5.4
Exceptional circumstances – relief payments	0.2	0.3	1.2	0.9	1.2	1.9
Farm Help	0.4	1.1	0.2	0.2	0.2	0.2
Farm Management Deposits Scheme	7.8	19.8	12.6	5.0	6.7	4.2
Farm Bis Program	0.1	0.4	0.3	0.1	0.1	0.1
Income tax averaging provisions	7.0	6.5	4.3	2.6	2.0	1.5
Industry partnerships program	-	-	-	0.1	<0.1	<0.1
Interim Income Support	<0.1	0.4	0.3	<0.1	<0.1	0.1
Rural Financial Counselling Service	0.4	0.4	0.4	0.3	0.3	0.2
Skilling farmers for the future	<0.1	<0.1	<0.1	-	-	-
Tax allowance on drought preparedness assets	<0.1	-	-	-	-	-
Tax deduction for conserving or conveying water	0.3	0.6	0.6	0.2	0.2	0.2
Rural R&D measures						
Pig Research and Development	3.7	3.3	4.6	6.2	3.6	3.4
Rural Industries R&D Corporation	1.2	1.2	1.1	1.2	1.2	1.8
General export measures						
Export Market Development Grants Scheme	0.3	0.6	0.4	0.5	0.5	0.6
General R&D measures						
COMET Program	0.1	<0.1	-	-	-	-
Cooperative Research Centres	-	-	-	-	3.3	3.6
CSIRO	4.1	4.3	3.4	3.8	3.8	4.0
New Industries Development Program	0.3	0.3	0.2	0.3	0.2	0.1
R&D tax concession	0.6	0.5	0.6	0.4	0.5	0.5
Other measures						
Farm Innovation Program	0.5	0.1	<0.1	-	-	-
Small business capital gains tax exemption	<0.1	-	-	-	-	-
Total	*28.6*	*40.4*	*31.6*	*23.2*	*27.0*	*27.7*

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Other crop growing						
Industry-specific measures						
Sugar Industries Package	19.7	-	-	-	-	-
Sugar Industry Infrastructure Program	1.8	-	-	-	-	-
Sugar Industry Reform Program	-	-	69.9	129.4	140.0	39.1
Tobacco Grower Adjustment Assistance	-	-	-	-	-	39.3
Sector-specific measures						
Drought Relief Package	-	0.2	0.2	0.1	-	-
Exceptional circumstances – interest rate subsidy	0.7	2.7	3.4	3.7	8.6	15.2
Exceptional circumstances – relief payments	1.3	2.9	13.3	10.2	13.3	21.6
Farm Help	10.0	2.4	2.5	1.4	0.9	0.7
Farm Management Deposits Scheme	7.7	21.3	14.0	5.5	7.5	6.7
Farm Bis Program	0.2	1.1	0.9	0.1	0.1	0.1
Income tax averaging provisions	7.0	6.9	4.5	4.7	3.6	2.8
Industry partnerships program	-	-	-	0.1	-	-
Interim Income Support	<0.1	3.3	3.6	0.2	<0.1	1.0
Rural Financial Counselling Service	0.1	0.1	0.1	0.1	0.1	0.7
Skilling farmers for the future	<0.1	0.1	0.1	-	-	-
Tax allowance on drought preparedness assets	0.1	-	-	-	-	-
Tax deduction for conserving or conveying water	6.8	6.2	6.2	5.2	5.2	6.2
Rural R&D measures						
Cotton Research and Development Corporation	7.2	7.3	4.8	4.3	4.9	4.6
Rural Industries R&D Corporation	0.4	0.6	0.7	0.6	0.8	0.8
Sugar Research and Development Corporation	7.0	5.1	5.2	3.8	5.2	5.5
General export measures						
Export Market Development Grants Scheme	0.5	0.3	0.2	0.1	0.2	0.2
TRADEX	-	<0.1	<0.1	-	-	-
General R&D measures						
Biotechnology Innovation Fund	-	<0.1	0.2	0.2	0.1	-
Commercial Ready Program	-	-	-	-	0.1	<0.1
COMET Program	-	<0.1	<0.1	<0.1	<0.1	-
Cooperative Research Centres	7.5	6.1	8.3	6.6	8.1	8.8
CSIRO	9.7	9.9	9.6	14.2	13.6	14.1
New Industries Development Program	0.2	0.1	0.1	0.1	0.1	0.1
Premium R&D tax concession	<0.1	0.1	0.1	0.2	0.2	0.3
R&D Start	0.1	-	-	<0.1	-	-
R&D tax concession	2.0	0.4	0.4	0.6	0.6	0.7
R&D tax offset for small companies	-	-	-	0.2	0.2	0.2
Other measures						
Farm Innovation Program	0.9	0.2	<0.1	-	-	-
Small business capital gains tax exemption	0.1	-	-	-	-	-
Total[e]	*91.0*	*77.4*	*148.5*	*191.5*	*213.6*	*168.8*

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Services to agriculture (inc hunting and trapping)						
Industry-specific measures						
Renewable Energy Equity Fund	-	-	-	-	0.5	-
Sector-specific measures						
Drought Relief Package	-	<0.1	<0.1	<0.1	-	-
Exceptional circumstances – interest rate subsidy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
FarmBis Program	-	<0.1	0.1	-	<0.1	<0.1
Income tax averaging provisions	10.3	9.0	5.9	4.1	3.1	2.4
Skilling farmers for the future	-	<0.1	<0.1	-	-	-
Tax allowance on drought preparedness assets	<0.1	-	-	-	-	-
Tax deduction for conserving or conveying water	0.4	1.3	1.3	0.6	0.6	0.7
General export measures						
Export Market Development Grants Scheme	0.3	0.4	0.6	0.1	0.3	0.3
TRADEX	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
General R&D measures						
Biotechnology Innovation Fund	0.1	1.2	0.9	0.5	0.2	<0.1
Commercial Ready Program	-	-	-	0.1	1.0	1.1
COMET Program	0.3	0.1	0.1	0.2	0.3	0.1
Premium R&D tax concession	<0.1	0.1	0.2	0.8	1.0	1.4
R&D Start	5.2	1.4	1.3	1.1	0.2	<0.1
R&D tax concession	0.8	0.6	0.7	2.6	2.8	3.0
R&D tax offset for small companies	-	1.0	1.4	1.5	1.8	1.7
Other measures						
Farm Innovation Program	0.1	<0.1	<0.1	-	-	-
Industry Cooperative Innovation Program	-	-	-	-	-	0.3
Small business capital gains tax exemption	0.2	0.5	0.5	0.9	0.9	1.0
Small business programs	-	-	-	-	0.4	-
South West Forests Structural Adjustment	0.1	0.1	-	-	-	-
Wide Bay Burnett Structural Adjustment	<0.1	<0.1	-	-	-	-
Total	*17.9*	*15.6*	*12.9*	*12.3*	*13.3*	*12.2*
Forestry and logging						
Industry-specific measures						
12-month prepayment rule	-	55.0	-15.0	40.0	40.0	-10.0
Forest Industry Structural Adjustment	18.9	16.4	21.5	21.3	9.7	30.6
Sector-specific measures						
Farm Management Deposits Scheme	0.1	0.4	0.3	0.1	0.2	1.3
Income tax averaging provisions	2.9	4.1	2.7	3.7	2.9	2.2
Industry partnerships program	-	-	-	0.1	-	0.4
Rural Financial Counselling Service	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Tax deduction for conserving or conveying water	<0.1	0.1	0.1	0.8	0.8	0.9

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Rural R&D measures						
Forest and Wood Products R&D	1.4	1.5	1.6	1.4	1.4	1.8
Rural Industries R&D Corporation	2.2	1.8	1.7	1.3	1.8	1.0
General export measures						
Export Market Development Grants Scheme	<0.1	<0.1	<0.1	-	<0.1	<0.1
General R&D measures						
Commercial Ready Program	-	-	-	-	0.6	1.1
COMET Program	-	0.1	<0.1	<0.1	-	-
Cooperative Research Centres	2.4	2.4	2.6	0.4	2.7	3.3
CSIRO	12.6	13.0	19.9	24.2	24.0	24.9
Premium R&D tax concession	<0.1	<0.1	<0.1	0.1	0.1	0.1
R&D tax concession	0.5	0.1	0.1	0.2	0.2	0.2
R&D tax offset for small companies	-	-	-	0.1	0.1	0.1
Other measures						
Eden Structural Adjustment	0.1	<0.1	<0.1	-	-	-
Farm Innovation Program	0.1	<0.1	<0.1	-	-	-
Small business capital gains tax exemption	0.1	-	-	-	-	-
Total	*41.4*	*95.0*	*35.6*	*93.8*	*84.4*	*58.0*
Commercial fishing						
Industry-specific measures						
Aquaculture Industry Action Agenda	-	-	2.5	1.0	-	-
Fisheries Structural Adjustment Package	-	-	-	-	1.3	159.9
Great Barrier Reef Structural Adjustment	-	-	-	49.1	32.6	65.9
Sector-specific measures						
Farm Help	0.1	0.1	0.1	1.2	0.1	0.1
Farm Management Deposits Scheme	1.0	3.0	1.6	0.6	0.7	0.6
Farm Bis Program	0.2	1.1	3.7	1.6	0.3	0.5
Income tax averaging provisions	27.2	10.6	6.9	5.8	4.5	3.5
Industry partnerships program	-	-	-	0.4	0.4	0.5
Rural Financial Counselling Service	0.1	0.1	0.1	0.1	0.1	0.1
Skilling farmers for the future	<0.1	0.1	0.4	-	-	-
Tax allowance on drought preparedness assets	<0.1	-	-	-	-	-
Tax deduction for conserving or conveying water	<0.1	-	-	-	-	-
Rural R&D measures						
Fishing industry R&D	15.8	17.4	17.7	16.9	16.0	16.0
General export measures						
Export Market Development Grants Scheme	0.4	0.3	0.5	0.4	0.5	0.5
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
General investment measures						
Development allowance	1.6	0.8	0.4	0.3	0.2	0.1

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General R&D measures						
Commercial Ready Program	-	-	-	0.1	1.6	3.0
COMET Program	<0.1	<0.1	0.1	0.1	0.1	0.1
Cooperative Research Centres	1.5	2.6	2.7	2.6	2.6	2.6
CSIRO	29.0	30.1	29.6	39.9	40.7	42.4
New Industries Development Program	0.4	0.4	0.3	0.3	0.3	0.2
Premium R&D tax concession	0.1	0.2	0.3	0.5	0.6	0.9
R&D Start	2.3	0.5	2.2	1.8	1.2	0.3
R&D tax concession	0.5	1.0	1.2	1.4	1.5	1.6
R&D tax offset for small companies	-	1.9	2.7	3.9	4.9	4.5
Other measures						
Eden Structural Adjustment	0.2	0.1	<0.1	-	-	-
Farm Innovation Program	0.6	0.1	<0.1	-	-	-
Industry Cooperative Innovation Program	-	-	-	-	0.1	0.2
Small business capital gains tax exemption	0.4	0.3	0.3	1.2	1.2	1.4
South West Forests Structural Adjustment	<0.1	<0.1	-	-	-	-
Total	*81.6*	*70.9*	*73.4*	*129.2*	*111.4*	*304.7*
Unallocated primary production						
Industry-specific measures						
Australian animal health laboratory	5.9	6.1	6.2	6.8	6.9	7.0
Exotic Disease Preparedness program	1.2	1.2	3.0	1.2	0.8	0.9
Sector-specific measures						
Agricultural development partnership	0.3	1.4	0.2	1.0	-	-
Drought Relief Package	-	<0.1	<0.1	<0.1	-	-
Exceptional circumstances – interest rate subsidy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Farm Help	0.6	0.5	0.3	0.4	0.3	0.3
Farm Bis Program	0.6	1.2	1.1	0.3	0.1	0.1
Industry Partnerships Program	-	-	-	0.2	0.2	-
National landcare program	40.3	32.7	39.1	39.3	37.0	37.0
Regional assistance	-	3.2	4.7	-	-	0.5
Rural adjustment scheme	10.7	-	-	-	-	-
Rural Financial Counselling Service	1.8	1.5	1.2	1.0	1.0	2.1
Skilling farmers for the future	0.1	0.2	0.1	-	-	-
Rural R&D measures						
Land and water resources R&D	11.6	11.9	12.2	12.5	12.5	12.8
Rural Industries R&D Corporation	4.2	4.7	4.8	5.2	5.4	5.8

Table A.1 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General R&D measures						
Biotechnology Innovation Fund	-	-	0.2	-	-	-
Cooperative Research Centres	9.1	11.0	19.4	20.8	22.0	23.3
Major national research facilities	0.1	0.7	1.1	1.3	1.3	-
R&D Start	-	-	1.7	-	-	-
Other measures						
Tasmanian Freight Equalisation Scheme	4.4	5.5	6.0	9.2	8.4	9.3
Total	*90.9*	*81.7*	*101.6*	*99.1*	*95.9*	*99.1*
Total outlays	**562.9**	**658.6**	**929.4**	**993.3**	**1154.8**	**1602.8**
Total tax expenditures	**452.7**	**743.6**	**429.3**	**302.4**	**296.5**	**192.0**
Total Budgetary assistance	**1015.6**	**1402.2**	**1358.7**	**1295.8**	**1451.4**	**1794.8**

- Nil. Figures may not add to totals due to rounding. [a] The estimates are derived primarily from Australian Government budget papers, departmental annual reports and Treasury's Tax Expenditure Statements. The budget paper estimates are 'estimated actuals'. [b] The estimates reported in this section are net National Interest Business outlays. These payments are insurance pay-outs. Because any difference between the National Interest Business scheme's borrowing and lending rates is underwritten by the Australian Government, the scheme may provide assistance to agricultural exporters. However, net National Interest Business outlays provide only a weak indication of any assistance provided. [c] Excludes assistance derived from NSW statutory marketing arrangements for rice, which the Commission categorises as 'agricultural pricing and regulatory assistance' rather than budgetary assistance. The Commission estimates that assistance derived from the rice marketing arrangements totalled $4 million in 2005-06. The arrangements ended on 1 July 2006. [d] Does not include funding provided under the Australian Government's Dairy Industry Adjustment Package, which has been included in the estimates of 'agricultural pricing and regulatory assistance' reported in recent *Reviews*. The Commission estimates that the package provided dairy farmers remaining in the industry with assistance totalling $124 million in 2006-07. [e] Does not include funding of $18 and $9 million in 2002-03 and 2003-04, respectively, provided under the Australian Government's 2002 Sugar Industry Reform Program. This assistance has been included in the estimates of 'agricultural pricing and regulatory assistance'.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2008; Bishop 2007; departmental data; Commission estimates.

Table A.2 **Estimated[a] Australian Government budgetary assistance to the mining sector, 2001-02 to 2006-07**

$ million

	01-02	*02-03*	*03-04*	*04-05*	*05-06*	*0607*
Industry-specific measures						
Greenhouse gas abatement program	0.3	0.2	0.7	0.6	0.6	0.9
Regional minerals program	0.3	0.3	0.3	0.3	-	-
Renewable Energy Development Initiative	-	-	-	-	-	0.3
Sector-specific measures						
Capital expenditure deduction for mining	30.0	30.0	20.0	20.0	20.0	20.0
General export measures						
Export Market Development Grants Scheme	2.2	1.5	1.4	1.4	1.3	1.4
TRADEX	0.4	2.3	1.9	0.2	0.5	0.6
General investment measures						
Development allowance	78.6	41.1	21.4	12.5	8.9	3.6
General R&D measures						
Biotechnology Innovation Fund	-	0.1	<0.1	0.1	<0.1	-
Commercial Ready Program	-	-	-	0.1	2.4	6.3
COMET Program	0.3	0.2	0.2	0.2	0.1	0.1
Cooperative Research Centres	7.3	8.4	10.2	10.5	10.9	9.3
CSIRO	54.1	55.4	74.4	104.8	109.0	113.5
Innovation Investment Fund	0.8	-	-	-	0.9	0.6
Major national research facilities	0.1	0.8	1.2	1.3	1.3	-
New Industries Development Program	0.2	0.1	0.1	0.1	0.1	0.1
Premium R&D tax concession	3.3	8.2	13.9	19.5	25.4	35.2
R&D Start	13.0	4.4	3.3	1.6	2.8	1.2
R&D tax concession	47.4	44.3	50.6	60.7	66.2	71.7
R&D tax offset for small companies[c]	-	0.7	1.0	2.4	3.0	2.8
Other measures						
Beaconsfield Community Fund	-	-	-	-	-	3.2
Small business capital gains tax exemption	0.1	-	-	-	-	-
Total outlays	**78.6**	**72.2**	**92.9**	**123.5**	**132.5**	**139.6**
Total tax expenditures	**159.8**	**125.9**	**107.9**	**112.9**	**121.0**	**131.1**
Total Budgetary assistance	**238.4**	**198.0**	**200.8**	**236.4**	**253.5**	**270.7**

- Nil. Figures may not add to totals due to rounding. **a** The estimates are derived primarily from Australian Government budget papers, departmental annual reports and Treasury's Tax Expenditure Statements. The budget paper estimates are 'estimated actuals'.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2008; Bishop 2007; departmental data; Commission estimates.

Table A.3 **Estimated[a] Australian Government budgetary assistance to the manufacturing sector, 2001-02 to 2006-07**

$ million

	01-02	*02-03*	*03-04*	*04-05*	*05-06*	*06-07*
Food, beverages and tobacco						
Industry-specific measures						
Brandy preferential excise rate	5.0	5.0	5.0	5.0	5.0	5.0
Food Processing in Regional Australia	-	-	-	-	3.6	4.2
National food industry strategy	-	7.0	12.1	14.5	18.0	15.6
Renewable Energy Development Initiative	-	-	-	-	-	0.8
Tasmanian wheat freight subsidy	0.4	0.4	0.4	0.2	-	-
Sector-specific measures						
Rural Financial Counselling Service	0.1	0.1	0.2	0.2	0.3	-
General export measures						
Export Market Development Grants Scheme	8.4	11.2	11.8	11.6	15.2	16.3
TRADEX	0.6	0.9	0.7	1.2	0.8	0.9
General investment measures						
Development allowance	2.9	1.5	0.8	0.5	0.3	0.1
General R&D measures						
Biotechnology Innovation Fund	-	-	0.1	<0.1	-	-
Commercial Ready Program	-	-	-	0.1	0.8	1.1
COMET Program	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cooperative Research Centres	4.1	2.6	2.7	2.6	2.6	2.6
CSIRO	21.0	21.7	38.9	36.1	37.7	39.2
Innovation Investment Fund	-	-	-	-	-	0.2
New Industries Development Program	0.5	0.4	0.4	0.4	0.3	0.2
Premium R&D tax concession	0.7	1.8	3.1	3.7	4.8	6.7
R&D Start	2.1	1.8	0.8	0.6	0.9	2.3
R&D tax concession	20.8	10.2	11.7	11.3	12.3	13.4
R&D tax offset for small companies[c]	-	0.7	1.1	1.9	2.3	2.1
Other measures						
Australia HomeGrown Campaign	-	-	-	-	0.5	1.8
Eden Structural Adjustment	0.7	0.3	0.1	-	-	-
Small business capital gains tax exemption	0.3	0.5	0.5	1.7	1.7	2.1
Small business programs	-	-	-	-	0.6	-
Tasmanian Freight Equalisation Scheme	12.2	12.5	13.6	15.7	16.8	16.3
Wide Bay Burnett Structural Adjustment	0.4	0.3	-	-	-	-
Total	*80.4*	*79.1*	*103.9*	*107.4*	*124.7*	*131.0*
Textiles, clothing, footwear and leather						
Industry-specific measures						
Howe leather – loan repayment	-	-	-2.3	-2.5	-2.4	-3.2
TCF Corporate Wear Program	37.4	41.1	52.2	46.0	50.9	56.4
TCF Development	3.2	0.5	0.1	-	0.5	-
TCF Import Credits Scheme	9.9	-	-	-	-	-
TCF Project Diversification Scheme	-	-	-	-	-	5.0

Table A.3 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
TCF Small Business Program	-	-	-	-	-	2.2
TCF Strategic Investment Program	150.7	109.7	119.1	123.7	123.8	-
TCF Strategic Investment Program - Post 2005	-	-	-	-	4.3	96.2
TCF Structural Adjustment Scheme	-	-	-	-	2.8	-
General export measures						
Export Market Development Grants Scheme	6.2	5.1	4.1	3.5	4.2	4.5
TRADEX	15.7	17.5	14.4	8.3	5.9	7.2
General R&D measures						
COMET Program	0.1	<0.1	0.1	<0.1	<0.1	<0.1
CSIRO	32.2	33.0	13.0	18.2	17.8	18.5
Premium R&D tax concession	<0.1	<0.1	0.1	0.1	0.1	0.1
R&D Start	0.7	1.0	0.6	<0.1	-	-
R&D tax concession	1.6	0.2	0.3	0.2	0.2	0.3
R&D tax offset for small companies	-	0.4	0.5	0.8	1.0	0.9
Other measures						
Small business capital gains tax exemption	<0.1	-	-	<0.1	<0.1	0.1
Tasmanian Freight Equalisation Scheme	0.8	0.8	0.6	0.5	0.5	0.5
Total	*258.5*	*209.3*	*202.9*	*198.9*	*209.8*	*188.6*
Wood and paper products						
Industry-specific measures						
Investment incentives to Visy industries	3.0	2.9	2.9	-	-	-
Rural R&D measures						
Forest and Wood products R&D Corporation	1.4	1.5	1.6	1.5	1.6	1.2
General export measures						
Export Market Development Grants Scheme	1.8	1.3	1.2	0.9	0.8	0.9
TRADEX	0.2	<0.1	<0.1	0.1	0.6	0.7
General investment measures						
Development allowance	0.8	0.4	0.2	0.1	0.1	<0.1
General R&D measures						
Commercial Ready Program	-	-	-	0.2	-	1.8
COMET Program	<0.1	<0.1	0.1	<0.1	-	<0.1
Cooperative Research Centres	2.5	5.4	6.4	5.4	5.3	3.5
CSIRO	5.8	5.9	-	-	-	-
Premium R&D tax concession	0.4	1.1	1.8	4.2	5.5	7.6
R&D Start	0.1	0.1	<0.1	0.2	0.3	0.1
R&D tax concession	7.5	5.8	6.7	14.5	15.8	17.2
R&D tax offset for small companies	-	0.4	0.6	1.0	1.3	1.2
Other measures						
Small business capital gains tax exemption	<0.1	-	-	-	-	-
Tasmanian Freight Equalisation Scheme	20.1	17.4	19.5	19.4	21.5	18.8
Wide Bay Burnett Structural Adjustment	0.1	<0.1	-	-	-	-
Total	*43.7*	*42.2*	*40.9*	*47.7*	*52.8*	*53.0*

Table A.3 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Printing, publishing and recorded media						
Industry-specific measures						
Enhanced printing industry competitiveness	-	1.1	1.6	-	-	-
Extended printing industry competitiveness	15.9	8.6	11.2	-	-	-
Printing Industry Competitiveness Scheme	1.9	0.5	-	-	-	-
General export measures						
Export Market Development Grants Scheme	2.9	3.2	3.2	2.2	3.4	3.7
TRADEX	0.1	0.3	0.3	0.2	0.2	0.3
General investment measures						
Development allowance	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
General R&D measures						
Commercial Ready Program	-	-	-	-	0.1	0.8
COMET Program	0.1	0.1	<0.1	<0.1	<0.1	0.2
Premium R&D tax concession	0.3	0.7	1.2	1.2	1.5	2.1
R&D Start	1.5	0.5	0.6	0.3	0.4	0.3
R&D tax concession	1.4	3.8	4.3	3.9	4.2	4.6
R&D tax offset for small companies	-	6.6	9.4	11.0	13.7	12.5
Other measures						
Small business capital gains tax exemption	0.2	0.2	0.2	-	-	-
Total	*24.3*	*25.6*	*31.9*	*18.7*	*23.5*	*24.4*
Petroleum, coal, chemical and associated products						
Industry-specific measures						
Biofuels Infrastructure Grants	-	-	-	2.1	11.5	3.7
Ethanol production subsidy	-	21.7	10.8	8.6	15.4	31.9
Greenhouse gas abatement program	1.5	0.7	3.0	2.7	2.9	3.9
Investment incentive to Syntroleum	20.0	-	-	-	-	-
Pharmaceutical industry development program	50.3	64.7	59.3	0.4	-	-
Pharmaceutical partnerships program	-	-	-	4.2	12.4	18.4
Product Stewardship (Oil) program	2.6	8.8	6.4	5.5	5.4	0.9
Renewable Energy Equity Fund	-	-	-	0.8	2.8	0.2
General export measures						
Export Market Development Grants Scheme	5.0	5.4	4.9	4.8	4.5	4.9
TRADEX	2.8	3.6	3.0	2.0	2.1	2.6
General investment measures						
Development allowance	6.8	3.5	1.9	1.1	0.8	0.3

Table A.3 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General R&D measures						
Biotechnology Australia	2.3	2.1	2.1	5.0	3.1	3.0
Biotechnology Innovation Fund	1.3	1.3	1.5	0.6	0.8	0.1
Commercial Ready Program	-	-	-	0.1	10.6	12.6
COMET Program	0.4	0.8	0.5	0.2	0.2	0.3
Cooperative Research Centres	12.0	11.2	12.0	7.3	9.1	9.1
CSIRO	42.9	44.0	22.8	45.1	44.9	46.8
Innovation Investment Fund	0.4	10.4	7.5	0.6	-	-
National Stem Cell Centre	0.8	3.6	4.6	5.8	7.1	6.5
New Industries Development Program	0.3	0.3	0.2	0.3	0.2	0.1
Premium R&D tax concession	0.9	2.3	3.8	4.1	5.3	7.3
Preseed fund	-	-	-	0.5	-	-
R&D Start	12.1	10.4	10.5	9.3	4.9	1.7
R&D tax concession	17.6	12.8	14.6	13.1	14.3	15.5
R&D tax offset for small companies	-	5.3	7.5	8.7	10.8	9.9
Other measures						
Farm Innovation Program	0.1	<0.1	<0.1	-	-	-
Industry Cooperative Innovation Program	-	-	-	-	0.2	0.6
Small business capital gains tax exemption	0.5	-	-	-	-	-
Structural Adjustment Fund for South Australia	-	-	-	2.7	-	-
Total	*180.5*	*212.7*	*176.9*	*135.6*	*169.5*	*180.3*
Non-metallic mineral products						
General export measures						
Export Market Development Grants Scheme	1.1	1.2	0.7	0.6	0.9	1.0
TRADEX	0.1	<0.1	<0.1	0.4	0.2	0.3
General investment measures						
Development allowance	0.4	0.2	0.1	0.1	<0.1	<0.1
General R&D measures						
Commercial Ready Program	-	-	-	-	1.0	1.2
COMET Program	<0.1	<0.1	0.1	-	<0.1	0.1
Premium R&D tax concession	0.4	0.9	1.5	1.4	1.9	2.6
Preseed fund	-	-	-	-	0.2	0.8
R&D Start	10.6	1.6	0.2	0.8	0.6	1.2
R&D tax concession	8.1	4.5	5.2	4.3	4.7	5.1
R&D tax offset for small companies	-	0.6	0.8	0.6	0.7	0.6
Other measures						
Small business capital gains tax exemption	<0.1	-	-	0.3	0.3	0.4
Total	*20.7*	*9.1*	*8.6*	*8.6*	*10.6*	*13.3*

Table A.3 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Metal products						
Industry-specific measures						
Australian Magnesium Corporation	-	-	84.6	-	-	-
Greenhouse gas abatement program	1.0	0.5	2.0	1.8	1.9	2.6
Investment incentives to Hismelt – grant	-	-	-	50.0	50.0	55.0
Investment incentives to Hismelt – loan	-	45.6	45.7	45.7	-	-
General export measures						
Export Market Development Grants Scheme	3.1	2.8	2.3	2.0	1.5	1.7
TRADEX	3.6	5.0	4.1	1.4	1.8	2.2
General investment measures						
Development allowance	40.3	21.1	11.0	6.4	4.6	1.8
General R&D measures						
Commercial Ready Program	-	-	-	0.1	2.1	3.6
COMET Program	0.1	0.1	0.1	0.1	0.4	0.3
Cooperative Research Centres	8.8	8.3	8.3	7.2	8.0	8.1
CSIRO	29.6	30.4	-	-	-	-
Premium R&D tax concession	0.8	2.1	3.6	3.8	4.9	6.8
R&D Start	7.4	6.9	5.7	1.5	1.3	1.4
R&D tax concession	24.1	11.5	13.1	12.3	13.4	14.5
R&D tax offset for small companies	-	1.6	2.2	2.6	3.3	3.0
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	-	<0.1
Small business capital gains tax exemption	<0.1	0.3	0.3	0.3	0.3	0.3
Tasmanian Freight Equalisation Scheme	1.7	2.2	2.8	3.7	2.4	2.9
Total	*120.6*	*138.3*	*185.8*	*138.8*	*95.9*	*104.1*
Motor vehicles and parts						
Industry-specific measures						
Automotive competitiveness and investment scheme – Stage 1[b]	594.9	571.5	584.3	568.8	479.8	-
Automotive competitiveness and investment scheme – Stage 2[b]	-	-	0.5	0.9	-	537.0
Automotive incentives – Ford	-	-	-	-	32.5	-
Automotive market access and development	4.9	-	-	-	-	-
Investment incentive for Holden	8.5	4.0	-	-	-	2.0
General export measures						
Export Market Development Grants Scheme	2.1	1.5	1.8	1.4	1.5	1.6
TRADEX	96.3	71.6	74.3	60.3	38.3	46.9
General investment measures						
Development allowance	8.8	4.6	2.4	1.4	1.0	0.4

Table A.3 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General R&D measures						
Commercial Ready Program	-	-	-	-	1.3	2.2
COMET Program	0.3	0.2	0.2	0.1	<0.1	0.1
Cooperative Research Centres	-	-	-	-	4.6	5.1
Premium R&D tax concession	1.5	3.8	6.5	4.2	5.4	7.5
Preseed fund	-	0.8	-	-	0.3	-
R&D Start	2.9	1.4	0.6	0.4	<0.1	-
R&D tax concession	29.7	21.4	24.4	13.1	14.3	15.5
R&D tax offset for small companies	-	1.3	1.8	2.2	2.7	2.5
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	-	0.1
Small business capital gains tax exemption	0.1	-	-	-	-	-
Wide Bay Burnett Structural Adjustment	<0.1	<0.1	-	-	-	-
Total	*750.0*	*682.1*	*696.8*	*652.9*	*581.9*	*620.8*
Other transport equipment						
Industry-specific measures						
Aerospace incentives – Hawker de Havilland	-	-	-	-	10.0	2.5
Shipbuilding bounty	5.5	13.3	6.8	0.8	-	-
Shipbuilding innovation scheme	4.0	8.7	7.0	2.1	-	-
General export measures						
Export Market Development Grants Scheme	1.0	1.3	1.8	1.2	1.4	1.5
TRADEX	0.1	0.2	0.1	0.2	0.2	0.2
General R&D measures						
Commercial Ready Program	-	-	-	-	0.1	0.9
COMET Program	0.2	0.2	0.2	0.2	<0.1	<0.1
Cooperative Research Centres	3.9	5.1	5.1	4.7	4.3	3.7
Innovation Investment Fund	-	-	-	-	-	0.3
Major national research facilities	0.1	0.7	1.1	1.3	1.3	-
Premium R&D tax concession	0.5	1.2	2.0	1.5	2.0	2.7
R&D Start	4.2	3.3	2.2	1.6	1.2	0.1
R&D tax concession	82.2	6.5	7.4	4.5	4.9	5.3
R&D tax offset for small companies	-	0.7	1.1	1.2	1.5	1.4
Other measures						
Small business capital gains tax exemption	-	-	-	0.1	0.1	0.2
Total	*101.7*	*41.1*	*34.8*	*19.3*	*27.1*	*18.9*
Other machinery and equipment						
Industry-specific measures						
Renewable Energy Development Initiative	-	-	-	0.2	0.2	1.1
Renewable Energy Equity Fund	-	-	-	0.3	0.1	<0.1
Wind turbine industry assistance	-	-	-	-	-	0.7

Table A.3 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General export measures						
Export Market Development Grants Scheme	14.8	15.1	15.0	12.8	13.2	14.1
TRADEX	7.4	4.7	3.9	4.3	4.7	5.8
General investment measures						
Development allowance	0.7	0.4	0.2	0.1	0.1	<0.1
General R&D measures						
Biotechnology Innovation Fund	-	0.7	0.7	1.1	0.7	<0.1
Commercial Ready Program	-	-	-	0.4	14.7	36.5
COMET Program	1.6	1.5	1.2	1.4	1.4	1.6
Cooperative Research Centres	19.3	15.3	14.5	11.7	8.3	5.5
CSIRO	36.8	37.8	-	-	-	-
Innovation Investment Fund	-	4.2	-	1.7	1.4	1.0
Major national research facilities	0.4	2.4	3.6	4.0	4.0	-
New Industries Development Program	0.2	0.2	0.1	0.1	0.1	0.1
Premium R&D tax concession	1.7	4.3	7.3	7.0	9.1	12.6
Preseed fund	-	-	-	-	1.3	0.2
R&D Start	51.8	27.3	31.1	30.0	26.4	11.3
R&D tax concession	46.2	23.1	26.5	21.6	23.6	25.5
R&D tax offset for small companies	-	16.5	23.4	24.3	30.2	27.7
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	0.2	0.3
Small business capital gains tax exemption	0.1	0.7	0.7	0.7	0.7	0.9
Small business programs	<0.1	0.2	0.2	0.2	-	-
South West Forests Structural Adjustment	<0.1	<0.1	-	-	-	-
Wide Bay Burnett Structural Adjustment	0.3	0.2	-	-	-	-
Total	*181.3*	*154.6*	*128.3*	*122.1*	*140.6*	*145.0*
Other manufacturing						
Industry-specific measures						
Renewable Energy Development Initiative	-	-	-	-	-	0.5
Renewable Energy Equity Fund	-	-	0.1	-	-	-
General export measures						
Export Market Development Grants Scheme	8.1	8.4	9.4	8.1	6.0	6.5
TRADEX	18.1	20.1	16.4	4.4	1.9	2.3
General investment measures						
Development allowance	0.1	0.1	<0.1	<0.1	<0.1	<0.1

Table A.3 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General R&D measures						
Biotechnology Innovation Fund	0.1	1.6	1.7	-	0.1	<0.1
Commercial Ready Program	-	-	-	-	6.4	6.9
COMET Program	0.8	0.8	0.8	0.9	0.7	0.6
CSIRO	-	-	56.6	91.0	90.7	94.4
Premium R&D tax concession	0.3	0.8	1.3	1.3	1.7	2.3
Preseed fund	-	-	1.0	-	-	-
R&D Start	17.5	13.3	27.1	0.1	11.5	4.5
R&D tax concession	6.3	4.2	4.8	4.1	4.5	4.9
R&D tax offset for small companies	-	5.2	7.4	8.2	10.2	9.4
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	0.1	0.2
Small business capital gains tax exemption	0.3	0.5	0.5	-	-	-
Tasmanian Freight Equalisation Scheme	1.7	1.7	1.9	2.0	1.4	1.4
Wide Bay Burnett Structural Adjustment	<0.1	<0.1	-	-	-	-
Total	*53.5*	*56.6*	*129.2*	*120.2*	*135.2*	*133.9*
Unallocated manufacturing						
Industry-specific measures						
Advanced electricity storage	-	-	-	-	-	0.5
General export measures						
Duty Drawback	93.7	121.0	105.9	121.1	117.0	103.9
General R&D measures						
Cooperative Research Centres	2.3	2.2	3.9	4.6	4.0	3.5
Technology Diffusion program	12.9	4.2	-	-	-	-
Other measures						
Enterprise Development program	0.7	-	-	-	-	-
Intermediary Access Program	-	-	-	-	-	1.1
Tasmanian Freight Equalisation Scheme	30.2	36.3	38.0	38.7	40.3	39.4
Total	*139.9*	*163.7*	*147.8*	*164.4*	*161.3*	*148.4*
Total outlays	**753.5**	**794.9**	**853.6**	**762.3**	**858.8**	**798.4**
Total tax expenditures	**1201.7**	**1019.5**	**1034.4**	**972.1**	**874.0**	**963.3**
Total Budgetary assistance	**1955.1**	**1814.4**	**1888.0**	**1734.4**	**1732.8**	**1761.7**

- Nil. Figures may not add to totals due to rounding. [a] The estimates are derived primarily from Australian Government budget papers, departmental annual reports and Treasury's Tax Expenditure Statements. The budget paper estimates are 'estimated actuals'. [b] Data provided by DITR indicates that, while most (>95%) assistance provided under the Automotive Competitiveness and Investment Scheme is received by businesses in the *Motor vehicles and parts* industry, there is also some assistance to businesses in other industry groupings.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2008; Bishop 2007; SELC 2005, p. 27; departmental data; Commission estimates.

Table A.4 **Estimated[a] Australian Government budgetary assistance to the services sector, 2001-02 to 2006-07**

$ million

	01-02	*02-03*	*03-04*	*04-05*	*05-06*	*06-07*
Electricity, gas and water supply						
Industry-specific measures						
Greenhouse gas abatement program	3.8	1.8	7.5	6.7	7.2	9.8
Low emission technology development fund	-	-	-	-	2.0	6.7
Remote renewable power generation program	-	-	-	-	28.7	13.8
Renewable energy commercialisation	8.9	9.2	9.2	1.4	1.7	1.5
Renewable Energy Development Initiative	-	-	-	2.2	3.3	5.0
Renewable Energy Equity Fund	3.4	2.6	1.0	0.5	0.3	-
General export measures						
Export Market Development Grants Scheme	0.4	0.4	0.3	0.4	0.5	0.6
TRADEX	-	-	-	<0.1	0.1	0.1
General investment measures						
Development allowance	4.4	2.3	1.2	0.7	0.5	0.2
Infrastructure bonds scheme	13.0	10.5	10.4	10.4	10.4	7.8
Infrastructure borrowing's tax offsets scheme	9.6	7.7	7.2	2.9	1.0	-
General R&D measures						
Commercial Ready Program	-	-	-	-	0.5	1.1
COMET Program	0.4	0.3	0.3	0.2	0.2	0.2
Cooperative Research Centres	7.4	8.6	7.3	6.8	5.6	4.5
Premium R&D tax concession	<0.1	0.1	0.2	0.1	0.1	0.2
Preseed fund	-	-	-	-	0.1	0.4
R&D Start	3.0	5.9	3.2	1.6	0.1	-
R&D tax concession	0.8	3.1	3.5	2.7	2.9	3.2
R&D tax offset for small companies	-	0.9	1.3	1.5	1.8	1.7
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	-	0.1
Small business capital gains tax exemption	<0.1	-	-	0.3	0.3	0.4
Total	*55.1*	*53.4*	*52.6*	*38.4*	*67.3*	*57.4*
Construction						
General export measures						
Export Market Development Grants Scheme	0.9	1.8	1.5	1.1	1.2	1.3
TRADEX	0.9	1.8	1.5	<0.1	<0.1	<0.1
General investment measures						
Development allowance	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
General R&D measures						
Commercial Ready Program	-	-	-	-	-	2.5
COMET Program	0.1	0.2	0.1	0.2	0.2	0.2
Cooperative Research Centres	1.5	2.0	2.6	2.5	2.3	1.8
Innovation Investment Fund	1.2	-	-	-	-	-
Premium R&D tax concession	0.4	1.0	1.7	1.4	1.9	2.6
R&D Start	3.5	1.2	0.9	0.3	0.2	-
R&D tax concession	8.0	6.6	7.6	6.0	6.5	7.0
R&D tax offset for small companies	-	2.2	3.2	4.1	5.1	4.7

Table A.4 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	0.3	0.2
Small business capital gains tax exemption	1.2	2.6	2.6	4.4	4.4	5.3
Small business programs	-	-	-	-	0.1	0.9
Total	*17.8*	*19.5*	*21.7*	*20.1*	*22.1*	*26.5*
Wholesale trade						
General export measures						
Export Market Development Grants Scheme	12.4	12.6	12.4	10.2	11.0	11.8
TRADEX	5.9	1.0	0.9	4.8	2.8	3.5
General investment measures						
Development allowance	0.2	0.1	0.1	<0.1	<0.1	<0.1
General R&D measures						
Biotechnology Innovation Fund	-	-	-	-	<0.1	-
Commercial Ready Program	-	-	-	-	0.1	0.2
COMET Program	-	0.1	0.2	0.1	0.1	0.1
Premium R&D tax concession	1.4	3.4	5.8	7.6	9.8	13.6
R&D Start	0.6	0.8	2.2	0.8	1.4	0.2
R&D tax concession	18.6	18.8	21.5	25.4	27.7	30.0
R&D tax offset for small companies	-	5.0	7.2	10.6	13.2	12.1
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	-	0.1
Small business capital gains tax exemption	12.4	3.1	3.1	2.3	2.3	2.8
Wide Bay Burnett Structural Adjustment	0.2	0.1	-	-	-	-
Total	*51.7*	*45.1*	*53.3*	*61.8*	*68.4*	*74.2*
Retail trade						
Industry-specific measures						
Greenhouse gas abatement program	0.2	0.1	0.4	0.3	0.4	0.5
LPG Vehicle Scheme	-	-	-	-	-	121.8
General export measures						
Export Market Development Grants Scheme	1.3	1.2	1.1	0.7	1.3	1.4
TRADEX	0.1	0.2	0.2	1.6	3.6	4.4
General investment measures						
Development allowance	0.1	0.1	<0.1	<0.1	<0.1	<0.1
General R&D measures						
COMET Program	0.1	0.1	<0.1	-	<0.1	0.1
Premium R&D tax concession	0.3	0.7	1.2	1.1	1.4	2.0
R&D Start	0.3	<0.1	0.3	-	-	-
R&D tax concession	2.6	3.6	4.2	3.4	3.7	4.0
R&D tax offset for small companies	-	3.1	4.3	5.4	6.7	6.1

Table A.4 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Other measures						
Eden Structural Adjustment	0.1	<0.1	<0.1	-	-	-
Small business capital gains tax exemption	4.4	10.9	10.9	16.5	16.5	19.8
South West Forests Structural Adjustment	0.5	0.5	-	-	-	-
Wide Bay Burnett Structural Adjustment	0.1	<0.1	-	-	-	-
Total	*10.0*	*20.7*	*22.7*	*29.1*	*33.6*	*160.0*
Accommodation, cafes and restaurants						
General export measures						
Export Market Development Grants Scheme	9.1	8.0	7.5	4.7	4.8	5.1
General R&D measures						
COMET Program	<0.1	-	-	-	-	-
Premium R&D tax concession	<0.1	<0.1	<0.1	-	-	-
Other measures						
Eden Structural Adjustment	0.2	0.1	<0.1	-	-	-
Small business capital gains tax exemption	5.4	16.4	16.4	17.6	17.6	21.1
Small business programs	<0.1	0.1	0.1	0.1	0.2	-
South West Forests Structural Adjustment	0.2	0.3	-	-	-	-
Wide Bay Burnett Structural Adjustment	<0.1	<0.1	-	-	-	-
Total	*14.9*	*24.9*	*24.1*	*22.4*	*22.5*	*26.2*
Transport and storage						
Industry-specific measures						
Bass Strait Passenger Vehicle Equalisation	17.4	34.3	31.8	32.4	31.1	28.4
Investment incentive to Asia Pacific Space Centre	6.0	-	-	-	-	-
General export measures						
Export Market Development Grants Scheme	9.3	8.6	7.6	5.4	5.2	5.5
TRADEX	2.4	3.2	2.7	1.1	0.4	0.5
General investment measures						
Development allowance	10.6	5.5	2.9	1.7	1.2	0.5
Infrastructure bonds scheme	12.0	9.5	9.6	9.6	9.6	7.2
Infrastructure borrowing’s tax offset scheme	5.4	7.3	11.6	8.4	6.5	3.8
General R&D measures						
Commercial Ready Program	-	-	-	-	0.2	0.8
COMET Program	0.2	0.3	0.2	0.2	0.2	0.1
Premium R&D tax concession	0.1	0.3	0.5	0.5	0.7	1.0
R&D Start	0.7	0.5	1.1	1.7	0.7	<0.1
R&D tax concession	3.4	2.4	2.7	2.3	2.5	2.7
R&D tax offset for small companies	-	0.4	0.5	1.1	1.4	1.3
Other measures						
` Small business capital gains tax exemption	1.5	2.2	2.2	5.0	5.0	6.0
Total	*69.0*	*74.6*	*73.4*	*69.4*	*64.6*	*57.8*

Table A.4 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Communication services						
Industry-specific measures						
Investment incentives to IBM	0.8	0.8	-	-	-	-
Investment incentives to SITA	2.3	1.7	0.3	-	-	-
Software engineering centres	3.5	2.4	1.1	-	-	-
The Advanced Networks Program	-	8.8	6.6	8.0	7.0	12.5
General export measures						
Export Market Development Grants Scheme	1.2	1.1	1.5	1.7	2.4	2.5
TRADEX	<0.1	<0.1	<0.1	<0.1	-	-
General investment measures						
Development allowance	12.0	6.3	3.3	1.9	1.4	0.5
General R&D measures						
Commercial Ready Program	-	-	-	-	1.2	5.2
COMET Program	1.1	0.8	0.4	0.6	0.5	0.6
Cooperative Research Centres	4.4	5.8	6.0	5.8	4.6	3.5
CSIRO	21.9	22.5	58.6	63.5	62.5	65.0
ICT centre of excellence	-	10.3	11.3	17.2	23.5	24.0
Innovation Investment Fund	6.1	6.8	2.3	2.0	0.7	0.2
Premium R&D tax concession	0.9	2.3	3.9	3.7	4.8	6.6
Preseed fund	-	-	2.2	1.8	2.4	1.8
R&D Start	14.8	4.6	8.4	8.4	5.3	0.6
R&D tax concession	6.9	11.8	13.5	11.1	12.1	13.1
R&D tax offset for small companies	-	2.5	3.5	5.2	6.4	5.9
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	0.2	0.4
Small business capital gains tax exemption	1.1	0.8	0.8	2.5	2.5	3.0
Small business programs	<0.1	<0.1	<0.1	<0.1	-	-
Total	*77.0*	*89.3*	*123.6*	*133.3*	*137.3*	*145.6*
Finance and insurance						
Industry-specific measures						
High Costs Claims scheme	-	-	-	0.4	0.1	8.8
Renewable Energy Equity Fund	-	-	-	0.4	0.5	0.3
United Medical Protection support	-	-	15.9	24.4	13.7	13.2
General export measures						
Export Market Development Grants Scheme	1.0	0.8	0.9	0.9	1.3	1.4
TRADEX	0.1	0.1	0.1	0.1	<0.1	<0.1
General investment measures						
Development allowance	0.4	0.2	0.1	0.1	<0.1	<0.1
Infrastructure borrowing’s tax offsets scheme	5.0	5.0	6.3	3.8	2.5	1.3
Offshore banking unit tax concession	45.0	45.0	55.0	75.0	90.0	160.0

Table A.4 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General R&D measures						
Biotechnology Innovation Fund	-	-	0.2	<0.1	-	-
Commercial Ready Program	-	-	-	-	0.3	1.6
COMET Program	0.1	0.2	0.2	0.1	0.2	0.1
Innovation Investment Fund	-	-	-	5.0	4.6	3.9
Premium R&D tax concession	1.9	4.8	8.1	11.4	14.8	20.5
Preseed fund	-	-	-	2.3	3.9	1.9
R&D Start	4.1	1.2	3.5	2.0	0.7	0.4
R&D tax concession	37.9	27.7	31.6	41.5	45.2	49.0
R&D tax offset for small companies	-	1.5	2.1	3.1	3.9	3.5
Other measures						
Pooled development funds	6.0	6.0	7.0	8.0	7.0	8.0
Small business capital gains tax exemption	3.1	2.6	2.6	3.5	3.5	4.1
Venture capital limited partnerships	-	-	20.0	25.0	30.0	10.0
Total	*104.6*	*95.0*	*153.6*	*206.9*	*222.0*	*288.0*
Property and business services						
Industry-specific measures						
Renewable Energy Development Initiative	-	-	-	0.2	0.3	1.1
Renewable Energy Equity Fund	-	-	-	-	-	0.3
Solar cities initiative	-	-	-	-	0.6	3.0
General export measures						
Export Market Development Grants Scheme	25.7	27.1	27.6	24.9	30.3	32.4
TRADEX	0.1	3.6	2.9	0.6	0.4	0.4
General investment measures						
Development allowance	1.8	0.9	0.5	0.3	0.2	0.1
General R&D measures						
Biotechnology Innovation Fund	2.2	3.7	4.7	3.6	1.2	0.2
Commercial Ready Program	-	-	-	0.3	11.4	26.9
COMET Program	4.5	3.7	2.9	2.3	2.6	3.6
Cooperative Research Centres	4.7	5.6	11.4	13.5	12.2	10.3
Innovation Investment Fund	15.0	3.3	2.1	4.8	4.9	3.8
Premium R&D tax concession	3.3	8.2	13.9	16.9	21.9	30.4
Preseed fund	-	-	-	0.7	2.6	2.1
R&D Start	35.9	20.9	24.6	31.5	13.6	5.6
R&D tax concession	61.0	43.6	49.9	54.2	59.1	64.0
R&D tax offset for small companies	-	54.9	78.1	98.6	122.4	112.3
Other measures						
Eden Structural Adjustment	<0.1	<0.1	<0.1	-	-	-
Industry Cooperative Innovation Program	-	-	-	-	0.1	0.2
Small business capital gains tax exemption	4.7	14.9	14.9	17.2	17.2	20.7
Small business programs	0.6	6.4	6.2	4.8	8.3	6.8
Techfast	-	-	-	2.5	-	-
Wide Bay Burnett Structural Adjustment	0.1	0.1	-	-	-	-
Total	*159.5*	*197.0*	*239.6*	*276.8*	*309.2*	*324.2*

Table A.4 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Government administration and defence						
General export measures						
Export Market Development Grants Scheme	<0.1	<0.1	<0.1	-	-	-
TRADEX	<0.1	2.4	1.9	0.1	0.2	0.2
General R&D measures						
COMET Program	<0.1	<0.1	<0.1	0.1	-	0.1
R&D Start	0.7	0.1	-	<0.1	-	-
Other measures						
Small business programs	0.4	4.6	4.5	3.4	1.6	4.3
Total	*1.2*	*7.2*	*6.4*	*3.6*	*1.7*	*4.6*
Education						
General export measures						
Export Market Development Grants Scheme	8.4	7.8	8.0	6.6	7.0	7.4
General investment measures						
Development allowance	0.1	0.1	<0.1	<0.1	<0.1	<0.1
General R&D measures						
COMET Program	0.1	0.2	0.2	0.1	0.3	0.2
Premium R&D tax concession	0.1	0.3	0.5	0.4	0.6	0.8
R&D Start	2.2	0.1	0.2	0.2	0.1	<0.1
R&D tax concession	1.4	1.4	1.6	1.4	1.5	1.6
R&D tax offset for small companies	-	1.1	1.5	1.7	2.1	1.9
Other measures						
Small business capital gains tax exemption	<0.1	-	-	0.5	0.5	0.5
Small business programs	<0.1	0.4	0.4	0.3	4.1	2.6
Total	*12.3*	*11.3*	*12.4*	*11.1*	*16.1*	*15.2*
Health and community services						
Industry-specific measures						
Premium Support scheme	-	-	-	24.4	17.1	50.0
Renewable Energy Equity Fund	-	0.4	-	-	-	-
General export measures						
Export Market Development Grants Scheme	0.5	0.9	0.8	1.6	2.0	2.1
TRADEX	<0.1	-	-	0.2	0.3	0.3
General investment measures						
Development allowance	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Table A.4 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
General R&D measures						
Biotechnology Innovation Fund	1.1	3.2	3.1	2.8	1.5	0.1
Commercial Ready Program	-	-	-	<0.1	3.5	7.0
COMET Program	0.9	0.8	0.3	0.2	0.6	0.5
Cooperative Research Centres	7.1	7.2	14.1	15.3	19.6	19.0
Innovation Investment Fund	0.6	-	5.8	3.9	2.3	2.4
Premium R&D tax concession	<0.1	0.1	0.2	0.2	0.3	0.4
Preseed fund	-	-	2.5	0.5	1.8	2.0
R&D Start	20.8	10.6	9.3	12.1	4.4	1.8
R&D tax concession	2.3	0.6	0.7	0.7	0.8	0.9
R&D tax offset for small companies	-	1.6	2.3	1.9	2.4	2.2
Other measures						
Small business capital gains tax exemption	0.8	3.6	3.6	5.4	5.4	6.5
Small business programs	<0.1	<0.1	<0.1	<0.1	0.2	0.1
Wide Bay Burnett Structural Adjustment	0.1	0.1	-	-	-	-
Total	*34.1*	*29.1*	*42.6*	*69.4*	*62.0*	*95.3*
Cultural and recreational services						
Industry-specific measure						
Australian Film Commission	16.9	20.5	22.5	48.6	52.0	52.4
Australian Film Finance Corporation	50.0	57.5	60.5	65.5	70.5	70.5
Exemption of film tax offset payments	-	1.0	3.0	16.0	7.0	10.0
Film Australia	4.9	9.8	10.0	10.8	13.0	13.2
Film industry tax incentives – 10B & 10A	-4.0	2.0	3.0	-1.0	-2.0	-13.0
Refundable tax offset for large scale film production	-	3.0	9.0	53.0	22.0	-
General export measures						
Export Market Development Grants Scheme	10.6	11.3	12.2	11.3	12.1	12.9
TRADEX	-	-	-	<0.1	-	-
General investment measures						
Development allowance	0.3	0.2	0.1	<0.1	<0.1	<0.1
General R&D measures						
Commercial Ready Program	-	-	-	-	0.2	0.2
COMET Program	0.1	0.1	<0.1	0.2	0.1	0.2
Cooperative Research Centres	2.4	2.4	4.3	4.8	4.7	4.7
Innovation Investment Fund	0.6	-	-	-	-	-
Premium R&D tax concession	<0.1	0.1	0.1	0.2	0.2	0.3
R&D Start	0.7	0.3	0.3	0.1	-	-
R&D tax concession	9.0	0.6	0.7	0.5	0.6	0.6
R&D tax offset for small companies	-	1.0	1.5	1.8	2.3	2.1

Table A.4 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Other measures						
Eden Structural Adjustment	0.1	<0.1	<0.1	-	-	-
Industry Cooperative Innovation Program	-	-	-	-	-	0.7
Small business capital gains tax exemption	0.5	0.9	0.9	0.8	0.8	0.9
Small business programs	<0.1	0.1	0.1	<0.1	-	0.7
South West Forests Structural Adjustment	0.2	0.3	-	-	-	-
Wide Bay Burnett Structural Adjustment	0.2	0.1	-	-	-	-
Total	*92.5*	*111.3*	*128.2*	*212.7*	*183.4*	*156.3*
Personal and other services						
Industry-specific measure						
Renewable Energy Development Initiative	-	-	-	-	-	0.7
General export measures						
Export Market Development Grants Scheme	1.2	0.7	0.7	0.9	1.2	1.3
General R&D measures						
Commercial Ready Program	-	-	-	-	0.6	0.1
COMET Program	<0.1	<0.1	-	0.1	0.1	0.1
Premium R&D tax concession	<0.1	0.1	0.2	0.3	0.3	0.5
R&D Start	2.7	0.3	0.2	<0.1	-	-
R&D tax concession	0.6	0.6	0.7	1.2	1.3	1.4
R&D tax offset for small companies	-	0.9	1.3	1.8	2.3	2.1
Other measures						
Industry Cooperative Innovation Program	-	-	-	-	-	0.5
Small business capital gains tax exemption	0.7	1.0	1.0	2.2	2.2	2.7
Small business programs	0.1	1.3	1.2	0.9	1.2	1.6
Total	*5.4*	*5.0*	*5.3*	*7.4*	*9.3*	*10.9*
Unallocated services						
Industry-specific measures						
Building IT strengths	64.6	16.1	11.6	12.6	10.6	-
Travel compensation fund	5.0	-	-	-	-	-
General export measures						
Tourism Australia	97.9	99.9	97.9	138.4	137.8	133.8
General R&D measures						
CSIRO	10.3	10.6	-	-	-	-
R&D Start	-	-	0.2	-	-	-

Table A.4 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Other measures						
Australian Tourism Development Program	-	-	-	4.0	7.0	6.8
Back of Bourke Exhibition Centre	0.9	0.2	-	-	-	-
Cairns Esplanade Development	-	-	-	2.9	3.0	1.9
Cairns Foreshore Promenade Development	-	-	-	2.0	2.9	-
Fairbridge Village Redevelopment	-	-	-	0.7	-	-
Film Licensed Investment Company Scheme	-	-	-	-	-	4.0
Further Tourism Promotion	5.0	-	-	-	-	-
Indigenous Tourism Business Ready Program	-	-	-	0.2	0.8	1.1
Kimberley Cultural Tourism Promotion	-	-	-	0.1	0.1	-
Lancefield Visitor Information Centre & Reserve	-	-	-	0.2	-	-
National Tourism Accreditation Framework	-	-	-	0.7	0.8	0.5
North East Chinese Heritage Trail	-	-	-	-	0.5	1.2
Oatlands Callington Mill upgrade	-	-	-	0.1	0.1	-
Regional Online Tourism Program	1.4	-	-	-	-	-
Regional Tourism Program	1.9	3.0	0.5	-	-	-
See Australia Domestic Tourism Initiative	-	1.5	1.5	2.4	-	-
Small business assistance – Tourism	10.5	-	-	-	-	-
Stockman's Hall of Fame	1.4	1.4	1.3	-	-	0.5
Tasmanian Infrastructure Initiative	-	-	1.1	-	0.7	-
Tasmanian Regional Tourism	0.2	0.4	-	-	-	-
The Great Green Way - Tourism Initiative	-	-	-	1.9	1.9	1.9
Tourism Assistance Package	5.0	-	-	-	-	-
Tourism in Protected Areas	-	-	1.1	1.9	1.7	-
Tourism Operations	0.5	0.5	-	-	-	-
Willow Court Restoration of 'The Barracks'	-	-	-	<0.1	0.3	-
Woodend Bike Trail	-	-	-	0.2	-	-
Total	*204.5*	*133.5*	*115.0*	*168.3*	*168.1*	*151.8*
Total outlays	**581.2**	**590.5**	**680.9**	**834.3**	**893.6**	**1034.0**
Total tax expenditures	**328.4**	**326.2**	**393.7**	**496.4**	**494.1**	**560.0**
Total Budgetary assistance	**909.7**	**916.7**	**1074.6**	**1330.7**	**1387.8**	**1594.1**

- Nil. Figures may not add to totals due to rounding. [a] The estimates are derived primarily from Australian Government budget papers, departmental annual reports and Treasury's Tax Expenditure Statements. The budget paper estimates are 'estimated actuals'.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2008; Bishop 2007; departmental data; Commission estimates.

Table A.5 **Estimated[a] Australian Government budgetary assistance, Unallocated other[b], 2001-02 to 2006-07**

$ million

	01-02	*02-03*	*03-04*	*04-05*	*05-06*	*06-07*
Industry-specific measures						
Australian Seafood Industry Council	-	-	-	0.1	0.1	-
Tasmanian wheat freight subsidy	-	-	-	-	-	0.6
General export measures						
Austrade	174.5	163.8	158.5	155.1	167.0	172.0
EFIC national interest business	11.8	13.0	12.8	10.4	9.1	10.9
Export access	2.9	0.2	-	-	-	-
International Food and Agricultural Service	-	-	-	30.7	30.5	30.5
TRADEX	-	-	-	1.4	-	-
General investment measure						
Development allowance	48.9	25.6	13.3	7.8	5.6	2.2
Invest Australia	14.0	16.7	19.4	22.3	22.0	24.0
Regional headquarters program	0.5	0.5	0.5	0.5	0.5	0.5
General R&D measures						
Biotechnology Innovation Fund	-	-	-	1.2	0.3	<0.1
Commercial Ready Program	-	-	-	0.8	1.3	0.4
COMET Program	-	-	-	<0.1	-	-
Commonwealth technology park	11.5	-	-	-	-	-
Innovation Access Program	-	10.7	11.0	5.8	9.3	0.8
Innovation Investment Fund	-	-	-	0.5	-	-
Major national research facilities	1.3	7.1	10.9	11.9	11.9	-
Premium R&D tax concession	0.4	1.0	1.6	2.4	3.1	4.3
Preseed fund	-	-	-	0.1	-	-
R&D Start	-	0.3	-	28.2	4.7	2.2
R&D tax concession	27.7	6.5	7.4	10.2	11.1	12.0
R&D tax offset for small companies	-	2.3	3.3	5.6	6.9	6.4
R&D tax offset payments – exemption	40.0	60.0	35.0	1.0	-35.0	-65.0

Table A.5 (continued)

	01-02	02-03	03-04	04-05	05-06	06-07
Other measures						
25 per cent entrepreneurs' tax offset	-	-	-	-	-	130.0
Australian Made Campaign – export strategy	-	-	-	0.9	0.7	0.5
Beaconsfield Community Fund	-	-	-	-	-	1.0
Business assistance fund for disasters	-	-	-	-	-	10.0
Capital gains tax relief for statutory licences	-	-	-	-	-	20.0
Home Based Business Seminars	-	-	-	-	-	0.4
Industry Capability Network Limited	-	-	1.5	1.8	1.5	2.3
Port Kembla Industry Facilitation Fund	-	-	-	-	-	2.4
Regional assistance program	29.2	21.9	-	-	-	-
Regional partnerships program	-	-	27.6	30.4	35.7	17.3
Small business CG tax 50 percent reduction	130.0	160.0	240.0	320.0	370.0	405.0
Small business CG tax asset exemption	5.0	10.0	15.0	15.0	55.0	55.0
Small business CG tax retirement exemption	55.0	85.0	100.0	150.0	150.0	200.0
Small business capital gains tax exemption	0.5	9.0	9.0	8.7	8.7	10.4
Small business interest rate subsidy	-	0.1	0.5	0.5	-	-
Small business participation in major projects	3.0	-	-	-	-	-
Small business programs	<0.1	0.1	0.1	0.1	-	0.5
Structural Adjustment Fund for South Australia	-	-	-	-	13.1	10.5
Sustainable regions program	0.4	6.2	20.9	22.6	36.8	7.1
Tasmanian Freight Equalisation Scheme	0.8	0.8	1.0	0.9	0.9	1.0
Tropical Cyclones Larry and Monica - business assistance	-	-	-	-	136.5	11.8
Tropical Cyclone Larry - fuel excise relief	-	-	-	-	-	1.0
Total outlays	**249.3**	**243.1**	**267.5**	**329.9**	**488.4**	**302.3**
Total tax expenditures	**307.9**	**357.5**	**421.9**	**517.0**	**569.0**	**785.5**
Total Budgetary assistance	**557.3**	**600.7**	**689.4**	**846.9**	**1057.4**	**1087.8**

- Nil. Figures may not add to totals due to rounding. [a] The estimates are derived primarily from Australian Government budget papers, departmental annual reports and Treasury's Tax Expenditure Statements. The budget paper estimates are 'estimated actuals'. [b] Includes programs or amounts of funding where the initial benefiting industry is not stated and/or has not been ascertained.

Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Treasury 2008; Bishop 2007; departmental data; Commission estimates.

B Anti-dumping and countervailing activity

Dumping is said to occur when a foreign supplier exports goods at a price below the 'normal value' of the goods. The price of the good in the exporter's home market is generally used to determine the normal value although, in certain prescribed circumstances, alternatives such as the good's price in another export market or a constructed price can be used.

The WTO 'Anti-dumping Agreement' places certain disciples on anti-dumping action by setting out rules about when and how a WTO member can or cannot react to dumping. To apply anti-dumping measures, a country has to demonstrate that dumping has taken place, show that dumping is causing, or threatening to cause, material injury to a competing domestic industry, and calculate the extent of dumping (how much lower the export price is compared to the exporter's home price).

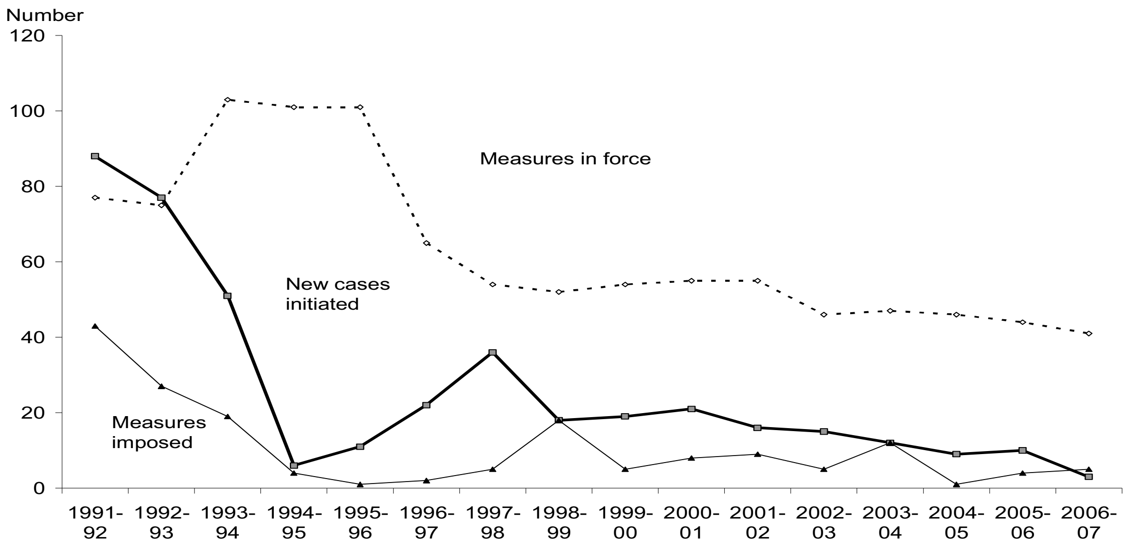
Countries may also apply countervailing duties where imports — benefiting from certain forms of subsidies in the country of origin — cause, or threaten to cause, material injury to a domestic industry.

Like other measures that raise the price of imports, anti-dumping and countervailing measures assist particular industries, but can also impose higher costs on other domestic industries and consumers. Australia's current anti-dumping and countervailing system, which took effect in July 1998, was described in *Trade & Assistance Review 1997-98* (PC 1998). This appendix reports recent anti-dumping and countervailing activity.

Australian trends

Anti-dumping and countervailing activity is shown by three statistics: *initiations*, measures *imposed* and measures *in force* (figure B.1). A case is *initiated* when a complaint of dumping or subsidisation is first made. If after investigation the case is found to have substance, the Customs Minister may *impose* measures to remedy the situation. These measures generally last for five years (although, for some cases, measures may be extended at the end of the period) and the stock of these measures at any point is reported as measures *in force*.

Figure B.1 **Anti-dumping and countervailing activity[a] 1991-92 to 2006-07**



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

Source: ACS (2006, 2007); PC (2007d).

The number of new anti-dumping and countervailing cases *initiated* in Australia has been relatively low over recent years, compared with the early 1990s (figure B.1). During 2006-07, Australian firms initiated three complaints against firms from three economies (table B.1). Two of the cases initiated were in the chemicals and plastics industry, while the third case was in the food and beverages industry.

Table B.1 **Australian anti-dumping and countervailing initiations,[a] 2006-07**

Commodity	*Exporting economy*
Certain brandy	France
Transparent Bi-Axially oriented polypropylene	Republic of Indonesia
Sodium tripolyphosphate	China

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

Source: ACS (2006, 2007).

In 2006-07, five new measures were *imposed* by the Government compared to four in the previous year, while nine measures expired. Overall, the number of measures *in force* dropped slightly, to 41.

The *Petroleum, coal, chemical and associated products* industry (mainly chemical and plastic products) has on average been the largest initiator of anti-dumping and countervailing actions, accounting for more than one third of total initiations over the last decade (table B.2). Over the 10-year period to 2006-07, Australia initiated anti-dumping and countervailing activity against over 25 countries. In the last three years, action has been initiated against nine countries, with more than one action initiated against five of these countries during the period (table B.3).

Table B.2 **Anti-dumping and countervailing cases initiated,[a] by industry, 1997-98 to 2006-07**

				1997-98 to 2006-07	
Industry[b]	*2004-05*	*2005-06*	*2006-07*	*Number of cases*	*Per cent of total* [c]
Food, beverages and tobacco	1	2	1	15	9
Textiles, clothing, footwear and leather	–	–	–	6	4
Wood and paper products	1	–	–	26	16
Printing, publishing and recorded media	–	–	–	–	–
Petroleum, coal, chemical and associated products	2	1	2	59	37
Non-metallic mineral products	–	2	–	9	6
Metal product manufacturing	4	5	–	28	18
Machinery and equipment manufacturing	1	–	–	10	6
Other manufacturing	–	–	–	6	4
Total	**9**	**10**	**3**	**159**	**100**

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

Source: ACS (various years).

International trends

Internationally in 2005-06, there were 189 anti-dumping and countervailing cases initiated (table B.4). The most initiations were by India (30) and the European Union (26), followed by China (16) and Argentina (16).

Twelve WTO countries currently account for 90 per cent of anti-dumping and countervailing measures in force, a similar percentage to recent years. However, over the last four years the composition of the twelve largest users of anti-dumping and countervailing measures has changed, with China (which joined the WTO in December 2001) and Peru joining the top 12 and Korea and New Zealand dropping out. The three countries with the most measures in force remain the United States, India and the European Union — together they have accounted for around half of all measures. Australia, with 48 measures in force at 30 June 2006, was the 11th largest user of anti-dumping and countervailing measures, compared to its position as eighth largest user in 2002.

Table B.3 **Australian initiations of anti-dumping and countervailing cases, by trading region and economy,[a] 1997-98 to 2006-07**

				1997-98 to 2006-07	
Region/economy	*2004-05*	*2005-06*	*2006-07*	*Total*	*Per cent[b]*
North America	**1**	**–**	**–**	**8**	**5**
Canada	1	–	–	3	2
United States	–	–	–	5	3
European Union	–	–	**1**	**38**	**24**
Austria	–	–	–	2	1
Belgium/Luxembourg	–	–	–	3	2
Finland	–	–	–	3	2
France	–	–	1	4	3
Germany	–	–	–	6	4
Italy	–	–	–	7	4
Netherlands	–	–	–	2	1
Sweden	–	–	–	3	2
UK	–	–	–	5	3
Other EU	–	–	–	3	2
Asia	**8**	**10**	**2**	**96**	**60**
China	3	3	1	20	13
Hong Kong	–	–	–	1	1
India	–	–	–	3	2
Indonesia	–	1	1	16	10
Japan	–	–	–	5	3
Korea	3	1	–	17	11
Malaysia	1	2	–	8	5
Philippines	–	1	–	1	1
Singapore	–	–	–	5	3
Thailand	1	1	–	12	8
Taiwan	–	1	–	8	5
Other	**–**	**–**	**–**	**17**	**11**
Saudi Arabia	–	–	–	2	1
South Africa	–	–	–	4	3
Other	–	–	–	11	7
Total	**9**	**10**	**3**	**159**	**100**

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

Source: ACS (various years).

Table B.4 International anti-dumping and countervailing actions, 2004-05 and 2005-06

	Initiation		*Provisional measures*		*Definitive duties*		*Price undertakings*		*Measures in force*[a]		*% total measures in force*[b]	
Country	*04-05*	*05-06*	*04-05*	*05-06*	*04-05*	*05-06*	*04-05*	*05-06*	*At 30 June 2005*	*At 30 June 2006*	*04-05*	*05-06*
US	9	11	26	11	22	8	–	–	335	307	24	23
India	30	30	9	12	29	18	1	1	191	177	14	13
EU	35	26	14	6	8	24	4	3	183	168	13	12
China	27	16	17	24	20	21	3	2	71	88	5	6
Turkey	20	9	2	2	16	16	–	–	68	81	5	6
South Africa	19	7	8	19	2	3	–	–	77	75	6	6
Mexico	7	6	7	7	7	11	–	–	64	72	5	5
Argentina	6	16	2	–	1	9	2	2	59	67	4	5
Canada	8	8	13	3	9	–	–	–	63	54	5	4
Brazil [c]	5	6	–	–	4	3	2	2	51	50	4	4
Australia	9	14	2	3	1	4	–	5	54	48	4	4
Peru	7	3	4	–	5	5	–	–	34	35	2	3
12 WTO members	**182**	**152**	**104**	**87**	**124**	**122**	**12**	**15**	**1250**	**1222**	**90**	**90**
All WTO Members	**214**	**189**	**126**	**110**	**155**	**150**	**15**	**18**	**1383**	**1358**	**100**	**100**

– Nil. [a] Includes definitive price undertakings. [b] The sum of the percentages for individual countries may not equal the total due to rounding. [c] Certain of the measures in force as at 30 June 2005 were notified as having been fully or partially suspended.

Source: WTO (2006, 2007a).

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