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Productivity Commission

Trade & Assistance
Review 2011-12

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Annual Report Series



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The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

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

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au) or by contacting Media and Publications on (03) 9653 2244 or email: maps@pc.gov.au

Foreword

The Productivity Commission is required under its Act to report annually on industry assistance and its effects on the economy. *Trade & Assistance Review 2011-12* contains the Commission's latest quantitative estimates of Australian Government assistance to industry. It also identifies recent developments in assistance for various industries and sectors of the economy, and international trade policy.

This year's review includes an information chapter on Intellectual Property, the design and implementation of which has widespread influences on Australia's innovation and trade. The Commission has also recently completed a report on *Compulsory Licensing of Patents*. Combined, this work could provide a base for further work on what is likely to be an area of increasing trade and innovation policy interest.

In preparing this report, the Commission has received helpful advice and feedback from a number of officials in Australian Government agencies and academia. The Commission is very grateful for their assistance.

Peter Harris
Chairman
June 2013

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Abbreviations

ABS	Australian Bureau of Statistics
ACTA	Anti-Counterfeiting Trade Agreement
ANZSIC	Australian and New Zealand Standard Industrial Classification
APEC	Asia-Pacific Economic Cooperation
BRTAs	bilateral and regional trade agreements
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DBCDE	Department of Broadband, Communications and the Digital Economy
DFAT	Department of Foreign Affairs and Trade
DIISRTE	Department of Industry, Innovation, Science, Research and Tertiary Education
DRET	Department of Resources, Energy and Tourism
IAC	Industries Assistance Commission
IC	Industry Commission
IP	Intellectual property
ISDS	investor-state dispute settlement
PC	Productivity Commission
RCEP	Regional Comprehensive Economic Partnership
R&D	Research and Development
TES	Tax Expenditures Statement
TPP	Trans-Pacific Partnership
TRIPS	Trade Related Aspects of Intellectual Property Rights
WIPO	United Nations World Intellectual Property Organization
WTO	World Trade Organization

OVERVIEW

Key points

- Government assistance to industry is provided through tariffs, budgetary outlays, taxation concessions, regulatory restrictions on competition and other measures.
 - Assistance generally benefits the industry receiving it and, if well targeted and designed, can deliver wider community benefits, but it can also come at a cost to other industries, taxpayers and consumers.
- The assistance estimates presented in this *Review* mark the commencement of a new series based on the 2008-09 ABS input-output tables.
- Using the new series, tariff assistance to industry was \$7.9 billion in 2011-12 in gross terms. After allowing for the cost to industries of tariffs of \$6.8 billion, net tariff assistance was \$1.1 billion.
- Assistance of \$9.4 billion was also provided through budgetary outlays and taxation concessions — \$5.1 billion in budgetary outlays and \$4.3 billion in tax concessions.
- Net assistance from tariffs and budgetary measures was \$10.5 billion in 2011-12.
- The effective rate of assistance (net assistance as a proportion of unassisted value added) for manufacturing is about 4 per cent and 3 per cent for primary industries.
 - Effective assistance to the TCF and motor vehicle industries at around 7 and 9 per cent, respectively, although much reduced, remain higher than average.
- Budgetary assistance in 2011-12 was \$0.4 billion lower than in 2010-11. There were large decreases from the winding down of the Small Business and General Business Tax Break, reduced outlays on drought relief payments reflecting (at the time) improved conditions, and large increases in carbon-related support to industry.
- Since the May 2012 Budget, the Australian Government announced further budgetary assistance of over \$430 million, most to be spent over the next five years.
- In relation to trade policy, with the stalling of the Doha Round of multilateral trade negotiations, Australia has been promoting alternative pathways including in the areas of trade facilitation and trade in services, where consensus may be reached.
- Intellectual property (IP) law has a pervasive impact on innovation, production, trade and consumption and is the theme topic in this *Review*.
 - IP law aims at encouraging the creation of beneficial new ideas.
- It influences firms' capacity to derive pecuniary benefits from innovations and creations. It also influences the activities of firms and individuals seeking to use IP protected goods and services.
 - Because of the pervasiveness of IP law, it is important that the design, operation and review of IP systems be carefully governed.
 - For such a diverse topic area, an issue is whether there would be a role in the medium term for an independent overarching framework-style review, to complement ongoing topic-specific reviews into current issues and developments.

Overview

The Australian Government assists industries through an array of measures, including import tariffs, budgetary outlays, taxation concessions, regulatory restrictions on competition and government purchasing arrangements and guarantees. Although assistance generally benefits the receiving industry and businesses, it can penalise other industries, taxpayers and consumers. Transparency about assistance arrangements is therefore important.

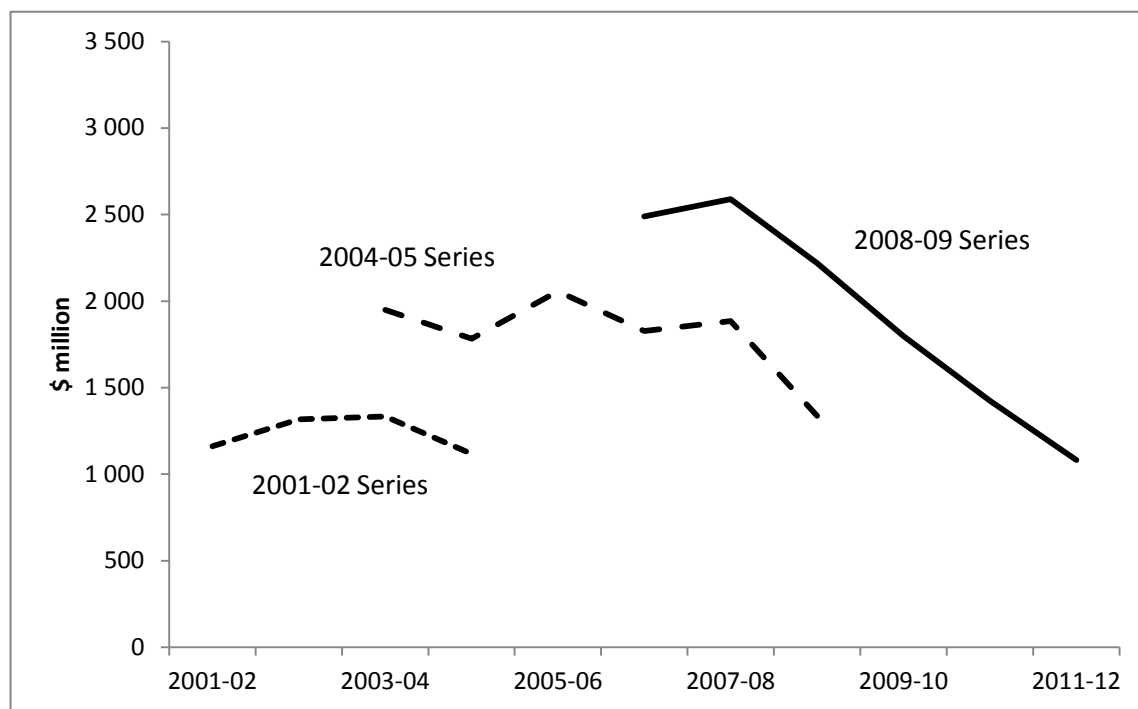
This *Review* reports on the levels of assistance afforded by government to industry as well as trade policy developments with assistance implications. However, assessing whether the benefits of any particular support program exceed the costs requires detailed consideration — a task beyond the scope of this *Review*.

The industry assistance landscape in Australia has changed considerably over the last 40 years. Tariff assistance has declined markedly, predominantly through unilateral tariff reductions implemented by the Australian Government. On the other hand, there has been a shift towards greater budgetary assistance to industry, particularly over the last decade. Such assistance is provided by the Australian Government, as well as by State, Territory and local governments.

Estimates of assistance to industry

Assistance estimates presented in this *Review* mark the commencement of a new series. The new series is benchmarked to the 2008-09 ABS input-output tables, replacing the previous 2004-05 based series. With the re-benchmarking of assistance estimates, the Commission also introduced the latest ABS classification of industries — the *Australia and New Zealand Standard Industrial Classification* 2006 Edition. Because of structural changes in the economy between input-output years and data revisions, the estimated level of tariff assistance varies between the last three series where the years overlap (figure 1). The difference between series for the latest revision is not large compared with the rebasing from the 2001-02 series to 2004-05, or compared with the size of the economy in 2008-09 (around \$1.3 trillion). The last two series (2004-05 and 2008-09) are consistent in revealing the broad downward path in net tariff assistance associated with tariff reductions and the growth in relative importance of the services sector (which is not tariff assisted).

Figure 1 Net tariff assistance to Australian industry
Gross assistance to output less tariff penalty on inputs



Using the new 2008-09 benchmarked series, measured assistance to industry by the Australian Government amounted to over \$17.3 billion in gross terms in 2011-12 — comprising \$7.9 billion in gross tariff assistance, \$5.1 billion of budgetary outlays and \$4.3 billion in estimated tax concessions.

After allowing for the cost to business of tariffs on imported inputs (\$6.8 billion), estimated net assistance was \$10.5 billion in 2011-12.

The manufacturing sector continues to receive the highest level of net assistance — mainly because of tariff assistance on outputs. For the services sector, the tariff penalty on inputs exceeds its measured budgetary assistance. While the primary industries sector received the majority of its assistance in the form of budgetary outlays, tariff protection continues to be afforded to a range of horticultural, crop and forestry products.

The estimated value of budgetary assistance amounted to \$9.4 billion in 2011-12 down from \$9.8 billion the previous year. The largest reduction was the winding down of temporary assistance afforded by the Small Business and General Business Tax Break introduced in the 2008-09 financial year as part of the Nation Building and Jobs Plan. The concession amounted to \$680 million in 2011-12 compared with \$2.4 billion in 2010-11. The level of budgetary support to rural industries in 2011-12 declined further from earlier years mainly because of lower Exceptional

Circumstances (drought relief) payments. The largest increases in budgetary assistance to industry in 2011-12 were \$1 billion under the Energy Security Fund (Transitional Assistance) and \$219 million for the Coal Sector Jobs Package.

With the unwinding of the temporary tax breaks the relative importance of assistance to small business is estimated to have declined from nearly 40 per cent of total budgetary assistance to industry in 2010-11 to around one quarter in 2011-12. The relative importance of assistance to R&D remained around 30 per cent. A further 30 per cent of budgetary assistance was directed to selected industries — including, textiles, clothing and footwear (TCF), motor vehicles, film production, steel, coal and electricity. The remainder of industry assistance is designated as sectoral-wide support, and assistance for exports, regional structural adjustment and investment.

Across the primary, mining and manufacturing industries, in 2011-12, the highest measured effective rates of assistance — net assistance per dollar of value added — continued to be for the TCF and motor vehicles industries. The effective rate of assistance for these industries was around seven and nine per cent, respectively, in 2011-12 compared to the average for manufacturing of around four per cent. The effective rate of assistance to primary industries is around three per cent. In dollar terms, the highest assistance was afforded to the food processing industries and metal and fabricated metal products industries — mainly on account of tariffs on a range of products manufactured by these industries.

While effective rates of assistance have not been estimated for the service industries, net assistance is negative for most service industries because the tariff penalty on inputs exceeds the magnitude of budgetary assistance.

Recent industry-related announcements

Since May 2012 (the reporting date for the 2010-11 *Review*), the Australian Government has announced a number of budgetary and regulatory measures relating to industry assistance, across a wide range of activities.

Announcements relating to proposed budgetary outlays affording assistance to businesses and activities amounted to around \$430 million. Of this, announcements in respect of industry-support programs totalled around \$230 million, much of which is planned to be expended over the next five years. This predominantly relates to transitional assistance to the fishing industry, the automotive new markets program, regional-industry infrastructure programs and tourism programs. A further \$192 million was announced for carbon emission reduction and energy efficiency

measures (including the Briquette Restructuring Package and the United States-Australia Solar Energy Collaboration).

In addition to these proposed expenditures, expenditure with potential assistance implications for firms and activities of over \$230 million were made, most of which related to the future submarine project.

Although difficult to quantify, assistance to industry can also be conferred through regulatory arrangements which affect market access and competition. During the last year, the Government made a number of such announcements and introduced legislation relating to the airport passenger movement charge and the promotion of tourism, broadcasting and communications, and fisheries.

International trade policy developments

The global financial crisis (GFC) was associated with significant disruption of financial markets, the effects of which have been felt unevenly across the globe. When the crisis began in 2008, world trade contracted severely and rapidly, but has since recovered and now exceeds pre-GFC levels. At the time of the crisis, the risk of increased protectionism and associated costs was recognised and high level commitments were made to avoid this. While average tariffs (trade-item average) worldwide have continued to decline, the onset of the crisis was marked by an increase in protectionist measures, the most common of which included trade remedies (such as anti-dumping investigations) and border assistance (including some increases in applied tariffs).

Concern continues to be expressed about the apparent shift in the policy emphasis of trade remedies and other trade-restricting measures, from measures aimed at combatting the temporary effects of the GFC, towards ‘national industrial planning’, including through government subsidies and purchasing preferences. Monitoring of changes in these by the WTO is proving difficult leading to calls for improvements in transparency and peer review.

In the aftermath of the GFC, concern has also been expressed that competitive currency devaluations are being used to gain advantage in trade.

The Doha Round of multilateral trade negotiations remain stalled. In order to progress the Doha agenda, the Australian Government has been promoting a ‘new pathways’ approach that involves attempting to conclude on those areas of the agenda where agreement may be attained. Two areas being pursued by the Australian Government as candidates for early completion are negotiations on trade facilitation (such as customs procedures) and agreement on trade in services. On the

latter matter, Australia is co-chairing with the United States negotiations amongst 46 WTO members.

Australia has continued to be involved in negotiations on bilateral and regional trade agreements. One of these is the proposed Trans-Pacific Partnership (TPP). It has also joined in negotiations for a proposed Regional Comprehensive Economic Partnership (RCEP) which was launched at the East Asia Summit in 2012. The two agreements, if formed to include the current negotiating parties would constitute two trading blocs with limited overlap in member-to-member trade.

In October 2012, the Australian Government issued the Asian Century White Paper. In this paper, it recommitted to existing schedules to lower tariffs and commitments encompassed in trade agreements. It also committed to work towards reducing unnecessary domestic regulatory impediments to cross border business activity, investment and skilled labour migration.

During the year, the Australian Government also made a number of other trade policy announcements.

- It indicated that it will implement a national foreign ownership register of agricultural land and a working group has been formed.
- It announced that the Export Finance and Insurance Corporation (EFIC) will apply a new market failure test to determine the eligibility for support and will direct more resources to small and medium sized enterprises seeking to expand into Asian markets.
- It established an Anti-Dumping Commission and announced changes to enable it to deal with anti-dumping cases more quickly and rigorously.

The Anti-Counterfeiting Trade Agreement (ACTA) was also subject to review by the Joint Standing Committee on Treaties. The Committee raised a number of concerns including the potential for the agreement to shift the balance of interpretation in favour of intellectual property rights holders. To date, ACTA has not been ratified by Australia.

Intellectual property (the theme chapter in this year's *Review*)

Intellectual property (IP) law has a pervasive impact on innovation, production, trade and consumption and is the theme topic in this year's *Trade & Assistance Review*. (Recent *Reviews* have included separate theme chapters on adjustment assistance, state and territory government assistance to industry, assistance to the finance industry and carbon reduction measures.)

Given the capacity for IP systems to facilitate (or inhibit) innovation, creative activity and trade, it is important that the design, operation and review of IP systems be carefully governed.

Intellectual property law, itself, has evolved over the centuries in response to changing economic circumstances. The inclusion of IP in the global trading system that accompanied the establishment of the World Trade Organization (WTO) in 1995 signalled a significant elevation of IP in economic policymaking.

An underlying motivation for much IP law is to facilitate trade and commerce, either through providing incentives for inventiveness and creativity, or through revealing information about new technology and ways of working to the market while preserving the proprietary rights of the IP owners. A stream of IP law also seeks to acknowledge the moral rights of creators and performers over their talents.

There are many types of IP provided for by statutory law in Australia, including patents, trade marks, designs, plant breeder's rights, copyrights, circuit layout rights, artists resale royalty rights, moral rights and performers rights. This law and its implementation variously influence firms' capacity to derive pecuniary benefits from their innovations and creations. The IP system also influences the activities of firms and individuals seeking to use IP in the production of their own goods and services, innovation and private consumption.

One of the most obvious differences between the various types of IP is the duration of protection — with the shortest maximum currently at eight years for an innovation patent while copyright protection extends to 70 years after the death of the author. Trade marks are of indefinite duration (provided they continue to be renewed). Differences in the duration of protection have also evolved within different types of IP. For example, the maximum duration available for pharmaceutical patents is longer than other standard patents in recognition of the lag between the patent being granted and regulatory approval for sale.

Complex legal systems and administrative frameworks have been established to manage IP law. In Australia, patents and other industrial IP are administered by Intellectual Property Australia, which employs around 1100 people and had a total expenditure in 2011-12 of about \$156 million, most of which was recovered through fees. Copyright is administered by the Attorney General's Department while a range of other government agencies including Department of Agriculture, Fisheries and Forestry, Department of Health and Ageing, the Department of Foreign Affairs and Trade, Department of Broadband, Communications and the Digital Economy, and Department of Regional Australia, Local Government, Arts and Sport have responsibility for aspects of IP policy and administration.

National systems of IP law are complemented by international frameworks and treaties. There are now 24 IP treaties administered by the United Nations World Intellectual Property Organization (WIPO) of which 15 are in force in Australia. Australia is also a member of the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) established in 1995 as an outcome of the Uruguay Round of trade negotiations. This agreement adopted the most-favoured-nation principle and sets substantive minimum standards in virtually all areas of IP. IP provisions are also negotiated as part of bilateral and regional trade agreements and there are separate international agreements on the protection of new plant varieties (of which Australia is a member) and an anti-counterfeiting agreement (which Australia has not ratified, at this stage).

Empirical research suggests that the relevance and impact of IP law varies between activities, while administrative arrangements can have separate effects on IP activity. Recent empirical research has covered a wide range of topics including the traditional focus on the incentive to invent and create, as well as new IP issues such as the impact of file sharing on copyright revenue and coordination of multiple input patents required to produce one product.

Australia has a substantive tradition of review and public debate concerning the implications for IP law of changing technology and ways of working, and evolving community norms. A review has just been completed in the area of compulsory licensing of patents while reviews are under way with respect to the implications of the digital economy on copyright and into pharmaceutical patents, amongst other matters.

Topic-specific reviews will continue to be needed from time-to-time to ensure that the economic, legal and administrative frameworks remain up to date. Empirical research on the balance of trade-offs associated with IP and the impact of IP protection on economic performance is likely to continue and deepen with improvements in information systems and analytical techniques.

For a large topic area such as IP, an issue is whether there would be a role in the medium term for an independent over-arching framework-style review, as has occurred in Australia in other areas, for example, the financial system and consumer policy.

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 to, a person in respect of carrying on a business or activity.

Assistance thus takes many forms. It extends beyond direct government subsidies to particular firms or industries and includes tariffs, quotas, regulatory restrictions on imported goods and services and tax concessions. Assistance can also arise from the provision of services below cost by government agencies and from government procurement policies.

Although assistance generally benefits the firms or industries that receive it, it typically imposes costs on other sectors of the economy. For example, direct business subsidies increase returns to recipient firms and industries, but to fund the 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 other local businesses and higher prices for consumers, who then have less money to spend on other goods and services.

Governments provide assistance for many different reasons. Some types of assistance — such as for R&D and to meet environmental objectives — can deliver net community benefits. Similarly, some policies which have industry assistance effects may be justified on other grounds, such as the achievement of social or equity objectives.

In view of the costs, as well as the potential benefits, that industry assistance can entail, government measures that provide assistance need to be monitored and regularly reviewed. One of the Productivity Commission's functions under its legislation 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 Australian Government assistance to industry (chapter 2). These estimates cover the years 2006-07 to 2011-12. They provide a broad indication of

the resource allocation effects of selective government industry policies, and highlight some of the costs of industry support. The estimates of assistance presented in this *Review* mark the commencement of a new series and the adoption of the 2006 edition of the *Australian and New Zealand Standard Industrial Classification* (ANZSIC). A comparison is provided in the body of this report between the new, re-benchmarked series and the previous series. Appendix A provides additional details of the Commission's estimates of assistance.

Care is required in interpreting the estimates. Among other things, they generally cover only those government measures that selectively benefit particular firms, industries or activities, and which can be quantified, given practical constraints in measurement and data availability. Because industry assistance is discriminatory and can distort the allocation of economic resources, assessing whether the benefits of any particular industry support program exceed its costs involves case-by-case consideration — a task beyond the scope of this volume.

This Review also reports on a number of developments from May 2012, the reporting date of the last 2010-11 *Review*, with consequences for Australia's assistance structure generally or for particular sectors or industries.

- Chapter 3 reports recent policy announcements relating to: research, development and innovation; primary industries; manufacturing; carbon emission reduction and energy efficiency; infrastructure, regional assistance; broadcasting and communications; and other industry assistance developments.
- Chapter 4 provides an overview of the nature and extent of Intellectual Property rights currently available in Australia. The chapter outlines the extent of trade and commerce in IP in Australia, identifies international IP agreements in force and Australia's involvement in these, notes Australian policy reviews affecting Australian IP law and developments in the spheres of IP administration and legal recourse. It also outlines finding from recent empirical research. (Appendix B provides a supporting catalogue of legislated measures providing protection to Intellectual Property rights).
- Chapter 5 reports on post-GFC trade developments, selected recent developments in international trade negotiations and agreements, including Australia's continued involvement in negotiating Preferential Trade Agreements (PTAs), complaints affecting Australia lodged through the WTO disputes resolution framework and other recent trade policy developments and program reviews. (Appendix C provides information on recent anti-dumping and countervailing duty cases in Australia.)

2 Assistance estimates

Industry is assisted through a wide array of government programs, regulatory instruments and policies. Each year, the Commission updates and publishes estimates of the assistance afforded by:

- import tariffs, which mainly assist the manufacturing sector while raising costs to consumers and to industries that use manufactured and other tariff-assisted inputs;
- Australian Government budgetary measures — divided into government outlays and tax concessions — which apply to the primary production, mining, manufacturing and service sectors; and
- certain agricultural pricing and regulatory measures.

As well as providing estimates for these three categories, the Commission aggregates them to yield an estimate of the ‘combined’ assistance for four broad sectors of the Australian economy — ‘primary production’, ‘mining’, ‘manufacturing’ and ‘services’ — along with effective rates of assistance for the primary, mining and manufacturing industries. For each category of assistance, the Commission provides more detailed estimates of assistance by 34 industry groupings. Estimates for which industry detail is not available are assigned to one of four ‘unallocated’ categories (primary production, manufacturing, services or other).

The Commission also disaggregates its estimates of budgetary assistance into categories (such as R&D, export assistance and support to small business) to facilitate more detailed assessments of changes in the composition and nature of assistance.

While the estimates cover a broad range of measures that afford support to industry, the estimates do not capture all Australian Government support for industry (box 2.1), nor State government assistance. The assistance provided through government regulation is also not represented in the estimates.

The following sections outline the coverage of the Commission’s assistance estimates, present the most recent (2011-12) estimates and report on broad changes in the structure of industry assistance over the last four decades.

Box 2.1 Coverage of the Commission's assistance 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. Arrangements that may have assistance implications but are not part of the estimates include:

- quarantine restrictions and the allocation and pricing of water resources;
- the effects of government purchasing preferences and local content arrangements — for example, as they affect the manufacturing sector, IT industries and broadcasting;
- regulatory restrictions on competition — such as those relating to pharmacy, air services, importation of books and media and broadcasting;
- anti-dumping and countervailing measures;
- certain differential tax rates, including in relation to excises, the GST and superannuation;
- State and Territory government support to industry, other than designated agricultural marketing arrangements and rural support programs;
- government programs affecting a range of service industries, mainly relating to the provision of health, education, and community services;
- government programs affecting national security and public safety, including police and defence programs;
- government programs and taxation concessions affecting professional sport and the arts;
- government programs affecting the labour market; and
- resource access arrangements including to mining, forestry and fisheries.

The estimates reported in this chapter cover the years 2006-07 to 2011-12. The estimates presented this year mark the commencement of a new series and incorporate revisions in underlying data sources (box 2.2). As such, they differ from the estimates published in the previous edition of the *Trade & Assistance Review*, with the key differences being noted in the body of this chapter. Further information on the assistance estimation methodology, program coverage, industry allocation and implementation of the new input-output series is to be provided in a (forthcoming) Methodological Annex to this *Review*.

Box 2.2 The 'new series' of assistance estimates

Updated input-output and import data used to estimate tariff assistance

The Commission's previous series of tariff assistance estimates (last published in *Trade & Assistance Review 2010-11*) were benchmarked to the Australian Bureau of Statistics (ABS) input-output and import data for the year 2004-05. For the new series, the Commission has re-benchmarked its estimates to ABS input-output and import data for the year 2008-09 (ABS 2012a).

Because of structural changes in the economy between input-output years and data revisions, estimated tariff assistance to outputs and tax penalty to inputs varies between series. The main changes from the 2004-05 benchmark to the 2008-09 benchmark are:

- lower output in tariff assisted activities (mainly textiles, clothing and footwear and motor vehicles) lowering the level of output assistance;
- higher activity levels of industries using tariff assisted products (including services) which act to raise the input penalty incurred; and
- an apparent shift towards inputs with lower or zero tariffs (including services inputs) which acts to lower the input penalty incurred.

The net effect of the changes has been to lower the estimated input penalty of tariffs relative to output assistance, raising the estimated level of net tariff assistance (section 2.1, below).

Latest ANZSIC industry classification

The Commission's previous series of assistance estimates were reported according to the ABS's 1993 version of the Australian and New Zealand Standard Industrial Classification (ANZSIC). As part of the re-benchmarking exercise carried out for this *Review*, the Commission's new series of estimates are now reported according to the ABS's latest classification, ANZSIC 2006 (ABS 2006).

To facilitate comparability of industry estimates over time, as far as practicable, the ANZSIC 1993 industries adopted in the previous *Reviews* have been concorded with the 34 ANZSIC 2006-based industries in the updated classification.

Effective rates of assistance

The Commission's previous estimates of the effective rate of assistance (published in *Trade & Assistance Review 2010-11*) were calculated using 2004-05 input-output data to determine the 'value added' for the primary, mining and manufacturing industries. For the new series, the Commission has used input-output data for 2008-09 to determine value added by industry. Estimated effective rates for both the new and previous series are presented in this *Review* (section 2.4, below). Taking into account the impact of both tariff and budgetary assistance, the estimated effective rates of assistance and year-to-year changes provided for the two series broadly align (for the overlapping years).

2.1 Tariff assistance

Tariffs have direct effects on the returns received by Australian producers. The Commission's estimates of tariff assistance are divided into three main categories — 'output' assistance, 'input' assistance and 'net' assistance.

- 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 competing products to increase their prices. These effects are captured by the Commission's estimates of output assistance.
- On the other hand, tariffs also increase the price of local and imported goods that are used as inputs and thus penalise local user industries. This 'penalty' is reduced if tariff concessions are available to Australian producers. The penalties are reflected in the Commission's estimates of input assistance.
- Net tariff assistance represents the 'effective' assistance provided through tariffs to industry, and is calculated as output tariff assistance less the input assistance, or input penalty, imposed by tariffs.

Output assistance

Using the new 2008-09 benchmarked series, the Commission estimates that the gross value of tariff assistance to domestic production was around \$7.9 billion in 2011-12 (table 2.1). The estimated declines in the years 2009-10 and 2010-11 mainly reflect reductions in assistance to passenger motor vehicles and parts, and textiles, clothing and footwear products in January 2010. The estimated decline in 2011-12 reflects lower output levels in tariff assisted activities (mainly food, beverages and tobacco, wood and paper products, printing and recorded media, and non-metallic mineral products).

Reflecting lower levels of output in tariff assisted activities, as measured in the 2008-09 benchmark series relative to the 2004-05 series, the estimated level of output assistance is lower in the re-benchmarked series (in the overlapping years 2006-07 to 2008-09) than the previous series. (table 2.1). The direction of change in both series in the overlapping years is, nevertheless, the same. Changes reported over the period 2006-07 to 2008-09 reflect changes in industry activity levels and not changes in tariffs.

Table 2.1 Tariff assistance, 2006-07 to 2011-12^a
\$million (nominal)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>2008-09 series (preliminary)</i>						
Output assistance	8472.0	9032.4	8936.3	8418.3	8076.0	7895.0
Input penalty	-5983.6	-6443.0	-6717.0	-6620.1	-6652.5	-6813.8
Net tariff assistance	2488.4	2589.4	2219.3	1798.2	1423.5	1081.2
<i>2004-05 series^b</i>						
Output assistance	9215.3	9847.0	9591.9			
Input penalty	-7387.6	-7963.4	-8254.1			
Net tariff assistance	1827.7	1883.7	1337.8			

^a Nominal tariff assistance estimates are derived by re-indexing a reference series based on 2008-09 (and 2004-05, as appropriate) ABS input-output data, using ABS Industry Gross Value Added at current prices data (ABS 2012b). This information is subject to periodic revision by the ABS. ^b Overlapping estimates shown for comparison of trends between the old (2004-05-based) and new (2008-09-based) series.

Source: Commission estimates.

Input penalty

In the new — 2008-09 — series, the estimated cost penalty on inputs to user industries (including primary, manufacturing and service industries) arising from tariffs was around \$6.8 billion in 2011-12. This compares with a penalty of around \$6 billion in 2006-07. Given the input-output structure of the 2008-09 input-output tables, the estimated penalty has increased in nominal terms with the general growth in the economy and rising price levels. This increase was moderated in 2009-10 and 2010-11 by reductions in tariffs on passenger motor vehicles and parts, and textiles, clothing and footwear products in January 2010.

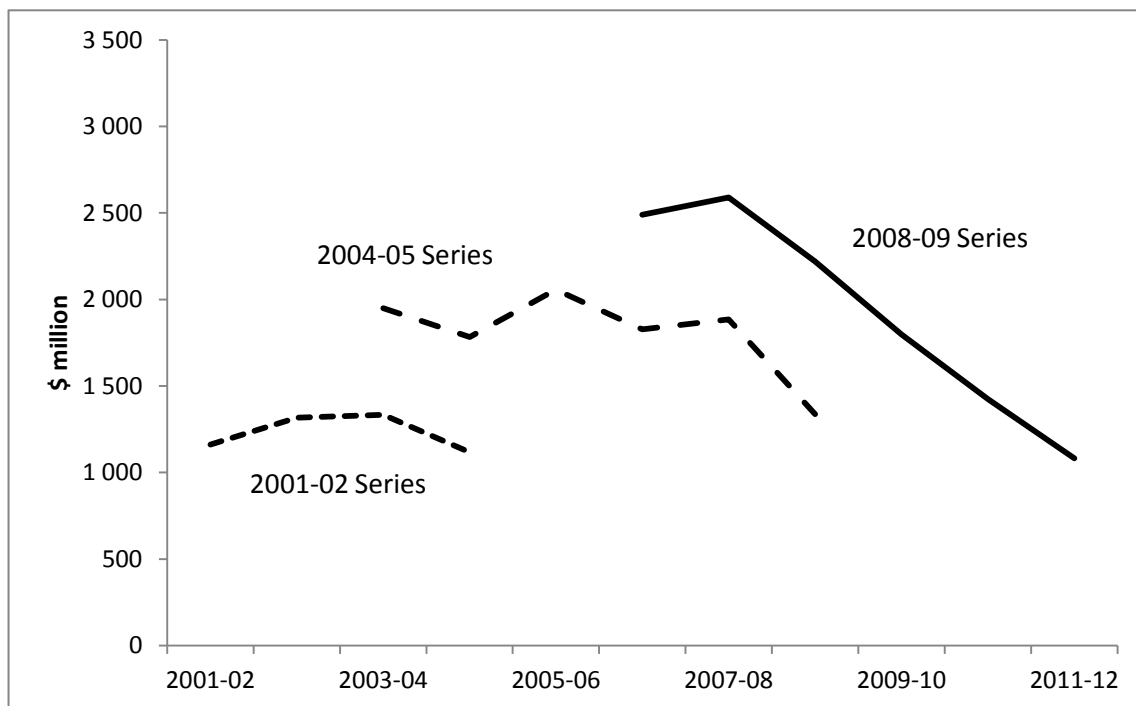
The changing structure of the economy, as reflected in ABS input-output tables, has been associated both with an increase in the size of non-tariff assisted activities and a shift towards the use of inputs that have lower or zero tariffs (including services). As noted (box 2.2), the first of these changes would raise the cost of the tariffs to local producers (as the demand for inputs expands) and is reflected in year-to-year estimated assistance. The second, however, would lower the cost of tariffs (as producers use of goods with low or zero tariffs and services, increase) and is captured with the re-benchmarking of assistance estimates. Overall, the cost lowering effect of structural changes between the input-output years appears to have exceeded the cost raising effects, so that the estimated level of input penalty is lower in the re-benchmarked series (in the overlapping years) than the previous series. (table 2.1).

Net tariff assistance

After deducting the tariff input penalty from the output assistance, net tariff assistance (for the Australian economy) was estimated to be around \$1.1 billion in 2011-12, down from nearly \$2.5 billion in 2006-07. This reflects both high relative growth in the services sector (which incurs significant tariff penalties), especially relative to the manufacturing sector (a significant beneficiary of tariff assistance), together with some reductions in tariffs applied to manufactured products.

Reflecting structural changes between input-output years and data revisions, estimates of net tariff assistance vary between series in the years for which estimates overlap (figure 2.1). The difference between the 2004-05 and the new 2008-09 series is not large compared with the difference between the 2001-02 and 2004-05 series, or compared with the size of the economy in 2008-09 (around \$1.3 trillion). The main factor influencing this change is the evident shift in activity in favour of inputs with relatively low tariffs and services. Further, the last two series (2004-05 and 2008-09) are also consistent in revealing the broad downward path in net tariff assistance associated with tariff reductions and the growth in relative importance of the services sector (which is not tariff assisted).

Figure 2.1 **Net tariff assistance, 2001-02, 2004-05 and 2008-09 Series**
\$million (nominal)



Source: Commission estimates.

In the Commission's tariff assistance estimates, preferences granted under Australia's preferential trading agreements are treated on the basis that domestic prices in Australia remain unchanged (box 2.3).

Box 2.3 Treatment of preferential tariffs in assistance estimates

The tariff preferences provided under Australia's preferential trading agreements (PTAs) need not result in any change in prices in the domestic market and, thus, in assistance to Australian industry provided by the general (Most Favoured Nation (MFN)) tariff regime. This would be the case if producers in the partner country effectively 'pocketed' the tariff concessions, rather than reduced their prices below the prevailing (tariff-inflated) price of rival imports.

However, to the extent that tariff concessions provided by PTAs reduce the prices of imported products in the Australian market, assistance to the relevant industry's outputs would be lower than that implied by the MFN rate. At the same time though, where the price of imported inputs falls as a result of PTA preferences, the penalties (or negative assistance) on the industry's inputs will also be lower than implied by the MFN rate. Whether this leads to a net overstatement or understatement of assistance to the Australian industry in question would depend on trade patterns with the PTA partner countries, which products are subject to price reductions, and their relative magnitudes.

Sources: PC (2004a; 2004b; 2008).

Tariff assistance by industry grouping

Most tariff assistance on outputs is directed towards the manufacturing sector, and in particular the *Metal and fabricated metal products* (\$1.8 billion), *Food, beverages and tobacco* (\$1.7 billion), *Petroleum, coal, chemical and rubber products* (\$1 billion), and *Motor vehicles and parts* (\$0.8 billion) industry groups (table 2.2 left hand column).

Mining and primary production industries receive little tariff assistance on outputs, and tariffs are not levied on services. On the other hand, tariffs impose input-cost penalties on all industries (because of their cost-raising effects on inputs) (table 2.2 middle column).

All manufacturing industries are estimated to receive positive net tariff assistance, as the value of tariff assistance on outputs outweighs the cost impost of tariffs on inputs for each industry group (table 2.2 right hand column).

Table 2.2 **Tariff assistance by industry grouping, 2011-12^{a,b}**
\$million (nominal)

<i>Industry grouping</i>	<i>Output assistance</i>	<i>Input cost penalty</i>	<i>Net tariff assistance</i>
Primary production	209.5	-73.4	136.1
Horticulture and fruit growing	154.3	-8.3	146.0
Sheep, beef cattle and grain farming	0.2	-17.2	-17.1
Other crop growing	2.0	-3.8	-1.8
Dairy cattle farming	–	-2.8	-2.8
Other livestock farming	–	-4.0	-4.0
Aquaculture and fishing	0.8	-13.1	-12.2
Forestry and logging	52.3	-10.3	41.9
Primary production support services	–	-13.8	-13.8
Mining	1.0	-208.5	-207.5
Manufacturing	7684.5	-2083.9	5600.7
Food, beverages and tobacco	1698.5	-486.4	1212.1
Textile, leather, clothing and footwear	295.6	-60.4	235.3
Wood and paper products	720.6	-145.8	574.8
Printing and recorded media	219.0	-35.5	183.5
Petroleum, coal, chemical & rubber products	991.5	-288.5	703.1
Non-metallic mineral products	246.3	-42.2	204.0
Metal and fabricated metal products	1780.4	-423.6	1356.8
Motor vehicle and parts	785.2	-289.2	496.1
Other transport equipment	68.6	-61.2	7.4
Machinery and equipment manufacturing	641.7	-193.4	448.3
Furniture and other manufacturing	236.9	-57.7	179.2
Services	0.0	-4448.1	-4448.1
Electricity, gas, water and waste services	–	-77.6	-77.6
Construction	–	-1542.6	-1542.6
Wholesale trade	–	-267.7	-267.7
Retail trade	–	-179.3	-179.3
Accommodation and food services	–	-520.9	-520.9
Transport, postal and warehousing	–	-190.9	-190.9
Information, media and telecommunications	–	-144.3	-144.3
Financial and insurance services	–	-10.0	-10.0
Property, professional and admin. services	–	-596.4	-596.4
Public administration and safety	–	-203.4	-203.4
Education and training	–	-110.5	-110.5
Health care and social assistance	–	-256.2	-256.2
Arts and recreation services	–	-77.2	-77.2
Other services	–	-271.3	-271.3
Total	7895.0	-6813.8	1081.2

– nil. ^a See footnote (a) in table 2.1. ^b Totals may not add due to rounding.

Source: Commission estimates.

Outside the manufacturing sector, the *Horticulture and fruit growing*, and *Forestry and logging* industries are also estimated to have received positive net tariff assistance in 2011-12. Some imported products in these two particular industry groupings attract tariffs (for example, grapes and softwood conifers). The *Mining* and *Construction* industries, together with all other service industries (and most primary production industries), incurred negative net tariff assistance.

Net tariff assistance by industry sector

In the new — 2008-09 benchmarked — series, the estimated value of net tariff assistance for the manufacturing sector has decreased by around 8 per cent since 2006-07, largely reflecting reductions in tariff assistance to the *Textiles, clothing, footwear and leather*, and *Motor vehicles and parts* industries in January 2010 (table 2.3). The year-to-year changes are also affected by activity levels in tariff-assisted activities. At the same time, the net tariff penalty on the service sector has increased by 24 per cent (to over \$4.4 billion), reflecting growth of that sector. Similarly, the net tariff penalty on the mining sector has increased substantially over the period. The value of tariff assistance to primary production has varied from year-to-year with changes in the value of activity in the sector, including changes as a consequence of drought.

Table 2.3 **Net tariff assistance by industry sector, 2006-07 to 2011-12^a**
\$million (nominal)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Primary production	79.4	78.1	125.0	133.1	132.3	136.1
Mining	-121.0	-131.3	-179.5	-143.9	-191.3	-207.5
Manufacturing	6112.5	6521.4	6408.8	5997.6	5742.0	5600.7
Services	-3582.5	-3878.9	-4135.1	-4188.6	-4259.6	-4448.1
Total	2488.4	2589.4	2219.3	1798.2	1423.5	1081.2

^a Nominal tariff assistance estimates are derived by re-indexing a reference series based on 2008-09 ABS input-output data, using ABS Industry Gross Value Added at current prices data. This information is subject to periodic revision by the ABS.

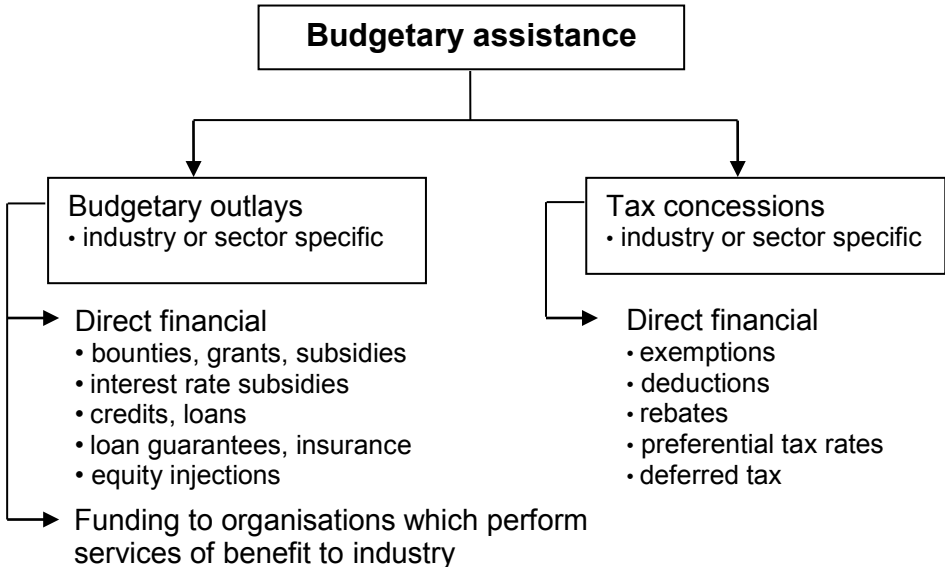
Source: Commission estimates.

2.2 Australian Government budgetary assistance

Budgetary assistance includes actual payments (outlays) and tax concessions (figure 2.2). Some measures provide assistance directly to firms, such as the Automotive Transformation Scheme and taxation concessions on R&D expenditures, while other budgetary support measures deliver benefits indirectly to an industry via intermediate organisations such as the Rural Industries Research and Development Corporations and the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

The budgetary assistance estimates are derived primarily from actual expenditures shown in departmental and agency annual reports, and the Australian Treasury Tax Expenditures Statement (TES). Industry and sectoral disaggregations are based primarily on supplementary information provided by relevant departments or agencies.

Figure 2.2 Forms of budgetary assistance



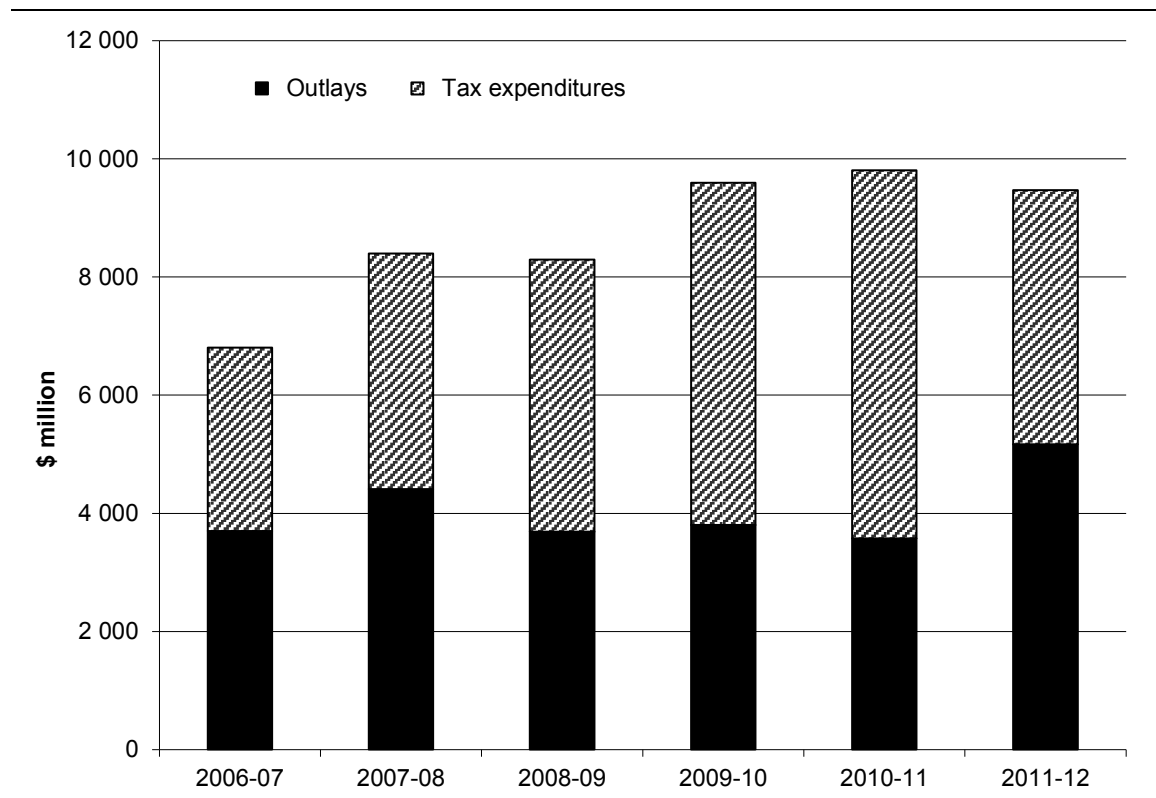
Aggregate budgetary assistance

The estimated gross value of budgetary assistance to Australian industry was around \$9.4 billion in 2011-12, compared with \$9.8 billion in 2010-11 and \$6.8 billion in 2006-07 in nominal terms (figure 2.3). In real terms, this represents a decline of 5 per cent since 2010-11, but an increase of 16 per cent since 2006-07.

The main reasons for the reduction in aggregate budgetary assistance in the last 12 months are:

- a decrease of around \$1.7 billion in temporary assistance afforded by the Small Business and General Business Tax Break introduced in the 2008-09 financial year as part of the Nation Building and Jobs Plan — the concession amounted to \$680 million in 2011-12 compared with \$2.4 billion in 2010-11;
- decreases of around \$215 million and \$140 million in Exceptional Circumstances interest rate subsidies and drought relief payments, respectively;
- the cessation of the Automotive Competitiveness and Investment Scheme in December 2010, although this was largely offset by the introduction of the Automotive Transformation Scheme; and
- the cessation of a number of other programs that together afforded around \$180 million in budgetary assistance in 2010-11.

Figure 2.3 Budgetary assistance to industry, 2006-07 to 2011-12
\$million (nominal)



Sources: Commonwealth Budget and Budget related papers (various years); departmental annual reports (various years); Australian Government (2013a); Commission estimates.

On the other hand, there were some increases in budgetary assistance totalling around \$2.7 billion in 2011-12, including:

-
- \$1 billion in transitional assistance under the Energy Security Fund;
 - around \$219 million and \$164 million under the Coal Sector Jobs Package and Steel Transformation Plan, respectively;
 - around \$288 million under the Automotive Transformation Scheme;
 - around \$200 million under the Farm Management Deposits Scheme;
 - around \$130 million under the Sustainable Rural Water Use and Infrastructure Program; and
 - increases of around \$485 million in other on-going programs.

Because not all taxation concessions affording assistance to industry are quantified in the annual TES, the coverage of taxation expenditures in the assistance estimates is limited. In cases where quantification is not practicable, the TES generally provides indicative ranges within which the value of the concession may fall. The published ranges suggest that gross budgetary assistance to industry could be substantially higher than the assistance estimates reported in this *Review*.

Activities targeted

Budgetary assistance is often designed to encourage particular activities (such as R&D or exports) or to support particular firms, industries or sectors. To provide an indication of the distribution of assistance among activities and to facilitate more detailed assessments of changes in the composition and nature of assistance, the Commission categorises its estimates of Australian Government budgetary assistance into:

- *R&D* measures, including that undertaken by CSIRO, CRCs and rural R&D corporations, as well as R&D taxation concessions;
- *Export* measures, including through Export Market Development Grants, import duty drawback, TRADEX and Austrade;
- *Investment* measures, including development allowances and several former investment attraction packages;
- *Industry-specific* measures, including the Automotive Transformation Scheme, the Textiles, Clothing and Footwear Strategic Investment Program, film industry measures and the Offshore Banking Unit Taxation Concession;
- *Sector-wide* measures, such as ‘exceptional circumstances’ drought relief payments and the tax concessions under the Farm Management Deposits Scheme, in the case of the primary sector;

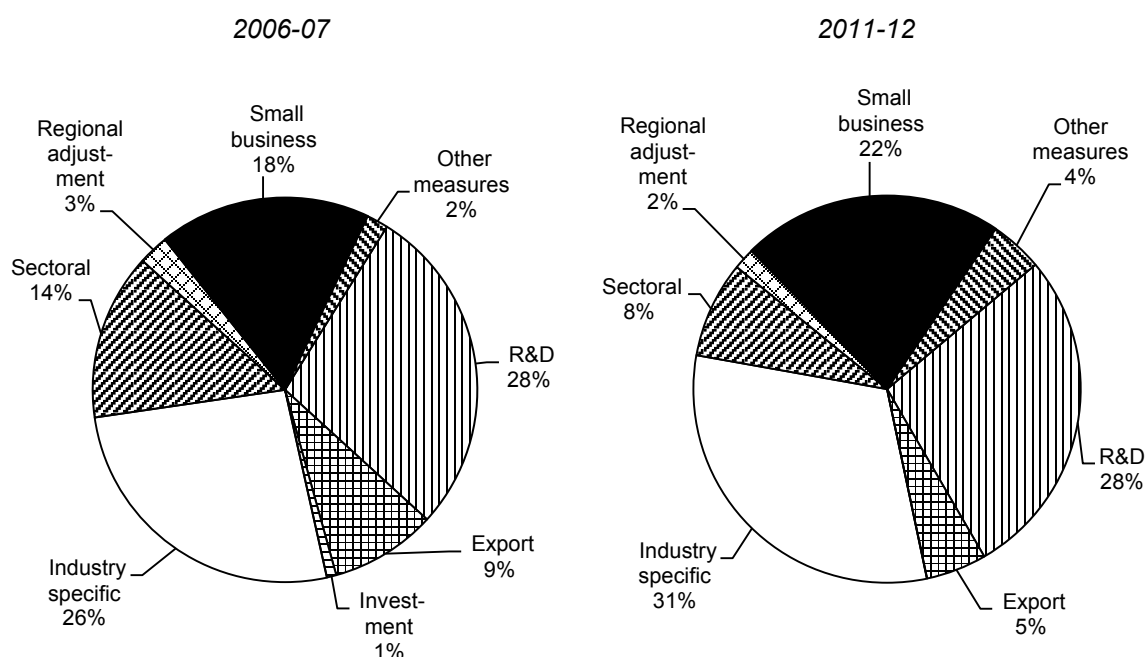
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- *Small business* programs, such as the Small Business and General Business Tax Break, the small business capital gains tax concessions, the 25 per cent Entrepreneurs' Tax Offset and the Small Business Advisory Services Program;
 - *Regional* assistance, including the Tasmanian Freight Equalisation Scheme, Regional Partnerships Program and various structural adjustment programs with a regional focus; and
 - a residual '*other*' category, including the Textiles, Leather, Clothing and Footwear Corporate Wear Program, the Pooled Development Funds initiative, and the Enterprise Connect Innovation Centres Initiative.

The majority of budgetary assistance in 2011-12 was directed to specific industries (31 per cent); R&D (28 per cent), and small business (22 per cent) (figure 2.4, right hand panel). This division of budgetary assistance to industry in 2011-12 is broadly similar to the division in 2006-07 (figure 2.4, left hand panel) though there have been substantial variations in the intervening years. In particular, with the unwinding of the temporary tax breaks to small business introduced in 2008, the relative importance of assistance to small business is estimated to have declined from nearly 40 per cent of total budgetary assistance to industry in 2010-11 (as reported in the 2010-11 *Review*) to around one quarter reported for 2011-12 (figure 2.4, right hand panel). The introduction of the Clean Energy Future Plan, which involves targeted assistance to qualifying activities and industries has seen the share of industry-specific assistance increased significantly from 15 per cent of budgetary assistance in 2010-11 to over 30 per cent in 2011-12.

A number of budgetary measures included in the estimates relate to carbon emissions reduction, renewable energy and energy goals. These measures support a range of activities that span R&D, industry-specific, sector-specific and other measures. The measures amounted to around \$1.7 billion (18 per cent) of estimated budgetary assistance in 2011-12, around \$1.4 billion higher than in 2010-11. The increase is largely on account of the Australian Government's newly introduced Clean Energy Future Plan.

Some caution is required when interpreting these shares. While programs have been allocated to one category only (based on the nature of the support and main activities assessed as receiving that support), some have characteristics that relate to more than one category. For example, the R&D category includes rural R&D, which could also be considered sector specific.

Figure 2.4 Budgetary assistance by category, 2006-07 and 2011-12



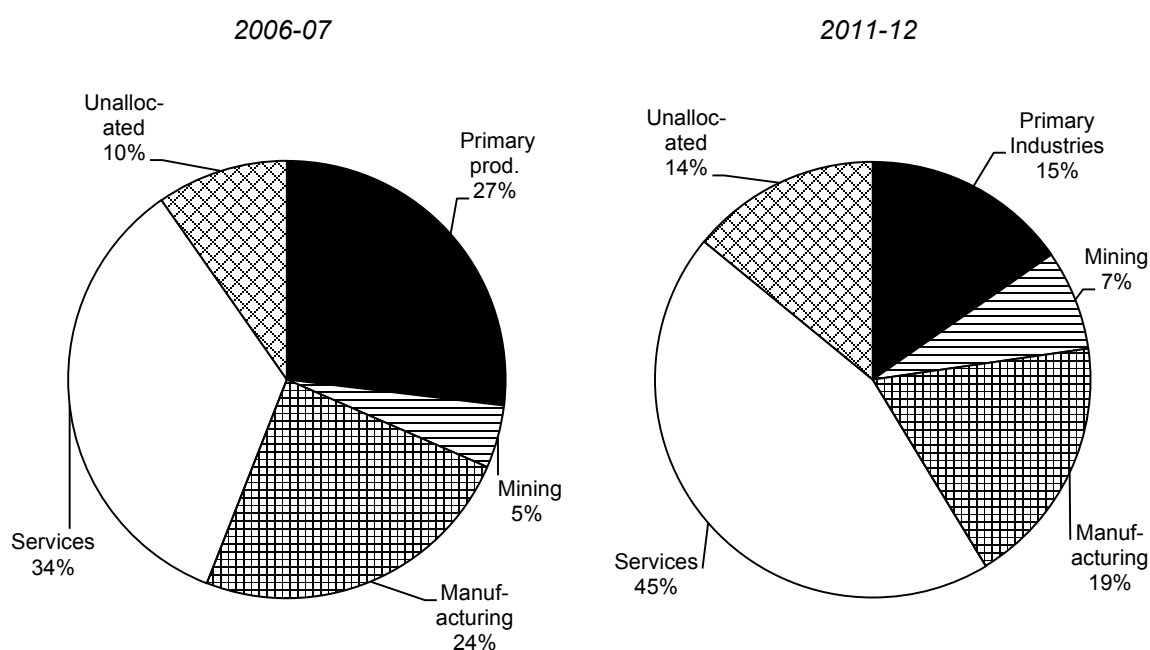
Source: Commission estimates.

Sectoral and industry distribution

The Commission records the incidence of budgetary assistance by the initial benefiting industry, that is, the industry to which the assistance first accrues. Estimates are presented for 34 industry groupings, while four ‘unallocated’ categories are used for programs for which it has not been possible to confidently identify the initial benefiting industry or sector.

In 2011-12, the services sector is estimated to have received around 45 per cent of estimated budgetary assistance; up from around 34 per cent in 2006-07 (figure 2.5). The manufacturing and primary production sectors, which together contribute about 12 per cent of value added, received around one third of total estimated budgetary assistance in 2011-12, while the mining sector received relatively little measured budgetary assistance. While it has been practicable to assign an initial benefiting industry to over 80 per cent of budgetary assistance, the proportion not assigned to a benefiting industry has increased.

Figure 2.5 **Budgetary assistance by industry sector, 2006-07 and 2011-12**



Source: Commission estimates.

In 2011-12, most budgetary assistance was afforded through outlays for the primary production, mining and manufacturing sectors while for services, the majority of assistance was provided through tax concessions.

Budgetary assistance by industry grouping

Six industry groups collectively accounted for around 50 per cent of estimated budgetary assistance to industry in 2011-12 (table 2.4).

- Budgetary assistance was highest for the *Electricity, gas, water and waste services* industry (\$1.1 billion), mainly in the form of transitional assistance provided under the Energy Security Fund.
- *Financial and insurance services* was the next highest recipient (\$914.7 million), mainly in the form of the Concessional Rate of Withholding Tax concession, the Offshore Banking Unit Taxation Concession and Small Business Capital Gains Tax concession measures.¹
- *Mining* accounted for \$700.4 million, mainly in the form of the Coal Sector Jobs Package and R&D tax concession programs.

¹ Taxation concessions on retirement savings associated with Australia's compulsory superannuation arrangements, while providing incidental benefits to the finance sector as the provider of financial services, are not included in the Commission's assistance estimates.

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- *Motor vehicles and parts* accounted for \$620.7 million, mainly in the form of the Automotive Transformation Scheme, the Green Car Innovation Fund, Assistance to Ford Australia and the TRADEX scheme.
 - *Property, professional and administrative services* accounted for \$611.3 million, mainly in the form of R&D tax concession programs and Small Business Capital Gains Tax concession measures.
 - *Sheep, beef cattle and grain farming* accounted for \$567.9 million, mainly in the form of the Farm Management Deposits Scheme, Income Tax Averaging Provisions for Primary Producers, the Small Business Capital Gains Tax concession measures, and assistance to the Grains R&D Corporation.

Budgetary assistance not assigned to an industry sector is reported in the *Unallocated other* category. That assistance accounted for around 14 per cent of total estimated budgetary assistance in 2011-12. The Small Business and General Business Tax Break (\$680 million), for which Industry allocation data is currently not available through taxation statistics, accounts for around a half of the category. Other budgetary assistance not classified to industry included Tourism Australia, Austrade and the TCF Corporate Wear Program.

Table 2.4 Budgetary assistance by industry grouping, 2011-12
\$ million (nominal)

	<i>Outlays</i>	<i>Tax concessions</i>	<i>Total budgetary assistance</i>
Primary production	891.2	548.3	1439.5
Horticulture and fruit growing	83.4	55.6	139.0
Sheep, beef cattle and grain farming	212.9	355.0	567.9
Other crop growing	30.2	33.2	63.4
Dairy cattle farming	29.6	31.7	61.3
Other livestock farming	22.2	24.5	46.7
Aquaculture and fishing ^a	52.4	14.3	66.7
Forestry and logging	60.2	17.6	77.8
Primary production support services	4.6	14.6	19.2
Unallocated primary production ^b	395.8	1.8	397.6
Mining	400.9	299.5	700.4
Manufacturing	1389.9	362.6	1752.6
Food, beverages and tobacco	44.6	61.3	105.8
Textile, leather, clothing and footwear	53.4	6.6	60.0
Wood and paper products	8.4	9.6	18.0
Printing and recorded media	8.4	4.3	12.7
Petroleum, coal, chemical and rubber prod.	177.7	46.1	223.8
Non-metallic mineral products	8.6	10.1	18.7
Metal and fabricated metal products	220.4	45.5	265.9
Motor vehicle and parts	579.9	40.9	620.7
Other transport equipment	21.5	7.9	29.3
Machinery and equipment manufacturing	120.2	62.4	182.6
Furniture and other manufacturing	20.7	5.6	26.3
Unallocated manufacturing ^b	126.2	62.5	188.7
Services	2091.1	2110.4	4201.5
Electricity, gas, water and waste services	1050.8	26.6	1077.4
Construction	24.2	107.5	131.7
Wholesale trade	63.0	162.5	225.4
Retail trade	39.2	91.8	130.9
Accommodation and food services	4.8	35.2	40.0
Transport, postal and warehousing	56.2	55.8	112.0
Information, media and telecommunications	105.8	40.3	146.1
Financial and insurance services	69.7	845.1	914.7
Property, professional and admin. services	193.7	417.6	611.3
Public administration and safety	30.9	2.5	33.4
Education and training	18.5	10.8	29.3
Health care and social assistance	111.6	51.7	163.3
Arts and recreation services	117.7	233.7	351.4
Other services	24.9	29.5	54.4
Unallocated services ^b	180.3	–	180.3
Unallocated other ^b	355.6	970.4	1326.0
Total	5128.7	4291.2	9419.9

– Nil. ^a Aquaculture and fishing includes *Hunting & trapping*. ^b Unallocated includes programs for which details of the initial benefiting industry cannot be readily identified.

Source: Commission estimates.

2.3 Combined assistance

This section presents the results for combined tariff, budgetary assistance, and agricultural pricing and regulatory assistance. Combined assistance is reported in terms of the net value of assistance and its components, and the effective rate of assistance (box 2.4).

Box 2.4 Summary measures of combined assistance

In reporting its estimates of net combined assistance, the Commission adopts two summary measures.

- First, it reports total net assistance (also referred to in assistance methodologies as the net subsidy equivalent (NSE)), which is the dollar value of net assistance to the land, labour and capital resources used in a particular industry or activity. It indicates the level of transfers of income to benefiting producers from consumers, taxpayers and other firms. NSE estimates are reported for the four sectors and 34 industry groupings.
- The second summary measure is the effective rate of assistance (ERA). It measures the NSE of combined assistance to a particular industry in proportion to that industry's unassisted net output (value added). It provides an indication of the extent to which assistance to an industry enables it to attract and hold economic resources relative to other sectors. 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 of effective assistance. ERA estimates are reported for industries in the primary production, mining and manufacturing sectors. Effective rates of assistance are not published for the services sector.

Aggregate assistance

Total estimated gross combined assistance was \$17.3 billion in 2011-12, a decline of around \$0.6 billion from 2010-11 in nominal terms (table 2.5). This represents a decline of around 3 per cent in nominal terms and 5 per cent in real terms.

Table 2.5 Combined assistance, 2006-07 to 2011-12

\$million (nominal)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Tariff output assistance	8472.0	9032.4	8936.3	8418.3	8076.0	7895.0
Budgetary outlays	3701.6	4411.1	3689.7	3802.3	3574.5	5128.7
Tax concessions	3103.6	3987.9	4607.1	5796.0	6230.9	4291.2
Agricultural pricing assistance	124.3	120.1	0.2	–	–	–
Gross combined assistance	15401.5	17551.5	17233.2	18016.6	17881.3	17314.9
Tariff input assistance	-5983.6	-6443.0	-6717.0	-6620.1	-6652.5	-6813.8
Net combined assistance^a	9418.0	11108.5	10516.3	11396.5	11228.8	10501.1

– Nil. ^a Further information on the estimation and interpretation of net combined assistance is provided in the (forthcoming) methodological annex to this *Review*. Estimates prior to 2011-12 differ from estimates published in earlier *Reviews*. Differences reflect the effects of re-benchmarking the estimates of tariff assistance and changes in source information. Further information on earlier estimates is provided in the methodological annex to *Trade & Assistance Review 2008-09*.

Source: Commission estimates.

After considering the negative effects of tariff assistance on industry inputs, total estimated net combined assistance amounted to around \$10.5 billion in 2011-12, a decrease of around \$728 million (in nominal terms) from 2010-11. Tariff and budgetary assistance declined by around \$340 million and \$385 million, respectively.

Over the six-year period 2006-07 to 2011-12, total estimated net combined assistance to industry has increased by around 12 per cent in nominal terms, but has decreased by around 7 per cent in real terms.

Value of combined assistance by industry grouping

Table 2.6 summarises, at the industry level, tariff and budgetary assistance for 2011-12. Reflecting the earlier discussion on individual elements, the manufacturing sector receives the highest level of net combined industry assistance because of the tariff assistance on its outputs. Although the services sector receives the most budgetary assistance (around \$4.2 billion in identifiable support), such assistance is outweighed by the estimated input tariff penalty (\$4.4 billion). The primary production sector received the majority of its assistance in the form of budgetary outlays, although some tariff protection continues to be afforded to a range of horticultural, crop and forestry products. A time series of net combined assistance (column 7) by industry grouping for the period 2006-07 to 2011-12 is presented in appendix A.

Table 2.6 Combined assistance by industry grouping, 2011-12^a
\$million (nominal)

<i>Industry grouping</i>	<i>Tariffs</i>		<i>Net tariff assistance</i>	<i>Budgetary</i>		<i>Net combined assistance</i>
	<i>Output</i>	<i>Input penalty</i>		<i>Outlays</i>	<i>Tax concess</i>	
Primary production	209.5	-73.4	136.1	891.2	548.3	1575.6
Horticulture and fruit growing	154.3	-8.3	146.0	83.4	55.6	284.9
Sheep, cattle & grain farming	0.2	-17.2	-17.1	212.9	355.0	550.8
Other crop growing	2.0	-3.8	-1.8	30.2	33.2	61.6
Dairy cattle farming	–	-2.8	-2.8	29.6	31.7	58.4
Other livestock farming	–	-4.0	-4.0	22.2	24.5	42.6
Aquaculture and fishing	0.8	-13.1	-12.2	52.4	14.3	54.5
Forestry and logging	52.3	-10.3	41.9	60.2	17.6	119.7
Primary production services	–	-13.8	-13.8	4.6	14.6	5.4
Unallocated primary	–	–	–	395.8	1.8	397.6
Mining	1.0	-208.5	-207.5	400.9	299.5	492.8
Manufacturing	7684.5	-2083.9	5600.7	1389.9	362.6	7353.2
Food, beverages and tobacco	1698.5	-486.4	1212.1	44.6	61.3	1318.0
Textile, clothing and footwear	295.6	-60.4	235.3	53.4	6.6	295.3
Wood and paper products	720.6	-145.8	574.8	8.4	9.6	592.8
Printing and recorded media	219.0	-35.5	183.5	8.4	4.3	196.2
Petroleum, coal and chemicals	991.5	-288.5	703.1	177.7	46.1	926.9
Non-metallic mineral products	246.3	-42.2	204.0	8.6	10.1	222.7
Metal and fabricated products	1780.4	-423.6	1356.8	220.4	45.5	1622.7
Motor vehicle and parts	785.2	-289.2	496.1	579.9	40.9	1116.8
Other transport equipment	68.6	-61.2	7.4	21.5	7.9	36.8
Machinery and equipment	641.7	-193.4	448.3	120.2	62.4	630.9
Furniture and other products	236.9	-57.7	179.2	20.7	5.6	205.6
Unallocated manufacturing	–	–	–	126.2	62.5	188.7
Services	0.0	-4448.1	-4448.1	2091.1	2110.4	-246.6
Electricity, gas, water and waste	–	-77.6	-77.6	1050.8	26.6	999.8
Construction	–	-1542.6	-1542.6	24.2	107.5	-1410.9
Wholesale trade	–	-267.7	-267.7	63.0	162.5	-42.3
Retail trade	–	-179.3	-179.3	39.2	91.8	-48.3
Accommodation & food services	–	-520.9	-520.9	4.8	35.2	-480.9
Transport, postal & warehousing	–	-190.9	-190.9	56.2	55.8	-79.0
Information & telecommunications	–	-144.3	-144.3	105.8	40.3	1.8
Financial and insurance services	–	-10.0	-10.0	69.7	845.1	904.8
Property, professional and admin.	–	-596.4	-596.4	193.7	417.6	14.9
Public administration and safety	–	-203.4	-203.4	30.9	2.5	-170.1
Education and training	–	-110.5	-110.5	18.5	10.8	-81.2
Health care and social assistance	–	-256.2	-256.2	111.6	51.7	-92.9
Arts and recreation services	–	-77.2	-77.2	117.7	233.7	274.2
Other services	–	-271.3	-271.3	24.9	29.5	-216.8
Unallocated services	–	–	–	180.3	–	180.3
Unallocated other	–	–	–	355.6	970.4	1326.0
Total	7895.0	-6813.8	1081.2	5128.7	4291.2	10501.1

– Nil. ^a Read in conjunction with notes to tables 2.2 and 2.4.

Source: Commission estimates.

Effective rates of (combined) assistance

Estimated effective rates of combined assistance by industry grouping

For the manufacturing sector, the estimated effective rate of assistance — that is, the value of assistance as a proportion of (unassisted) value added — was 4.1 per cent in 2011-12, and in line with the estimate for previous years (table 2.7). The effective rate for the primary sector in 2011-12 was 3.3 per cent. (It had reached 6.4 per cent in 2007-08, reflecting assistance afforded the industry for drought relief). The estimated effective rate of assistance from tariff and budgetary assistance for mining is negligible.

Table 2.7 **Effective rate of combined assistance by industry grouping, 2006-07 to 2011-12^a**
per cent

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Primary production^b	5.9	6.4	4.7	4.4	3.4	3.3
Horticulture and fruit growing	4.1	4.2	4.4	4.0	3.7	3.5
Sheep, beef cattle and grain	5.7	6.3	6.3	5.2	3.4	2.7
Other crop growing	7.6	6.9	2.0	2.1	1.2	1.6
Dairy cattle farming	12.5	13.2	4.5	4.3	2.6	1.8
Other livestock farming	1.8	1.7	1.2	1.0	0.9	1.1
Aquaculture and fishing	12.0	6.9	3.5	3.8	3.9	3.3
Forestry and logging	6.9	6.8	-1.3	4.5	5.5	7.2
Primary production services	-0.1	0.2	0.3	0.1	0.1	0.1
Mining	0.2	0.3	0.2	0.3	0.2	0.3
Manufacturing^b	4.4	4.4	4.6	4.3	4.0	4.1
Food, beverages and tobacco	3.2	3.2	3.4	3.3	3.3	3.3
Textile, clothing and footwear	12.4	12.2	13.8	11.0	9.0	7.3
Wood and paper products	4.8	4.9	5.2	4.6	4.6	4.6
Printing and recorded media	3.4	3.4	3.5	3.4	3.4	3.4
Petroleum, coal & chemicals	2.7	2.7	2.9	2.8	2.9	2.8
Non-metallic mineral products	2.9	3.0	2.9	2.9	2.8	2.8
Metal and fabricated products	4.6	4.4	4.5	4.3	4.3	4.7
Motor vehicle and parts	12.5	11.9	13.1	11.6	8.7	9.4
Other transport equipment	0.8	0.8	0.9	0.9	0.9	0.9
Machinery and equipment	3.2	3.1	3.2	3.1	3.0	3.0
Furniture and other products	4.8	5.0	4.6	4.4	4.4	4.4

^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.

Source: Commission estimates.

Textiles, leather, clothing and footwear and Motor vehicles and parts

The *Textiles, leather, clothing and footwear* and *Motor vehicle and parts* industry groupings continue to have higher effective rates of combined assistance than other manufacturing activities. While remaining relatively high, the estimated effective rates of assistance to both industry groups have declined significantly over recent decades following substantial reductions in tariff rates and the removal of import quotas. Effective rates of assistance for these industries have also declined significantly since 2008-09, following the legislated tariff cuts in January 2010 and net reductions in budgetary assistance following the closure of ACIS and introduction of the new automotive assistance arrangements.

For *Motor vehicles and parts* industry in 2011-12, however, the effective rate of assistance increased from 8.7 to 9.4 per cent following increases in budgetary assistance under the Green Car Innovation Fund and Assistance to Ford Australia.

Dairy cattle farming and Sheep, beef cattle and grain farming

The estimated effective rate of assistance for *Dairy cattle farming* declined markedly from 2007-08 to 2011-12 — from 13.2 per cent to 1.8 per cent. This reflects a decline in Exceptional Circumstances drought support and the cessation of payments under the Dairy Structural Adjustment Program in April 2008. Prior to the dairy industry's deregulation in July 2000, the effective rate of combined assistance was estimated to exceed 30 per cent.

Reflecting lower claims for Exceptional Circumstances drought support, the effective rate of assistance for the *Sheep, beef cattle and grain farming* group declined from 6.3 per cent in 2008-09 to 2.7 per cent in 2011-12. Declines were also estimated for some other agricultural industry groupings because of lower claims for drought support.

Fisheries and Forestry and logging

The estimated effective assistance to *Aquaculture and fishing*, and *Forestry and logging* has changed markedly over recent years. A decline in annual expenditure under the Fisheries Structural Adjustment Program has seen the estimated effective rates for Fisheries decrease from a high of 12 per cent in 2006-07 to 3.3 per cent in 2011-12.

The change in effective assistance to *Forestry and logging* from 6.8 per cent in 2007-08 to a negative 1.3 per cent for 2008-09 and then back to 4.5 per cent in 2009-10, as indicated above, reflects the impact of changes in the direction of

accelerated write-offs on forestry-managed investments from positive assistance in 2007-08 (the acceleration stage) to increased taxation in 2008-09 (the pay-back stage). The Forestry Managed Investment Scheme was terminated on 30 June 2008.

Effective rates of assistance to *Forestry and logging* have increased further in more recent years — 5.5 per cent in 2010-11 and 7.2 per cent in 2011-12 — reflecting new structural adjustment packages for the Tasmanian forest industry.

2.4 Effective rates of industry assistance 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, with each series retaining a common methodology, coverage of measures and data sources across those years. While methodologies and data sources have changed between series, taken together, the series provide a broad indication of directions and trends in assistance at the sectoral level.

Figure 2.6 presents effective rate estimates from the different series from 1970-71 to the present. Breaks in the series are represented by gaps in the chart, and overlaps are included to show the effects of the methodological and data changes made in moving between series. In figure 2.6, estimates of the effective rate of assistance for the previous 2004-05 benchmarked series are reported for the years 2003-04 to 2008-09. Estimates for the new 2008-09 benchmark series are reported for the years 2006-07 to 2011-12. The overlapping estimates are also shown in expanded form in an insert in the figure.

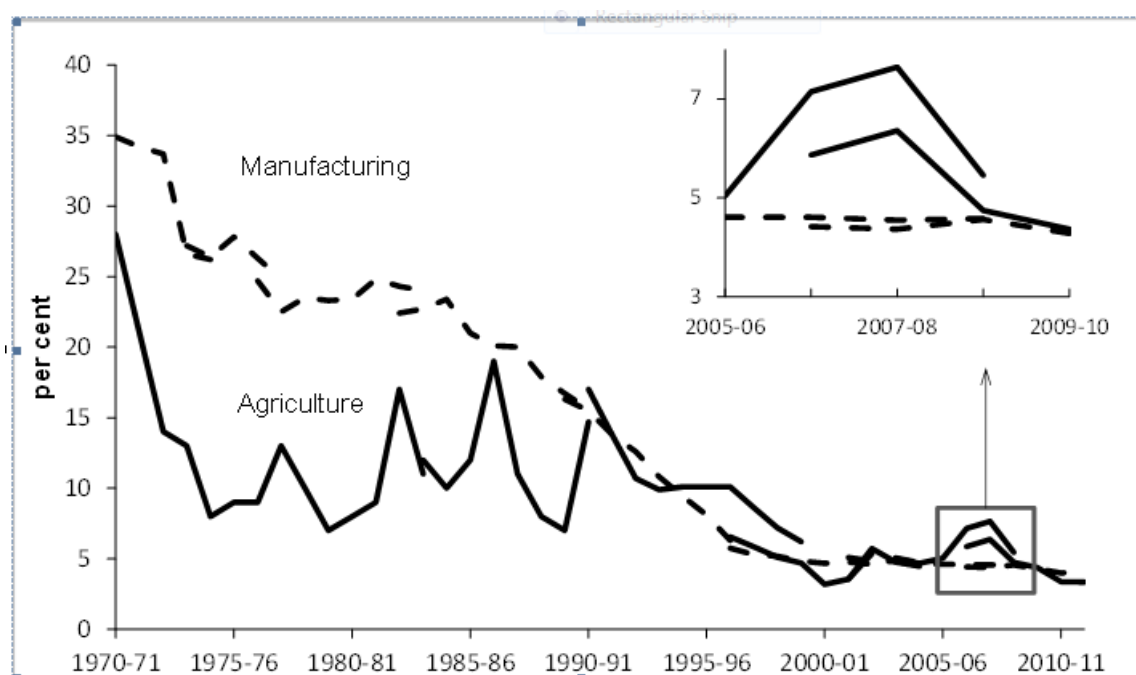
Manufacturing

The estimates indicate a marked decline in measured assistance to the manufacturing sector particularly over the 23 year period from 1974-75 to 1996-97. The estimated effective rate of assistance for manufacturing as a whole (as calculated in the first series) was around 35 per cent in 1970-71 when the estimates were first calculated, whereas since the late 1990s, the rate (as calculated in the new 2008-09 series and previous 2004-05 and 2001-02 series) has been around 5 per cent or less.

Major influences on this decline in manufacturing assistance over the past four decades have been the 25 per cent across-the-board tariff cut of 1973, the abolition of (subsequent) tariff quotas and the broad programs of tariff reductions that commenced in the late 1980s. Recent declines have been mainly associated with

reductions in tariff assistance to the TCF and passenger motor vehicle industries. A 5 per cent tariff, levied on over 50 per cent of manufactured items of merchandise trade, continues to provide assistance to a range of manufacturing activities, as well as an associated impost on consumers and industry and costs to government administration.

Figure 2.6 Effective rates of assistance to manufacturing and agriculture^a, 1970-71 to 2011-12
per cent



^a Refers to selected agriculture activities up to and including the year 2000-01. From 2001-02, estimates refer to division A of the Australian and New Zealand Standard Industrial Classification which covers agriculture, forestry, fishing and hunting activities.

Source: Commission estimates.

Agriculture (primary production)

For agriculture, the estimated effective rate of assistance (as calculated in the first series) was over 25 per cent in 1970-71 and, by 1974-75, it had fallen to about 8 per cent. The subsequent volatility in the agricultural estimates, particularly through the 1970s and 1980s, reflects variation in differences between domestic support prices and world prices (used for assistance benchmarks) as well as the impact of drought and other factors on output and assistance conferred on the sector.

The rise in the effective rate of assistance to agriculture in 2006-07 and 2007-08 reflects significant increases in Exceptional Circumstances drought relief payments and interest rate subsidies at the height of the drought through much of Australia. Such assistance has since declined significantly and the estimated assistance to the sector overall has declined to around 3 per cent.

3 Recent developments in industry assistance

This chapter provides an overview of Australian Government announcements and related developments pertaining to industry assistance since May 2012, the reporting date for *Trade & Assistance Review 2010-11*.

Developments in industry assistance or with assistance implications are reported in this chapter in the following groupings: research, development and innovation, primary industries, manufacturing, carbon emissions reduction and energy efficiency, regional assistance and broadcasting and communications, and other industry assistance developments.

Some of the policy initiatives reported in the chapter also include announcements with government service provision or social objectives. These are also noted.

3.1 Research, development and innovation

Support for business innovation R&D, including R&D and commercialisation, forms a significant component of the Australian Government's budgetary assistance to industry. As measured by the Commission, it accounted for around 30 per cent of budgetary assistance to industry in 2011-12 (chapter 2). This section reports on recent Australian Government announcements in this area.

Industry and Innovation statement

In February 2013, the Australian Government announced its Industry and Innovation Statement (Combet 2013 and Gillard, Swan and Combet 2013). The Statement is in response to a report by the non-Government members of the Prime Minister's Taskforce on Manufacturing.¹ The Statement is intended to provide a

¹ The taskforce chaired by the Prime Minister included non-Government members from industry, unions, universities and the CSIRO. The Government released the report of the non-Government members in August 2012 (Prime Minister's Manufacturing Taskforce 2012).

vision and strategic framework for current and future industry and innovation initiatives. It sets out the Australian Government's major commitments and priorities to facilitate business growth and the creation of new high-skilled jobs. It includes several new policy measures intended to address the concerns expressed by manufacturers, including those arising from the current period of intense structural change. The Statement also acknowledges that innovation and increasing productivity are important for businesses and jobs across the Australian economy, including in the services sector.

The statement, titled *A Plan for Australian Jobs*, contains three core strategies (Box 3.1):

- backing Australian firms to win more work at home;
- supporting Australian industry to increase exports and win business abroad; and
- helping Australian small to medium businesses to grow and create new jobs.

In announcing the package of initiatives the Government stated that they will be funded via changes to the R&D Tax Incentive (Combet and Swan 2013). Under the changes, businesses with annual Australian turnovers of \$20 billion or more will no longer be eligible for the incentive. This change in arrangements is estimated by the Government to result in savings of over \$1 billion from 2014-17.

Manufacturing Technology Innovation Centre

In May 2012, the Australian Government announced the creation of a new \$29.8 million Manufacturing Technology Innovation Centre (Combet 2012a). The Centre is intended to assist growing manufacturing Small and Medium Enterprises (SMEs) to become better managed, more capable and higher value enterprises, and to collaborate and innovate more effectively. Under the announced arrangements, the Centre will be led by industry through the creation of a small number of sectoral collaborations involving major manufacturers, SMEs, public research agencies (including CSIRO) and universities. Qualifying industry collaborations will also be able to draw on related innovation infrastructure and support, including:

- the services of Austrade, AusIndustry, Commercialisation Australia and Enterprise Connect;
- a new \$236 million Industrial Transformation Research Program (reported in PC 2012a);
- relevant Cooperative Research Centres (CRCs) such as the Advanced Manufacturing CRC, the Automotive Australia 2020 CRC and the Advanced Composites Structures CRC; and

-
- skills and training through the National Workforce Development and Productivity Agency and associated Fund.

The Manufacturing Technology Innovation Centre was subsequently absorbed into the Manufacturing Precinct initiative announced as part of the Industry and Innovation policy statement (Box 3.1).

Further funding for Cooperative Research Centres

In November 2012, the Australian Government announced that it would provide \$240 million for the 16th round of the Cooperative Research Centres (CRC) Program (Evans 2012). This funding is part of the larger \$619 million of funding which the government intends to provide to the CRC program over the next four years.

3.2 Primary industries

In 2011-12, Australian Government support for the primary industries is estimated to be around 15 per cent of budgetary support to industry (chapter 2). This section reports on developments directly affecting agriculture and fishing, and the export of primary products during the year.

Rural industries

Caring for our Country program

The Australian Government announced in May 2012 that it was committing to a further five years of funding for the *Caring for our Country* program (Ludwig and Burke 2012a). Total funding arising from the extension was estimated at \$2.2 billion from 2013-14 to 2017-18.

The program will now be separated into two discrete funding streams, using the categories of ‘sustainable agriculture’ and ‘sustainable environmental’ activities.

Box 3.1 **Main elements of A Plan for Australian Jobs**

At the time of its release in February 2013, the Australian Government stated that its industry and innovation statement consisted of three broad streams.

Backing Australian industry to win more work at home

- Expenditures in this stream are valued at \$125.9 million, including:
 - a new Australian Industry Participation Authority to help businesses build the capabilities and connections to win work on major projects;
 - legislating Australian Industry Participation (AIP) arrangements, requiring major projects worth \$500 million or more to implement AIP Plans to give local industry opportunities to win work on a commercial basis;
 - requiring projects worth \$2 billion or more applying for concessions under the Enhanced Project By-Law Scheme to embed Australian Industry Opportunity officers within their global supply offices; and
 - Changes to the anti-dumping system, including the establishment of a new Anti-Dumping Commission.

Supporting Australian industry to win new business abroad

- Expenditures in this stream are valued at \$514.4 million, including:
 - more than \$500 million to establish up to 10 Industry Innovation Precincts intended to encourage business innovation and growth in areas of Australian competitive advantage with the first two precincts being a Manufacturing Precinct with locations in South East Melbourne and Adelaide, and a Food Precinct headquartered in Melbourne; and
 - a new Industry Innovation Network intended to enable Australia to take part in Precinct activities, gaining access to knowledge, support, services and partnerships regardless of the location of their operations.

Helping Australian small and medium businesses to grow and create new jobs

- Expenditures in this stream are valued at \$406.3 million, including:
 - a new \$350 million round of the Innovation Investment Fund intended to encourage private investment in innovative Australian start-up companies;
 - changes to venture capital tax arrangements intended to improve clarity and certainty for investors and encourage participation by so-called 'angel' syndicates;
 - a new Growth Opportunities and Leadership Development (GOLD) initiative intended to provide focused support for SMEs with high-growth potential;
 - extending the Enterprise Connect program for SMEs to more manufacturing firms and to new sectors; and
 - a new Enterprise Solutions Program intended to help SMEs become better equipped to win work through public tenders.

Source: Australian Government (2013b), Gillard, Swan and Combet (2013).

The Sustainable Agriculture stream is intended to provide support to increase the adoption of more sustainable farm and fisheries practices while increasing the capacity of land managers for improved natural resource management. Support will be provided to professional farming groups, Indigenous groups, industry bodies, land managers, farmers, fishers, regional natural resource management organisations, governments, Landcare groups and communities.

Activities to be supported in the Sustainable Environment stream include carbon storage, enhanced biodiversity, and improved urban waterways and coastal environments.

The further funding followed a review of the first phase of the program. The review, conducted by the Australian Government Land and Coasts Caring for our Country Review Team (2012), considered that the program should exceed the outcomes set for it in the first five years of its operation.

New research grants for agriculture

In May 2012, the Australian Government announced that funding of \$72.5 million would be allocated to over 100 research and demonstration projects as part of the first round of its *Filling the Research Gap* and *Action on the Ground* programs (Ludwig and Dreyfus 2012).

The Filling the Research Gap program will expend \$47 million into 57 projects in research areas including ‘reducing methane emissions (from livestock and manure), reducing nitrous oxide emissions (from fertilisers and soils), and increasing soil carbon and improving modelling capability’.

The Action on the Ground program will outlay \$25.2 million into 59 projects to ‘trial and demonstrate a range of on-farm technologies and innovative practices that store carbon, reduce or mitigate emissions of nitrous oxide and methane and improve farm productivity.’

The 116 projects funded cover a range of areas, including ‘reducing emissions from livestock and cropping, through to on-farm trials of practices and technologies intended to help land managers become more sustainable and resilient.’

National Food Plan review

In July 2012, the Australian Government released its National Food Plan green paper (Ludwig 2012b) as part of an ongoing review process towards the development of a Plan to safeguard Australia’s food future.

The green paper sought views on possible future food policy options, including in relation to:

- assisting Australian producers to enter overseas markets and create closer trade ties;
- fostering stronger supply chain relationships; and
- increasing rural research and development investment.

Following the release of the green paper, further public consultation was undertaken, and this concluded on 30 September 2012. It is intended that the final National Food Plan will be released as an Australian Government white paper.

Rural Research and Development Corporations

In June 2011, the Australian Government released a preliminary response to the Productivity Commission's report on Rural Research and Development Corporations (RDCs) (PC 2011). The response stated that, while the Government acknowledged that improvements can be made to the RDC model, it would not adopt the Commission's recommendation to halve the cap on government matching contributions to RDCs in conjunction with the introduction of a new subsidy above the cap.

The final response to the report was released in July 2012 (Australian Government 2012c). The Government agreed or agreed in principle to thirteen of the Commission's recommendations. These included recommendations on public funding principles, industry requests for marketing, evaluations and performance reviews, specific maximum levy rates, government matching funding, annual monitoring and reporting, and government representation on RDC Boards. As noted, the Government confirmed that it did not agree with the recommendations on halving the cap on government matching contributions to RDCs in conjunction with the introduction of a new subsidy above the cap. It also announced it did not agree with the recommendations on the possible establishment of a new RDC, Rural Research Australia.

New national framework on drought

On 30 June 2012, the Australian Government closed the Exceptional Circumstances Interest Rate Subsidy program. The decision to close the program was based on successive reviews of drought policy since 1997, including by the Productivity Commission, which found that the subsidy was ineffective and could lead to farm businesses being less responsive to drought conditions.

At the same time, the Australian and Western Australia governments also concluded the pilot of drought reform measures in Western Australia (see *Trade & Assistance Review 2010-11* for a description of the program). The outcomes from the pilot informed the development of the future package of drought-related programs.

Subsequently, on 26 October 2012, the Australian, state and territory primary industries ministers agreed at a Standing Council of Primary Industries meeting to the framework for a new package to better support farmers and their families prepare for future challenges. The new package focuses on risk management and preparedness, rather than crisis management (Ludwig 2012e).

The new package, which is scheduled to be implemented by 1 July 2014, will include:

- a farm household support payment;
- promotion of Farm Management Deposits and taxation measures;
- a national approach to farm business training;
- a coordinated, collaborative approach to the provision of social services; and
- tools and technologies to inform farmer decision making (encompassing a range of options for improving the information available to farmers to help them prepare for and manage the risks of climate variability).

Further details of the new package will be announced as Australian, state and territory government budgets are finalised.

Ministers also agreed that further consideration would be given to providing in-drought support that is consistent with agreed reform principles.

The approach announced in the new national framework draws on, and appears broadly consistent with, that of the Commission's 2009 report on *Government Drought Support* (PC 2009c) and the 2011 report of the Independent Drought Pilot Review Panel (Keogh, Granger and Middleton 2011).

In a later development, in April 2013 the Australian Government announced that it was introducing a Farm Finance package consisting of four measures:

- short-term assistance in the form of concessional loans for productivity enhancement projects or debt restructuring;
- funding for up to 16 additional full-time counsellors with the Rural Financial Counselling Service;

-
- increasing the non-primary production income threshold for Farm Management Deposits (FMDs) from \$65 000 to \$100 000, and allowing consolidation of existing FMD accounts; and
 - establishing a nationally consistent approach to farm debt mediation (Swan and Ludwig 2013).

Fishing

Assistance to the fishing industry

In June 2012, the Australian Government announced the final network of new marine reserves. At the same time, around \$100 million of fisheries adjustment assistance funding was announced to assist the commercial fishing industry adjust to the introduction of the new marine reserves (Ludwig and Burke 2012b). The major elements of the package include:

- transitional business assistance – payments to fishing businesses based on their recent fishing history in those parts of the fishery where they will not be able to operate as a result of the new marine reserves;
- sectoral measures – competitive grants to improve the long-term sustainability of fisheries displaced by the marine reserves; and
- removal of commercial fishing effort – the purchase of individual fisher’s entitlements or quota units in fisheries, where appropriate, up to the level of production displaced by the new marine reserves (Burke 2012c).

As part of the announcement, the Australian Government estimates that the new reserves will displace approximately 1 per cent of the annual value of wild-catch fisheries production in Australia. This displacement is estimated at approximately \$10.1-11.1 million gross value of production per year (Larcombe and Marton 2012).

Assistance for recreational fishing projects

In August 2012, the Minister for Agriculture, Fisheries and Forestry announced the provision of a total of \$1.74 million in funding to ten recreational fishing projects (Ludwig 2012d and Burke 2008). The projects funded covered areas including national education, climate change matters, and the monitoring of fish stocks.

Revised export inspection and certification system

In May 2012, the Australian Government announced new transitional funding of \$4 million to the grain, fish and egg export industries (Ludwig 2012a). This is intended to help businesses transition to revised certification arrangements (reported in the *Trade & Assistance Review 2010-11* (PC 2012a)). In announcing the new funding, the Minister indicated that the assistance was part of the Government's:

... commitment to small and medium sized businesses and to jobs in regional Australia. (Ludwig 2012a)

3.3 Manufacturing sector

Australian Government support for the manufacturing sector comprised around 19 per cent of total budgetary assistance in 2011-12 (chapter 2). The main identified changes to manufacturing assistance arrangements have focused on the automotive industry.

Automotive New Markets Initiative and other measures

In August 2012, the Australian, Victorian and South Australian governments announced a joint initiative intended to assist automotive manufacturers to compete in global automotive markets (Combet, Dalla-Riva and Snelling 2012). The \$35 million Automotive New Markets Initiative places an emphasis on global supply chains, and will run for four years to 2014-15. It has three main elements:

- a \$30 million Automotive New Markets Program, co-funded by the Australian and Victorian Governments;
- funds provided by the Australian Government under the Business Capability Support Program intended to assist automotive firms to develop new capabilities and improve productivity; and
- the establishment of an Automotive Envoy and Automotive Supplier advocate.

The initiative is part of the Australian Government's \$5.4 billion *New Car Plan*.

Subsequent to this announcement, in December 2012 the Minister for Industry and Innovation announced the appointment of the automotive industry advocate (Combet 2012b). It is intended that the advocate will be tasked with developing an action plan to increase the purchase of Australian-made vehicles by fleets. It is also intended that the advocate will work with small and medium sized component makers to build their capabilities to compete in local and overseas markets.

The Government also announced the establishment of Automotive Supplier Excellence Australia (ASEA) in December 2012 (Combet 2012c). ASEA is intended to assist the automotive industry in diversifying and integrating into new supply chains. The Government has provided \$2.6 million of funding towards the establishment of ASEA.

3.4 Carbon emissions reduction and energy efficiency

In the *Trade & Assistance Review 2007-08*, the Commission compiled a list of existing or prospective measures by Australian, State and Territory Governments intended to reduce carbon emissions. That stocktake identified \$342 million in Australian Government budgetary assistance alone in 2007-08 with total Australian Government budgetary assistance for the period 2007-08 to 2011-12 estimated at around \$22 billion (PC 2009d). As reported in chapter 2, for the current 2011-12 reporting period, assistance measures in this area amount to around \$1.7 billion, that is, 18 per cent of Australian Government assistance to industry.

This section reports on more recent announcements relating to carbon emissions reduction and energy efficiency programs. While reporting focuses on announcements of new programs or variations of pre-existing programs, some items cover major outlays under previously announced programs.

As with other programs reported in this chapter, this section does not report on the cost-effectiveness of the programs being undertaken, a matter beyond the scope of the *Trade & Assistance Review*.

Review of Carbon Reduction and Energy Efficiency Measures

The Council of Australian Governments (COAG) undertook a review of unnecessary carbon reduction and energy efficiency schemes, and opportunities for fast tracking or rationalisation of policies and programs (Business Advisory Forum 2013).

As a result of the review a total of 12 state-based measures were found to be non-complementary or duplicative and will be removed or not renewed. Other programs, such as the Australian Government's Energy Efficiency Opportunities (EEO) program were found to be complementary, but will be revised to improve flexibility and reduce compliance and reporting burden.

Energy Efficiency Information Grants

The Australian Government announced funding for 28 projects in May 2012 under its \$40 million ‘Energy Efficiency Information Grants’ program (Ferguson and Dreyfus 2012). This included funding of \$612 000 to the Australian Tourism Export Council to undertake workshops and web seminars on energy efficiency for tourism businesses; and \$423 000 to the Australian Hotels Association to provide tailored information for hotels and accommodation businesses to help them reduce costs and increase their energy efficiency.

Funding for Large Scale Solar Power Plant

In June 2012, the Australian Government announced a \$129.7 million grant towards a project involving electricity and gas retailer AGL Energy and solar photovoltaic manufacturer First Solar (Ferguson 2012a). The project, built across two sites in Broken Hill and Nyngan, is intended to establish a 159 Megawatt advanced thin-film PV solar plant. The grant was awarded as part of the Government’s Solar Flagships Program.

As part of the same announcement, the Australian Government also provided \$40.7 million under the Education Investment Fund to the Universities of Queensland and New South Wales to conduct related research.

Advanced Lignite Demonstration Project

A \$90 million partnership between the Australian and Victorian Governments was announced in August 2012 to establish the Advanced Lignite Demonstration Project in the Latrobe Valley (Ferguson and O’Brien 2012).

Each government will contribute \$45 million to the program, which will ‘fund the development and deployment of emerging technologies to improve the economic recovery of brown coal and reduce emissions from coal-fired electricity generation.’

The program is administered by the Victorian Department of Primary Industries (DPI) with the Victorian and Australian Governments having a joint decision-making role.

The program is intended to pursue the development of more efficient and less emissions-intensive coal upgrading technologies including direct conversion, drying or dewatering of coal, and conversion to higher value energy products.

The program has a two stage project selection process which closed in March 2013. An announcement of successful projects is expected in the third quarter of 2013.

Coal Mining Abatement Technology Support Package

In July 2012, the Australian Government commenced the Coal Mining Abatement Technology Support Package (DRET 2013a). The Package provides \$70 million over five years intended to complement and support the coal industry's own research activities aimed at developing safe abatement related technologies and processes to reduce fugitive methane emissions from coal mining. Funding will be directed at three elements:

- research, development and demonstration of technologies and processes associated with coal mining greenhouse gas mitigation including the measurement and monitoring of emissions, avoidance and abatement technologies;
- work to address safety and regulatory issues associated with the development and deployment of greenhouse mitigation related technologies, equipment and processes; and
- assistance to small and medium-size coal sector participants for the development abatement strategies or the conduct of feasibility studies to reduce emissions from current and proposed mines.

Projects submitted for the first round of funding round are currently being assessed and successful projects are expected to be announced by July 2013.

Geothermal Energy Grant

In September 2012, the Australian Government announced that it had awarded a grant of \$1.25 million from its Emerging Renewables Program to the South Australian Centre for Geothermal Energy Research at the University of Adelaide (Ferguson 2012 h). The grant will contribute to a project on understanding and predicting the permeability of geothermal drilling wells.

Renewable Energy Venture Capital Fund

The Australian Government's Renewable Energy Venture Capital (REVC) Fund aims to provide a total of \$100 million of funding intended to assist with commercialisation activities for designated energy projects.

In September 2012, the Government announced an initial outlay of \$1.5 million out of the fund to Queensland company Brisbane Materials (Ferguson 2012j). The outlay was made out of the Government's Southern Cross Renewable Energy Fund, which is a part of the broader REVC fund. In making the announcement, the Minister stated that:

The Southern Cross Renewable Energy Fund is a co-investment arrangement, with the Australian Government's commitment of \$100 million... matched dollar for dollar by (the private sector).

The Australian Renewable Energy Agency (ARENA) oversees the day to day operations of the REVC fund.

Ethanol Production Grants (EPG) program

The EPG Program was first introduced in September 2002 and was intended to encourage the use of biofuels in transport. Initially, the Program was to run for a 12 month period, while longer-term arrangements were considered regarding the future of the emerging renewable energy industry (DRET 2013b). The program has subsequently been extended on a number of occasions, most recently in June 2011, providing for the Program to continue until 30 June 2021 with a review after that date.

The EPG program is a demand driven program that effectively eliminates, for approved recipients, the excise on domestically produced transport-grade ethanol. Under the program, domestically produced fuel ethanol sold for transport use into the Australian market is liable for full excise of 38.143 cents per litre. This is reimbursed to eligible ethanol producers through the EPG program.

ARENA funding for uninterruptible power supply system

In October 2012, the Australian Government announced that it was providing \$15 million in ARENA funding towards the \$45 million King Island Renewable Energy Integration project (Ferguson 2012k). The objective of the project is to provide a reliable, off-grid power supply by integrating designated alternative energy sources with enabling and storage technologies.

The ARENA is a \$3.2 billion Australian Government commitment intended to improve the competitiveness of designated alternative energy technologies and increasing the supply of energy in Australia from such sources.

Funding for commercial scale gasifier

The Australian Government announced \$3.6 million of funding in November 2012 intended to assist in the development of a commercial scale gasifier (Ferguson 2012l). The announcement stated that, when operational, the gasifier would convert agricultural and mallee biomass into energy for small-scale, distributed electricity generation applications. The grant was provided to Renergi Pty Ltd, a Curtin University company, as part of the Government's ARENA Emerging Renewables program.

Collaboration on Building a Solar Future

In December 2012, the Minister for Resources and Energy announced over \$83 million of funding for solar research as part of the United States-Australia Solar Energy Collaboration (USASEC) (Ferguson 2012m). USASEC was established in 2010 to support collaborative solar research between the United States. The US is providing in-kind support for the most recently funded projects and programs 'through access to researchers and facilities that complement Australian expertise'. The announcement also stated that:

The Australian Government's commitment is leveraging \$140 million of research and industry investment, resulting in more than \$220 million for solar research and involving over 40 organisations across Australia and the US.

Further government support for CCS Project

In December 2012, the Minister for Resources and Energy announced an additional \$13 million of funding for the Callide Oxyfuel project (Ferguson 2012n). The funding is intended to facilitate an extension of the demonstration phase of the project by 15 months. The Queensland-based project aims to demonstrate 'how oxyfuel carbon capture technology can be applied to traditional coal-fired power stations to significantly lower CO₂ emissions.'

Carbon programs for the dairy industry

In June 2012, the Australian Government announced that it was funding the provision of information to the dairy sector on energy efficiency (Crean, Dreyfus and Sidebottom 2012). The funding of \$1 million was given to Dairy Australia to provide energy efficiency advice to around 900 dairy farms Australia-wide. As part of the same announcement, the Government also stated that it was providing further detail to dairy farms on the methodology to be used in earning tradeable carbon

credits. This involves the use of covering systems in waste pools to trap methane and other greenhouse gases.

Community Energy Efficiency Program

The Australian Government announced the first round recipients of grants under its Community Energy Efficiency Program (CEEP) in June 2012 (Crean and Dreyfus 2012). These grants are intended to assist local governments and community groups to improve their energy efficiency. Of the 63 successful recipients, 28 were regional organisations.

3.5 Regional assistance programs

This section reports on assistance announcements directed at regional activities, including assistance to regional business, infrastructure development and natural disaster recovery support that may have industry assistance implications. Federal support in regions is typically associated with co-contributions by relevant state jurisdictions. In some instances these co-contributions are termed ‘partnership investments’.

While assistance measures covered in this section have a regional focus, including the maintenance of certain regional employment, the measures are often targeted at specific businesses, activities or industries. By its nature, the levels of assistance provided may not be large at the national level, but the subsidy equivalent to recipient businesses could be substantial.

Point Henry aluminium smelter

The Australian and Victorian governments announced in June 2012 that they would assist the restructuring of Alcoa’s Point Henry aluminium smelter in Geelong (Combet, Baillieu and Napthine 2012). The Australian Government’s commitment is \$40 million in new funding over the 2011-12 Budget year. The restructure aims to help ensure the smelter’s continued operation and to support jobs in the region. Under the announced arrangements, Alcoa will use the assistance in areas such as workforce skills and training, maintenance and repairs, and other activities that will contribute to the competitiveness of the smelter.

Latrobe Valley pulp and paper mill

The Australia Government announced in October 2012 that it was contributing \$9.5 million of funding towards a \$90 million project to construct a de-linked pulp plant at Australian Paper's pulp and paper mill at Maryvale in Victoria's Latrobe Valley (Combet, Ryan and Dalla-Riva 2012). As part of the announcement, the Government stated that it expects the project to create 140 construction jobs in its initial phase, to directly support the jobs of around 900 workers when initial production commences in 2014, and support over 4000 indirect jobs connected to the mill's operations.

The Government will redirect funding of \$1.1 million over two years from the Green Building Fund to partially offset the cost of providing the assistance. It will also redirect funding of \$1.4 million in 2012-13 from the South-East South Australia Innovation Investment Fund to partially offset the cost of providing the assistance.

Burnie stormwater infrastructure upgrade

In June 2012, the Australian and Tasmanian Governments announced that a \$4.25 million Federal Government grant would be provided to the Lion Dairy and Drinks company in Burnie, Tasmania (Crean, Green and Sidebottom 2012). The grant is intended to assist the company in the upgrading of stormwater infrastructure. The announcement also stated that the company would itself be investing \$140 million towards expanding its speciality cheese production from 11 000 to 18 000 tonnes each year by 2016.

Eyre Peninsula Lucky Harbour upgrade

In July 2012, a joint announcement of funding was made by the Australian and South Australian Governments for an upgrade of Lucky Harbour in the Eyre Peninsula (Crean and Gallacher 2012). The Federal Government will provide a \$2.2 million grant administered through the Regional Development Australia Fund (RDAF) toward the upgrading costs of \$12.1 million. The announced funding is intended to assist the region to benefit from increases in mining activity.

Assistance to Vodafone Hutchison Australia

In March 2013, the Australian Government announced that it was providing \$4 million of funding to Vodafone Hutchison Australia (Gillard, Combet and

Crean 2013). The funds are intended to assist with the expansion of Vodafone's customer service centre in Tasmania and to 'assist Vodafone to increase the skills of the company's Tasmanian workforce and to help them harness the benefits of the NBN.' The announcement also stated that, as part of the assistance package, the Tasmanian Government would be providing \$850 000 for infrastructure costs and would be waiving payroll tax for Vodafone's new employees.

Assistance to Premium Fresh Tasmania

In August 2012, the Australian and Tasmanian governments announced a joint assistance package of \$750 000 to Premium Fresh Tasmania which is intended to support the operations of the company through a period of Voluntary Administration (O'Byrne and Sidebottom 2012). The assistance is intended to enable the company — one of Australia's largest carrot washing, grading and packing facilities — to restructure.

Briquette Restructuring Package

The Australian Government announced a two-year restructuring package of \$50 million intended to allow Energy Brix Australia Corporation Pty Ltd and associated company Industrial Energy Pty Ltd to maintain briquette production to 30 June 2014 (Ferguson, Combet and Crean 2012). The funding is intended to ensure that around 50 downstream businesses nationwide which rely on the briquettes have time to transition to alternative fuels or feedstock. The restructuring package is in addition to entitlements to transitional assistance under the Energy Security Fund.

Briquette Replacement Program

The Australian Government announced a \$5.5 million Briquette Replacement Program to provide existing briquette customers of Energy Brix Australia Corporation and associated company Industrial Energy Pty Ltd with support to transition to cleaner alternatives (Crean 2013). The program is intended to complement the Briquette Restructuring Package. The Briquette Replacement Program will operate over two years from 2013-14 to 2014-15 and includes two elements: Engineering Advice (entitlement rebates to obtain engineering and associated costing advice); and Investment Support (competitive grants to support capital investment to facilitate the transition to cleaner alternatives). The Investment Support is for applicants who are non-manufacturers and not eligible for the Clean

Technology Investment Program or Clean Technology Food and Foundries Investment Program.

Water for the Future initiative

Irrigation infrastructure investment

In the May 2012 Budget, the Australian Government announced that it would commit \$350 million to support water reform in the Murray Darling Basin through investing in irrigation infrastructure (Burke 2012a). This funding, provided under the Sustainable Rural Water Use and Infrastructure Program, comprises:

- an additional \$150 million over six years from 2012-13 for the On-Farm Irrigation Efficiency Program to support individual farm infrastructure improvement projects; and
- \$200 million over four years for the Strategic Sub-System Reconfiguration Program, which aims to achieve water savings through decommissioning or reconfiguring inefficient off-farm water delivery infrastructure.

Targeted assistance for South Australian River Murray Communities

In October 2012, the Australian Government committed up to \$265 million for water recovery and industry regeneration projects in South Australian River Murray communities (Burke 2012b). This funding comprises:

- up to \$180 million to recover 40 gegalitres of water for the environment under the South Australia River Murray Improvements Program; and
- \$85 million for a National Partnership Agreement with South Australia for an Industry Futures fund comprising research, regional development and industry development in South Australian River Murray communities.

Murray-Darling Basin Regional Economic Diversification Program

In November 2012, the Australian Government committed \$100 million to the Murray-Darling Basin Regional Economic Diversification Program (Crean 2012c). The program aims to assist communities in the Murray-Darling Basin living in a water-constrained environment to invest in programs to stimulate employment and regional growth.

3.6 Broadcasting and communications

Across 2011-12, there were several significant announcements regarding broadcasting and communications policies and related activities. The announcements covered policy measures varying significantly in nature. They include support for the transition to digital television and measures related to the take-up of the NBN. To the extent that the measures afford services to businesses or activities below the normal cost of service provision and confer pecuniary benefits on businesses or activities, the measures may have assistance implications. Measures affording budgetary support to businesses and activities would typically be included in the Commission's estimates of assistance to industry at the time expenditures are made by government.

NBN local training services

The Australian Government announced in July 2012 that it had provided \$15.2 million of funding out of its Digital Hubs and Digital Enterprises program to establish local NBN training services (Conroy 2012a). The announcement stated that the successful applicants, located in 36 communities across Australia, will operate 24 Digital Hubs and 20 Digital Enterprise programs 'to highlight the opportunities of the National Broadband Network.' These programs are intended to:

- help individuals in local communities improve their online and digital literacy skills;
- assist local residents to understand the opportunities created by the NBN; and
- work with small business and not-for-profit organisations to develop their online presence.

The successful applicants listed as part of the announcement include territory governments, local councils, not for profit organisations, as well as private companies and consultancy businesses.

In a subsequent announcement in July 2012, the Government also stated that it was providing \$5 million to 14 local governments to assist them to take advantage of the NBN to provide better services to their communities (Conroy 2012b).

Local government funding

In June 2011, the Australian Government announced the Digital Local Government Program which is intended to assist local councils to take advantage of the NBN

through the development and upgrade of innovative online service delivery to homes and businesses (DBCDE 2013).

As at the end of March 2013, three funding rounds had been announced, with 32 councils having received over \$11.3 million in project funding. Projects funded under this program include:

- live customer support which people can access from their home or business using videoconferencing;
- live community consultation and engagement services which people can access from their home or business using videoconferencing;
- planning and development application services which enables people to lodge and track applications online; and
- an emergency management system which enables emergency service personnel to communicate and share data in real time using videoconferencing.

Government response to 2011-12 Regional Telecommunications Review

In August 2012, the Australian Government's response to the 2011-12 Regional Telecommunications Review was released (Conroy 2012c). The Review was established on 7 July 2011 by the Minister for Broadband, Communications and the Digital Economy to examine telecommunications services in regional, rural and remote parts of Australia.

In announcing its response to the Review, the Government stated that it had started implementing recommendations including:

- allowing remote schools and health facilities to access the NBN Co Interim Satellite Service;
- continuing the provision of untimed local calls in the Extended Zones (remote areas of Australia) for 2012-13; and
- providing funding to relevant Regional Development Australia committees to help develop digital economy strategies for the rollout of the NBN in regional communities.

The Government also stated that it had released the NBN Co Network Extension policy in July 2012 for the provision of network extensions on the basis of financial contributions from eligible applicants (including individuals, businesses and government bodies).

Changes to local content rules

The Minister for Broadband, Communications and the Digital Economy announced significant changes to local content rules for Australian television in November 2012 (Conroy 2012d), which were passed by Parliament in March 2013.

The package of measures included:

- an immediate extension, via regulation, of the current rebate on television broadcasting licence fees by a further 12 months, ahead of moving to reduce television broadcasting licence fees permanently by 50 per cent, to a maximum of 4.5 per cent of revenue. The rebates will have effect for the 2012-13 financial year.
- the introduction of a multichannel Australian content requirement for each commercial television broadcaster of 730 hours in 2013, increasing to 1095 hours in 2014 and to 1460 hours in 2015. This includes an incentive for first-release drama by allowing an hour of first release drama premiered on a digital multichannel to count for two hours under the transmission-hours requirement for multi channels.
- retention of the current 55 per cent transmission quota for the commercial television broadcasters' primary channels, together with the introduction of greater flexibility in current arrangements for sub-quotas.

The Government also announced that no spectrum or broadcast licences would be made available to enable a fourth free-to-air television network.

3.7 Other industry assistance developments

Tourism

Tourism Employment Plans

In May 2012, Australia's tourism ministers agreed to commit \$1.2 million for employment creation in eight tourism regions (Ferguson 2012c). In announcing the initiative, the Federal Tourism Minister stated that it would assist in developing Tourism Employment Plans intended to help tourism businesses to address skills and labour shortages. It is also intended to help tourism businesses utilise existing government programs to train and access local labour, including developing opportunities for Indigenous Australians.

The announcement was part of Australia's Tourism 2020 strategy, which is intended to enhance industry growth and competitiveness and increase overnight visitor spending to \$140 billion by 2020.

Asia Marketing Fund and further funding detail

As part of the 2012-13 Commonwealth Budget, the Minister for Tourism announced an initial \$61 million over four years to promote Australia as a premium holiday and business travel destination in Asia (Ferguson 2012d). The new Asia Marketing Fund is in addition to Tourism Australia's current funding of \$530 million over four years.

At the same time, some further detail on the current government funding provided to the tourism industry was released (Ferguson 2012e). This involved a number of components.

- Direct support for tourism of \$751 million over the next four years.
- Several major funding tranches for 'attractions', including: \$20 million to the Melbourne Royal Exhibition Building for protection and promotion purposes; \$12.5 million over four years to the Great Barrier Reef Foundation for research on protection and preservation in response to climate change; and \$10.4 million to reduce the Standard Tourist Program Charge levied on visitors to the Great Barrier Reef Marine Park.

Welcoming Chinese Visitors program and other T-QUAL developments

The Australian Government has allocated \$40 million towards T-QUAL Grants over 4 years from 1 July 2011.

In June 2012, the Government awarded a \$600 000 grant to a consortium led by training company AVANA, as part of its T-QUAL program (Ferguson 2012f). The grant was to assist the company to provide training and support programs to tourism businesses to increase understanding of Chinese visitor demands and develop related products. In announcing the grant, the Minister stated that it was intended to raise the level of Chinese cultural awareness in the tourism industry through a nationally recognised training curriculum, a national system of trainers, an online academy and research and promotion activities to ensure awareness of the program. The announcement of the program complements 'a 15 per cent increase in Tourism Australia's marketing activities within China this year, to a value of \$13 million.'

During the year, there were several other significant announcements connected to the T-QUAL program. For example, in August 2012, the Australian Government

announced that 77 tourism projects were to receive a total of \$6.7 million in funding under the 2012 round of T-QUAL Grants (Ferguson 2012i). These projects covered ‘a wide range of products and experiences, from expanded and improved accommodation, to online projects, wine tourism initiatives and a number of studies and strategies.’ Over 83 per cent of the latest group of successful projects were located in regional areas.

Changes to the Passenger Movement Charge

In June 2012, the Australian Government introduced legislation into Parliament to amend the Passenger Movement Charge (Swan, Clare and Ferguson 2012). The Bill provided for an increase in the charge from \$47 to \$55, the first increase in the charge since 2008.

The proposed increase will raise \$485 million over the forward estimates. The Government announced that from this increased revenue, \$48.5 million over four years will be allocated to the Asia Marketing Fund, and a further \$48.5 million will be allocated to the Tourism Industry Regional Development Fund.

Funding for National Landscapes of Australia

In July 2012, the Australian Government announced that it had increased funding by \$1 million for the National Landscapes of Australia program (Ferguson 2012g). The program aims to ‘promote nature-based tourism experiences and provide economic and social benefits to participating tourism regions.’ The \$1 million grant is to a consultancy firm, TRC Tourism, in order to ‘lead a consortium to prepare and implement Experience Development Strategies (EDS) for Australia’s National Landscapes. Further detail on the initiatives funded is provided in box 3.2.

Tourism Industry Regional Development Fund

In October 2012, the Australian Government announced the establishment of a new \$48.5 million Tourism Industry Regional Development Fund (Ferguson 2012b). The Fund aims to provide matching grants of between \$50 000 and \$250 000 to assist businesses to ‘upgrade their accommodation and build new tourism attractions.’ Applications for funds will be received from tourism operators outside the Sydney, Brisbane and Melbourne metropolitan areas.

Box 3.2 Australia's National Landscapes – Grant funding details

The \$1 million of increased funding for the *National Landscapes* program is to include the following 'Experience Development Strategies':

- *Australian Alps*: Planning and construction of part of Australia's first EPIC mountain bike trail at Mount Buller.
- *Australia's Coastal Wilderness*: Expansion of the Sapphire Coast Heritage Strategy experiences assessment for the 'Global Experience Seeker' target market and engagement with tourism operators to deliver the Australia's Coastal wilderness brand.
- *Great Ocean Road*: Design of a 38 km, three metre wide pathway between Timboon and Princetown via Port Campbell.
- *Great Ocean Road*: Detailed design and preparation works for the Great Ocean Road National Heritage Centre.
- *Flinders Ranges*: Support program to help tourism operators' business in the Flinders Ranges around experience development and delivery.
- *Kimberley*: Feasibility Study for iconic walk trails in the Kimberley region.
- *Kimberley*: Facilitating the development of caravan and camping opportunities on Indigenous land.
- *Kimberley*: Development of a Kimberley Coast Cruise Management Strategy to effectively manage the impacts of the increasing number of vessels and to improve the visitor experience.
- *Great Barrier Reef/Wet Tropics/Australia's Green Cauldron*: Experience Development, Positioning and Mentoring in three Queensland National Landscapes: Great Barrier Reef, Wet Tropics and Australia's Green Cauldron.
- *Australia's Green Cauldron*: Development of Wild Journeys nature-based experience — a fully hosted guided tour, featuring all-inclusive packaging of products, experiences and recreational activities including a business development support program to enable an Indigenous enterprise to take over the operation of the tour guiding business once tours are developed and established.

Source: Ferguson (2012g).

Arts funding

Funding for Indigenous arts, culture and language

In July 2012, the Minister for the Arts announced \$27 million of total funding to assist Indigenous arts, culture and languages projects (Crean 2012a). As part of this funding, for 2012-13, over \$22.3 million in funding was sought for a total of 93 activities under the Indigenous Visual Arts Industry Support (IVAIS) program. This included 19 multi-year activities that were approved in previous funding rounds.

The announcement stated that funding will be provided to over 80 Indigenous art centres, many located in remote areas, and a number of industry service organisations.

Interactive games fund

The Australian Government announced the establishment of a \$20 million Australian Interactive Games Fund in November 2012 (Crean 2012b). The Fund will commence in 2012-13 delivering \$5 million per annum in the first and second years, jumping to \$10 million in 2014-15.

Assistance to small business

Changes to the instant asset write-off threshold

In May 2012, the Australian Government announced that it would increase the instant asset write-off threshold for small business (O'Connor 2012a). This would allow small businesses to write off any eligible business asset bought for the business costing up to \$6500. The previous threshold was set at \$1000.

The Government estimates that the new arrangements will benefit around 110 000 companies in the first four years of operation, of which around 90 per cent are estimated to be small businesses (O'Connor 2012b).

Small business assistance under the clean energy package

In August 2012, the Australian Government announced that it was providing significant assistance to small business as part of its Clean Energy Future package (O'Connor 2012c). In addition to the changes to small business loss carry back arrangements, these included:

- a \$40 million energy efficiency information grants program intended to provide small business with information on how to cut energy costs; and
- \$27.5 million to extend the Small Business Advisory Service (SBAS) program for a further four years.

Defence procurement

Future Submarine Review

In May 2012, the Government announced \$214 million of additional funding towards the next stage of the Future Submarine Project (Gillard, Smith and Clare 2012). The funding is intended to provide further detailed studies and analysis to inform the Government's decision on the design of Australia's next submarine. This follows an earlier commitment in the 2009 Defence White Paper to acquire 12 new submarines to be assembled in South Australia over the next three decades.

4 Intellectual property

Intellectual property (IP) law has a pervasive impact on innovation, production, trade and consumption and is the theme topic in this year's *Trade & Assistance Review*. (Recent *Reviews* have included separate theme chapters on adjustment assistance, state and territory government assistance to industry, assistance to the finance industry and carbon reduction measures.)

The inclusion of IP in the global trading system that accompanied the establishment of the World Trade Organisation (WTO) in 1995 clearly signalled the significant elevation of IP in national and international economic policymaking. Well-designed IP law can facilitate innovation and creativity, trade and investment, as well as technology transfer and economic development. At the same time, open trade and investment regimes can encourage firms to be innovative and, in turn, lead to the growth of IP.

IP law aims at 'safeguarding creators and other producers of intellectual goods and services by granting them certain time-limited rights to control the use made of those productions' (WIPO 2004, p. 3). The underlying rationale for IP law is that creations and ideas, once known, may be copied at little cost which may in turn lead to under-investment in intellectual goods and services, in the absence of IP protection.

IP law and its implementation influence firms' capacity to derive pecuniary benefits from their inventions and creations. The IP system also influences the activities of firms and individuals seeking to use IP in the production of their own goods and services. It can further innovation and private consumption, but if too much protection for IP is provided, it can deter consumption and investment.

Given the capacity for IP systems to facilitate (or inhibit) innovation, creative activity and trade, it is important that the design, operation and review of IP systems be carefully governed. This chapter provides an overview of these facets of the IP system in Australia. It begins with the nature and extent of IP rights in Australia and a brief historical background to modern IP law (sections 4.1 and 4.2). Against this backdrop, the chapter outlines the extent of trade and commerce in IP in Australia (section 4.3), identifies international IP agreements in force and Australia's involvement in these (section 4.4), and aspects of IP administration and legal recourse (section 4.5). It also outlines some findings from recent empirical research

(section 4.6) and notes Australian policy reviews affecting Australian IP law (section 4.7). Some concluding remarks are provided at the close of the chapter (section 4.8). Appendix B provides a catalogue of legislated measures providing IP protection.

Previous work by the Commission in relation to IP includes:

- an inquiry (just completed) on the *Compulsory Licensing of Patents* (PC 2013);
- a report into *Bilateral and Regional Trade Agreements* (PC 2010b);
- a report into *Restrictions on the Parallel Importation of Books* (PC 2009a);
- an inquiry into *Public Support for Science and Innovation* (PC 2007); and
- the *Review of National Competition Policy Reforms* (PC 2005).

The Commission has also reported on trade policy developments pertaining to IP in Australia in previous editions of its *Trade & Assistance Review*.

4.1 Types of intellectual property in Australia

Australian law provides legal protections for a diverse range of intellectual property (box 4.1). There is no single ‘IP Act’, rather, most types of IP are provided for by separate, specific statutory laws — for example, a patents act for inventions and a copyright act for literary and artistic creations (appendix B). In Australia, the statutory IP law comprises two broad categories:

- registered rights for industrial property, such as patents, trade marks,¹ geographical indications of source, designs and plant breeder’s rights; and
- unregistered rights for creative activity in the literary, artistic and scientific fields, such as copyrights, moral rights, performers’ rights, circuit layout rights, and artists resale royalty rights.

¹ Trade mark (or ‘mark’) is adopted in this chapter for consistency with the *Trade Marks Act 1995*. Some international treaties and IP agencies adopt ‘trademark’ or ‘trade-mark’.

Box 4.1 **Some types of intellectual property**

A *standard patent* is granted for any device, substance, method or process that is new, inventive and useful. An application must disclose sufficient information, such that a person skilled in the relevant field could replicate the invention.

Innovation patents provide protection for lower-level inventions that may not meet the higher inventive threshold required for standard patents (for example, incremental advances in existing technology). An innovation patent allows an innovator to protect each stage of a development.

A *design* refers to the features of shape, configuration, pattern or ornamentation which gives a product a unique appearance, and must be new and distinctive. Design registration is intended to protect designs which have an industrial or commercial use.

Plant breeder's rights are used to protect new varieties of plants that are distinguishable, uniform and stable.

A *trade mark* is used to distinguish the goods and services of one trader from those of another. A trade mark can be a letter, number, word, phrase, smell, shape, logo, picture, aspect of packaging or any combination of these.

A *geographical indication* identifies goods as originating in a specific territory or locality where a particular quality, reputation or other characteristic is essentially attributable to its geographic origin.

Copyright protects the original expression of ideas (not the ideas themselves). Works protected by copyright include books, films, music, sound recording, newspapers, databases, media broadcasts and computer programs.

Creators' *moral rights* are treated under 'copyright' in Australia but are distinct from the economic copyrights in a literary, dramatic, musical or artistic work, film or live recorded performance. The three designated 'moral rights' are the right of attribution, the right against false attribution, and the right of an author or performer to object to treatment of a work that demeans their reputation.

Performers' rights are treated under 'copyright' in Australia, but are separate from copyright in the material that is performed and from the creator's moral right. Performers have the right to: grant, or refuse, consent to the reproduction of a performance; co-ownership of copyright in a sound recording of their performance; and moral rights in relation to live performances and their sound recordings.

Circuit layout rights protect the layout design (3D topography) of integrated circuits (commonly known as semi-conductor chips). These rights are based on copyright but are a separate, unique form of protection.

The *artists' resale royalty right* entitles visual artists (including painters, sculptors, printmakers, craft workers, and photographers) to a five per cent royalty on the sale price for certain resales of their work.

Standard patents and trade marks involve an application and examination process. If examination is successful, the patent or trade mark is registered. Designs and innovation patents involve an application process and registration without substantive examination. Examination can be requested if the right owner wishes to enforce or license their right. In contrast, copyright and related rights apply automatically and are unregistered in Australia. This dichotomy is reflected in the division of administrative responsibilities, with industrial property rights administered by IP Australia (a prescribed agency within the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education) and copyright and related law administered by the Attorney-General's Department (section 4.5).

Copyright differs fundamentally from patents in that copyright does not protect ideas or information as such, but only the original expression (material form) of ideas or information. Copyright does not protect against independent creation of a similar work whereas independent discovery infringes patents (Posner 2005).

Other protections are also provided in Australia through non IP-specific law and/or the common law. These include confidential information, trade secrets, test data submitted for regulatory approval of medicines and agricultural chemicals, business reputation and goodwill in trade names, the Olympic insignia, the Advance Australia logo, and the Scout Association name and uniform.

Each type of IP is quite distinct, governed by separate legislation and subject to a variety of international agreements. The nature of the legal entitlement differs across the types of IP in such aspects as eligibility, duration, use exemptions, administration timelines and fees, third party objections, international registration requirements, legal infringement processes and awards.

Most of the IP rights establish general 'exclusivity' which the holder may then use to derive a financial benefit. However, the artists' resale royalty right differs in that it establishes a 'specific remuneration right' (augmenting the initial exclusivity right of the artist). Moral rights are also different from economic copyrights and registered industrial property rights in that they are personal and cannot be assigned or licensed — moral rights are not tradeable 'property', as such.

While IP generally gives an owner an exclusive right over an innovation, safeguard mechanisms also typically limit the extent of the IP holder's right to exclusive use. For instance, there are several mechanisms in the Patents Act that allow a patented invention to be used without the patentee's authorisation, including compulsory licensing, government use, and research and regulatory exemptions. Such mechanisms are essentially safeguards to be invoked in exceptional cases where the

outcomes associated with a patent would not serve the best interests of the community as a whole (PC 2013). Similarly, copyright law provides for certain fair dealing exceptions. The nature and scope of copyright exceptions is currently being reviewed (section 4.7).

Duration of protection

One of the most obvious differences that has evolved around the various instruments is duration of protection. The shortest *maximum* term is currently eight years for an innovation patent. In comparison, a standard patent is for 20 years (with an extension of up to five years available for pharmaceutical patents that meet certain requirements), while copyright protection generally extends to 70 years after death of the creator, and trade marks are of indefinite duration (provided they continue to be renewed). The *minimum* initial period of protection and renewal options also differ. A standard patent initially applies for four years (from filing date) and lapses unless renewed annually thereafter, whereas designs are initially registered for five years (with a single five-year renewable option). Trade marks initially apply for ten years (with the option of unlimited ten-year renewals).

Differences in the duration of protection have also evolved within different types of IP. For example, the maximum duration available for pharmaceutical patents is five years longer than other standard patents in recognition of the lag between the patent being granted and regulatory approval for sale. Similarly, the duration of plant breeders' rights (PBR) is longer (25 years) for trees and vines than for other plants (20 years), reflecting the longer breeding process for trees and vines. The duration of protection afforded by copyright and moral rights vary across activities, for instance, while copyright protection for authors generally extends to 70 years after death, copyright protection for broadcasts extends 50 years from the first broadcast, while circuit layout rights (based on copyright) are protected for a maximum of 20 years.

4.2 Historical background

The origins of contemporary IP frameworks in Australia date back to developments in law in Britain during the 17th and 18th centuries, with these in turn being underpinned by earlier related laws and practices.

- *Patent law* in England had its beginnings in the 14th century with the granting of monopoly rights in exchange for designated technology-related products, initially for the purpose of attracting skilled craftsmen from abroad (David 1993). Following the example of Venice and Antwerp, England adopted

the practice of patents for inventions in the 16th century (as an alternative to invention grants at a time when scarce public revenue was used mainly to finance the military and elite). The English Statute of Monopolies of 1623 transferred the right of granting monopolies from the monarchy to the Parliament (Moser 2013) and, in 1778, was later broadened to require disclosure of the invention details (Moir 2012).

- *Copyright law* in European countries emerged from efforts by the church and state to regulate the output of printers following the introduction of printing presses in the mid-15th century. With the emergence of printing presses, output formerly regulated through a system of control over scribes was continued through regulated monopolistic printing guilds, with copyrights being given to publishers rather than authors. The modern copyright protection of authors appeared in England in 1709, when the Act of Anne eliminated the guild monopoly on the holding of copyrights, enabling anyone to hold a copyright for a new work. Following this change, copyright began to assume the role of providing a commercial incentive for the expression of new forms and ideas, including musical compositions and the visual arts (David 1993).
- *Trade mark law* originated from laws and practices governing the use of marks in the Middle Ages to indicate the maker of specific products (for example, bread and silver). Various craft guilds had ‘rules’ to indicate the product maker. By the 19th century, trade marks and the goodwill associated with them were considered as a type of property. Trade mark laws emerged in the UK in the middle of the 19th century giving the right to take action in the courts against infringement of a trade mark (UK IPO 2012).

International treaties

With the trade and commerce-related aspects of IP reaching across national borders, IP has been the subject of international treaties. The Paris Convention for the Protection of Industrial Property of 1883 and the Berne Convention for the Protection of Literary and Artistic Works of 1896 were the first multilateral international treaties governing IP. A succession of topic-specific international IP agreements has subsequently been initiated (section 4.5). In 1995, the broad-ranging Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) came into effect. IP matters have also been included in bilateral and regional trade agreements and other international protocols.

Post-federation Australia

Section 51(xviii) of the Australian Constitution provides the Federal Government with the power to make laws with respect to ‘copyright, patents of inventions and designs, and trade marks’. Before Federation, most Australian colonies had enacted patent and copyright laws. The first industrial property IP laws enacted by the Australian Government were the *Patents Act 1903*, *Trade Marks Act 1905* and *Designs Act 1906*. These Acts were modelled on the UK *Patents, Designs & Trade Marks Act 1883*. The Patents Act was re-enacted in 1952 and again in 1990, the Trade Marks Act was re-enacted in 1955 and 1995, and the Design Act in 2003. Along the way, there were many amendments to each of the Acts. In addition to the continuous development of the original post-Federation industrial property IP laws, new and separate legal protection was added through the *Plant Variety Act 1987* and the *Plant Breeder’s Rights Act 1994*.

The first Australian Government copyright statute was the Copyright Act 1905, based on the UK *Copyright Act 1842*. In 1912, the Federal Parliament recognised the UK *Copyright Act 1911*, superseding the 1905 Act. This arrangement remained in force until the enactment of the Australian *Copyright Act 1968*, which took into account the 1948 revision of the Berne Convention, the UK *Copyright Act 1956* and national requirements. Legal protection over creative material has also been extended to new areas such as moral rights, performers rights, and circuit layout rights. Over the last two decades, significant changes to copyright law have been made in the light of digital technology developments (section 4.5)

With the extension of coverage of legal protections and the evolution of legal practices and technologies falling within the purview of IP, the volume of Australian IP law — measured by the number of sub-sections in the Acts — is estimated to have increased six-fold over the 20th century, from 553 in 1905 to 3317 in 2005 (figure 4.1).²

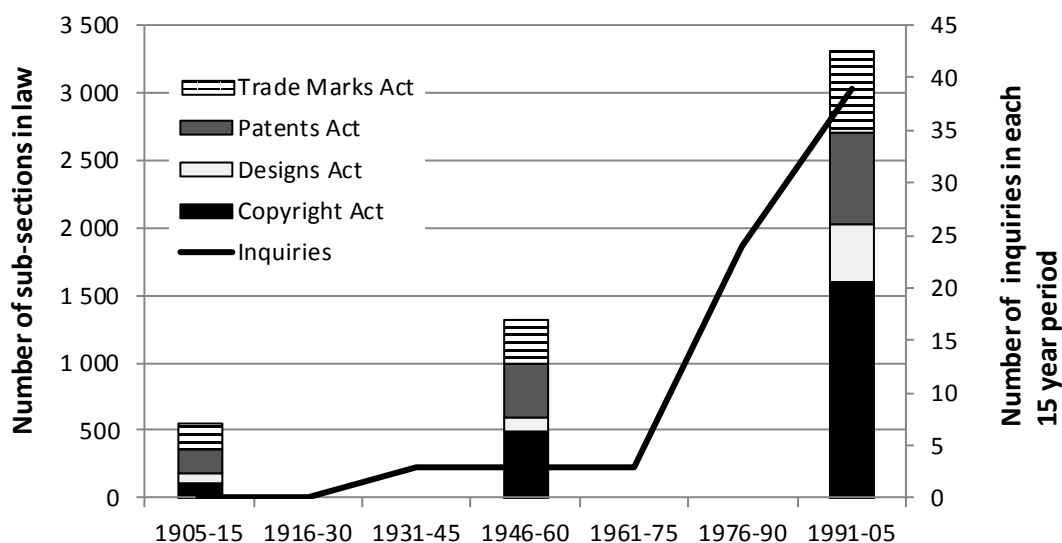
Up to 2005, the volume of copyright law had grown in relative significance compared with other IP law, from around 22 per cent of the total volume of IP law in 1906 to nearly half by 2005. Since 2005, there have been further changes to IP law, with one of the most recent being the passing of the *Intellectual Property Laws Amendment (Raising the Bar) Act 2012* (box 4.2). While the volume of law and frequency of changes is indicative of legislative activity, it does not necessarily provide an indicator of the level of, or changes to, administration and compliance costs of Australia’s IP system or the *net* community-wide benefits of the system.

² Caine and Christie (2005) considered sub-sections (rather than number of sections, number of pages or word length) to be a better reflection of the volume and complexity of the legislation and better for comparison across different areas of law.

Associated with the increase in the volume of IP law has been an increase in the incidence of reviews of IP law (figure 4.1). (The nature and scope of reviews is outlined in section 4.7.)

Figure 4.1 **Volume of Australia IP law and incidence of reviews, 1905 to 2005^a**

Trade mark, patents, design and copyright legislation



^a Number of sub-sections in consolidated Acts.

Source: Caine and Christie (2005).

Box 4.2 'Raising the Bar' reforms

In April 2012, the *Intellectual Property Laws Amendment (Raising the Bar) Act 2012* was passed by the Commonwealth Parliament. The Act includes a number of changes to the patent, trade mark, copyright, design and plant breeder's rights system including:

- raising patent standards;
- increasing penalties for trade mark counterfeiters;
- improvements to border security measures for goods that infringe copyright and trade marks;
- providing free access to patented inventions for researchers;
- improving application processes and reducing delays when seeking an IP right; and
- permitting patent and trade mark attorneys to adopt a corporate structure.

Source: Carr (2011).

4.3 Extent of trade and commerce in IP in Australia

There are a number of measures available that indicate the extent of economic activity subject to IP law. There is also detailed reporting on the number of patent applications and grants of patents and other industrial IP rights. Collectively, this information provides an indication of the economic footprint of IP rights in trade and commerce.

The number of applications and grants of IP rights

The most common form of registered IP in Australia is trade marks (table 4.1). Over 60 000 trade mark applications are made each year, claiming protection in over 100 000 business areas with about 70 per cent of these being granted. More than half of trade marks granted have been to Australian applicants.

The next most common category of registered IP is a standard patent. In 2012, over 26 000 standard patent applications were filed in Australia — a level broadly in line with the number of applications received in 2007, that is, before the onset of the global financial crisis (GFC). The increase in the number of patents granted (about 60 per cent since 2007) is largely reflective of an increase in examination resources rather than a change in demand for patents, as such. Of the standard patents awarded in 2012, 7 per cent were to Australian applicants, down from 10 per cent in 2005. In 2012, applications were lodged for over 1800 innovation patents and 6400 designs, respectively, both of which do not require examination in order to be registered. Plant breeder's rights are the least voluminous of the registered IP rights, averaging under 350 applications per year, with about 70 per cent being successful.

Use of IP protections in trade and commerce

IP protection afforded by patents can enter into trade and commerce in a number of ways. These include 'own use' in production and licensing and other arrangements, defensive uses directed at blocking competitors as well as simply holding the rights to an invention or idea against possible application. While there are limited data and studies in this area, one indication of how patents enter trade and commerce is the use made of them by registered holders. A sample of around 9000 inventions patented in six Western European economies (France, Germany, Italy, the Netherlands, Spain and the United Kingdom) between 1993 and 1997 indicates that around half of those patents were intended for use internally for commercial or industrial purposes. The use of a further 13 per cent included licensing arrangements (Giuri *et al.* 2007). Cross licensing of IP is a feature in areas such as

information technology where the overall product or system relies on bringing together a number of complementary components each patented by a separate inventor.

Table 4.1 Intellectual property applications and grants in Australia, 2005 to 2012

	2005	2006	2007	2008	2009	2010	2011	2012
<i>Applicants from all countries (number)</i>								
Trade marks								
Applications (filings) ^a	56414	60445	60976	59216	56573	59274	61557	62633
Applications (classes) ^a	92680	101695	108450	108314	99937	105837	110912	112543
Registrations (classes) ^a	62203	69915	77251	86138	79145	72607	72012	79894
Standard patents								
Applications ^b	23851	25515	26774	26562	23675	24868	25520	26358
Registrations (by examination)	10977	9416	11069	11836	12410	14557	17877	17722
Innovation patents								
Filings	1072	1094	1249	1297	1341	1485	1701	1856
Registrations (automatic)	n.a.	n.a.	1059	1173	1207	1345	1581	1838
Designs								
Filings	5860	5878	5800	6083	5138	5865	6064	6449
Registrations	5843	7370	5207	6097	5665	5327	5647	5995
Certifications	318	637	863	1263	1007	856	895	963
Plant Breeder's Rights								
Filings	354	364	336	374	363	325	330	304
Registrations	362	280	196	249	282	217	183	144
<i>Grants to Australian applicants as a proportion of total grants^c</i>								
Trade marks	0.57	0.54	0.55	0.54	0.55	0.57	0.59	0.54
Standard patents	0.10	0.09	0.09	0.07	0.07	0.08	0.07	0.07
Innovation patents	n.a.	n.a.	0.82	0.79	0.83	0.75	0.68	0.62
Designs	0.47	0.48	0.45	0.4	0.47	0.47	0.44	0.41
Plant breeders rights	0.44	0.53	0.35	0.53	0.46	0.51	0.44	0.56

n.a. not available. ^a Every trademark application can claim cover in a set of 45 classes, so each filing will have multiple classes. ^b Direct applications with IP Australia plus National Phase Entry applications under the Patent Cooperation Treaty. ^c Calculated as the number of grants to Australian applicants (not shown) as a proportion of applications of Australian and foreign origin (shown in upper panel).

Source: provided by IP Australia from IP Australia data warehouse and IP Australia business units.

As copyright and related measures do not require registration, estimates of the incidence of works for which legal protections are provided are not available.

Intellectual property protection afforded by copyright and related measures enters trade and commerce through the protection of the expression of ideas such as through reproduction, publication and performance. The time-scale over which income accrues therefore will be of importance to how copyright might enter trade and commerce as well as the duration of protection afforded by IP law.³ Evidence suggests that the commercial life of creative works is, on average, relatively short — with the majority of income generated by sound recordings accruing within five years of release and income from sales of fiction titles occurring in the first months of publication (Gowers 2006, pp. 52-3).

Licence fees, royalties and other IP revenues

For arrangements yielding licence fees, royalties and other revenue for IP holders, transactions between countries are estimated in balance of payments statistics. There is, however, no comparable Australian national accounts data which measure the flow of IP fees and royalties between firms in Australia.

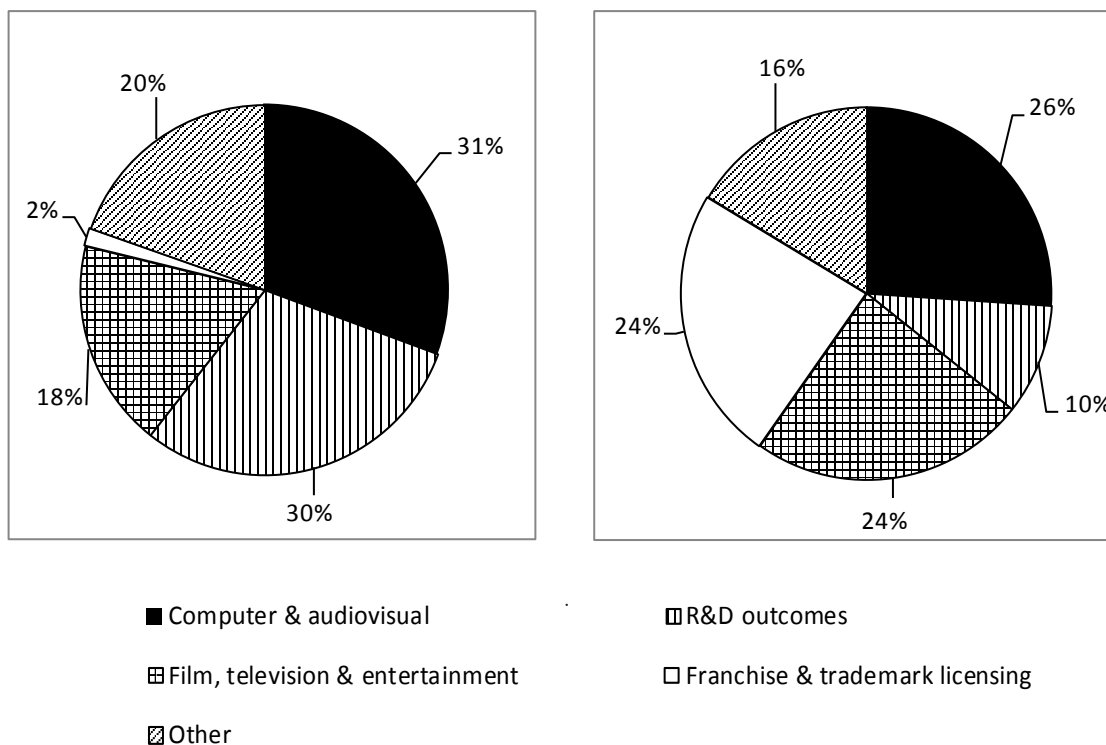
In 2011-12, the recorded value of Australia's payments to offshore IP holders amounted to \$5.2 billion, while Australia's receipts from non-residents were nearly \$1 billion, around 0.3 per cent and 0.1 per cent of GDP, respectively (figure 4.2). Licences to reproduce or distribute computer services (mainly software), royalties on film and television entertainment and charges for the use of franchises and trade marks together accounted for about three quarters of the value of these payments offshore (figure 4.2, right hand panel). On the receipts side, around 60 per cent by value accrued from licensing of the use of computer services and for the use of the outcomes of research and development (figure 4.2, left hand panel). Since 1989-90, the value of balance of payments IP receipts and payments have, on average, increased about one percentage point faster per year than GDP. These estimates, as would be expected, will be influenced by a variety of factors including the level and changes in IP activity as well as other factors such as increased globalisation of economic activity and international taxation considerations of multinational firms.

³ As noted (section 4.1) the period of copyright typically extends to the author's life plus a further margin, which is 70 years after death in Australia.

Figure 4.2 Balance of payments licence, royalty and other charges for the use of intellectual property, Australia, 2011-12^a

Balance of payments IP credits (receipts) — about \$1 billion (0.3 per cent of balance of payments credits and 0.1 per cent of GDP)

Balance of payments IP debits (payments) — about \$5.2 billion (1.3 per cent of balance of payments debits and 0.3 per cent of GDP)



^a Charges for use of intellectual property are compiled in accordance with the IMF *Balance of Payments and International Investment Position Manual* (sixth edition). Under this manual, charges for IP include charges for use of proprietary rights, and charges for licences to reproduce or distribute IP embodied in originals or prototypes. Transactions are recorded when payments are made in accordance with the substance of licensing agreements. Franchise fees, trade mark revenue and payments for use of brand names may include aspects of property and services income, as well as charges for IP.

Source: Commission estimates based on data from ABS (2012c) (*Balance of Payments and International Investment Position, Australia, Sept. 2012*, Cat. no. 5302.0, tables 15, 16 and 51).

IP content of production and trade conferred by IP protection

In an earlier study of the trade-related aspects of IP, the Commission used a two-stage process to examine the value of the IP content of Australian production (whether used locally or exported) and imports, recovered commercially through IP protection (Revesz 1999). In the first stage, an assessment of the R&D and creative costs of domestic production, exports and imports was made. In the second stage, the component of these costs recovered commercially through IP protection was

estimated.⁴ The calculations were in terms of ‘per cent of GDP’ with lower and upper-bound estimates being made. The lower bounds have been projected forward to 2011-12 dollars to provide a broad indication of the possible current values.

- For *copyright*, the value of content in Australian production and trade may be at least \$28 billion (in 2011-12 values) (around two per cent of GDP) with about three quarters of this embedded in domestic sales of locally produced goods and services. The copyright content applying to imports has typically been estimated to be much larger than that applying to exports.
- For *patents*, the IP content embodied in Australian production and trade (imports and exports) may be at least \$3.5 billion (2011-12 values) (around 0.25 per cent of GDP) — most of which is likely to be embedded in imports — reinforcing the common statement that Australia is a net importer of IP.

The Commission’s 1999 study recognised that there are monetary premiums attached to trade marks, designs and other IP subject to legal protections, but noted a lack of suitable data to make quantitative inferences about the IP content for these instruments in production and trade.

Other measures

Another relatively easy-to-measure indicator of the economic footprint of IP is the ‘size’ of IP-related industries — with indicative estimates suggesting this could be as high as 10 per cent of GDP for copyright-related activities.⁵ While economic activity in the copyright supply and distribution chain would, to varying degrees, be influenced by copyright law, it is important to note that measures of the scale of activity in the chain do not provide a measure of the value of the copyright ‘content’ of production and trade. Nor do they imply links between legal protection for IP and

⁴ Other means by which businesses may recover the cost of their R&D and creative activity include secrecy and market power, as well as direct support by government through taxation concessions and other budgetary outlays. The estimates of the costs recovered through IP protection would vary over time with the level of IP embodied in goods and services and the relative importance of IP law as a means of recovering the costs of development or creation.

⁵ The World Intellectual Property Organization has also developed a framework for identifying industries in the ‘copyright supply and distribution chain’ (WIPO 2003). This framework distinguishes between industries that may be engaged in the creation or distribution of copyright material (core activities) and industries that provide technology and equipment supporting the creation, production or use of creative works (independent industries). This framework has been applied in Australia, in a consultant study, as part of a study of 30 countries of the scale of copyright supply, distribution and support (PwC 2012; WIPO 2012b). The WIPO study indicated that copyright supply and distribution and support activities account for around 5 per cent of GDP across the 30 countries sampled, while for Australia and the United States, the activities were estimated to account for around 10 per cent of GDP.

levels or the extent of such activities that would exist without copyright protection, that is, the counterfactual.

Another approach to examining the economic importance of copyright is to measure firm investment in copyright content. Such measurement has formed part of the move in the national economic accounting field to treat long-lived artistic originals as capital assets (rather than treating the cost of producing artistic originals as current expenses). Soloveichik (2011) estimated the investment in artistic originals (such as theatrical movies, recorded music, books, and television programs) to be around 0.35 per cent of United States GDP in 2007. Goodridge *et al.* (2012) make a comparable estimate of 0.4 per cent of United Kingdom GDP in 2009. Australian national accounts information indicates capital formation of artistic originals amounted to around \$2.3 billion in 2012 or around 0.15 per cent of GDP (ABS 2013).

4.4 Bilateral, regional and global frameworks

There has been a progressive increase in the coordination and harmonisation of IP law and its application through global frameworks, as well as bilateral and regional agreements. Frameworks influencing Australian IP law, and trade and commerce in IP both within Australia and internationally, include:

- the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS);
- treaties administered by the World Intellectual Property Organization (WIPO);
- other dedicated IP agreements falling outside of the WIPO framework; and
- IP provisions included as part of bilateral and regional trade agreements.⁶

Other international treaties and agreements, such as the United Nations Framework Convention on Climate Change and the Kyoto Protocol contain provisions relating to the transfer of technology (which may have implications for domestic IP arrangements).

In Australia, treaties are tabled in Parliament before the agreement enters into force. Tabling may be followed by review processes, after which enabling legislation is presented to Parliament. (Treaties are referred to by a number of different names, including, international conventions, international agreements, covenants, final acts,

⁶ A non-treaty measure that may affect the transfer of Australian manufactured products using US technology (including data) is the United States International Trafficking in Arms Regulation (ITAR), which requires US Department of State approval before transfer.

charters, protocols, pacts, and accords. Usually these different names have no legal significance in international law.)

The plurality of international IP agreements and the interaction between them and with existing domestic law is complex.

- The IP agreements interact through the referencing of one agreement in another, such as through the referencing of several WIPO agreements in TRIPS. They also interact through eligibility criteria — for example, the Budapest Treaty on deposits of micro-organisms for patent procedures is only open to parties to the Paris Convention for the protection of intellectual property.
- In some areas of IP, there is more than one treaty. Sometimes new treaties are developed to address changes in technology or developments in IP, as happened with the Singapore Treaty on the Law of Trademarks (which followed on from the Trademark Law Treaty). There may also be multiple versions of the ‘same’ treaty, such as the International Convention for the Protection of New Varieties of Plants, with different signatories to different versions.
- Uncertainty can arise when treaty obligations are not incorporated directly into the relevant domestic Act or subordinate legislation. This issue was raised by participants in the Commission’s recent inquiry into compulsory licensing of patents, in reference to differences between the Patents Act and provisions in the Australia-United States Free Trade Agreement (AUSFTA (PC 2013)).

Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS)

TRIPS is the overarching international IP agreement, and came into effect on 1 January 1995 as one of the major outcomes from the Uruguay Round of multilateral trade negotiations that led to the establishment of the WTO.⁷ TRIPS adopted the most-favoured-nation (MFN) principle, which had not traditionally been provided for in multilateral IP treaties. This principle means that an ‘advantage’ granted by a TRIPS member to the nationals of another country (whether a member or not) should be afforded to all members.

⁷ Prior to the Uruguay Round, IP exporting countries, particularly the United States, had pursued stronger IP protection against infringements in developing countries (Maskus 2000). The Uruguay trade negotiations provided an opportunity to offer developing countries some compensating benefits for strengthening IP protection. Developing countries agreed to join TRIPS partly in exchange for the liberalisation of agricultural and textile imports by developed nations. Initially, the trade talks focussed on ‘pirated’ copyright and counterfeit products that misappropriated well-known trade marks. However, the final agenda was widened to include all IP issues (Revesz 1999).

TRIPS sets substantive minimum standards in virtually all areas of IP protection. It does not aim at complete harmonisation as countries are free to exceed the minimum standards in national law. Particularly significant provisions introduced by TRIPS were in relation to patent eligibility, requirements for the protection of plant varieties, copyrights for computer software and electronic transmissions, protection for well-known trade marks, and effective measures to safeguard confidential information. The Agreement also provides guidelines about the effective and expeditious domestic enforcement of IP rights — an element that was not included in earlier international agreements. Compared with the previously unenforceable conventions supervised by WIPO, the TRIPS brought IP into the dispute settlement mechanism of the WTO.

Most of the requirements of TRIPS were already incorporated into Australian law and enforcement practices before the adoption of the agreement. The most significant legislative change brought about by TRIPS in Australia was the increase in the maximum available standard patent protection term from the existing 16 years to 20 years.

TRIPS does not codify detailed matters such as the screening criteria for a patent or the definition of infringements to copyright, leaving scope for national guidelines to vary without violating TRIPS.

WIPO administered agreements

WIPO is the United Nations agency dedicated to the use of IP as a means of stimulating innovation and creativity (WIPO 2012a). WIPO was established in 1967 — with predecessor agencies dating from the 19th century. It currently has 186 member states, including Australia. Of the 24 IP treaties it currently administers, 15 are in force in Australia (table 4.2). Of major trading nations with significant patent and trade mark filings, the United States is party to 14, China to 13, Japan to 14, Germany to 19 and the United Kingdom to 17. The Republic of Moldova is party to the most (24).

In many cases, Australia was either not an original signatory or did not ratify the agreement at the time it came into force.⁸ Although being a signatory does not mean the provisions are immediately part of domestic law, signing does prohibit a

⁸ A country can become a member of a treaty through a process of ‘accession’ or ‘ratification’. In the case of ratification, the country first signs and then ratifies a treaty. The procedure for accession has only one step (and is not preceded by an act of signature). Australian membership of most IP treaties has been through accession rather than ratification. In Australia, treaties have no force until legislation is passed by Parliament.

country from action that would defeat or undermine the treaty's objective (Geneva Academy 2012).

Over time, more countries have become parties to existing agreements and the subject matter covered by international agreements has expanded. At the same time, no two countries are party to precisely the same agreements. Some agreements have been revised several times with different countries being party to different versions. Many agreements are also flexible in various provisions allowing for a variety of domestic laws to give effect to the treaty objective.

In addition, some countries have IP regimes consistent with WIPO treaties, even though those countries have not formally joined. For example, Australia uses the Locarno system of classification for designs even though it is not a member of the relevant treaty.

Table 4.2 Current international IP agreements administered by WIPO

<i>Agreements</i>	<i>First agreed^a</i>	<i>Current contracting parties^b</i>	<i>Area of IP</i>	<i>Ratified by Aust.</i>
Paris Convention	1883	174	Industrial property	1925
Berne Convention	1886	166	Copyright	1928
Madrid Agreement (Indications of Source)	1891	35	Repression of false or deceptive indications of source on goods	-
Madrid Agreement (Marks)	1891	56	International registration of marks	-
Hague Agreement	1925	60	International registration of designs	-
Nice Agreement	1957	83	Classification of trade marks	1961
Lisbon Agreement	1958	27	Appellations of origins (geographical indications)	-
Rome Convention	1961	91	Performers, phonogram producers & broadcasting organisations	1992
Locarno Agreement	1968	52	Classification of industrial designs	-
Patent Cooperation Treaty	1970	146	International patent filing	1980
Strasbourg Agreement	1971	62	International patent classification	1975
Phonograms Convention	1971	77	Protection of phonogram producers against unauthorised duplication	1974
Vienna Agreement	1973	31	Classification of figurative elements of marks	-
Brussels Convention	1974	35	Unauthorised distribution of program-carrying signals transmitted by satellite	1995
Budapest Treaty	1977	78	International recognition of microorganism deposits for patents	1987
Nairobi Treaty	1981	50	The Olympic symbol	-
Washington Treaty	1989	Not yet in force (8 signatories)	Integrated circuits	-
Madrid Protocol	1989	88	Compatibility of Madrid system with legislation of certain countries which had not acceded to the Madrid Agreement	2001
Trademark Law Treaty	1994	53	Simplification & harmonization of trade mark registration procedures	1998
WIPO Copyright Treaty	1996	90	Copyright	2007
WIPO Performances and Phonograms Treaty	1996	90	Performers rights	2007
Patent Law Treaty	2000	32	Harmonization & streamlining of international applications	2009
Singapore Treaty on the Law of Trademarks	2006	29	Harmonization of trade mark registration procedures	2009
Beijing Treaty on Audio visual Performances	2012	Not yet in force (51 signatories)	Performers rights	-

^a Some agreements have been revised multiple times, for example there are three Acts of the Hague Agreement currently in force (1934, 1960 and 1999). ^b Of the current contracting parties, some may be party to different versions.

Source: WIPO (2012a).

Other international IP agreements influencing Australian IP law

International Convention for the Protection of New Varieties of Plants

The protection of new plant varieties was first introduced in the United States in 1930⁹ and progressively adopted in Western Europe. The first international agreement on plant IP was the 1961 International Convention for the Protection of New Varieties of Plants. This was revised in 1972, 1978 and 1991. These international plant protection agreements are managed by the International Union for the Protection of New Varieties of Plants (UPOV), an organisation largely independent of WIPO. Currently, there are 71 members of UPOV, with 19 party to the 1978 version only and not the latter 1991 version.

Australia did not sign the 1961, 1972 and 1978 UPOV conventions because of concerns over whether the Federal Government had constitutional power to legislate and because of debate over the merits and form of any such legislation (Sanderson and Adams 2008: Sanderson 2011). Ultimately, separate legislation for plant breeder's rights was enacted through the *Plant Variety Rights Act 1987*. Australia subsequently became a member of UPOV in 1989 and replaced the 1987 Act with the *Plant Breeder's Rights Act 1994*, to give effect to the UPOV Conventions of 1978 and 1991, and to align the plant breeder's rights system with changing technologies (ACIP 2010).

The Anti-Counterfeiting Trade Agreement

The Anti-Counterfeiting Trade Agreement (ACTA) is a plurilateral¹⁰ treaty for the enforcement of IP rights through a regime of common enforcement standards and practices, and a framework for international cooperation on these matters. Article 36 of ACTA would create an the ACTA Committee, comprising the Parties to the Agreement. The ACTA text was finalised in 2010 with Australia signing in October 2011. As at May 2012, Australia has not ratified the agreement. To date, 31

⁹ It established *patent rights* for developers of new varieties of many asexually propagated plants, for example apple trees and rose bushes, that are propagated by cutting pieces of stems rather than germinating seeds. Patent rights in the United States for seed propagated plants were established in 1970.

¹⁰ The primary difference between a plurilateral treaty and other multilateral treaties is that the availability of reservations is more limited under a plurilateral treaty. Due to the limited nature of a plurilateral treaty, the full cooperation of the parties to the treaty is required in order for the object of the treaty to be met. As a result, reservations to plurilateral treaties are not allowed without the consent of all other parties to the treaty.

countries have signed ACTA and Japan is the only one to have ratified. (Further detail on the ACTA is provided in chapter 5.)

IP provisions in Australian bilateral and regional trade agreements

While IP protections have traditionally been the province of domestic legislation and dedicated multilateral treaties, in recent years they have also increasingly been included in bilateral and regional trade agreements (BRTAs). While most of Australia's recent BRTAs reaffirmed the existing commitments under TRIPS, the agreements with the United States and Chile covered more IP matters than TRIPS (DFAT 2010).

Australia made changes to domestic law as a result of the (AUSFTA). A prominent change was the extension of the copyright expiration period from 50 to 70 years after the author's death to align with US practice.¹¹ Another notable consequential change to Australian law (implemented in the *Copyright Amendment Act 2006*) related to strengthened protection against the circumvention of digital rights management systems (DRMS), which had already been implemented in the United States by the Digital Millennium Copyright Act. DRMS are technical 'locks' copyright owners use to stop material being copied without permission. Strengthened DRMS potentially provides stronger protection for copyright holders, but may also inhibit 'fair dealing'. As noted below (section 4.7), permissible circumvention of technical protection measures in Australia is currently under review.

IP matters are included in negotiations towards a proposed Trans-Pacific Partnership (see chapter 5).

4.5 IP administration and legal recourse

Administration of the Australian IP system involves significant public resources, and responsibilities are spread across many government agencies. The design and operation of IP administration as well as the prevalence and costs of legal action can

¹¹ Copyright term in the United States has progressed from 14 years plus an additional 14 years if the author was still alive (1791), to 28 +14 (1831), to 28+28 (1909), to life of author plus 50 years (1976), to life + 70 years (1998). In Australia, the copyright term in the 1905 legislation was the shorter of seven years after death of the author or 50 years from publication. In 1912, when copyright law reverted to the British copyright legislation, the term changed to life of the author plus 50 years, which remained the case until the AUSFTA extension in 2006 to generally life plus 70 years.

materially influence the outcomes of IP systems. Some background on these aspects is outlined below.

IP responsibilities within the Australian Government

The array of IP types and related activities has given rise to widespread government responsibilities. The Attorney-General's Department is responsible for the Australian Government Intellectual Property Rules, setting out how government manages its own IP. The registered rights (patents, trade marks, design and plant breeder's rights) are administered by IP Australia, a prescribed agency within the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education portfolio. Responsibility for copyrights resides with the Attorney-General's Department. Other government agencies with IP related functions include: the Department of Foreign Affairs and Trade (international IP policy and trade-related aspects of IP in consultation with domestic agencies); the Department of Regional Australia, Local Government, Arts and Sport (artists' resale royalty); the Department of Broadband, Communications and the Digital Economy (IP issues relating to digital content of communications providers); the Department of Health and Ageing (pharmaceutical patent extension applications and compulsory licensing and crown-use exemptions relating to delivering medical and pharmaceutical benefits); Therapeutic Goods Administration (protection of test data in the context of therapeutic goods registration applications); the Department of Agriculture, Fisheries and Forestry (test data submitted for agricultural chemical regulatory approval and wine geographical indicators under the Wine Corporation Act); and the Australian Customs and Border Protection Service (seizure of suspected IP infringing goods).

In addition to the administration and policy responsibilities of departments, the Australian Government provides funding for the Australian Copyright Council (through the Arts Council) and the Intellectual Property Research Institute of Australia (through IP Australia). The Advisory Council on Intellectual Property (ACIP) is an independent body appointed by the government, to advise the Australian Minister for Industry and Innovation on IP matters and strategies.

IP office resources and examination

While IP systems are often described and compared in terms of their length and coverage of IP protection (section 4.1), the overall strength and quality of an IP system also depends on institutional design features (such as examination periods, opposition processes, and IP office resources) as well as enforcement and litigation

cost effectiveness. Recent research suggests that seemingly minor changes in the institutional design of patent systems can have relatively large effects on application levels, grants rates and disputes over validity of patents (Hall and Harhoff 2012; PC 2013, appendix B).

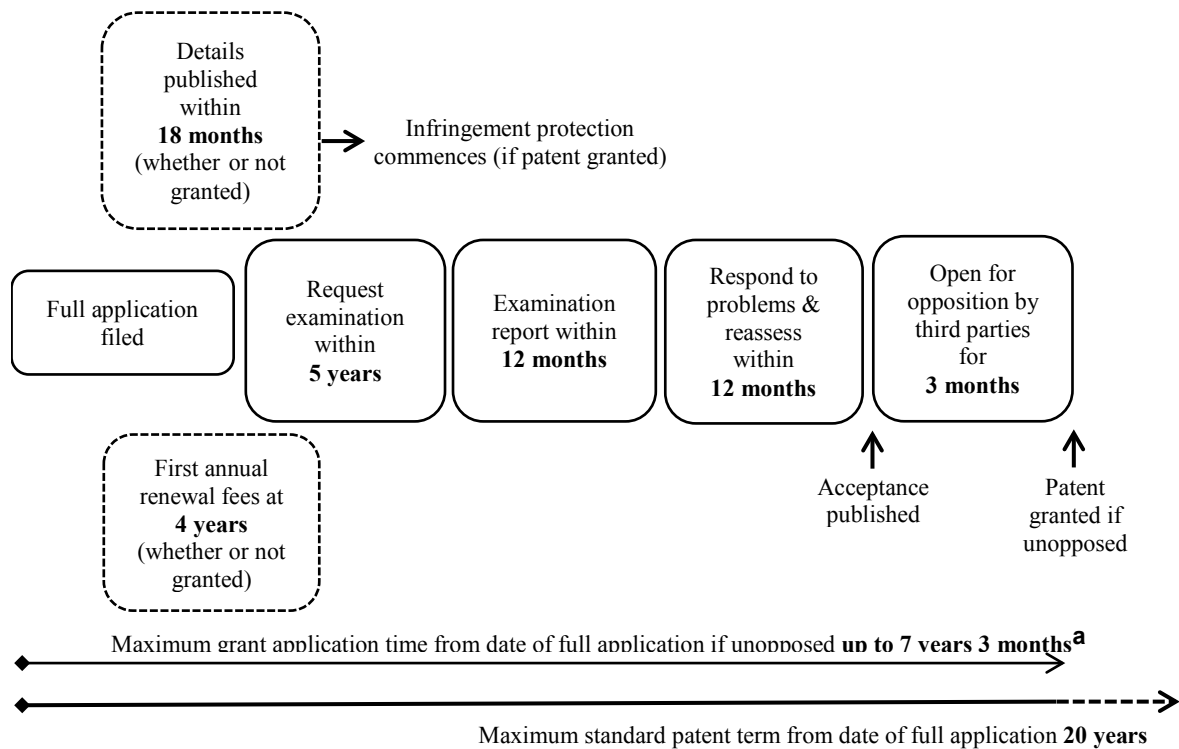
IP Australia

Intellectual property offices can be large public organisations. In 2011-12, IP Australia employed around 1100 people and had a total expenditure of about \$156 million, most of which was recovered by charging fees for its IP rights services, as required under government cost recovery requirements (IP Australia 2012a).

A standard patent can be granted in Australia within a couple years from initial application, though it can take up to a maximum of around eight years (figure 4.3). An opposition can take one year; although three to four years has not been uncommon in the past. Recent legislative changes aim to streamline the opposition process. Once granted, the standard patent term dates 20 years from the filing date (with an extension of up to five years potentially available for pharmaceutical patents). Potential infringements of a patent date from the initial publication (disclosure) of the application and can be legally pursued (retrospectively) if a patent application is subsequently successful.

In recent years, rising demand for IP rights in an increasingly global system, and difficulties in attracting and retaining enough qualified staff, created a steady increase in the backlog of unexamined applications and a weakening in the achievement of compliance and timeliness standards (IP Australia 2012a). In 2010-11, IP Australia introduced a Product Quality Review System (PQRS) and by 2011-12, the patent backlog had been reduced by about 24 per cent from the peak level in 2010, while average examination times were reduced from 16 months to 11 months.

Figure 4.3 **Stylised overview of a standard patent application process and patent term**



^a Until recently this was up to 8 years. Under the recent Raising the Bar Act 2012 the statutory time period for responding to examination problems and obtaining reassessment was reduced from 21 to 12 months. Many applications already in progress may continue to take up to 8 years to be granted.

Source: Based on IP Australia (2013b).

Differences between international patent offices

Picard and van Pottelsberghe de la Potterie (2011) compared the demand for patents, examination resources, workload of examiners, examiner remuneration and staff turnover for the patent offices of the United States, Europe and Japan. They characterised the US patent office as a cheap and fast system, with a low-to-medium quality examination process.¹² In contrast, the European patent office was seen as a slower and more expensive system, with medium-to-high quality. The Japan patent office was assessed to be in an intermediate position. Lemley (2012) argued that the US issues a small but worrisome number of economically significant ‘bad’ patents

¹² The US processes more patents and more claims per patent (both on a per capita and per-examiner basis). Despite the higher apparent individual productivity at the United States Patent and Trademark Office (USPTO), remuneration is estimated to be lower. Staff turnover is much higher at the USPTO. ‘Quality’ is measured by the inputs (work time per examination and on-the-job experience).

(where the legal rights awarded are far broader than what their relevant inventors actually invented and hard to overturn legally).

Preliminary results from a recent empirical comparison of the examination of identical patent applications in Australia, the United States and Europe indicated materially different decisions despite generally similar tests. The investigations indicated that the terms of US and European patent grants tended to be narrower than Australian granted claims (Dent and Christie 2012).

Pre-grant time and deferred examination

In most countries, a patent application is not automatically examined after it is filed, rather, examination proceeds only after an applicant formally requests commencement of examination. The deferment period varies across countries and influences workloads and comparison of grant success rates across countries. Australia currently allows up to five years in which to request examination (figure 4.3) with the average time in recent years being 17 months (IP Australia 2013b). Three to five years is typical across many countries, although in the United States examination is undertaken without formal request by the patent applicant and in Japan and Germany it is seven years. At the German patent office, only two-thirds of all applications are ever examined as the remainder are dropped by the applicants during the deferment period (Hall and Harhoff 2012).

While longer deferment may be considered an administrative advantage in terms of reducing workloads, Hall and Harhoff identify research suggesting deferred patent examination may create uncertainty for rivals of an applicant who keeps an application in play (McGinley 2009; Henkel and Jell 2010).

Challenging and enforcing patent and trade mark rights

Administrative opposition to patent applications and grants

Patent systems typically offer some form of administrative pre- and post-grant review mechanisms that provide third parties with an opportunity for challenging the validity of an application or successful grant. (This administrative challenge is separate from the statutory provisions, noted above, which allow certain non-voluntary access to IP). Over the last decade, opposition requests in Australia have ranged between 100 and 200 per year (PC 2013) — about 0.25 to 0.5 per cent of total patent applications. About half of patents that are opposed either do not proceed or proceed after amendment (Weatherall *et al.* 2011). The median procedure time of oppositions was 865 days from commencement of opposition.

The design of opposition systems varies across countries (such as the available period for opposition, the grounds for opposition, appeal options and fees), with differences in design considered to have a material effect on usage and outcomes, particularly the much lower rate of opposition in the United States compared with the European Patent Office (Hall and Harhoff 2012).

Infringement and litigation of patents and trade marks

Once IP rights are created through law, they are typically enforced in a similar manner to property rights over land and other assets. That is, IP holders are responsible for identifying infringements of their own rights and taking action, such as letters of warning and litigation. (It is not the responsibility of IP Australia to identify infringement of registered IP rights). The different IP Acts set out the type of action that can be taken against a person who infringes those rights, as well as the legal remedies and compensation that may be ordered by a court. The court has the power to order an interim injunction pending the outcome of a trial (which can take many months).

For Australia, the court filing rate for patent disputes between 1986 and 2005 was estimated to be about 0.5 per cent of patents in force in any one year (Weatherall and Webster 2009). Most patent cases that are filed are settled privately, with only a small percentage going to trial. However, the relatively low rate of patent litigation does not mean that patent copying and alleged infringement is correspondingly low. A survey of 3700 Australian inventors found 28 per cent of patented inventions between 1986 and 2005 had been the subject of unapproved copying (Weatherall and Webster 2009). Letters warning of infringements were sent in about half these cases, and succeeded in stopping the alleged infringing behaviour in about 40 per cent of the cases. Trade mark litigation in Australia is also relatively rare, with 391 court decisions in trade mark and counterfeit cases identified in Australia between 1997 and 2003 (Bosland *et al.* 2006). Of the 391 court decisions, many were legally straightforward counterfeit cases awarded in favour of the owner, with the alleged infringer often failing to appear in court.

As a comparison, the overall rate of patent litigation in the United States in recent years has been approximately one to two per cent of patents (Hall and Harhoff 2012). For litigation in the United States, financial patents are estimated to be litigated at a rate between 27 and 39 times more often than other patents, and were predominantly being asserted by small entities or individuals against large firms (Lerner 2008). Other research has suggested that the cost of patent litigation has increased and that there are other difficult-to-quantify effects on

uncertainty arising from the operation of the legal system (Boldrin and Levine 2013).

4.6 Some recent empirical research into IP

Recent empirical research has covered a wide range of topics including the traditional focus on the incentive to invent and create, as well as new IP issues such as the impact of file sharing on copyright revenue and the coordination of multiple input patents required to produce one product. A selection of recent work is identified in this section.

The effectiveness of patents in encouraging innovation

Hall and Harhoff (2012) provide a wide-ranging survey of recent research on the economics of patents citing 210 theoretical and empirical studies. Regarding the effectiveness of patents in encouraging innovation, Hall and Harhoff (2012) formed the view from the cited studies that patents are an important incentive for innovation for a small subsector of industry (particularly pharmaceuticals, biotechnology, medical instruments and specialty chemicals).

The bottom line from the empirical evidence is that the patent system provides clear incentives for innovation in only a few sectors, but that firms and industries do respond to its presence, both by making use of the system and by sometimes tailoring their innovative strategies to its presence. (Hall and Harhoff 2012, p. 15)

Another recent review article also concludes that the relative importance of patents varies across industries and draws attention to other factors influencing innovation.

A half century of occasional research on the economics of patents has convinced me that although patents are important, other first-mover advantages are even more powerful as spurs to investment in technological innovation. Unfortunately, this knowledge does not appear to be widely diffused. Many policy initiatives proceed as if patents were the only effective stimulus to invention and innovation. The full story needs to be recognised more widely. (Scherer 2010, p. 27)

Another comprehensive study of existing empirical work concluded that there is evidence that strengthening the patent regime increases patenting, but a connection between patents and some measure of innovation or productivity has proven difficult to verify (Boldrin and Levine 2013).

The effectiveness of patent disclosure in facilitating follow-on inventions

One of the motivating factors behind the development of a patent system was the facilitation of follow-on inventions provided by disclosure of technical information relating to the patented invention (rather than remaining secret). Hall and Harhoff's (2012) interpretation of the literature is that the effects on innovation by third parties from the revelation of technical information also varies widely across industries, but that the disclosure effects are 'quite small in comparison' to the private value of patents. In fields where patents have a strong impact on appropriability such as chemicals and pharmaceuticals, disclosure effects appear to matter the most. The lack of clarity and preciseness of some patent disclosure information (for strategic and legal reasons) has been identified as impinging on the potential usefulness of disclosure, and some researchers avoid studying existing patents to avoid possible wilful infringement claims (Boldrin and Levine 2013).

Potential impediments to innovation in multiple patent scenarios

Recent research has also considered the implications of the tendency for complex products like 'smart' phones to use multiple patented inventions. Two streams of concerns have been expressed.

- The management of the take-up of technologies in an environment of multiple patents with fragmented ownership (patent thickets). A review of the patent thicket literature identified that the core feature of a patent thicket appears to be the number of patentees affected rather than the number of patents pertaining to a single product or service (IPTMAA 2013).
- The potential for 'hold-up', where a new technology unknowingly infringes a patent and a technology user is not made aware until large-scale production has commenced or is about to commence. The patent holder can use its enhanced bargaining power to hold-up production (through legal injuncture) and extract higher licensing fees. Where a single product infringes multiple patents, it may be subject to multiple royalty burdens (royalty stacking). One stream of analysis concludes that patent hold-up and royalty stacking outcomes in the United States have been systematically excessive (Lemley and Shapiro 2007; Shapiro 2010). However, some authors dispute this work (Elhauge 2008; Sidak 2007; Sidak 2009).

An investigation into access to input patents and strategies of innovative German firms found that about six per cent halted or did not start innovation projects because of problems with access to IP, and a further nine per cent reported

modifying projects or developing ‘coping mechanisms’ such as the acquisition or exchanges of IP (Mueller *et al.* 2010).¹³ About another seven per cent reported proceeding with the project without access to the necessary IP. Rates of modifying a product due to IP access issues were higher for firms in industries where IP is considered more important (such as chemicals and pharmaceuticals).

The impact of file sharing and illegal copying on copyright revenue

The former UK Strategic Advisory Board for Intellectual Property Policy commissioned an independent report on the theoretical and empirical literature pertaining to the economics of copyright and digitisation (Handke 2010). That report drew on 170 studies. On the topic of the impact of file sharing and illegal copying, the majority of studies considered in the report focused on the primary market for sound recordings and estimated that there had been a negative short-run effect on revenues. However, this was not a universal finding and the size of the estimated effect differs widely between studies.

Subsequent to the Handke work the UK Government commissioned the Independent Review of Intellectual Property and Growth (Hargreaves 2011). This review included a comprehensive stocktake of surveys and claims of the cost of copyright infringement. It observed wide variation in estimates and expressed concerns about the surveys’ methodologies. The review concluded that creative businesses are experiencing turbulence and uncertainty about present and future copyright infringement but the measured impact on the creative business sector as a whole is not as stark as some suggest.

The Australian Competition and Consumer Commission (ACCC) drew on the literature covered by Handke in its submission to the current Australian Law Reform Commission (ALRC review of copyright and the digital economy, noting that most analysis of copyright was incomplete as the benefits to consumers and intermediate users of file sharing were typically not considered (ACCC 2012).

One study since the Handke literature review — on films — found evidence of a relatively small sales revenue displacement effect of illegal copying on Australian box office releases (McKenzie 2013) The study found that the release gap between the United States and Australian markets is a key contributor to piracy early in a film's theatrical life which provides a partial explanation of the industry's increasing trend towards coordinated worldwide releases.

¹³ These results were presented in Australia in 2012 at Intellectual Property Research Institute of Australia (IPRIA) organised seminars. The bibliography in Mueller *et al.* (2010) provides a guide to recent analysis.

4.7 Review activity in Australia

There has been a progressive increase in formal reviews of the Australian IP system (section 4.2). The breadth of modern IP issues and the changing nature of the economic and legal environment pertaining to IP has given rise to frequent review activity.

Past review activity

The first formal reviews of IP in Australia appear to have been conducted about three decades after the first laws were introduced (Caine and Christie 2005). In 1933, there was a Royal Commission on Performing Rights (the Owen Committee). This was followed in 1935 by a review of patents law (Knowles Committee) and in 1938 by a review of trade marks law (also a Knowles Committee). After this, review activity remained low and sporadic for another 40 years. Review activity (relating to patents, trade marks, design and copyright) then accelerated, with 24 reviews between 1976 and 1990 and then a further 39 reviews in the next 15 year period (1991 to 2005). There has been no stocktake of reviews since Caine and Christie in 2005.

The reviews into aspects of IP have been conducted by a wide range of bodies including: dedicated IP standing bodies (the Copyright Law Review Committee, Advisory Council on Intellectual Property, and the Intellectual Property Advisory Committee); Parliamentary standing committees (both Senate and House of Representatives); government departments; other government bodies (such as IP Australia, the Prices Surveillance Authority, the National Competition Council and the Productivity Commission); other permanent bodies (such as the Australian Law Reform Commission and the Professional Standards Board for Patent and Trade Marks Attorneys); and one-off appointed committees (with a chairperson).

One of the most recently completed reviews was by the Productivity Commission into the compulsory licensing provisions in the *Patents Act 1990* (PC 2013). It included recommendations to:

- remove overlap and inconsistency between provisions addressing anticompetitive behaviour in the *Competition and Consumer Act 2010* (Cwlth) and *Patents Act 1990* (Cwlth);
- replace criteria based on the ‘reasonable requirements of the public’ in the *Patents Act* with a ‘public interest’ test;
- reduce uncertainty about international treaty obligations on compulsory licensing; and

-
- clarify when Crown use can be invoked by governments, and improve the associated transparency and accountability.

Review of IP within broader frameworks

While reviews of IP have tended to focus on particular aspects of the IP system and its applicability to changing technologies and ways of working, IP rights and law have also been considered in the context of broader frameworks of competition policy, innovation policy and trade policy.

- In 1999, the National Competition Council reviewed the exemption of elements of IP from some provisions of the Trade Practices Act (NCC 1999).
- IP laws were reviewed in 2000 (Ergas committee) under the Competition Principles Agreement of Australia's National Competition Policy (IPCRC 2000).
- The Productivity Commission's 2007 research report on public support for science and innovation (PC 2007) discusses impediments in the IP system identified by participants, and the management of IP in universities and publicly funded research agencies.
- The 2008 review of Australia's innovation system (Cutler review) briefly discussed the inventive steps required to qualify for patents (Cutler 2008)
- The Productivity Commission study into Bilateral and Regional Trade Agreements (PC 2010b) assessed the inclusion of IP provisions in trade agreements.

Current reviews

A number of current reviews highlight the diversity of IP matters and the continual need to regularly reconsider IP laws and systems in light of changing (and sometimes unforeseen) circumstances.

- The Australian Law Reform Commission is considering whether exceptions and statutory licences in the *Copyright Act 1968* are adequate and appropriate in the digital environment and whether further exceptions should be recommended (ALRC 2012).¹⁴
- The Attorney-General's Department is undertaking a Review of Technological Protection Measure Exceptions made under the *Copyright Act 1968* (AGs 2013).

¹⁴ IP Australia has submitted to the review examples of how copyright law impedes its own administration of IP rights.

Technological protection measures are technical locks copyright owners use to stop their material being copied or accessed without permission.

- The Advisory Committee on Intellectual Property has two public reviews in train; one on the Innovation Patent System and another on the Design System (ACIP 2013).
- A review of pharmaceutical patents is evaluating whether the system for pharmaceutical patents is effectively balancing the objectives of securing timely access to competitively priced pharmaceuticals, fostering innovation and supporting employment in research and industry (IP Australia 2013a). Amongst other things, the draft report to this review included for public comment draft recommendations for greater scrutiny of IP provisions in trade agreements and a medium-term review of Raising the Bar reforms (PPRP 2013).

4.8 Some concluding remarks

IP law is long established and has evolved over the centuries in response to changing economic circumstances. The inclusion of IP in the global trading system that accompanied the establishment of the World Trade Organization (WTO) in 1995 signalled the further elevation of IP in economic policymaking.

An underlying motivation of much IP law is to facilitate trade and commerce, either through providing incentives for inventiveness and creativity, or through revealing information about new inventions and ways of working to the market while preserving the proprietary rights of the IP owners. A stream of IP law also seeks to acknowledge the moral rights of creators and performers over their talents.

The tradeoffs entailed in IP arrangements have been recognised in two recent reports by the Commission, one dealing with bilateral and regional trade agreements (PC 2010b) and the other with compulsory licensing of patents (PC 2013). The latter notes in the case of patents:

A patents system involves a tradeoff between encouraging innovation and facilitating access to new technologies. In particular, the right to exclude others from using a patented invention is central to providing innovators with a means to benefit financially from their efforts, but it also has the potential to hinder the community's access to new technologies. A patent that provides a greater reward than needed to induce an invention could reduce the invention's net benefit to the community as a whole, and result in a greater share of the benefits going to the patent owner. In cases where there are no substitutes for the invention, a patent could also facilitate monopolistic and/or anticompetitive behaviour. (PC 2013, p. 6)

Complex legal systems and administrative frameworks have been established to manage IP law. National systems of IP law are complemented by international frameworks and treaties. Australia has ratified a number of international treaties and is a signatory or observer to others. Australia also has a substantive tradition of review and public debate concerning the implications for IP law of changing technology, ways of working and evolving community norms. An inquiry into compulsory licensing of patents has just been completed and reviews are current in the areas of the implications of the digital economy on copyright and the pharmaceutical patents system, amongst other matters.

Empirical research suggests that the relevance and impact of IP law varies between activities, while administrative arrangements can have separate effects on IP activity and its use in trade and commerce.

Topic-specific reviews, including assessment of recent changes such as the Raising the Bar reforms, will continue to be needed from time-to-time to ensure that economic, legal and administrative frameworks remain up to date. For a diverse topic area such as IP, an issue is whether there would be a role in the medium term for an independent over-arching framework-style review, as has occurred in Australia in other areas, for example, the financial system and consumer policy.

5 Recent developments in trade policy

This chapter reports on selected developments in Australia's trade policy, including:

- post-GFC trade developments;
- continued efforts to conclude the Doha Round of multilateral trade negotiations;
- ongoing negotiation of preferential bilateral and regional trade agreements, and the intention to initiate further agreements;
- international trade disputes at the World Trade Organization (WTO) that involve Australia; and
- other recent trade policy developments and program reviews.

The chapter is supported by appendix C which provides information on recent anti-dumping and countervailing duty cases in Australia.

5.1 Post-GFC trade developments

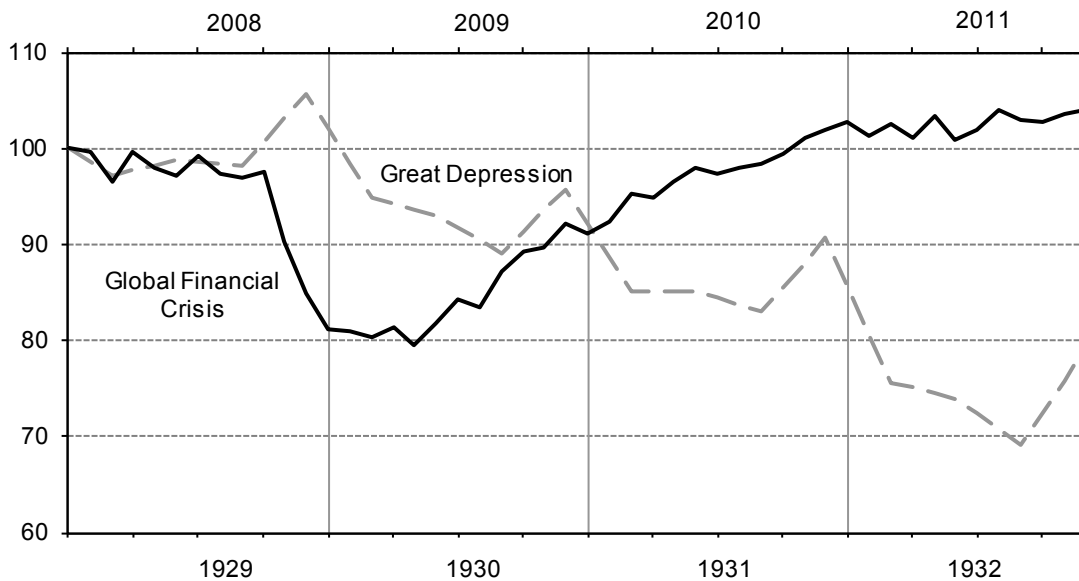
The GFC has been associated with significant disruption of global financial markets and some asset markets, the effects of which have been felt unevenly across the globe.

When the crisis began in 2008, world trade contracted more severely and rapidly than had occurred during the Great Depression (figure 5.1). One of the key risks then associated with the initial decline in trade and economic activity was an outbreak of protectionist policies, which could have risked extending the decline in global trade and economic activity, as occurred following the Great Depression.

The risk of increased protectionism and associated economic costs were recognised and a number of warnings were issued by bodies such as the OECD, which noted:

Open markets for trade and investment are a key driver of economic growth and development. Keeping markets open will therefore be an essential condition for recovery and long-term growth. Yet, just as the need to maintain open markets is greatest, concerns about the consequences of liberalisation and the perception that liberalisation may have even contributed to the current crisis have been growing. If these concerns result in a wavering commitment to multilateralism and in rising protectionism, the crisis will become even worse and recovery will be delayed. (OECD 2008, p. 8)

Figure 5.1 World merchandise trade by volume



Sources: CPB (2012); League of Nations (1939).

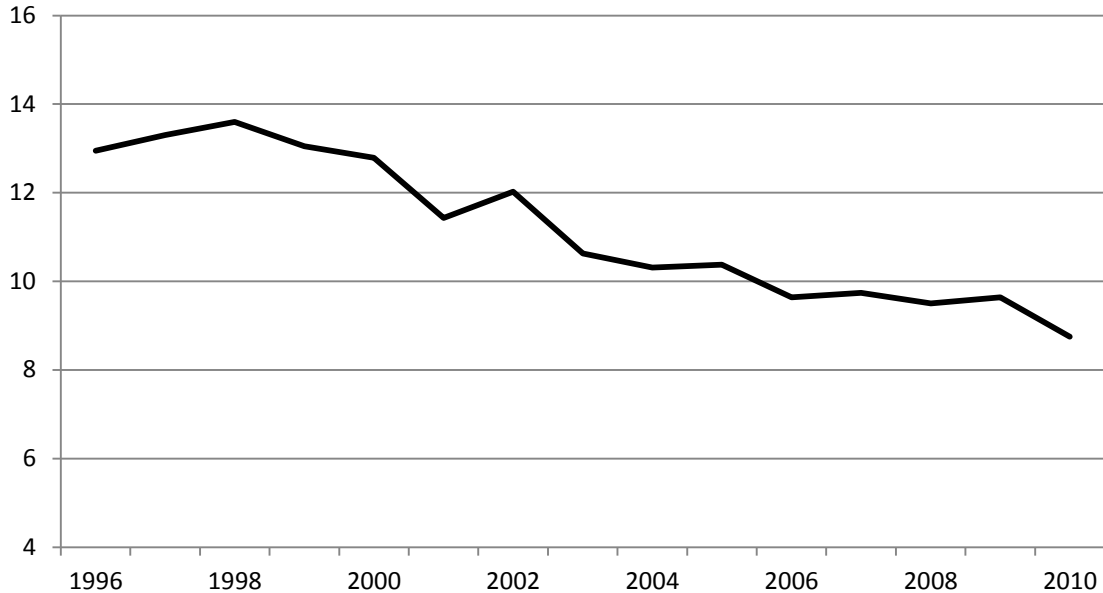
Governments across the globe also acknowledged the risks and made high-level commitments to avoid protectionist policies. For instance, the G-20, in its November 2008 Declaration, stated:

We underscore the critical importance of rejecting protectionism and not turning inward in times of financial uncertainty. In this regard, within the next 12 months, we will refrain from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing World Trade Organization (WTO) inconsistent measures to stimulate exports. (G-20 2008)

While global trade has since recovered, and now exceeds pre-GFC levels (figure 5.1), and average tariffs worldwide have continued on a downward trend (figure 5.2), the onset of the crisis was marked by an increase in the incidence of protectionist measures. The implementation of new protectionist measures has continued, although the rate of expansion appears to have moderated more recently (figure 5.3). Further, some of these measures have been temporary. For instance, in its May 2012 report, the WTO noted that nearly one fifth of measures that were introduced by G-20 countries from 2008 had since been removed (WTO 2012a).

Figure 5.2 **World tariff rates (simple mean), 1996-2010^a**

Per cent



^a The simple mean of most favoured nation (MFN) tariff rates is the unweighted average of MFN rates for all products subject to tariffs calculated for all traded goods. Data are classified using the Harmonized System of trade at the six- or eight-digit level. Tariff line data were matched to Standard International Trade Classification (SITC) revision 3 codes to define commodity groups.

Source: World Bank (2013).

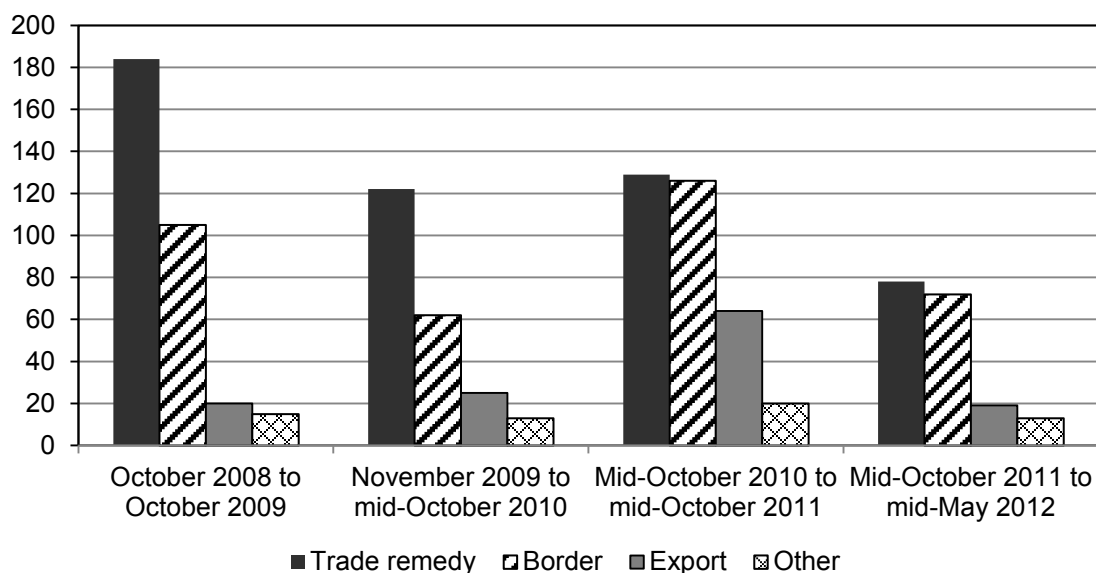
Trade remedies (such as anti-dumping investigations) have been the most common measure, followed by border measures (which include some instances of increases in tariffs). Combined, these two categories account for the bulk of the new measures (figure 5.3). While the number of measures is a poor indicator of the aggregate restrictiveness of measures on trade and does not identify their economic impact, it does provide an indication of government trade-measure activity.

In his 2012 report on trade-related developments, the Director-General of the WTO expressed the concern that the implementation of new measures is continuing to add to the stock of trade restrictions:

The new measures restricting or potentially restricting trade that were implemented over the past seven months are adding to the trade restrictions put in place in previous periods. The accumulation of trade restrictions is becoming a matter of concern. Moreover, this has to be considered in a broader perspective where the stock of trade restrictions and distortions that existed before the global crisis struck, such as in agriculture, is still in place. (WTO 2012a, p. 1)

Figure 5.3 Implementation of trade restrictive measures by WTO members^a

Number of measures



^a Includes measures notified to the WTO that restrict, or have the potential to restrict trade. The potential impact of the respective measures are not necessarily comparable.

Sources: WTO (2011, 2012a).

There also appears to have been a shift in the policy emphasis of the trade remedies and other trade-restricting measures being implemented. In this regard, the Director-General of the WTO has noted:

The more recent wave of trade restrictions seems no longer to be aimed at combatting the temporary effects of the global crisis, but rather at trying to stimulate recovery through national industrial planning, which is an altogether longer-term affair. In addition to trade restrictions, many of these plans envisage the granting of tax concessions and the use of government subsidies, as well as domestic preferences in government procurement and local content requirements. (WTO 2012a, p. 2)

Separate monitoring of the implementation of trade-restricting policies, such as that undertaken by Global Trade Alert, also points to a continued increase in protectionism over recent years (Evenett 2012). In this monitoring, the majority of identified new measures were implemented by G-20 countries, in spite of the high-level public assurances to eschew protectionism. Further, the monitoring indicates that crisis-era protectionism has been dominated by non-traditional forms of protectionism (such as direct industry assistance, export taxes/subsidies, investment restrictions and government procurement requirements):

During the crisis era, then, governments have circumvented tougher WTO rules and used beggar-thy-neighbour policies subject to less demanding or no binding

multilateral trade rules. Much of that discrimination is pretty non-transparent — that is, it is murky protectionism. (Evenett 2012, p. 2)

Concern has also been expressed about the impact of countries using competitive devaluations to improve their trade performance post-GFC. A communique of Ministers of Finance and Central Bank Governors of the G20 stated:

... we reiterate our commitments to move more rapidly toward more market-determined exchange rate systems and exchange rate flexibility to reflect underlying fundamentals, avoid persistent exchange rate misalignments and refrain from competitive devaluation of currencies; to boost domestic sources of growth in surplus economies, and boost national savings in deficit economies. We reiterate that excess volatility of financial flows and disorderly movements in exchange rates have adverse implications for economic and financial stability. (G20 2012, p. 2)

The Director-General of the WTO recently also referred to the need for reform of the international monetary system to facilitate international trade and investment (Lamy 2012b).

With regard to protective measures, while on one hand, available evidence suggests that the incidence of such measures has risen, on the other hand, the actual monitoring of changes is encountering difficulties — for example, only eight delegations had volunteered information on government support for the preparation of the WTO Director-General's 2012 report on trade-policy developments (WTO 2012a). In response, he has suggested improvements in transparency and peer review:

A complete and timely notification of all trade and trade-related measures will help strengthen WTO's trade monitoring. One specific area where efforts need to be heightened is in the field related to government support measures where the monitoring of developments is more complex and the relevant information publicly available is scarcer. Enhanced multilateral peer review should help Members abide by their commitments. (WTO 2012a, pp. 3-4)

While the impacts of the GFC on trade and protectionist measures are still unfolding, and concerns continue to be raised about the increased incidence of trade restricting measures, there are a number of factors which may be acting to moderate a possible shift to even greater protectionism. These include the constraining effects of multilateral trade rules, and the higher costs of protection associated with the increased global integration of manufacturing and commerce accompanied by higher trade of intermediate products.

The future of the multilateral trading system was discussed by the Director-General of the WTO at the Productivity Commission's 2012 Richard Snape Lecture. Lamy drew attention to, amongst other things, the adverse effects of protectionism in the context of increasing trade in intermediate products, that is, of country dependence on imports to supply their export markets (box 5.1).

Box 5.1 Lamy's 2012 Richard Snape Lecture

Pascal Lamy, Director-General of the WTO, delivered the Commission's 2012 Richard Snape Lecture on 26 November, addressing *The Future of the Multilateral Trading System*. Lamy highlighted that the global economic outlook has increased the risks of higher protectionism:

... there has been worrying signs of the traditional propensity of nation-states to turn inwards when the global economic outlook is bad, but for the most part, countries have exercised restraint. There is the fear however that if unemployment and economic stagnation persists, this discipline may be tested. (p. 3)

He then stated that:

Protectionism does not work however. Closing off markets would be a mistake in a world where hampering imports will actively harm prospects for exporting success. Protectionism does not protect. It does not strengthen economies and it does not save jobs. Governments protect people by supporting domestic economic growth and social protection, not by resorting to short-term policies that may benefit the few at the expense of the many. (p. 3)

Lamy then discussed the changing nature of international trade, pointing to the increase in trade by developing countries, including increasing trade flows between developing countries. He also emphasised that trade is increasingly being made up of intermediate components rather than just final products:

Increasingly countries are trading in intermediates not final products. The concept of made in country X is becoming obsolete as we see the exponential increase of trade in intermediates or trade in tasks — where components of goods and services are produced and assembled in different countries. ... This is why, as I intimated earlier, enacting protectionist measures, which could be trade distorting or trade diversionary, will actually have an inverse reaction in economies which are increasingly reliant on imports to complete their exports. (p. 6)

Lamy also outlined the role of the WTO, noting the importance of improved transparency provided through the monitoring and surveillance functions of the WTO:

The WTO, in many ways, is one of the most successful examples of rules-based multilateralism at work. Its capacity to administer and enforce the global trade rules especially through its monitoring and surveillance function has been a major input into preventing a widespread resort to protectionist measures. (p. 11)

Source: Lamy (2012a).

As the Commission has noted previously (PC 2009b), good transparency processes can be used as a basis to begin unwinding protective measures introduced in response to the crisis, and, more generally, to progress multilateral reform in new areas.

5.2 Trade negotiations and agreements

Doha Round negotiations

The Doha Round of multilateral trade negotiations was launched in 2001 with an ambitious agenda.¹ Originally, the goal was to conclude negotiations by 2005, but a conclusion is not yet in sight. One feature of the negotiations contributing to the delays is the ‘single undertaking’ condition, whereby no agreement can be reached until there is consensus amongst all parties across the entire scope of the agreement.

In order to progress the Doha agenda, the Australian Government has been promoting a ‘new pathways’ approach that involves attempting to conclude on those areas of the agenda where agreement might be more attainable. Two areas being pursued by the Australian Government as candidates for early completion are negotiations on trade facilitation and a plurilateral agreement on trade in services (Australian Government 2012a).

Trade facilitation is aimed at reducing barriers to trade, such as customs procedures. Estimates put the trade facilitation agreement as contributing almost half of the benefits that could accrue from completion of the Doha Round (Australian Government 2012a).

Non-tariff measures are a substantial source of impediments to global trade in their own right, but their relative importance has also increased over time, as average applied tariffs have decreased since the conclusion of the Uruguay Round. In regard to non-tariff measures, the WTO’s *World Trade Report 2012* reported, amongst other things, that:

- the range of non-tariff measures (on goods trade) and measures affecting services is vast, covering a broad range of different measures, further there is a

¹ The list of topics covered by the Doha Round covers traditional tariff and non-tariff measures and a wide range of other measures, namely: intellectual property, investment rules, competition policy, transparency in government procurement, trade facilitation, anti-dumping, regional trade agreements, dispute settlement understanding, environment, e-commerce, small economies, debt & finance, technology transfer, capacity building, least-developed countries, special & different treatment.

lack of transparency, and in many cases, it is the way in which measures are administered, rather than the measures per se, that represents the greatest barrier;

- while non-tariff measures can have genuine public policy objectives, they are often used for protectionist purposes; and
- the mix of measures is constantly changing and when measures are subject to stricter disciplines there is the risk of substitution towards less regulated or transparent replacements (WTO 2012b).

On services, Australia is currently co-chairing, with the United States, plurilateral negotiations amongst 48 WTO members on liberalisation of trade in services. A plurilateral agreement (which would be known as the ‘Trade in Services Agreement’) amongst these parties would cover around 70 per cent of global services trade, but could be expanded further through the participation of other WTO members (Australian Government 2012a).

Asia-Pacific Economic Cooperation

The broad objectives of the Asia-Pacific Economic Cooperation (APEC) are to promote free and open trade and investment, accelerate regional economic integration, encourage economic and technical cooperation, enhance human security, and facilitate a favourable and sustainable business environment (APEC 2012a). APEC operates on the basis of non-binding commitments and open dialogue. All decisions are reached by consensus and undertaken on a voluntary basis.

APEC’s 21 member economies account for 56 per cent of the world’s GDP, 40 per cent of world trade and more than 70 per cent of Australia’s trade in goods and services. APEC has been instrumental in achieving reductions in trade and investment barriers by member countries since its formation in 1989. This has been achieved through step-by-step, voluntary cooperation on practical issues, simplifying customs procedures, improving logistics and infrastructure, and encouraging unilateral trade and investment liberalisation.

The 20th APEC Economic Leaders’ Meeting was held in Vladivostok, Russia in September 2012. Leaders reaffirmed the commitment of APEC economies to the multilateral trading system, working towards successful conclusion of the Doha Round and the pledge to refrain from the introduction of new protectionist measures until the end of 2015. In addition, commitment was reached for APEC economies to reduce their applied tariffs on a list of 54 products designated as environmental goods (this includes products such as solar panels and waste treatment items) to 5 per cent or less by the end of 2015 (APEC 2012b).

APEC also facilitates capacity building initiatives amongst member economies.² Its extensive network of officials-level committees address issues pertinent to regional cooperation and identify capacity building projects. APEC contributes funding to upwards of 100 of these programs each year.

Preferential trade agreements

Australia has had some long standing preferential trade agreements with New Zealand, the Forum Island Countries,³ Papua New Guinea and Canada. In the last decade, Australia has also entered into agreements with: Singapore, (entered into force on 28 July 2003); Thailand (1 January 2005); the United States (1 January 2005); Chile (6 March 2009); and ASEAN and New Zealand (1 January 2010). The Malaysia-Australia agreement entered into force on 1 January 2013.

Further bilateral agreements are currently being pursued with China, Japan, Korea, Indonesia and India, although some of these negotiations have been protracted — for instance, negotiations with China commenced in 2005.

Australia is involved in negotiations for a number of regional agreements:

- a proposed Pacific Agreement on Closer Economic Relations (PACER) Plus agreement with Pacific Islands Forum members;
- an agreement with the Gulf Cooperation Council (GCC);⁴
- a proposed Trans-Pacific Partnership (TPP) Agreement that would, on conclusion, expand on the current Trans-Pacific Strategic Economic Partnership Agreement between Brunei Darussalam, Chile, New Zealand and Singapore (which entered into force in 2006), to include Australia, Canada, Peru, Malaysia, Mexico, the United States, Vietnam, and Japan; and

² As part of APEC's New Strategy for Structural Reform program, the Productivity Commission is involved in a twinning program, whereby it is hosting officials from other APEC economies to impart its experiences as an advisory body to government.

³ Under the South Pacific Regional Trade and Economic Co-operation Agreement (SPARTECA), Australia and New Zealand have a non-reciprocal agreement which offers duty free or concessional access for goods originating from the Forum Island Countries, which include: Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu and Western Samoa.

⁴ The GCC has suspended negotiations pending a review of their trade agreement policy.

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- the ASEAN-originated Regional Comprehensive Economic Partnership (RCEP), which includes the 10 ASEAN members,⁵ as well as China, India, Japan, Korea and New Zealand.

Australia-New Zealand Closer Economic Relations

The Closer Economic Relations (CER) agreement between Australia and New Zealand entered into force in 1983. While the initial focus of the agreement was on merchandise trade, the CER agenda was progressively expanded to cover matters including trade in services, business regulation, taxation and government procurement. An investment protocol came into force on 1 March 2013.

In January 2012, the Australian and New Zealand Governments agreed that the Productivity Commissions of the two countries would conduct a joint study on the options for further reforms to enhance integration and improve economic outcomes across the countries. The final report was submitted to both governments in December 2012 (Australian Productivity Commission and New Zealand Productivity Commission 2012).

Some key points from the study include:

- the Commissions' qualitative assessment is that CER has produced benefits overall for Australia and New Zealand, even though evidence is limited in some areas;
- CER initiatives have contributed significantly to trans-Tasman integration over the past 30 years; and
- barriers to further integration remain and new issues will emerge, often in complex areas including the regulation of services.

The study made 32 recommendations aimed at furthering (beneficial) integration. Most are intended to reduce regulatory barriers to services trade and commercial presence, and some remaining impediments to integration in goods, capital and labour markets.

At their February 2013 Leaders' Meeting, the Prime Ministers of Australia and New Zealand welcomed the findings and recommendations of the joint study and 'committed to finalising their joint response to the report by mid-2013 with an

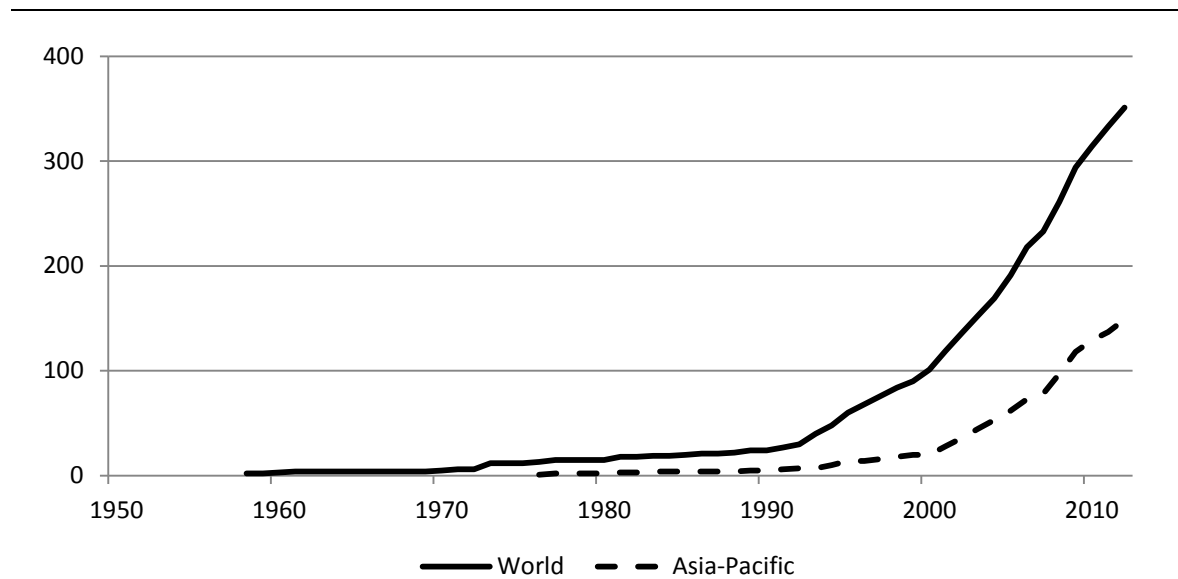
⁵ ASEAN members include Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei Darussalam (7 January 1984), Viet Nam (28 July 1995), Lao PDR (23 July 1997), Myanmar (23 July 1997) and Cambodia (30 April 1999).

emphasis on measures that will produce net trans-Tasman benefits' (Gillard and Key 2013).

Asia-Pacific regional agreements

In the Asia-Pacific region, the number of preferential trade agreements has increased substantially over the last two decades or so. In 1990, there were only five agreements in force in the region, accounting for around 20 per cent of agreements across the globe (figure 5.4). By 2000, 20 agreements were in force in the Asia-Pacific, including regional agreements such as the NAFTA and ASEAN agreements. By the end of 2012, the number of preferential trade agreements in force in the region had risen to 150, accounting for over 40 per cent of global agreements.

Figure 5.4 **Number of trade agreement notifications to the WTO, January 2013^a**
Number and date of entry into force

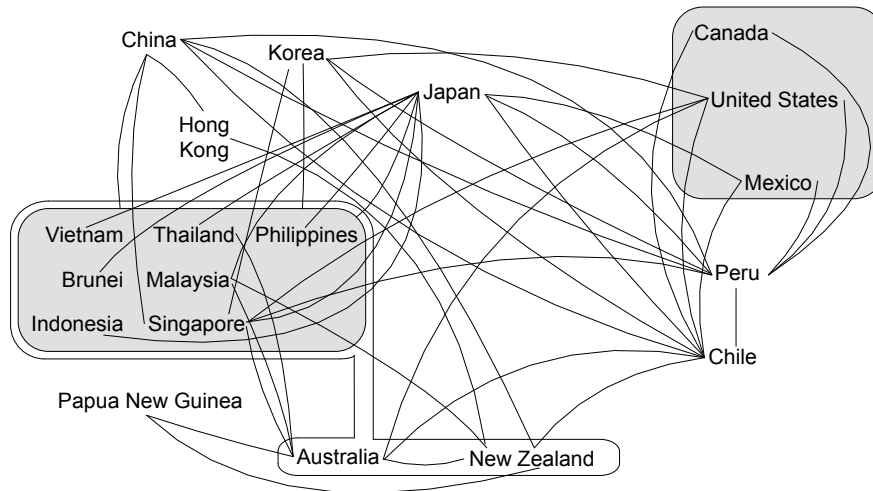


^a Only includes agreements that are presently in force. Includes notifications under the Enabling Clause, GATT Art. XXIV and GATS Art. V. An agreement covering goods and services would require two separate notifications (in two instances, an agreement has three notifications, and one goods only agreement has two notifications). The Asia-Pacific category includes countries in South-East Asia, East Asia, Pacific Islands, and countries in North, Central and South America bordering the Pacific.

Source: Commission estimates based on WTO (2013b).

The large number of preferential trade agreements entered into in recent years means that such agreements potentially cover a large proportion of bilateral trade flows. The prevalence and over-lapping nature of these agreements among APEC economies is illustrated in figure 5.5.

Figure 5.5 Inter-linkages between PTAs in the APEC economies



Sources: Based on Lloyd and Maclaren (2004) and WTO (2013b).

As noted, Australia is already a party to nine agreements in the Asia-Pacific region, is negotiating a further four bilateral agreements and is participating in the negotiation of three new regional agreements — the Pacific Agreement on Closer Economic Relations (PACER) Plus, Trans-Pacific Partnership (TPP) and Regional Comprehensive Economic Partnership (RCEP).

The Australian Government’s stated ‘highest regional trade negotiation priority’ is the conclusion of a Trans-Pacific Partnership agreement (DFAT 2012). Australia decided to participate in the negotiations towards such an agreement in 2008. The first formal round of negotiations were held in Melbourne in March 2010. The most recent (seventeenth) round was held in May 2013 in Lima. Over the course of the process, the number of participating nations has increased, with Mexico and Canada joining the negotiations in mid-2012. In April 2013, Japan accepted an invitation to join the negotiations.

Negotiations for the proposed Regional Comprehensive Economic Partnership (RCEP) were launched at the East Asia Summit in November 2012. The negotiations will be guided by a set of guiding principles and objectives that were agreed to by the negotiating countries (ASEAN 2012). In addition to matters typically covered in preferential trade agreements (such as trade in goods and services, investment, competition, intellectual property, and dispute settlement), the negotiations will also cover matters relating to economic integration, development and cooperation. The guiding principles and objectives recognise ‘ASEAN centrality in the emerging regional architecture’.

RCEP negotiations are scheduled to be completed by the end of 2015. The completion of RCEP could help realise an ASEAN Leaders agreement to:

... hasten the establishment of the ASEAN Economic Community by 2015 and to transform ASEAN into a region with free movement of goods, services, investment, skilled labour, and freer flow of capital. (ASEAN 2007, p. 5)

In regard to the negotiations towards both the TPP and RCEP, the Australian Government stated in its Asian Century White Paper:

There are different possible pathways to a free trade area of the Asia–Pacific. The Trans-Pacific Partnership Agreement negotiations involve 11 APEC members and membership is likely to continue expanding. Australia will support the November 2012 launch of, and participate in negotiations for, the Regional Comprehensive Economic Partnership involving ASEAN, Australia, China, India, Japan, New Zealand and South Korea. (Australian Government 2012a, p. 208)

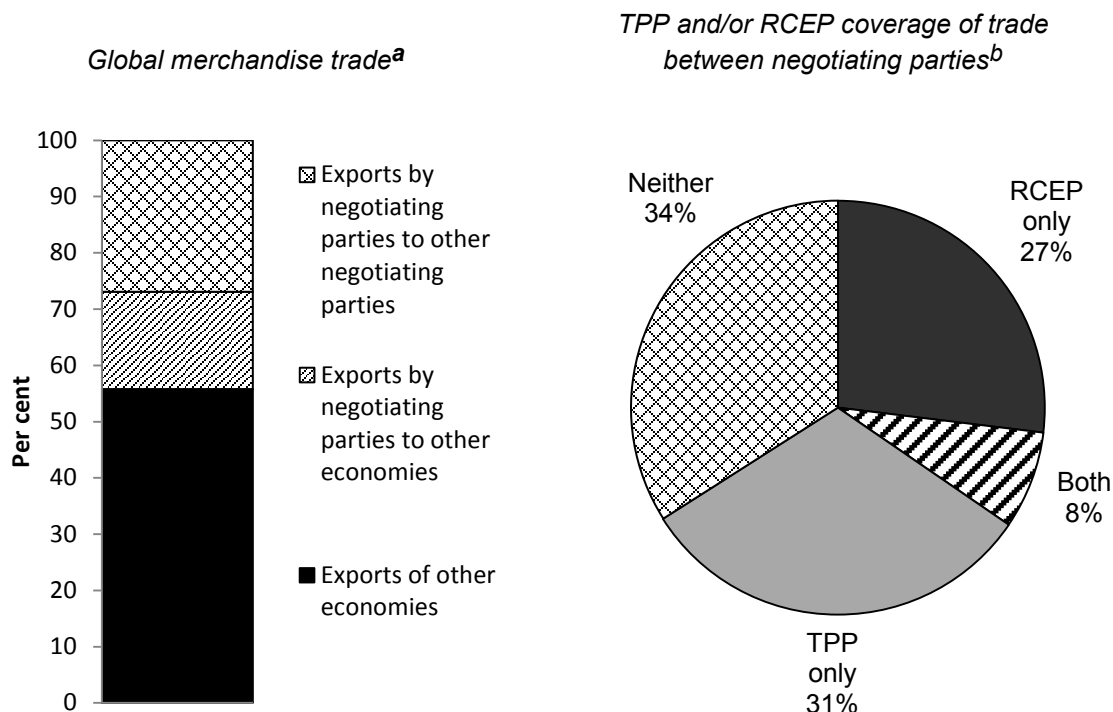
The two agreements, if formed to include the current negotiating parties, would constitute two separate trading blocs with little overlap in member-to-member trade. Trade between the negotiating parties of either agreement collectively accounts for around 27 per cent of total global merchandise trade (figure 5.6, left hand panel). Almost one third of the trade between negotiating parties would be covered only by the TPP, while a bit over a quarter would only be covered by RCEP (figure 5.6, right hand panel). A relatively small share of bilateral trade between negotiating parties would be covered by both agreements. Around one third of the trade between negotiating parties to either agreement, however, would not be covered — mainly because a substantial portion of this trade is between the United States (a negotiating party to the TPP) and each of China and South Korea (negotiating parties to RCEP).

Future Australian engagement in preferential trade agreements

In late 2009, the Commission commenced a study on the ‘impact of bilateral and regional trade agreements on trade and investment barriers and on Australia's trade and economic performance’. Some of the key points from the study are reproduced in box 5.2.

Following the Commission's final report, the Australian Government (2011) released a trade policy statement, which included its responses to the Commission's report. The Government indicated that it agreed with most of the Commission's recommendations, save for some elements of the recommendations relating to undertaking independent quantitative analysis on both the potential gains from an agreement and on the negotiated outcomes prior to ratification.

Figure 5.6 Contribution of TPP and RCEP negotiating parties to global merchandise trade and potential coverage of agreements, 2010
Per cent



^a Calculated with reference to global exports. ^b Calculated with reference to exports by the 21 negotiating parties to RCEP and/or the TPP to other members, except for Brunei and Lao PDR, where reported imports by other members from these two countries have been used. There are 16 negotiating parties to RCEP and 12 negotiating parties to the TPP, with 7 countries being negotiating parties to both.

Source: Commission estimates based on Comtrade (2013) data.

The trade policy statement outlined five principles to guide Australia’s trade policy — unilateralism, non-discrimination, separation of trade and foreign policy, transparency, and the indivisibility of trade policy and economic reform. Citing these as a basis, the Australian Government identified the following as guiding the negotiation of further trade agreements:

- Multilateral agreements offer the largest benefits;
- Regional and bilateral agreements must not weaken the multilateral system – they must be genuinely liberalising, eliminating or substantially reducing barriers to trade;
- Australia will not seek to entrench preferential access to markets in trade negotiations, but simply an opportunity to compete on terms as favourable as anyone else’s;
- Australia will not allow foreign policy to dictate parties to and the content of trade deals;

Box 5.2 The Commission's study on bilateral and regional trade agreements (BRTAs)

Some of the key points from the Commission's 2010 study include:

- Theoretical and quantitative analysis suggests that tariff preferences in BRTAs, if fully utilised, can significantly increase trade flows between partner countries, although some of this increase is typically offset by trade diversion from other countries. The increase in national income from preferential agreements is likely to be modest.
- The Commission received little evidence from business to indicate that bilateral agreements (to date) had provided substantial commercial benefits. This may be because the main factors that influence decisions to do business in other countries lie outside the scope of BRTAs.
- Domestic economic reform offers relatively large economic benefits and should not be delayed to retain 'bargaining coin'.
- In the international arena, the Australian Government should continue to pursue progress in the Doha Round.
- While BRTAs can reduce trade barriers and help meet other objectives, their potential impact is limited and other options often may be more cost-effective.
- Current processes for assessing and prioritising BRTAs lack transparency and tend to oversell the likely benefits. To help ensure that any further BRTAs entered into are in Australia's interests:
 - Pre-negotiation modelling should include realistic scenarios and be overseen by an independent body. Alternative liberalisation options should also be considered.
 - A full and public assessment of a proposed agreement should be made after negotiations have concluded — covering all of the actual negotiated provisions.
- Matters that could increase barriers to trade, raise costs or affect established social policies should not be included in future agreements without a review of the implications and available options. More specifically, the Government should avoid the inclusion of IP matters as an ordinary matter of course. It should also seek to avoid the inclusion of investor-state dispute settlement provisions that confer additional substantive or procedural rights on foreign investors beyond those enjoyed by Australian investors.
- The Government should also develop and publish an overarching trade policy strategy, to better coordinate and track the progress of trade policy initiatives, and to ensure that efforts are devoted to areas of greatest likely return.

Source: PC (2010b).

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- The public will be well informed about negotiations for, and the content of, proposed trade agreements and have an opportunity for input; and
 - Australia will press ahead with domestic economic reform irrespective of whether other countries agree to reform their economies. (Australian Government 2011, p. 9)

More recently, in its White Paper, *Australia in the Asian Century*, the Australian Government outlined a number of commitments relating to trade and investment. It recommitted to existing schedules to lower tariffs and to commitments encompassed by trade agreements. It also committed to work towards reducing unnecessary domestic regulatory impediments to cross-border business activity, investment and skilled-labour mobility. On its preferential trade agreement agenda, the Government expressed its support for an Asia-Pacific regional agreement, and confirmed its commitment to regional and bilateral negotiations currently underway (Australian Government 2012a).

5.3 Dispute settlement in the global trading system

Disputes under WTO

Dispute settlement is central to the multilateral trading system under the WTO. It helps make global trade more secure and predictable. Disputes are dealt with by the WTO's Dispute Settlement Body (DSB), which follows defined rules and specified timetables in resolving a case. Since the WTO's inception in 1995, 458 disputes have been initiated (by 3 May 2013) under the dispute settlement system (WTO 2013a).

Australia has been a complainant in 7 cases since the commencement of the WTO in 1995 and has been a third party in 79 cases between WTO Members.

Fourteen complaints have been lodged against Australia since 1995. The last four have concerned certain Australian laws and regulations relating to plain packaging requirements for tobacco products. Separate complaints were lodged by Ukraine (DS434 — 13 March 2012), Honduras (DS435 — 4 April 2012), the Dominican Republic (DS441 — 18 July 2012) and Cuba (DS458 — received by Australia on 6 May 2013). After 60 days, if consultations have failed to resolve the complaint, the complainants may request adjudication by a panel. The first three complainants have requested the establishment of a panel, but to date, only in the Ukraine case has a panel been subsequently established (on 28 September 2012). The more recent Cuba case is at the consultation stage.

As alluded to above, countries can request to join disputes as a third party where they have a substantial interest in the matter. There are numerous third parties to the current disputes against Australia.⁶

Investor-state dispute legal proceedings against the Australian Government

Some trade agreements and investment treaties entered into by the Australian Government contain investor-state dispute settlement (ISDS) provisions for settling disputes between an investor of one party to the agreement and the other government. Under the provisions, dispute settlement options can include third-party arbitration.

Pursuant to the *Agreement between the Government of Australia and the Government of Hong Kong for the Promotion and Protection of Investments*, which entered into force in 1993, Philip Morris Asia Limited has lodged a dispute against the Australian Government over its tobacco plain packaging requirements, which is subject to third-party arbitration. A tribunal was constituted on 15 May 2012. Philip Morris Asia Limited filed its Statement of Claim on 28 March 2013. Australia is due to file its Statement of Defence by 23 October 2013. A hearing on bifurcation (whether to split the hearing into a preliminary jurisdictional phase and a subsequent merits phase) is scheduled for 20 February 2014 (Permanent Court of Arbitration 2013).

There has also been a completed case where an Australian company (White Industries) brought proceedings against the Indian Government in relation to a contractual agreement between White Industries and state-owned enterprise (Rowley, Brower and Lau 2011).

There are also two other ongoing ISDS cases where Australia-incorporated companies (Planet Mining and Tethyan Copper Company) have initiated ISDS claims under Australian treaties, against the Governments of Indonesia and Pakistan, respectively (ICSID 2013).

⁶ Third parties include: DS434 (Panel) — Argentina, Brazil, Canada, Dominican Republic, Ecuador, European Union, Guatemala, Honduras, India, Indonesia, Japan, Republic of Korea, New Zealand, Nicaragua, Norway, Oman, Philippines, Singapore, Chinese Taipei, Turkey, United States, Uruguay, Zambia, Zimbabwe, Chile, China, Cuba, Egypt, Malaysia, Mexico, Republic of Moldova, Nigeria, Peru and Thailand; DS435 (Consultations) — Brazil, Canada, El Salvador, European Union, Guatemala, Indonesia, Nicaragua, New Zealand, Norway, Philippines, Ukraine, Uruguay and Zimbabwe; and DS441 (Consultations) — Brazil, Canada, El Salvador, European Union, Guatemala, Honduras, New Zealand, Nicaragua, Norway, South Africa, Ukraine and Uruguay.

5.4 Other trade policy developments

Foreign investment

Considerable public comment has arisen over foreign investment in Australia, particularly with respect to agricultural land. In response, the Australian Government requested the ABS to collect information on the foreign ownership of land and water and ABARES, through the Rural Industries Research and Development Corporation, to report on the role of foreign investment in Australian agriculture. ABARES noted that in 2010, around 11 per cent of farmland was wholly or partly foreign owned and that the inflow of capital had boosted capacity and improved the efficiency of Australian agriculture. It concluded that introducing further barriers to foreign investment could adversely affect the performance of the agricultural sector (Moir 2011).

The issue is also being considered, in part, by a Senate Committee inquiry. In July 2011, the Senate referred an examination of the Foreign Investment Review Board national interest test to the Senate Standing Committees on Rural and Regional Affairs. In its November 2012 interim report, the Senate Committees recommended that the Government further review a number of the taxation arrangements that apply to foreign investors, including ways to prevent leakage of taxation revenue where foreign governments undertake agricultural production for humanitarian or food security reasons. The Committee is due to submit its final report in May 2013 (Senate Standing Committees on Rural and Regional Affairs 2013).

The Australian Government has also indicated that it will implement a national foreign ownership register of agricultural land. A working group has been established to consider the design of such a register, taking into account existing State and Territory land registration processes. The objective of the new register will be to ‘improve transparency of foreign ownership in agriculture without imposing unnecessary burdens on investors’ (Ludwig 2012c).

Export Finance and Insurance Corporation

The Export Finance and Insurance Corporation (EFIC) is a statutory authority that provides export credits, insurance, reinsurance and other financial services that support Australian exports and overseas investments. EFIC is to operate its commercial account under a ‘market gap’ mandate, whereby it is only to provide

services to viable projects where the private sector is unwilling or unable to provide those services.

In September 2011, the Australian Government announced that the Productivity Commission would conduct an inquiry into the arrangements for the provision of export credit through EFIC.

The Commission's final report was submitted to Government on 31 May 2012. The Commission identified that the bulk of exports takes place without EFIC assistance, and that EFIC's support goes to a relatively small number of large firms, often on a repeat basis. Further, EFIC's commercial account operations have yielded a low rate of return, with some facilities subsidised by taxpayers. The Commission also found that there was no convincing evidence of systemic market failures for large firms in accessing export finance, nor for resource-related projects in Australia. Rather, information-related failures were likely to be limited to small and medium-sized enterprises that are new to exporting, or are attempting to access emerging markets. Accordingly, the Commission recommended that EFIC's role should be limited to demonstrating to the private sector that providing export finance to newly exporting small and medium sized businesses can be commercially viable. To fulfil this demonstration role, EFIC should provide services on a commercial basis, including setting prices to cover the expected full economic costs of provision and being subject to competitive neutrality arrangements. Amongst the Commission's other recommendations were the introduction of measures to enhance the transparency of EFIC's operations (PC 2012b).

The Australian Government, in its White Paper on the Asian Century, indicated that it:

... will revise EFIC's mandate to ensure more of its resources are devoted to addressing the market failures that impede Australian small and medium-sized exporters, especially in emerging and frontier markets. (Australian Government 2012a, p. 203)

In January 2013, the Australian Government announced further reforms to EFIC and provided its formal response to the Commission's report (Emerson 2013). The Government announced that EFIC will apply a new market failure test to determine exporters' eligibility for EFIC services and will direct more resources to small and medium-sized enterprises looking to expand into Asian markets. The Government agreed, in whole or in part, with 16 of the Commission's recommendations, and noted the remaining six.

The Anti-Counterfeiting Trade Agreement (ACTA)

The stated aim of the ACTA is to reduce the international trade of goods that infringe intellectual property rights, in particular, counterfeit trade marks and copyright pirated products. The ACTA text was finalised in 2010, and signed by Australia in November 2011. The treaty was subject to review by the Joint Standing Committee on Treaties, with a report tabled in Parliament on the 27 June 2012 (JSCT 2012).

The Committee raised a number of concerns about the proposed treaty, including what it saw as a lack of clarity in the text, the absence of provisions protecting individuals' rights and the potential of the treaty to shift the balance of interpretation of copyright, intellectual property and patent laws in favour of intellectual property rights holders. It also noted the international reactions to the treaty and that the treaty had not yet been voted on by the European Parliament and that the ratification process in the United States appeared to have stalled.

The Committee recommended (Recommendation 8):

That the *Anti-Counterfeiting Trade Agreement* not be ratified by Australia until the:

- Joint Standing Committee on Treaties has received and considered the independent and transparent assessment of the economic and social benefits and costs of the Agreement referred to in Recommendation 2;
- Australian Law Reform Commission has reported on its Inquiry into Copyright and the Digital Economy; and the
- Australian Government has issued notices of clarification in relation to the terms of the Agreement as recommended in the other recommendations of this report. (JSCT 2012, p. 61)

And (Recommendation 9):

In considering its recommendation on whether or not to ratify the *Anti-Counterfeiting Trade Agreement* (ACTA), a future Joint Standing Committee on Treaties have regard to events related to ACTA in other relevant jurisdictions including the European Union and the United States of America. (JSCT 2012, p. 62)

In its response, the Australian Government agreed in full or part with the Committee's recommendations. It agreed to commission an analysis of the economic and social benefits and costs. It also agreed to take into account events in other jurisdictions into its consideration to ratify ACTA (Australian Government 2012b).

To date, the ACTA has not been ratified by Australia.

Australia's anti-dumping arrangements and activity

Review into Australia's anti-dumping arrangements

Like other forms of protection, anti-dumping helps some at a cost to others. The Productivity Commission considered Australia's anti-dumping and countervailing system in an inquiry commencing March 2009 (PC 2009e). The Commission found that the anti-dumping system benefited a small number of import-competing firms, but imposed greater costs on the rest of the economy, although the net economic cost was likely to be small. The Commission recommended that a public interest test be introduced, as well as changes to arrangements for continuing anti-dumping measures and measures to improve transparency.

The government's response was provided in June 2011, when the Government announced a range of changes to Australia's anti-dumping system (O'Connor and Emerson 2011). While it accepted (in full or in part) 15 of the Commission's 20 recommendations, it did not accept the introduction of a public interest test.

In July 2012, the Australian Government announced a further review into the arrangements for assessing and investigating anti-dumping matters and to consider the feasibility of establishing an anti-dumping agency (Clare 2012). The review, headed by the Hon. John Brumby, reported to Government in November 2012. Broadly, the review found that despite recent reforms, the administration of Australia's anti-dumping system was under-resourced and required further ongoing reform to restore public confidence.

It is recommended that a new International Trade Remedies Authority, Agency or Commission be established under legislation. To fully realise its benefits, the agency must be:

- separately and adequately resourced, and
- headed by a legislated CEO or Commissioner who reports directly to the Minister for Home Affairs and Justice.

The agency should be established within Customs and Border Protection to preserve the links and synergies with Customs that are critical to the effectiveness of the system.

It is recommended that the new agency be principally located in a major capital city where there is a high concentration of Australian industry.

It is recommended that an immediate increase in resources be made available to facilitate establishment of the new agency and ensure timely resolution of the underlying issues. (Brumby 2012, p. 11)

In response to the Brumby Review and a report by the non-Government members of the Prime Minister's Taskforce on Manufacturing, in December 2012, the Australian Government announced changes to the administration of Australia's anti-dumping system (Combet *et al.* 2012). The changes include the establishment of a Melbourne-based Anti-Dumping Commission to investigate complaints and an increase in funding for the administration of the anti-dumping system (of \$27.4 over four years) to enable it to deal with anti-dumping cases more quickly. The Government will also introduce stricter remedies, including:

- removal of the mandatory consideration of lesser duty, to allow dumping duties to be imposed at the highest permissible level in complex cases;
- clarification of the existing legislation to make it easier to impose retroactive duties;
- the introduction of a new review mechanism; and
- increases in the penalties for importers who make false or misleading statements to Customs to avoid duties (Department of Industry, Innovation, Science, Research and Tertiary Education 2012).

The changes to the anti-dumping system formed part of the Australian Government's February 2013 Industry and Innovation Statement (see chapter 3).

Recent anti-dumping and countervailing duty cases in Australia

Appendix C provides information on recent anti-dumping and countervailing duty cases in Australia.

A Detailed estimates of Australian Government assistance to industry

Chapter 2 provides an overview of the Commission's estimates of Australian Government assistance to industry. This appendix provides supporting details of those estimates for the period 2006-07 to 2011-12.

Tables A.1 to A.3 provide estimates of net tariff assistance, budgetary assistance and net combined assistance by industry grouping. Following this, tables A.4 to A.7 provide estimates of output tariff assistance, input tariff penalties, budgetary outlays and tax concessions by industry grouping. Tables A.8 and A.9 provide estimates of the nominal rate of combined assistance on outputs and the nominal rate of combined assistance on materials, respectively.

Tables A.10 to A.13 detail budgetary assistance to primary, mining, manufacturing and services industry groupings, respectively. For each industry, budgetary assistance measures are also identified according to the activity assisted, such as exports and R&D. Table A.14 covers budgetary measures for which information about the industry benefiting is not available.

The budgetary assistance estimates are derived primarily from actual expenditures shown in departmental and agency annual reports, and the Australian Treasury Tax Expenditures Statement. Industry and sectoral disaggregations are based primarily on supplementary information provided by relevant departments or agencies.

Further information on the assistance estimation methodology, program coverage (including new programs), industry allocation and implementation of the new input-output series is to be provided in a (forthcoming) Methodological Annex to this *Review*.

Tables in this appendix are also available on the Commission's website (<http://www.pc.gov.au/annual-reports/trade-assistance>).

Table A.1 Net tariff assistance by industry grouping, 2006-07 to 2011-12^a
\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production	79.4	78.1	125.0	133.1	132.3	136.1
Horticulture and fruit growing	104.4	105.0	135.7	139.0	138.9	146.0
Sheep, beef cattle and grain farming	-12.3	-15.3	-15.0	-13.5	-16.4	-17.1
Other crop growing	-1.4	-1.4	-1.8	-2.0	-1.9	-1.8
Dairy cattle farming	-2.4	-2.9	-2.9	-2.4	-2.8	-2.8
Other livestock farming	-2.9	-3.5	-3.8	-3.7	-4.0	-4.0
Aquaculture and fishing	-19.4	-20.1	-15.4	-14.0	-13.2	-12.2
Forestry and logging	27.5	31.2	42.1	42.5	45.4	41.9
Primary production support services	-14.2	-14.9	-13.7	-12.8	-13.7	-13.8
Unallocated primary production ^b	-	-	-	-	-	-
Mining	-121.0	-131.3	-179.5	-143.9	-191.3	-207.5
Manufacturing	6112.5	6521.4	6408.8	5997.6	5742.0	5600.7
Food, beverages and tobacco	1185.8	1221.3	1230.5	1294.9	1292.8	1212.1
Textile, leather, clothing and footwear	601.9	643.3	591.2	356.6	241.9	235.3
Wood and paper products	620.5	612.3	586.6	598.5	591.3	574.8
Printing and recorded media	233.3	245.2	212.1	199.6	200.1	183.5
Petroleum, coal, chemical and rubber	733.7	774.0	722.5	720.5	708.5	703.1
Non-metallic mineral products	221.1	238.1	245.0	231.8	223.5	204.0
Metal and fabricated metal products	1217.9	1403.1	1436.4	1317.9	1370.4	1356.8
Motor vehicle and parts	709.0	755.8	756.0	637.5	488.3	496.1
Other transport equipment	4.9	5.2	5.2	6.4	7.3	7.4
Machinery & equipment manufacturing	425.1	453.1	453.2	457.0	441.3	448.3
Furniture and other manufacturing	159.5	170.0	170.1	176.9	176.4	179.2
Unallocated manufacturing ^b	-	-	-	-	-	-
Services	-3582.5	-3878.9	-4135.1	-4188.6	-4259.6	-4448.1
Electricity, gas, water & waste services	-64.6	-68.2	-71.3	-71.0	-73.7	-77.6
Construction	-1141.5	-1243.9	-1359.2	-1426.2	-1496.9	-1542.6
Wholesale trade	-227.3	-249.9	-249.6	-248.0	-250.7	-267.7
Retail trade	-149.9	-161.2	-167.4	-165.3	-169.2	-179.3
Accommodation & food services	-394.7	-424.5	-450.4	-467.8	-491.6	-520.9
Transport, postal & warehousing	-209.2	-222.3	-225.2	-202.9	-187.6	-190.9
Information & telecommunications	-133.9	-143.4	-148.7	-150.4	-143.6	-144.3
Financial and insurance services	-7.0	-7.7	-8.4	-8.5	-9.2	-10.0
Property, professional & admin.	-421.2	-477.1	-511.9	-533.0	-556.5	-596.4
Public administration and safety	-183.4	-189.6	-204.3	-201.4	-198.1	-203.4
Education and training	-88.6	-93.2	-101.9	-104.6	-104.4	-110.5
Health care and social assistance	-208.7	-228.9	-242.5	-240.0	-235.3	-256.2
Arts and recreation services	-67.0	-72.4	-74.5	-74.7	-72.7	-77.2
Other services	-285.3	-296.7	-319.7	-294.8	-269.9	-271.3
Unallocated services ^b	-	-	-	-	-	-
Unallocated other^b	-	-	-	-	-	-
Total	2488.4	2589.4	2219.3	1798.2	1423.5	1081.2

– Nil. Figures may not add to totals due to rounding. ^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. ^b Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

Table A.2 Budgetary assistance by industry grouping, 2006-07 to 2011-12
\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production	1830.6	2318.4	1839.9	1638.9	1429.6	1439.5
Horticulture and fruit growing	130.6	140.0	184.7	166.5	157.9	139.0
Sheep, beef cattle and grain farming	793.9	1087.9	1056.9	815.3	672.2	567.9
Other crop growing	192.0	175.6	66.3	81.5	50.3	63.4
Dairy cattle farming	202.4	308.4	144.3	120.1	87.1	61.3
Other livestock farming	50.5	60.2	47.5	39.2	38.3	46.7
Aquaculture and fishing	281.7	174.1	75.6	77.4	82.8	66.7
Forestry and logging	49.9	55.2	-63.6	34.3	53.9	77.8
Primary production support services	11.7	23.9	24.2	17.9	18.6	19.2
Unallocated primary production ^a	117.9	293.1	304.0	286.7	268.3	397.6
Mining	316.7	398.8	442.2	506.6	510.6	700.4
Manufacturing	1660.8	1652.0	1659.1	1852.6	1597.7	1752.6
Food, beverages and tobacco	100.8	90.6	114.8	119.5	116.8	105.8
Textile, leather, clothing and footwear	132.5	130.8	127.5	135.3	133.8	60.0
Wood and paper products	43.3	69.2	71.8	24.6	21.3	18.0
Printing and recorded media	11.7	19.9	10.0	9.8	9.2	12.7
Petroleum, coal, chemical and rubber	150.3	178.0	193.7	210.0	237.3	223.8
Non-metallic mineral products	18.7	27.2	14.3	19.0	18.8	18.7
Metal and fabricated metal products	200.4	138.1	121.2	110.5	104.7	265.9
Motor vehicle and parts	619.7	584.6	558.1	724.8	518.6	620.7
Other transport equipment	26.3	27.5	32.3	32.7	29.2	29.3
Machinery & equipment manufacturing	168.4	175.5	181.3	193.6	179.0	182.6
Furniture and other manufacturing	39.8	50.4	24.3	26.2	24.9	26.3
Unallocated manufacturing ^a	148.8	160.2	209.8	246.5	204.3	188.7
Services	2336.5	3168.6	3440.0	3355.3	3060.6	4201.5
Electricity, gas, water & waste services	73.9	98.8	97.3	137.4	90.2	1077.4
Construction	104.1	123.0	150.3	137.1	126.1	131.7
Wholesale trade	97.1	121.0	193.7	236.3	224.3	225.4
Retail trade	212.3	272.3	334.3	182.0	150.2	130.9
Accommodation & food services	48.7	66.6	78.0	47.1	41.3	40.0
Transport, postal & warehousing	99.2	107.9	124.4	117.2	110.1	112.0
Information & telecommunications	151.3	178.1	134.8	147.2	140.5	146.1
Financial and insurance services	492.8	745.3	918.7	851.4	849.1	914.7
Property, professional & admin.	421.8	528.2	669.0	635.3	590.7	611.3
Public administration and safety	20.8	18.0	33.9	40.1	40.3	33.4
Education and training	22.3	25.6	35.2	33.9	30.9	29.3
Health care and social assistance	181.2	195.9	178.4	153.9	154.0	163.3
Arts and recreation services	209.2	492.7	275.5	394.4	297.6	351.4
Other services	39.2	49.1	56.3	47.3	46.0	54.4
Unallocated services ^a	162.7	146.0	160.2	194.7	169.3	180.3
Unallocated other^a	660.6	861.1	915.6	2244.9	3206.9	1326.0
Total	6805.2	8399.0	8296.7	9598.3	9805.4	9419.9

– Nil. Figures may not add to totals due to rounding. ^a Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

Table A.3 Net combined assistance by industry grouping, 2006-07 to 2011-12^a
\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production	2034.3	2516.6	1965.1	1772.0	1561.9	1575.6
Horticulture and fruit growing	235.0	245.0	320.4	305.5	296.9	284.9
Sheep, beef cattle and grain farming	781.6	1072.6	1041.9	801.8	655.8	550.8
Other crop growing	190.6	174.2	64.4	79.5	48.4	61.6
Dairy cattle farming	324.3	425.6	141.6	117.6	84.4	58.4
Other livestock farming	47.7	56.7	43.7	35.5	34.3	42.6
Aquaculture and fishing	262.3	154.0	60.1	63.4	69.6	54.5
Forestry and logging	77.5	86.4	-21.5	76.8	99.3	119.7
Primary production support services	-2.5	9.0	10.4	5.1	5.0	5.4
Unallocated primary production ^b	117.9	293.1	304.0	286.7	268.3	397.6
Mining	195.7	267.6	262.8	362.8	319.4	492.8
Manufacturing	7773.3	8173.4	8067.9	7850.2	7339.7	7353.2
Food, beverages and tobacco	1286.6	1311.9	1345.3	1414.4	1409.6	1318.0
Textile, leather, clothing and footwear	734.4	774.0	718.7	491.9	375.7	295.3
Wood and paper products	663.9	681.5	658.5	623.1	612.6	592.8
Printing and recorded media	245.0	265.1	222.1	209.4	209.3	196.2
Petroleum, coal, chemical and rubber	884.0	951.9	916.2	930.5	945.7	926.9
Non-metallic mineral products	239.8	265.4	259.3	250.8	242.3	222.7
Metal and fabricated metal products	1418.3	1541.3	1557.6	1428.5	1475.1	1622.7
Motor vehicle and parts	1328.7	1340.4	1314.1	1362.3	1006.9	1116.8
Other transport equipment	31.2	32.7	37.5	39.0	36.5	36.8
Machinery & equipment manufacturing	593.4	628.6	634.5	650.6	620.3	630.9
Furniture and other manufacturing	199.3	220.5	194.4	203.1	201.3	205.6
Unallocated manufacturing ^b	148.8	160.2	209.8	246.5	204.3	188.7
Services	-1246.0	-710.2	-695.0	-833.3	-1199.0	-246.6
Electricity, gas, water & waste services	9.3	30.7	25.9	66.5	16.5	999.8
Construction	-1037.4	-1121.0	-1208.9	-1289.1	-1370.8	-1410.9
Wholesale trade	-130.2	-128.8	-55.9	-11.7	-26.4	-42.3
Retail trade	62.5	111.1	166.9	16.7	-19.0	-48.3
Accommodation & food services	-346.0	-357.9	-372.5	-420.8	-450.3	-480.9
Transport, postal & warehousing	-110.0	-114.4	-100.9	-85.7	-77.5	-79.0
Information & telecommunications	17.3	34.7	-13.9	-3.2	-3.1	1.8
Financial and insurance services	485.8	737.6	910.4	842.9	839.9	904.8
Property, professional & admin.	0.6	51.1	157.2	102.3	34.2	14.9
Public administration and safety	-162.7	-171.6	-170.4	-161.2	-157.7	-170.1
Education and training	-66.4	-67.6	-66.6	-70.6	-73.6	-81.2
Health care and social assistance	-27.5	-33.0	-64.1	-86.2	-81.4	-92.9
Arts and recreation services	142.2	420.4	201.0	319.7	224.9	274.2
Other services	-246.1	-247.5	-263.5	-247.5	-223.9	-216.8
Unallocated services ^b	162.7	146.0	160.2	194.7	169.3	180.3
Unallocated other^b	660.6	861.1	915.6	2244.9	3206.9	1326.0
Total	9418.0	11108.5	10516.3	11396.5	11228.8	10501.1

– Nil. Figures may not add to totals due to rounding. ^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. ^b Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

Table A.4 Output tariff assistance by industry grouping, 2006-07 to 2011-12^a
\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production	148.7	154.0	200.4	203.7	206.6	209.5
Horticulture and fruit growing	110.7	111.3	143.8	147.0	146.9	154.3
Sheep, beef cattle and grain farming	0.1	0.1	0.1	0.1	0.2	0.2
Other crop growing	1.3	1.3	1.7	1.9	2.0	2.0
Dairy cattle farming	–	–	–	–	–	–
Other livestock farming	–	–	–	–	–	–
Aquaculture and fishing	1.3	1.2	0.9	0.9	0.9	0.8
Forestry and logging	35.3	40.0	53.9	53.7	56.9	52.3
Primary production support services	–	–	–	–	–	–
Unallocated primary production ^b	–	–	–	–	–	–
Mining	0.5	0.6	0.8	0.6	0.9	1.0
Manufacturing	8322.8	8877.9	8735.1	8213.9	7868.5	7684.5
Food, beverages and tobacco	1670.4	1720.5	1733.4	1819.2	1811.6	1698.5
Textile, leather, clothing and footwear	740.4	791.3	727.2	442.1	304.0	295.6
Wood and paper products	780.6	770.2	737.9	751.6	741.4	720.6
Printing and recorded media	280.3	294.6	254.8	239.1	238.9	219.0
Petroleum, coal, chemical and rubber	1031.2	1087.8	1015.5	1014.3	999.2	991.5
Non-metallic mineral products	267.3	287.9	296.2	280.0	269.8	246.3
Metal and fabricated metal products	1607.7	1852.3	1896.2	1734.6	1798.3	1780.4
Motor vehicle and parts	1056.2	1125.8	1126.1	972.5	773.0	785.2
Other transport equipment	63.1	67.2	67.3	68.8	67.5	68.6
Machinery & equipment manufacturing	609.4	649.7	649.8	654.7	631.7	641.7
Furniture and other manufacturing	216.3	230.5	230.6	236.9	233.3	236.9
Unallocated manufacturing ^b	–	–	–	–	–	–
Services	0.0	0.0	0.0	0.0	0.0	0.0
Electricity, gas, water & waste services	–	–	–	–	–	–
Construction	–	–	–	–	–	–
Wholesale trade	–	–	–	–	–	–
Retail trade	–	–	–	–	–	–
Accommodation & food services	–	–	–	–	–	–
Transport, postal & warehousing	–	–	–	–	–	–
Information & telecommunications	–	–	–	–	–	–
Financial and insurance services	–	–	–	–	–	–
Property, professional & admin.	–	–	–	–	–	–
Public administration and safety	–	–	–	–	–	–
Education and training	–	–	–	–	–	–
Health care and social assistance	–	–	–	–	–	–
Arts and recreation services	–	–	–	–	–	–
Other services	–	–	–	–	–	–
Unallocated services ^b	–	–	–	–	–	–
Unallocated other^b	–	–	–	–	–	–
Total	8472.0	9032.4	8936.3	8418.3	8076.0	7895.0

– Nil. Figures may not add to totals due to rounding. ^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. ^b Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

Table A.5 Input tariff penalty by industry grouping, 2006-07 to 2011-12^a

\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production	-69.3	-75.9	-75.4	-70.6	-74.3	-73.4
Horticulture and fruit growing	-6.3	-6.3	-8.1	-8.1	-8.0	-8.3
Sheep, beef cattle and grain farming	-12.4	-15.4	-15.2	-13.7	-16.6	-17.2
Other crop growing	-2.7	-2.7	-3.5	-3.9	-3.9	-3.8
Dairy cattle farming	-2.4	-2.9	-2.9	-2.4	-2.8	-2.8
Other livestock farming	-2.9	-3.5	-3.8	-3.7	-4.0	-4.0
Aquaculture and fishing	-20.7	-21.3	-16.3	-14.8	-14.1	-13.1
Forestry and logging	-7.7	-8.8	-11.8	-11.2	-11.2	-10.3
Primary production support services	-14.2	-14.9	-13.7	-12.8	-13.7	-13.8
Unallocated primary production ^b	-	-	-	-	-	-
Mining	-121.5	-131.8	-180.2	-144.5	-192.2	-208.5
Manufacturing	-2210.2	-2356.4	-2326.3	-2216.3	-2126.5	-2083.9
Food, beverages and tobacco	-484.6	-499.2	-502.9	-524.4	-518.7	-486.4
Textile, leather, clothing and footwear	-138.5	-148.1	-136.1	-85.5	-62.1	-60.4
Wood and paper products	-160.0	-157.9	-151.3	-153.1	-150.0	-145.8
Printing and recorded media	-47.1	-49.5	-42.8	-39.5	-38.7	-35.5
Petroleum, coal, chemical and rubber	-297.5	-313.8	-293.0	-293.9	-290.7	-288.5
Non-metallic mineral products	-46.2	-49.7	-51.2	-48.2	-46.3	-42.2
Metal and fabricated metal products	-389.8	-449.1	-459.8	-416.7	-427.8	-423.6
Motor vehicle and parts	-347.1	-370.0	-370.1	-335.1	-284.7	-289.2
Other transport equipment	-58.2	-62.1	-62.1	-62.5	-60.2	-61.2
Machinery & equipment manufacturing	-184.4	-196.6	-196.6	-197.7	-190.4	-193.4
Furniture and other manufacturing	-56.8	-60.5	-60.5	-60.0	-56.8	-57.7
Unallocated manufacturing ^b	-	-	-	-	-	-
Services	-3582.5	-3878.9	-4135.1	-4188.6	-4259.6	-4448.1
Electricity, gas, water & waste services	-64.6	-68.2	-71.3	-71.0	-73.7	-77.6
Construction	-1141.5	-1243.9	-1359.2	-1426.2	-1496.9	-1542.6
Wholesale trade	-227.3	-249.9	-249.6	-248.0	-250.7	-267.7
Retail trade	-149.9	-161.2	-167.4	-165.3	-169.2	-179.3
Accommodation & food services	-394.7	-424.5	-450.4	-467.8	-491.6	-520.9
Transport, postal & warehousing	-209.2	-222.3	-225.2	-202.9	-187.6	-190.9
Information & telecommunications	-133.9	-143.4	-148.7	-150.4	-143.6	-144.3
Financial and insurance services	-7.0	-7.7	-8.4	-8.5	-9.2	-10.0
Property, professional & admin.	-421.2	-477.1	-511.9	-533.0	-556.5	-596.4
Public administration and safety	-183.4	-189.6	-204.3	-201.4	-198.1	-203.4
Education and training	-88.6	-93.2	-101.9	-104.6	-104.4	-110.5
Health care and social assistance	-208.7	-228.9	-242.5	-240.0	-235.3	-256.2
Arts and recreation services	-67.0	-72.4	-74.5	-74.7	-72.7	-77.2
Other services	-285.3	-296.7	-319.7	-294.8	-269.9	-271.3
Unallocated services ^b	-	-	-	-	-	-
Unallocated other^b	-	-	-	-	-	-
Total	-5983.6	-6443.0	-6717.0	-6620.1	-6652.5	-6813.8

– Nil. Figures may not add to totals due to rounding. ^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. ^b Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

Table A.6 Budgetary outlays by industry grouping, 2006-07 to 2011-12
\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production	1554.2	1880.3	1434.9	1281.0	1058.4	891.2
Horticulture and fruit growing	87.6	83.3	133.0	125.1	117.3	83.4
Sheep, beef cattle and grain farming	638.4	841.6	741.6	601.9	453.0	212.9
Other crop growing	169.7	152.3	41.3	58.0	25.2	30.2
Dairy cattle farming	186.0	270.8	104.4	99.1	67.4	29.6
Other livestock farming	39.1	45.7	28.7	25.4	23.9	22.2
Aquaculture and fishing	267.8	166.4	68.8	66.5	66.8	52.4
Forestry and logging	44.2	27.2	15.1	18.2	34.9	60.2
Primary production support services	3.5	4.3	5.6	5.2	2.8	4.6
Unallocated primary production ^a	117.9	288.8	296.4	281.6	267.0	395.8
Mining	87.2	96.5	117.0	171.4	194.5	400.9
Manufacturing	725.5	755.8	733.0	896.7	930.0	1389.9
Food, beverages and tobacco	74.7	65.2	63.0	53.0	53.5	44.6
Textile, leather, clothing and footwear	117.6	116.1	113.1	122.2	123.2	53.4
Wood and paper products	34.2	61.1	60.3	14.5	11.6	8.4
Printing and recorded media	8.9	15.8	5.4	5.2	4.9	8.4
Petroleum, coal, chemical and rubber	117.2	143.1	141.7	160.1	189.7	177.7
Non-metallic mineral products	10.7	11.9	6.7	8.3	8.4	8.6
Metal and fabricated metal products	128.1	96.6	62.5	62.1	58.0	220.4
Motor vehicle and parts	16.8	18.9	27.1	150.6	195.9	579.9
Other transport equipment	15.2	16.6	23.4	24.4	21.2	21.5
Machinery & equipment manufacturing	122.7	116.4	121.9	124.8	114.5	120.2
Furniture and other manufacturing	34.4	41.2	16.7	19.7	19.3	20.7
Unallocated manufacturing ^a	44.9	53.0	91.4	151.9	129.8	126.2
Services	1093.8	1414.4	1202.1	1176.5	1056.0	2091.1
Electricity, gas, water & waste services	59.3	80.4	80.7	108.4	62.7	1050.8
Construction	18.9	16.9	20.7	23.1	21.6	24.2
Wholesale trade	35.5	44.5	54.6	58.1	56.8	63.0
Retail trade	133.7	182.1	200.3	82.9	59.2	39.2
Accommodation & food services	5.6	5.8	7.0	8.0	5.6	4.8
Transport, postal & warehousing	47.5	50.4	53.2	56.5	54.2	56.2
Information & telecommunications	99.8	116.2	106.4	104.4	99.0	105.8
Financial and insurance services	45.6	30.2	49.8	62.0	67.3	69.7
Property, professional & admin.	143.5	167.5	184.4	185.6	171.0	193.7
Public administration and safety	18.2	15.8	28.5	35.0	35.5	30.9
Education and training	15.5	14.0	19.7	22.6	20.5	18.5
Health care and social assistance	130.5	115.2	96.2	98.5	103.0	111.6
Arts and recreation services	170.6	420.1	128.8	120.5	113.2	117.7
Other services	10.8	13.4	11.6	16.1	17.3	24.9
Unallocated services ^a	158.7	142.0	160.2	194.7	169.3	180.3
Unallocated other^a	241.0	264.0	202.6	276.8	335.6	355.6
Total	3701.6	4411.1	3689.7	3802.3	3574.5	5128.7

– Nil. Figures may not add to totals due to rounding. ^a Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

Table A.7 Budgetary tax concessions by industry grouping, 2006-07 to 2011-12
\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production	276.4	438.1	404.9	357.9	371.2	548.3
Horticulture and fruit growing	43.0	56.7	51.8	41.4	40.6	55.6
Sheep, beef cattle and grain farming	155.5	246.3	315.3	213.4	219.2	355.0
Other crop growing	22.3	23.3	25.0	23.5	25.1	33.2
Dairy cattle farming	16.4	37.7	39.8	21.0	19.7	31.7
Other livestock farming	11.4	14.5	18.8	13.8	14.4	24.5
Aquaculture and fishing	13.9	7.7	6.8	10.9	16.0	14.3
Forestry and logging	5.7	28.0	-78.7	16.1	19.0	17.6
Primary production support services	8.2	19.6	18.6	12.7	15.9	14.6
Unallocated primary production ^a	–	4.4	7.6	5.1	1.2	1.8
Mining	229.5	302.3	325.2	335.2	316.2	299.5
Manufacturing	935.3	896.2	926.0	955.9	667.7	362.6
Food, beverages and tobacco	26.1	25.4	51.8	66.5	63.3	61.3
Textile, leather, clothing and footwear	14.9	14.7	14.4	13.2	10.6	6.6
Wood and paper products	9.1	8.1	11.5	10.1	9.7	9.6
Printing and recorded media	2.8	4.1	4.6	4.6	4.3	4.3
Petroleum, coal, chemical and rubber	33.1	34.8	52.0	50.0	47.6	46.1
Non-metallic mineral products	8.0	15.3	7.6	10.8	10.4	10.1
Metal and fabricated metal products	72.3	41.5	58.7	48.4	46.7	45.5
Motor vehicle and parts	602.9	565.7	531.0	574.2	322.7	40.9
Other transport equipment	11.1	10.9	9.0	8.3	8.0	7.9
Machinery & equipment manufacturing	45.6	59.1	59.5	68.8	64.5	62.4
Furniture and other manufacturing	5.3	9.2	7.6	6.5	5.6	5.6
Unallocated manufacturing ^a	103.9	107.2	118.4	94.6	74.5	62.5
Services	1242.8	1754.3	2237.9	2178.8	2004.6	2110.4
Electricity, gas, water & waste services	14.5	18.4	16.5	29.0	27.5	26.6
Construction	85.2	106.0	129.6	114.0	104.5	107.5
Wholesale trade	61.6	76.6	139.1	178.2	167.5	162.5
Retail trade	78.6	90.2	134.1	99.0	91.1	91.8
Accommodation & food services	43.1	60.8	71.0	39.1	35.7	35.2
Transport, postal & warehousing	51.7	57.5	71.2	60.7	55.8	55.8
Information & telecommunications	51.5	62.0	28.4	42.8	41.5	40.3
Financial and insurance services	447.2	715.1	868.9	789.4	781.7	845.1
Property, professional & admin.	278.3	360.7	484.6	449.7	419.7	417.6
Public administration and safety	2.6	2.2	5.4	5.2	4.9	2.5
Education and training	6.8	11.6	15.5	11.4	10.4	10.8
Health care and social assistance	50.6	80.7	82.2	55.4	51.0	51.7
Arts and recreation services	38.6	72.6	146.8	273.8	184.5	233.7
Other services	28.4	35.8	44.7	31.2	28.8	29.5
Unallocated services ^a	4.0	4.0	–	–	–	–
Unallocated other^a	419.6	597.1	713.0	1968.1	2871.3	970.4
Total	3103.6	3987.9	4607.1	5796.0	6230.9	4291.2

– Nil. Figures may not add to totals due to rounding. ^a Unallocated includes general programs where details of beneficiaries are unknown.

Source: Commission estimates.

**Table A.8 Nominal rate of combined assistance on outputs
by industry grouping, 2006-07 to 2011-12^a**

\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production^b	0.3	0.3	0.3	0.4	0.3	0.3
Horticulture and fruit growing	1.2	1.2	1.3	1.2	1.2	1.2
Sheep, beef cattle and grain farming	0.0	0.0	0.0	0.0	0.0	0.0
Other crop growing	0.0	0.0	0.0	0.0	0.0	0.0
Dairy cattle farming	0.0	0.0	0.0	0.0	0.0	0.0
Other livestock farming	0.0	0.0	0.0	0.0	0.0	0.0
Aquaculture and fishing	0.0	0.0	0.1	0.2	0.2	0.2
Forestry and logging	1.9	1.9	2.0	2.1	2.0	2.1
Primary production support services	0.0	0.0	0.0	0.0	0.0	0.0
Mining	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing^b	2.5	2.5	2.5	2.3	2.2	2.1
Food, beverages and tobacco	2.1	2.1	2.1	2.0	2.0	2.0
Textile, leather, clothing and footwear	7.7	7.7	8.4	6.2	4.6	4.5
Wood and paper products	3.7	3.7	3.8	3.6	3.6	3.6
Printing and recorded media	2.9	2.8	2.9	2.8	2.8	2.8
Petroleum, coal, chemical and rubber	1.4	1.5	1.5	1.5	1.5	1.5
Non-metallic mineral products	2.0	2.0	2.0	2.0	1.9	1.9
Metal and fabricated metal products	1.9	1.9	1.9	1.9	1.8	1.8
Motor vehicle and parts	7.9	7.6	8.0	6.7	4.8	3.5
Other transport equipment	0.9	0.9	0.9	0.9	0.9	0.9
Machinery & equipment manufacturing	2.0	2.0	2.0	1.9	1.9	1.8
Furniture and other manufacturing	3.1	3.1	3.2	3.1	3.1	3.1

– Nil. Figures may not add to totals due to rounding. ^a 'Combined assistance' comprises tariff, budgetary and agricultural pricing and regulatory assistance. ^b Sectoral estimates include assistance to the sector that has not been allocated to specific industry groupings.

Source: Commission estimates.

**Table A.9 Nominal rate of combined assistance on materials
by industry grouping, 2006-07 to 2011-12^a**

\$ million (nominal)

<i>Industry grouping</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
Primary production^b	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2
Horticulture and fruit growing	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Sheep, beef cattle and grain farming	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
Other crop growing	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Dairy cattle farming	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Other livestock farming	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Aquaculture and fishing	-1.4	-1.1	-1.4	-1.3	-1.2	-1.2
Forestry and logging	-1.1	-1.1	-1.1	-1.0	-1.0	-1.0
Primary production support services	-0.6	-0.6	-0.6	-0.5	-0.5	-0.5
Mining	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Manufacturing^b	-1.1	-1.1	-1.1	-1.0	-1.0	-1.0
Food, beverages and tobacco	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1
Textile, leather, clothing and footwear	-3.5	-3.5	-3.6	-2.8	-2.2	-2.2
Wood and paper products	-2.1	-2.1	-2.1	-2.1	-2.0	-2.0
Printing and recorded media	-1.8	-1.8	-1.8	-1.7	-1.7	-1.7
Petroleum, coal, chemical and rubber	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
Non-metallic mineral products	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
Metal and fabricated metal products	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
Motor vehicle and parts	-3.1	-3.1	-3.3	-2.8	-2.5	-2.5
Other transport equipment	-1.9	-1.9	-2.0	-1.9	-1.8	-1.8
Machinery & equipment manufacturing	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3
Furniture and other manufacturing	-1.8	-1.8	-1.9	-1.8	-1.7	-1.7

– Nil. Figures may not add to totals due to rounding. ^a ‘Combined assistance’ comprises tariff, budgetary and agricultural pricing and regulatory assistance. ^b Sectoral estimates include assistance to the sector that has not been allocated to specific industry groupings.

Source: Commission estimates.

Table A.10 Australian Government budgetary assistance to primary industry, 2006-07 to 2011-12^a

\$ million (nominal)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Horticulture and fruit growing						
<i>Industry-specific measures</i>						
Assistance to the vegetable industry	1.0	1.1	<0.1	–	–	–
Biotechnology Innovation Fund	<0.1	–	–	–	–	–
Citrus Canker Eradication	0.6	0.6	–	–	–	–
Tax deduction for horticultural plantations	4.0	5.0	5.0	5.0	6.0	6.0
Tax deduction for grape vines	3.0	-1.0	-4.0	-7.0	-7.0	-6.0
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	8.7	13.5	34.0	27.6	26.0	8.7
Exceptional Circumstances – relief payments	–	–	26.6	23.2	17.6	0.8
Farm Bis Program	0.9	1.4	–	–	–	–
Farm Help	2.4	0.4	0.3	<0.1	–	<0.1
Farm Management Deposits Scheme	10.3	14.4	20.5	14.7	4.2	20.4
Income tax averaging provisions	9.5	10.9	9.9	8.4	17.3	14.7
Industry partnerships program	3.0	2.8	0.9	–	–	–
Interim Income Support	–	–	–	<0.1	<0.1	<0.1
Rural Financial Counselling Service	1.1	2.0	2.1	2.1	2.1	2.3
Tax deduction for conserving or conveying water	3.8	2.0	2.0	3.7	4.7	4.7
<i>Rural R&D measures</i>						
Grape and Wine R&D Corporation	14.5	11.4	11.7	13.7	12.3	10.3
Horticulture Australia Limited – R&D	34.6	34.5	39.8	40.5	40.5	42.0
Rural Industries R&D Corporation	2.3	2.5	2.7	2.2	2.4	2.9
<i>General export measures</i>						
Export Market Development Grants Scheme	0.9	0.9	1.4	1.0	1.3	1.0
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.2	0.2	<0.1	–
COMET Program	<0.1	<0.1	<0.1	<0.1	<0.1	–
Commercial Ready Program	1.3	0.6	0.5	0.1	–	–
Commercialisation Australia	–	–	–	–	0.2	0.3
CSIRO	12.6	9.2	8.1	8.6	8.7	8.7
New Industries Development Program	0.6	0.3	<0.1	–	–	–
Premium R&D tax concession	–	–	<0.1	0.1	0.1	0.1
Preseed fund	<0.1	<0.1	–	–	–	–
R&D Start	<0.1	–	–	–	–	–
R&D tax concession	0.9	0.9	0.9	1.4	1.4	1.3
R&D tax offset for small companies	2.8	1.7	4.0	4.4	4.7	5.3

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.4	0.5	0.7	0.6	0.5	0.5
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	–	–	–	–	<0.1
North East Tasmania Innovation and Investment Fund	–	–	–	0.4	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	1.0	1.5	–
Scottsdale Industry and Community Development Fund	–	0.3	0.5	–	–	–
Small business CG tax asset exemption	–	0.6	–	1.8	1.8	2.3
Small business CG tax 50 percent reduction	7.3	14.0	9.1	7.3	6.6	6.6
Small business CG tax retirement exemption	2.3	7.7	6.0	4.1	3.8	3.8
Small business capital gains tax exemption	1.3	1.7	1.7	1.2	1.1	1.0
South East South Australia Innovation and Investment Fund	–	–	–	–	–	0.5
Tasmanian Innovation and Investment Fund	–	–	–	–	–	0.4
Total	130.6	140.0	184.7	166.5	157.9	139.0
Sheep, beef cattle and grain farming						
<i>Industry-specific measures</i>						
Australian Wool Innovation grant	15.0	–	–	–	–	–
National Livestock Identification System	5.0	4.7	0.2	0.2	–	–
Northern Australia Beef Industry Strategy Indigenous Pastoral Project	–	–	–	–	–	0.5
Wheat Export Authority Supplementation	–	2.0	–	–	–	–
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	296.4	457.7	359.1	256.2	182.8	15.8
Exceptional Circumstances – relief payments	154.3	229.3	230.3	168.3	93.4	4.1
Farm Bis Program	5.5	7.2	–	–	–	–
Farm Help	6.3	1.5	1.0	–	–	–
Farm Management Deposits Scheme	46.7	64.0	80.4	57.3	19.5	168.3
Income tax averaging provisions	36.3	59.8	54.4	45.4	93.6	79.4
Industry partnerships program	0.4	0.8	0.2	–	–	–
Interim Income Support	7.0	4.8	1.0	0.4	0.2	<0.1
Rural Financial Counselling Service	5.7	6.1	7.8	7.8	6.6	6.7
Tax deduction for conserving or conveying water	16.7	13.3	13.3	11.4	14.3	14.3

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Rural R&D measures</i>						
Wool R&D	11.6	12.3	11.4	10.5	11.3	12.5
Grains R&D Corporation	35.8	28.9	36.9	50.1	53.4	55.9
Harvesting Productivity Initiative	–	–	–	1.1	<0.1	–
Meat and Livestock Australia R&D	35.7	34.5	31.4	38.1	35.6	37.1
Rural Industries R&D Corporation	2.4	1.7	1.0	0.8	0.8	1.3
<i>General export measures</i>						
EFIC national interest business ^b	4.0	1.0	0.9	0.4	0.8	0.5
Export Market Development Grants Scheme	0.5	0.5	0.6	0.8	0.6	0.4
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
COMET Program	<0.1	<0.1	<0.1	<0.1	–	–
Cooperative Research Centres	11.4	13.0	12.4	11.5	9.9	6.1
CSIRO	40.2	34.3	45.3	47.8	48.9	48.9
New Industries Development Program	0.1	<0.1	<0.1	–	–	–
R&D tax concession	1.1	0.8	1.7	2.6	2.6	2.5
R&D tax offset for small companies	1.2	1.3	2.1	7.2	7.7	8.7
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	1.2	1.6	1.7	1.7	1.5	1.6
Enterprise Connect Innovation Centres	–	–	–	–	<0.1	<0.1
Live Animal Exports Business Assistance	–	–	–	–	–	13.3
Small business CG tax asset exemption	3.7	14.4	18.8	11.4	11.4	14.4
Small business CG tax 50 percent reduction	26.3	52.4	79.6	43.0	38.7	38.7
Small business CG tax retirement exemption	11.2	24.2	30.3	22.8	21.5	21.5
Small business capital gains tax exemption	12.2	15.8	35.0	17.8	16.0	14.3
Tasmanian Freight Equalisation Scheme	–	–	–	0.8	0.8	0.8
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	0.1
Total	793.9	1087.9	1056.9	815.3	672.2	567.9
Other crop growing						
<i>Industry-specific measures</i>						
Sugar Industry Reform Program	39.1	35.6	4.5	–	–	–
Tobacco Grower Adjustment Assistance	39.3	14.4	0.3	–	<0.1	–

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	15.4	23.8	7.8	31.8	–	2.1
Exceptional Circumstances – relief payments	22.1	32.8	0.9	<0.1	–	<0.1
Farm Bis Program	<0.1	0.2	–	–	–	–
Farm Help	0.7	0.2	0.2	–	–	–
Farm Management Deposits Scheme	6.7	8.9	9.0	6.5	1.9	11.9
Income tax averaging provisions	6.2	3.8	3.4	6.3	13.0	11.0
Interim Income Support	1.0	0.7	0.1	<0.1	–	<0.1
Rural Financial Counselling Service	0.7	0.6	0.8	0.9	0.8	0.9
Tax deduction for conserving or conveying water	5.0	1.8	1.8	1.5	1.8	1.8
<i>Rural R&D measures</i>						
Cotton R&D Corporation	4.6	3.1	2.4	3.0	5.7	9.5
Rural Industries R&D Corporation	0.8	0.9	0.8	1.4	0.9	1.1
Sugar R&D Corporation	5.5	6.3	6.1	5.8	5.9	5.4
<i>General export measures</i>						
Export Market Development Grants Scheme	0.2	0.2	0.4	0.6	0.4	0.5
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.1	0.5	0.3	<0.1
COMET Program	–	0.1	0.2	<0.1	<0.1	–
Commercial Ready Program	<0.1	0.6	–	–	–	–
Cooperative Research Centres	8.8	9.0	8.5	6.5	3.5	3.0
CSIRO	31.3	23.3	7.1	7.5	7.7	7.7
New Industries Development Program	<0.1	<0.1	<0.1	–	–	–
R&D tax concession	–	–	0.6	1.0	1.0	1.0
R&D tax offset for small companies	–	–	0.9	–	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Scottsdale Industry and Community Development Fund	–	0.3	–	–	–	–
Small business CG tax asset exemption	0.6	–	–	0.5	0.5	0.6
Small business CG tax 50 percent reduction	1.9	5.0	6.0	5.2	4.7	4.7
Small business CG tax retirement exemption	1.4	2.1	2.1	1.3	1.2	1.2
Small business capital gains tax exemption	0.6	1.7	2.0	1.0	0.9	0.8
Total	192.0	175.6	66.3	81.5	50.3	63.4

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Dairy cattle farming						
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	88.4	136.5	45.3	38.1	23.3	2.9
Exceptional Circumstances – relief payments	73.2	108.8	36.5	35.0	17.9	0.8
Farm Bis Program	0.4	0.4	–	–	–	–
Farm Help	0.9	0.2	0.2	–	–	–
Farm Management Deposits Scheme	4.8	8.3	11.4	7.2	2.1	15.4
Income tax averaging provisions	4.7	16.5	15.0	4.1	8.5	7.2
Interim Income Support	3.3	2.3	0.5	<0.1	<0.1	<0.1
Rural Financial Counselling Service	1.4	1.7	1.3	1.7	1.2	1.0
Tax deduction for conserving or conveying water	1.8	1.3	1.3	1.5	1.8	1.8
<i>Rural R&D measures</i>						
Dairy Research and Development	16.0	18.3	19.2	19.6	18.8	18.6
<i>General export measures</i>						
Export Market Development Grants Scheme	<0.1	<0.1	–	<0.1	–	–
TRADEX	0.6	0.6	0.5	0.5	0.3	0.3
<i>General R&D measures</i>						
Cooperative Research Centres	–	–	–	3.0	4.8	4.8
CSIRO	2.1	2.3	1.4	1.4	1.5	1.5
New Industries Development Program	0.1	<0.1	<0.1	–	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.2	0.2	0.2	0.2	0.2	0.2
North East Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
Scottsdale Industry and Community Development Fund	–	–	<0.1	–	–	–
Small business CG tax 50 percent reduction	2.4	6.0	5.6	4.8	4.4	4.4
Small business CG tax retirement exemption	0.7	2.6	3.1	1.8	1.7	1.7
Small business capital gains tax exemption	1.1	2.1	2.8	0.9	0.8	0.7
Total^C	202.4	308.4	144.3	120.1	87.1	61.3

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Other livestock farming						
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	5.6	8.6	5.9	3.4	1.5	0.4
Exceptional Circumstances – relief payments	5.3	7.8	4.3	2.0	1.5	<0.1
Farm Bis Program	0.2	0.2	–	–	–	–
Farm Help	0.3	0.4	<0.1	–	–	–
Farm Management Deposits Scheme	4.6	5.1	6.1	4.1	1.1	12.3
Income tax averaging provisions	2.7	4.1	3.7	3.4	7.0	6.0
Industry partnerships program	1.0	1.0	0.3	–	–	–
Interim Income Support	0.2	0.2	<0.1	<0.1	<0.1	<0.1
Rural Financial Counselling Service	0.2	0.2	0.2	0.2	0.3	0.3
Tax deduction for conserving or conveying water	0.9	1.1	1.1	1.6	2.0	2.0
<i>Rural R&D measures</i>						
Egg Research and Development	1.2	1.0	1.0	1.0	1.6	1.9
Pig Research and Development	3.4	3.7	2.8	4.0	4.3	4.6
Rural Industries R&D Corporation	3.6	4.7	4.9	4.1	3.9	5.7
<i>General export measures</i>						
Export Market Development Grants Scheme	0.6	0.6	0.9	0.6	0.6	0.2
<i>General R&D measures</i>						
Cooperative Research Centres	7.0	7.2	7.4	8.0	8.2	6.8
CSIRO	10.4	10.0	0.9	1.0	1.0	1.0
New Industries Development Program	0.2	<0.1	<0.1	–	–	–
R&D tax concession	–	–	0.3	0.5	0.5	0.5
R&D tax offset for small companies	–	–	–	0.9	1.0	1.1
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.1	0.2	0.2	0.2	0.2	0.2
Enterprise Connect Innovation Centres	–	–	–	<0.1	–	–
North East Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
Small business CG tax 50 percent reduction	1.2	2.3	4.9	2.2	2.0	2.0
Small business CG tax retirement exemption	0.6	0.8	1.9	1.4	1.3	1.3
Small business capital gains tax exemption	1.3	0.9	0.5	0.4	0.4	0.3
Total	50.5	60.2	47.5	39.2	38.3	46.7

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Aquaculture and fishing						
<i>Industry-specific measures</i>						
Fisheries Structural Adjustment Package	159.9	25.3	16.7	9.6	1.8	–
Fishing Structural Adjustment Package – Management Levy Subsidy	–	5.0	–	–	–	–
Great Barrier Reef Structural Adjustment	65.9	67.8	–	–	–	–
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	–	–	<0.1	<0.1	13.3	<0.1
Exceptional Circumstances – relief payments	–	–	0.2	0.2	<0.1	<0.1
Farm Bis Program	0.5	0.8	–	–	–	–
Farm Help	<0.1	–	<0.1	–	–	–
Farm Management Deposits Scheme	0.6	–	–	–	–	–
Income tax averaging provisions	6.2	5.9	5.4	5.1	10.6	9.0
Industry partnerships program	0.5	0.2	<0.1	–	–	–
Interim Income Support	–	–	–	<0.1	<0.1	<0.1
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
<i>Rural R&D measures</i>						
Fishing industry R&D	16.0	16.3	16.3	16.3	16.5	16.6
Fisheries Research Program	–	–	1.9	2.2	–	–
Fisheries Resources Research Fund	3.1	3.1	3.2	3.8	1.6	0.1
Torres Strait Prawn Fisheries Program	0.6	21.1	0.2	–	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	0.5	0.3	0.5	0.9	0.6	0.4
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	–	0.3	0.1	–
COMET Program	<0.1	<0.1	–	–	–	–
Commercial Ready Program	3.0	3.4	1.9	1.2	0.2	<0.1
Commercialisation Australia	–	–	–	–	<0.1	1.1
Cooperative Research Centres	2.6	6.5	5.2	5.4	5.4	5.4
CSIRO	9.2	10.8	15.9	16.8	17.2	17.2
New Industries Development Program	0.2	<0.1	<0.1	–	–	–
Premium R&D tax concession	0.1	0.1	<0.1	0.3	0.3	0.3
R&D Start	0.3	<0.1	–	–	–	–
R&D tax concession	1.8	0.9	1.1	2.2	2.2	2.2
R&D tax offset for small companies	5.2	5.4	5.7	5.4	5.8	6.5

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.8	<0.1	<0.1	0.7	0.6	0.7
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	<0.1	<0.1	<0.1	–	<0.1
Industry Cooperative Innovation Program	0.2	0.2	0.3	–	<0.1	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.5	0.4	–
Small business CG tax 50 percent reduction	2.7	0.4	<0.1	1.8	1.6	1.6
Small business CG tax retirement exemption	1.2	0.3	–	0.3	0.3	0.3
Small business capital gains tax exemption	0.5	–	–	0.4	0.3	0.3
South Australia Innovation and Investment Fund	–	–	–	–	<0.1	–
South East South Australia Innovation and Investment Fund	–	–	–	–	–	0.1
Tasmanian Freight Equalisation Scheme	–	–	0.7	3.6	3.7	3.5
Tasmanian Innovation and Investment Fund	–	–	–	–	–	0.8
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	0.5
Total	281.7	174.1	75.6	77.4	82.8	66.7
Forestry and logging						
<i>Industry-specific measures</i>						
12-month prepayment rule	-5.0	5.0	-95.0	–	–	–
Forest Industry Structural Adjustment	30.6	–	–	–	–	–
Tasmanian Contractors Assistance Program	–	–	–	–	16.9	–
Tasmanian Forest Industry Adjustment Package	–	–	–	–	–	42.4
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	–	–	<0.1	–	–	<0.1
Farm Management Deposits Scheme	1.3	–	–	–	–	–
Income tax averaging provisions	1.9	3.4	3.1	3.6	7.5	6.4
Industry partnerships program	0.4	<0.1	<0.1	–	–	–
Rural Financial Counselling Service	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tax deduction for conserving or conveying water	0.4	0.1	0.1	0.1	0.2	0.2
<i>Rural R&D measures</i>						
Forest and Wood Products R&D	1.8	2.0	2.1	1.8	2.6	2.4
Rural Industries R&D Corporation	1.0	0.9	1.1	–	–	–

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>General export measures</i>						
Export Market Development Grants Scheme	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General R&D measures</i>						
Commercial Ready Program	1.1	0.6	0.4	–	–	–
Cooperative Research Centres	3.3	4.2	4.7	4.8	3.8	3.2
CSIRO	4.6	18.0	6.3	6.7	6.8	6.8
R&D tax concession	0.2	0.1	0.1	0.2	0.2	0.2
R&D tax offset for small companies	1.3	1.0	–	1.0	1.0	1.2
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.2	0.3	0.3	0.3	0.3	0.3
North East Tasmania Innovation and Investment Fund	–	–	–	0.2	–	–
Scottsdale Industry and Community Development Fund	–	0.4	0.2	–	–	–
Small business CG tax asset exemption	–	0.6	0.4	–	–	–
Small business CG tax 50 percent reduction	4.3	10.8	6.9	6.5	5.8	5.8
Small business CG tax retirement exemption	1.6	4.4	3.1	3.3	3.1	3.1
Small business capital gains tax exemption	0.9	3.2	2.2	2.1	1.9	1.7
Tasmanian Freight Equalisation Scheme	–	–	0.3	3.7	3.7	3.5
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	0.5
Total	49.9	55.2	-63.6	34.3	53.9	77.8
Primary production support services						
<i>Industry-specific measures</i>						
Biotechnology Innovation Fund	<0.1	–	–	–	–	–
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	<0.1	<0.1	1.2	1.6	–	1.8
Exceptional Circumstances – relief payments	–	–	–	–	–	0.3
FarmBis Program	<0.1	<0.1	–	–	–	–
Income tax averaging provisions	2.6	5.7	5.2	3.6	7.5	6.4
Interim Income Support	–	–	–	–	–	<0.1
Tax deduction for conserving or conveying water	1.4	0.3	0.3	0.1	0.2	0.2
<i>General export measures</i>						
Export Market Development Grants Scheme	0.3	0.5	0.7	0.7	0.4	0.3
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.3	0.7	0.3	<0.1
COMET Program	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
Commercial Ready Program	1.1	1.2	0.9	0.3	<0.1	–
Commercialisation Australia	–	–	–	–	<0.1	<0.1
R&D Start	<0.1	–	–	–	–	–
R&D tax concession	0.5	0.9	0.9	1.6	1.6	1.5
R&D tax offset for small companies	1.6	2.2	2.5	1.8	1.9	2.1
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.8	1.7	1.8	1.2	1.1	1.2
Enterprise Connect Innovation Centres	–	–	–	–	<0.1	<0.1
Industry Cooperative Innovation Program	0.3	<0.1	–	–	–	–
Innovation Investment Fund for South Australia	–	0.2	–	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
Scottsdale Industry and Community Development Fund	–	0.1	–	–	–	–
Small business CG tax 50 percent reduction	1.8	5.4	6.2	3.4	3.1	3.1
Small business CG tax retirement exemption	0.5	4.5	1.7	0.8	0.8	0.8
Small business capital gains tax exemption	0.7	1.1	2.5	1.9	1.7	1.5
Total	11.7	23.9	24.2	17.9	18.6	19.2
Unallocated primary production						
<i>Industry-specific measures</i>						
Australian Animal Health Laboratory	7.0	7.2	7.1	7.2	7.3	7.4
Exotic Disease Preparedness program	0.9	0.9	1.0	1.7	0.6	0.6
<i>Sector-specific measures</i>						
Carbon Farming Futures	–	–	–	–	–	27.3
Carbon Farming Initiative	–	–	–	–	0.3	2.0
Caring for our country – Landcare	–	9.0	35.2	32.1	34.0	36.8
Climate Change Adjustment Program	–	–	3.5	12.4	8.7	16.2
Drought assistance – Murray Darling Basin grants to irrigators	–	144.3	60.4	0.8	–	–
Drought assistance – professional advice	–	6.2	14.2	12.5	7.1	1.9
Drought assistance – re-establishment assistance	–	4.6	17.6	20.0	23.9	16.4
Drought assistance – technical information workshop	–	6.1	–	–	–	–
Environmental Stewardship Program	–	–	–	8.9	13.3	13.2
Exceptional Circumstances – interest rate subsidy	<0.1	<0.1	3.9	–	–	<0.1
Exceptional Circumstances – relief payments	–	–	22.8	13.9	14.6	0.3

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Table A.10 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Sector-specific measures (continued)</i>						
Farm Bis Program	0.1	0.2	–	–	–	–
Farm Help	0.3	0.1	–	0.1	–	–
Farm Management Deposits Scheme	–	4.4	7.6	5.1	1.2	1.8
Industry Partnerships Program	–	0.3	0.1	–	–	–
Interim Income Support	–	–	–	<0.1	<0.1	<0.1
National Landcare Program	37.0	35.5	–	–	–	–
Promoting Australian Produce Program	–	–	3.0	1.3	3.8	–
Regional assistance	0.5	0.1	–	–	–	–
Rural Financial Counselling Service	2.1	2.8	2.3	2.2	1.7	1.9
Sustainable Rural Water Use and Infrastructure Program	–	0.1	17.3	54.2	59.2	191.8
<i>Rural R&D measures</i>						
Climate Change Adaptation Partnerships Program	–	–	10.1	19.3	10.8	8.5
Climate Change and Productivity Research Program	–	–	10.0	15.0	15.0	6.2
Land and water resources R&D	12.8	13.0	13.0	5.7	–	–
National Weeds and Productivity Research Program	–	–	3.1	4.1	4.0	4.0
Rural Industries R&D Corporation	5.8	5.4	5.8	5.0	5.1	3.9
<i>General R&D measures</i>						
Cooperative Research Centres	23.2	23.8	23.1	19.1	10.9	9.5
CSIRO	18.8	17.5	30.3	31.9	32.7	32.7
<i>Other measures</i>						
Tasmanian Freight Equalisation Scheme	9.3	11.6	12.6	14.1	14.1	13.3
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	2.0
Total	117.9	293.1	304.0	286.7	268.3	397.6
Total outlays	1554.2	1880.3	1434.9	1281.0	1058.4	891.2
Total tax expenditures	276.4	438.1	404.9	357.9	371.2	548.3
Total budgetary assistance	1830.6	2318.4	1839.9	1638.9	1429.6	1439.5

– Nil. Figures may not add to totals due to rounding. ^a The estimates are derived primarily from Australian Government departmental annual reports and Treasury's Tax Expenditure Statements and unpublished information provided by relevant agencies. ^b The estimates reported in this item 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. ^c 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 \$124.3 million in 2006-07 and \$120.1 million in 2007-08.

Source: Commission estimates.

**Table A.11 Australian Government budgetary assistance to mining,
2006-07 to 2011-12^a**

\$ million (nominal)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Industry-specific measures</i>						
Coal Sector Jobs Package	–	–	–	–	–	218.8
Greenhouse gas abatement program	0.9	0.4	<0.1	–	–	–
National Low Emissions Coal Initiative	–	–	8.7	32.3	47.6	25.6
<i>Sector-specific measures</i>						
Capital expenditure deduction for mining	25.0	20.0	15.0	10.0	7.0	2.0
<i>General export measures</i>						
Export Market Development Grants	1.4	1.6	1.6	2.2	1.4	1.8
TRADEX	0.6	0.6	0.5	0.5	0.3	0.3
<i>General investment measures</i>						
Development allowance	3.6	0.2	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.9	1.6	0.9	0.3
COMET Program	<0.1	<0.1	0.1	0.3	<0.1	<0.1
Commercial Ready Program	6.3	9.2	3.7	0.2	–	–
Commercialisation Australia	–	–	–	–	<0.1	0.9
Cooperative Research Centres	9.3	8.1	3.6	6.7	10.7	11.3
CSIRO	47.0	47.6	60.4	63.8	65.2	65.2
Innovation Investment Fund	0.6	0.3	0.4	–	–	–
New Industries Development Program	<0.1	<0.1	<0.1	–	–	–
Premium R&D tax concession	85.7	121.0	111.4	119.5	103.9	97.0
R&D Start	1.2	0.1	<0.1	–	–	–
R&D tax concession	112.6	156.8	195.4	202.2	202.2	197.3
R&D tax offset for small companies	16.9	28.7	36.1	63.3	68.1	76.5
Renewable Energy Development	0.3	0.5	0.8	0.3	–	–

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Table A.11 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.2	0.2	0.2	0.2	0.2	0.2
Beaconsfield Community Fund	3.2	–	–	–	–	–
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.2	0.2	0.1
Innovation Investment Fund for South Australia	–	–	0.3	0.3	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.2	<0.1	–
Small business capital gains tax 50 per cent reduction	1.2	2.1	1.9	2.1	1.9	1.9
Small business capital gains tax retirement exemption	0.6	1.4	0.5	0.9	0.8	0.8
Small business capital gains tax exemption	–	–	0.2	–	–	–
Tasmanian Freight Equalisation Scheme	–	–	<0.1	0.2	0.2	0.2
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	<0.1
<i>Total</i>	<i>316.7</i>	<i>398.8</i>	<i>442.2</i>	<i>506.6</i>	<i>510.6</i>	<i>700.4</i>
Total outlays	87.2	96.5	117.0	171.4	194.5	400.9
Total tax expenditures	229.5	302.3	325.2	335.2	316.2	299.5
Total budgetary assistance	316.7	398.8	442.2	506.6	510.6	700.4

– Nil. Figures may not add to totals due to rounding. ^a The estimates are derived primarily from Australian Government departmental annual reports and Treasury's Tax Expenditure Statements and unpublished information provided by relevant agencies.

Source: Commission estimates.

Table A.12 Australian Government budgetary assistance to manufacturing, 2006-07 to 2011-12^a

\$ million (nominal)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Food, beverages and tobacco						
<i>Industry-specific measures</i>						
Assistance for upgrade of Simplot Processing Plant (Tasmania)	–	–	–	–	2.0	1.0
Australian HomeGrown Campaign	1.8	0.9	–	–	–	–
Brandy preferential excise rate	4.0	4.0	5.0	4.0	4.0	4.0
Clean Technology Investment – Food and Foundries Program	–	–	–	–	–	1.2
Food Processing in Regional Australia	4.2	2.3	–	–	–	–
National food industry strategy	15.6	0.5	–	–	–	–
Regional Food Producers' Innovation and Productivity Program	–	–	–	3.0	5.1	0.4
<i>General export measures</i>						
Export Market Development Grants Scheme	16.1	13.8	16.0	14.4	11.4	8.1
TRADEX	0.9	0.9	0.8	0.7	0.5	0.5
<i>General investment measures</i>						
Development allowance	0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	–	0.4	0.3	0.3
COMET Program	<0.1	0.1	<0.1	<0.1	<0.1	–
Commercial Ready Program	1.1	1.6	2.0	0.3	0.1	–
Commercialisation Australia	–	–	–	<0.1	0.8	0.4
Cooperative Research Centres	2.6	2.6	0.4	0.3	–	–
CSIRO	10.3	18.6	18.2	19.2	19.6	19.6
Innovation Investment Fund	0.2	–	–	–	–	–
New Industries Development Program	0.2	<0.1	<0.1	–	–	–
Premium R&D tax concession	2.8	5.4	13.9	18.6	16.1	15.1
R&D Start	2.3	0.2	0.3	–	–	–
R&D tax concession	11.9	9.3	25.8	37.2	37.2	36.3
R&D tax offset for small companies	3.1	4.3	6.3	10.2	10.9	12.3
Renewable Energy Development Initiative	0.8	–	1.8	0.2	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.1	0.2	0.2	0.2	0.2	0.2
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	0.2	0.2	0.6	0.9	0.8
Geelong Innovation and Investment Fund	–	–	1.0	–	0.2	–
Innovation Investment Fund for South Australia	–	2.3	1.6	1.4	–	–

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures (continued)</i>						
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	2.5	1.9	–
Scottsdale Industry and Community Development Fund	–	<0.1	–	–	–	–
Small business CG tax asset exemption	–	0.4	–	–	–	–
Small business CG tax 50 percent reduction	3.1	3.5	3.0	3.0	2.7	2.7
Small business CG tax retirement exemption	2.1	1.5	1.8	1.8	1.7	1.7
Small business capital gains tax exemption	0.9	0.2	1.3	1.0	0.9	0.8
South Australia Innovation and Investment Fund	–	–	0.3	0.5	–	–
Tasmanian Freight Equalisation Scheme	16.3	17.5	14.8	–	–	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	0.5
Total	100.8	90.6	114.8	119.5	116.8	105.8
Textile, leather, clothing and footwear						
<i>Industry-specific measures</i>						
Clothing and Household Textile Building Innovative Capability Program	–	–	–	–	–	22.6
Howe leather – loan repayment	-3.2	-3.4	-3.1	–	–	–
TCF Project Diversification Scheme	5.0	5.0	4.5	4.6	4.2	–
TCF Small Business Program	2.2	2.0	2.1	1.7	2.1	2.0
TCF Strategic Capability Program	–	–	–	<0.1	5.2	8.7
TCF Strategic Investment Program – Post 2005	96.2	97.4	96.5	98.5	99.2	–
TCF Structural Adjustment Scheme	3.0	2.3	1.3	5.9	2.3	6.2
<i>General export measures</i>						
Export Market Development Grants Scheme	4.5	5.4	8.0	6.9	5.3	4.6
TRADEX	7.2	7.2	6.1	5.5	3.5	3.7
<i>General R&D measures</i>						
COMET Program	<0.1	<0.1	<0.1	<0.1	<0.1	–
Commercial Ready Program	–	0.7	0.9	0.7	0.2	–
Commercialisation Australia	–	–	–	–	–	0.1
CSIRO	13.8	9.8	5.0	5.3	5.4	5.4
Premium R&D tax concession	<0.1	<0.1	0.4	0.4	0.4	0.3
R&D tax concession	0.4	0.4	0.9	0.9	0.9	0.9
R&D tax offset for small companies	0.7	1.2	2.2	2.7	2.9	3.3

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.7	0.8	0.9	0.9	0.8	0.9
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.2	0.4	0.4
Geelong Innovation and Investment Fund	–	–	–	–	0.2	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.2	<0.1	–
Small business CG tax 50 percent reduction	0.6	0.7	1.2	0.4	0.3	0.3
Small business CG tax retirement exemption	0.8	0.5	–	0.3	0.3	0.3
Small business capital gains tax exemption	0.1	<0.1	0.5	<0.1	<0.1	<0.1
Tasmanian Freight Equalisation Scheme	0.5	0.4	0.2	–	–	–
Total	132.5	130.8	127.5	135.3	133.8	60.0
Wood and paper products						
<i>Industry-specific measures</i>						
Australia's Forest Industry – Preparing for the Future	–	–	3.3	6.9	3.5	–
Integrated Forest Products Grant	–	4.0	–	–	–	–
Tasmanian Community Forest Agreement	–	26.0	35.3	–	–	–
<i>Rural R&D measures</i>						
Forest and Wood Products R&D Corporation	1.2	1.4	1.7	1.7	1.8	1.5
<i>General export measures</i>						
Export Market Development Grants Scheme	0.9	1.0	0.9	0.8	0.7	0.4
TRADEX	0.7	0.7	0.6	0.5	0.3	0.4
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.1	–	–	–
COMET Program	<0.1	0.1	<0.1	–	<0.1	–
Commercial Ready Program	1.8	2.4	0.4	<0.1	–	–
Cooperative Research Centres	3.5	2.3	–	–	–	–
CSIRO	6.9	0.4	2.3	2.4	2.4	2.4
Premium R&D tax concession	2.5	1.3	0.3	–	–	–
R&D Start	0.1	–	–	–	–	–
R&D tax concession	4.8	3.9	6.0	7.2	7.2	7.0
R&D tax offset for small companies	1.0	1.9	2.1	2.5	2.6	3.0

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.3	0.3	0.3	0.3	0.3	0.3
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.2	0.5	0.4
North East Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
Scottsdale Industry and Community Development Fund	–	2.4	1.1	–	–	–
Small business CG tax 50 percent reduction	0.8	1.8	2.8	1.2	1.1	1.1
Small business capital gains tax retirement exemption	–	–	1.4	0.9	0.8	0.8
Small business capital gains tax exemption	–	<0.1	<0.1	–	–	–
South East South Australia Innovation and Investment Fund	–	–	–	–	–	0.3
Tasmanian Freight Equalisation Scheme	18.8	19.3	13.2	–	–	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	0.4
Total	43.3	69.2	71.8	24.6	21.3	18.0
Printing and recorded media						
<i>Industry-specific measures</i>						
TCF Small Business Program	–	–	–	<0.1	<0.1	–
<i>General export measures</i>						
Export Market Development Grants Scheme	3.6	0.8	0.6	0.4	0.2	0.2
TRADEX	0.3	0.3	0.2	0.2	0.1	0.1
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
COMET Program	0.2	0.2	<0.1	–	<0.1	–
Commercial Ready Program	0.8	11.0	1.1	0.3	<0.1	–
CSIRO	2.2	–	0.6	0.7	0.7	0.7
Premium R&D tax concession	0.4	0.6	0.2	–	–	–
R&D Start	0.3	0.9	–	–	–	–
R&D tax concession	0.9	0.9	0.6	0.8	0.8	0.8
R&D tax offset for small companies	1.8	2.7	3.1	3.5	3.8	4.3
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.2	0.2	0.2	0.2	0.2	0.2
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.2	0.2	0.2
Illawarra Region Innovation and Investment Fund	–	–	–	–	–	2.9
Scottsdale Industry and Community Development Fund	–	0.3	–	–	–	–
Small business CG tax asset exemption	–	1.1	–	–	–	–
Small business CG tax 50 percent reduction	0.8	0.8	1.3	2.2	2.0	2.0

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures (continued)</i>						
Small business CG tax retirement exemption	0.3	0.2	2.0	1.2	1.1	1.1
Small business capital gains tax exemption	–	<0.1	–	–	–	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	<0.1
Total	11.7	19.9	10.0	9.8	9.2	12.7
Petroleum, coal, chemical and rubber						
<i>Industry-specific measures</i>						
Biofuels Infrastructure Grants	3.7	7.2	–	–	–	–
Biotechnology Innovation Fund	0.1	–	–	–	–	–
CSL – Commonwealth assistance	–	–	–	–	9.3	10.6
Ethanol production subsidy	31.9	56.7	79.8	102.7	124.7	115.3
Greenhouse gas abatement program	3.9	1.6	0.3	–	–	–
Pharmaceutical Partnerships Program	18.4	18.5	8.1	1.7	–	–
Product Stewardship (Oil) program	4.4	–	–	–	–	–
Small scale mammalian cell production facility	–	–	–	1.0	1.0	4.0
<i>General export measures</i>						
Export Market Development Grants Scheme	4.8	7.2	8.2	9.7	7.0	5.3
TRADEX	2.6	2.6	2.2	2.0	1.3	1.4
<i>General investment measures</i>						
Development allowance	0.3	<0.1	–	–	–	–
<i>General R&D measures</i>						
Biotechnology Australia	3.0	–	–	–	–	–
Clean Business Australia – Climate Ready Program	–	–	1.3	1.8	0.8	0.2
COMET Program	0.3	0.6	0.5	0.5	0.3	<0.1
Commercial Ready Program	12.6	9.2	5.9	1.1	0.5	<0.1
Commercialisation Australia	–	–	–	0.5	2.5	2.5
Cooperative Research Centres	9.1	13.9	8.5	9.0	8.0	7.0
CSIRO	4.2	3.8	1.8	1.9	1.9	1.9
Innovation Investment Fund	–	–	–	0.5	0.9	1.2
National Stem Cell Centre	6.5	6.0	5.5	5.0	4.5	–
New Industries Development Program	0.1	<0.1	<0.1	–	–	–
Premium R&D tax concession	12.4	11.6	9.9	12.1	10.5	9.8
Preseed fund	–	0.5	–	–	–	–
R&D Start	1.7	0.4	0.1	–	–	–
R&D tax concession	15.7	17.4	38.3	35.1	35.1	34.2
R&D tax offset for small companies	11.7	15.7	20.7	23.9	25.7	28.9
Renewable Energy Development Initiative	–	1.6	0.7	–	–	–
Renewable Energy Equity Fund	0.2	0.1	–	–	–	–

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.1	0.2	0.1	0.1	0.1	0.1
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.5	0.9	0.6
Geelong Innovation and Investment Fund	–	–	–	–	0.2	–
Industry Cooperative Innovation Program	0.6	–	–	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.3	–	–
Scottsdale Industry and Community Development Fund	–	–	0.1	–	–	–
Small business CG tax 50 percent reduction	1.1	2.1	0.4	0.6	0.6	0.6
Small business CG tax retirement exemption	0.8	1.0	1.2	–	–	–
South Australian Innovation and Investment Fund	–	–	–	–	1.4	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	<0.1
<i>Total</i>	<i>150.3</i>	<i>178.0</i>	<i>193.7</i>	<i>210.0</i>	<i>237.3</i>	<i>223.8</i>
Non-metallic mineral products						
<i>General export measures</i>						
Export Market Development Grants Scheme	1.0	0.9	0.5	0.7	0.4	0.4
TRADEX	0.3	0.3	0.2	0.2	0.1	0.1
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	–	0.4	<0.1	–
COMET Program	0.1	0.5	0.2	0.1	<0.1	–
Commercial Ready Program	1.2	1.2	0.4	<0.1	–	–
Commercialisation Australia	–	–	–	–	0.1	0.3
CSIRO	2.5	0.1	0.4	0.4	0.4	0.4
Premium R&D tax concession	2.2	6.6	1.3	2.2	1.9	1.8
Preseed fund	0.8	–	–	–	–	–
R&D Start	1.2	0.1	<0.1	–	–	–
R&D tax concession	4.4	6.2	5.2	7.9	7.9	7.7
R&D tax offset for small companies	4.0	4.1	5.1	6.2	6.7	7.5
Renewable Energy Development Initiative	–	4.9	–	–	–	–

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.2	0.2	0.2	0.2	0.2	0.2
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.1	0.1	<0.1
Geelong Innovation and Investment Fund	–	–	–	–	0.7	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.4	<0.1	–
Small business CG tax 50 percent reduction	0.5	1.3	0.7	0.3	0.2	0.2
Small business CG tax retirement exemption	0.4	0.7	–	–	–	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	<0.1
Total	18.7	27.2	14.3	19.0	18.8	18.7
Metal and fabricated metal products						
<i>Industry-specific measures</i>						
Greenhouse gas abatement program	2.6	1.1	0.2	–	–	–
Investment incentives to Hismelt – grant	55.0	20.0	–	–	–	–
Steel Transformation Plan	–	–	–	–	–	164.0
<i>General export measures</i>						
Export Market Development Grants Scheme	1.6	3.4	3.8	3.0	2.6	2.2
TRADEX	2.2	2.2	1.9	1.7	1.1	1.1
<i>General investment measures</i>						
Development allowance	1.8	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.9	1.8	0.1	–
COMET Program	0.3	0.5	0.3	0.2	<0.1	–
Commercial Ready Program	3.6	2.4	2.4	2.4	0.4	–
Commercialisation Australia	–	–	–	–	<0.1	1.1
Cooperative Research Centres	8.1	8.3	8.5	8.1	7.8	5.5
CSIRO	47.1	47.3	27.1	28.6	29.2	29.2
Innovation Investment Fund	–	–	–	<0.1	0.2	0.2
Premium R&D tax concession	28.5	11.9	13.9	7.2	6.2	5.8
R&D Start	1.4	1.1	–	–	–	–
R&D tax concession	35.0	16.0	31.1	37.1	37.1	36.2
R&D tax offset for small companies	5.5	8.8	12.4	13.4	14.4	16.2

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	1.1	1.1	1.1	1.0	0.9	1.0
Enterprise Connect Innovation Centres	–	0.2	0.2	0.9	1.3	0.9
Geelong Innovation and Investment Fund	–	–	–	–	<0.1	–
Industry Cooperative Innovation Program	<0.1	<0.1	–	–	–	–
Innovation Investment Fund for South Australia	–	–	0.3	0.3	–	–
North East Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.8	1.3	–
Small business CG tax asset exemption	0.4	–	0.9	–	–	–
Small business CG tax 50 percent reduction	2.0	4.9	5.1	0.8	0.7	0.7
Small business CG tax retirement exemption	1.1	4.8	4.2	0.5	0.5	0.5
Small business capital gains tax exemption	<0.1	0.6	0.5	0.2	0.2	0.1
South Australia Innovation and Investment Fund	–	–	1.6	2.5	0.5	–
South East South Australia Innovation and Investment Fund	–	–	–	–	–	0.1
Tasmanian Freight Equalisation Scheme	2.9	3.4	4.8	–	–	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	0.8
Total	200.4	138.1	121.2	110.5	104.7	265.9
Motor vehicles and parts						
<i>Industry-specific measures</i>						
ACL Bearings	–	2.0	–	–	–	–
Automotive competitiveness and investment scheme – Stage 2	537.0	506.9	479.1	520.9	282.7	–
Automotive Industry Structural Adjustment Program	–	–	7.9	18.1	17.0	16.8
Automotive Market Access Program	–	–	–	0.5	0.5	0.5
Automotive Supply Chain Development Program	–	–	<0.1	3.9	5.8	5.4
Automotive Transformation Scheme	–	–	–	–	93.3	381.0
Ford Australia Assistance	–	–	–	–	–	34.0
Green Car Innovation Fund	–	–	–	108.1	63.0	125.5
Investment incentive for Holden	2.0	2.0	–	2.7	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	1.6	1.1	1.6	2.0	1.3	0.9
TRADEX	46.9	46.8	39.7	35.7	22.9	24.4

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>General investment measures</i>						
Development allowance	0.4	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.3	1.0	0.2	0.2
COMET Program	0.1	0.4	0.2	0.2	<0.1	<0.1
Commercial Ready Program	2.2	0.8	0.5	0.2	–	–
Commercialisation Australia	–	–	–	–	0.5	1.2
Cooperative Research Centres	5.1	6.4	6.2	6.1	5.5	5.0
CSIRO	1.4	1.1	0.5	0.6	0.6	0.6
Premium R&D tax concession	4.3	0.8	0.7	4.3	3.8	3.5
Preseed fund	–	<0.1	<0.1	–	–	–
R&D Start	–	–	<0.1	–	–	–
R&D tax concession	13.5	10.9	11.1	12.4	12.4	12.1
R&D tax offset for small companies	4.3	5.0	9.6	7.1	7.6	8.6
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.1	0.1	0.1	<0.1	<0.1	<0.1
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.2	–	0.2
Industry Cooperative Innovation Program	<0.1	<0.1	–	–	–	–
Small business CG tax 50 percent reduction	0.8	0.1	0.1	0.9	0.8	0.8
South Australia Innovation and Investment Fund	–	–	–	–	0.5	–
Total	619.7	584.6	558.1	724.8	518.6	620.7
Other transport equipment						
<i>Industry-specific measures</i>						
Aerospace incentives – Hawker de Havilland	2.5	–	–	–	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	1.5	1.3	1.2	1.3	1.5	1.1
TRADEX	0.2	0.2	0.2	0.2	0.1	0.1
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	–	0.3	0.2	–
COMET Program	<0.1	0.2	0.2	0.1	<0.1	–
Commercial Ready Program	0.9	0.1	0.3	<0.1	–	–
Commercialisation Australia	–	–	–	–	–	0.6
Cooperative Research Centres	3.7	5.7	6.9	7.4	5.2	5.1
CSIRO	2.6	2.6	5.4	5.6	5.8	5.8
Innovation Investment Fund	0.3	0.7	0.2	–	–	–
Premium R&D tax concession	3.5	3.3	1.1	0.8	0.7	0.6
R&D Start	<0.1	<0.1	–	–	–	–
R&D tax concession	6.1	5.9	5.9	6.5	6.5	6.3
R&D tax offset for small companies	3.5	5.8	7.7	7.4	7.9	8.9

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.4	0.5	0.5	0.4	0.4	0.4
Enterprise Connect Innovation Centres	–	<0.1	<0.1	<0.1	0.4	<0.1
Geelong Innovation and Investment Fund	–	–	<0.1	–	–	–
Industry Cooperative Innovation Program	–	–	0.3	0.3	0.1	–
North East Tasmania Innovation and Investment Fund	–	–	–	0.2	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.1	<0.1	–
Scottsdale Industry and Community Development Fund	–	–	0.2	–	–	–
Small business CG tax 50 percent reduction	0.9	0.4	0.1	0.4	0.4	0.4
Small business CG tax retirement exemption	–	0.6	1.3	–	–	–
South Australia Innovation and Investment Fund	–	–	0.9	1.5	–	–
Total	26.3	27.5	32.3	32.7	29.2	29.3
Machinery and equipment manufacturing						
<i>Industry-specific measures</i>						
Biotechnology Innovation Fund	<0.1	–	–	–	–	–
Wind turbine industry assistance	0.7	–	–	–	–	–
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	–	–	–	–	<0.1	–
<i>General export measures</i>						
Export Market Development Grants Scheme	13.9	13.8	16.3	19.5	11.6	9.7
TRADEX	5.8	5.7	4.9	4.4	2.8	3.0
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	7.2	11.8	7.3	2.9
COMET Program	1.6	2.2	1.8	1.7	0.8	<0.1
Commercial Ready Program	36.5	28.2	17.0	4.5	0.7	<0.1
Commercialisation Australia	–	–	–	0.1	4.1	11.4
Cooperative Research Centres	5.5	2.5	3.9	2.8	2.5	2.0
CSIRO	15.6	13.9	19.6	20.6	21.1	21.1
Innovation Investment Fund	1.0	1.4	0.3	–	–	–
New Industries Development Program	<0.1	<0.1	<0.1	–	–	–
Premium R&D tax concession	9.1	19.1	13.8	20.5	17.9	16.7
Preseed fund	0.2	1.8	0.3	0.8	–	–

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>General R&D measures (continued)</i>						
R&D Start	11.3	4.3	<0.1	–	–	–
R&D tax concession	26.2	29.1	35.2	42.8	42.8	41.8
R&D tax offset for small companies	34.9	41.8	51.5	58.8	63.2	71.0
Renewable Energy Development Initiative	1.1	1.9	0.2	0.1	–	–
Renewable Energy Equity Fund	<0.1	–	–	–	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.3	0.3	0.3	0.3	0.3	0.3
Enterprise Connect Innovation Centres	–	0.2	0.2	1.0	1.1	1.1
Geelong Innovation and Investment Fund	–	–	1.0	–	0.1	–
Illawarra Region Innovation and Investment Fund	–	–	–	–	–	0.7
Industry Cooperative Innovation Program	0.3	<0.1	–	–	–	–
Innovation Investment Fund for South Australia	–	4.2	2.6	2.2	–	–
North East Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.9	0.6	–
Scottsdale Industry and Community Development Fund	–	<0.1	–	–	–	–
Small business CG tax asset exemption	0.8	0.7	–	–	–	–
Small business CG tax 50 percent reduction	2.1	1.5	3.3	0.8	0.7	0.7
Small business CG tax retirement exemption	1.3	2.6	2.0	–	–	–
South Australia Innovation and Investment Fund	–	–	–	–	1.5	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	<0.1
Total	168.4	175.5	181.3	193.6	179.0	182.6

(continued next page)

Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Furniture and other manufacturing						
<i>Industry-specific measures</i>						
Biotechnology Innovation Fund	<0.1	–	–	–	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	6.4	4.0	6.0	7.6	5.7	6.0
TRADEX	2.3	2.3	1.9	1.7	1.1	1.2
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
COMET Program	0.6	0.7	0.3	0.6	0.3	<0.1
Commercial Ready Program	6.9	8.1	0.9	0.5	<0.1	–
Commercialisation Australia	–	–	–	<0.1	0.3	2.1
Cooperative Research Centres	–	2.5	4.1	6.0	6.8	6.8
CSIRO	10.0	15.7	–	–	–	–
Premium R&D tax concession	0.1	0.2	0.4	1.4	1.2	1.1
Preseed fund	–	–	–	0.2	–	–
R&D Start	4.5	2.8	0.1	0.1	–	–
R&D tax concession	0.9	1.0	1.7	2.1	2.1	2.0
R&D tax offset for small companies	3.8	4.6	3.8	4.1	4.5	5.0
Renewable Energy Development Initiative	0.5	0.7	–	–	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.5	0.6	0.6	0.7	0.6	0.7
Enterprise Connect Innovation Centres	–	0.2	0.2	0.4	0.3	0.3
Illawarra Region Innovation and Investment Fund	–	–	–	–	–	0.3
Industry Cooperative Innovation Program	0.2	0.2	–	–	–	–
Innovation Investment Fund for South Australia	–	0.3	–	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.1	1.5	–
Small business CG tax 50 percent reduction	1.0	2.6	1.7	0.6	0.5	0.5
Small business CG tax retirement exemption	0.5	2.5	1.2	–	–	–
Small business capital gains tax exemption	–	<0.1	–	–	–	–
Structural Adjustment Fund for South Australia	–	–	<0.1	–	–	–
Tasmanian Freight Equalisation Scheme	1.4	1.4	1.1	–	–	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	0.2
Total	39.8	50.4	24.3	26.2	24.9	26.3

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Table A.12 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Unallocated manufacturing						
<i>Industry-specific measures</i>						
Advanced electricity storage	0.5	2.8	8.7	–	–	–
<i>Sector-specific measures</i>						
Clean Business Australia – Re-tooling for Climate Change	–	–	0.7	4.9	7.6	4.2
Clean Technology Investment – General Program	–	–	–	–	–	<0.1
<i>General export measures</i>						
Duty Drawback	103.9	107.2	118.4	94.6	74.5	62.5
<i>General R&D measures</i>						
Cooperative Research Centres	3.5	3.5	2.6	2.0	–	–
CSIRO	0.4	0.3	12.8	13.5	13.8	13.8
Energy Innovation Fund	–	–	5.8	49.8	30.0	32.7
<i>Other measures</i>						
Enterprise Connect Innovation Centres	–	–	–	10.6	9.2	0.1
Innovation Investment Fund for South Australia	–	–	0.2	0.2	–	–
Intermediary Access Program	1.1	–	–	–	–	–
South Australia Innovation and Investment Fund	–	–	1.2	2.0	–	–
Structural Adjustment Fund for South Australia	–	–	0.3	–	–	–
Tasmanian Freight Equalisation Scheme	39.4	46.4	59.1	69.0	69.2	65.5
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	9.9
<i>Total</i>	<i>148.8</i>	<i>160.2</i>	<i>209.8</i>	<i>246.5</i>	<i>204.3</i>	<i>188.7</i>
Total outlays	725.5	755.8	733.0	896.7	930.0	1389.9
Total tax expenditures	935.3	896.2	926.0	955.9	667.7	362.6
Total budgetary assistance	1660.8	1652.0	1659.1	1852.6	1597.7	1752.6

– Nil. Figures may not add to totals due to rounding. ^a The estimates are derived primarily from Australian Government departmental annual reports and Treasury's Tax Expenditure Statements and unpublished information provided by relevant agencies.

Source: Commission estimates.

Table A.13 Australian Government budgetary assistance to services, 2006-07 to 2011-12^a

\$ million (nominal)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Electricity, gas, water and waste services						
<i>Industry-specific measures</i>						
Carbon Capture and Solar Flagships Program	–	–	–	61.8	7.1	6.8
Energy Security Fund – transitional assistance	–	–	–	–	–	1000.0
Greenhouse gas abatement program	9.8	4.1	0.7	–	–	–
Low emission technology development fund	–	3.1	1.6	–	–	–
Remote renewable power generation program	13.8	29.9	39.1	4.4	–	–
Renewable energy commercialisation	1.5	–	–	–	–	–
Solar Flagships Programs	–	–	–	0.1	17.3	3.8
<i>General export measures</i>						
Export Market Development Grants	0.6	0.6	0.6	0.8	0.5	0.3
TRADEX	0.1	0.1	0.1	0.1	<0.1	<0.1
<i>General investment measures</i>						
Development allowance	0.2	<0.1	–	–	–	–
Infrastructure bonds scheme	7.8	2.6	2.6	0.3	0.3	0.3
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	1.3	3.3	0.3	<0.1
COMET Program	0.2	0.7	0.6	0.3	0.3	–
Commercial Ready Program	1.1	0.9	0.7	0.3	<0.1	–
Commercialisation Australia	–	–	–	–	0.3	0.9
Cooperative Research Centres	4.5	4.0	–	–	–	–
CSIRO	19.8	28.0	22.3	23.6	24.1	24.1
Innovation Investment Fund	–	2.2	–	1.2	2.2	2.8
Premium R&D tax concession	2.0	6.9	3.8	9.7	8.4	7.8
Preseed fund	0.4	–	–	–	–	–
R&D tax concession	2.8	4.3	8.5	16.1	16.1	15.7
R&D tax offset for small companies	2.4	5.1	7.1	9.6	10.4	11.6
Renewable Energy Development Initiative	5.0	1.8	6.1	2.3	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.2	0.2	0.3	0.2	0.2	0.2
Enterprise Connect Innovation Centres	–	<0.1	<0.1	<0.1	0.2	0.3
Illawarra Region Innovation and Investment Fund	–	–	–	–	–	0.2
Industry Cooperative Innovation Program	0.1	<0.1	0.1	<0.1	<0.1	–
Innovation Investment Fund for South Australia	–	–	0.4	0.4	–	–

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures (continued)</i>						
Small business CG tax 50 per cent reduction	0.9	2.3	0.8	1.1	1.0	1.0
Small business CG tax retirement exemption	0.4	1.7	0.5	1.5	1.4	1.4
Small business capital gains tax exemption	–	0.2	–	–	–	–
Total	73.9	98.8	97.3	137.4	90.2	1077.4
Construction						
<i>General export measures</i>						
Export Market Development Grants Scheme	1.3	1.1	1.6	1.1	0.6	0.9
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.6	0.4	–	<0.1
COMET Program	0.2	0.3	<0.1	0.2	<0.1	–
Commercial Ready Program	2.5	1.8	1.8	0.9	<0.1	0.5
Cooperative Research Centres	1.8	1.5	–	0.4	–	–
CSIRO	3.4	1.4	1.3	1.3	1.4	1.4
Innovation Investment Fund	–	<0.1	–	–	–	–
Premium R&D tax concession	1.4	4.3	5.9	11.5	10.0	9.4
R&D Start	–	–	0.4	0.3	–	–
R&D tax concession	10.5	13.7	13.1	18.1	18.1	17.7
R&D tax offset for small companies	8.6	10.5	14.9	17.4	18.7	21.0
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	42.2	48.5	50.4	52.1	46.8	50.8
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.2	0.3	0.5
Industry Cooperative Innovation Program	0.2	0.2	–	–	–	–
North East Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.9	0.6	–
Scottsdale Industry and Community Development Fund	–	0.1	–	–	–	–
Small business CG tax asset exemption	–	1.6	4.3	2.1	2.1	2.6
Small business CG tax 50 percent reduction	18.8	21.6	30.4	16.1	14.5	14.5

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures (continued)</i>						
Small business CG tax retirement exemption	7.2	11.5	16.0	8.9	8.4	8.4
Small business capital gains tax exemption	5.0	4.8	9.5	5.0	4.5	4.0
Small business programs	0.9	–	0.1	<0.1	–	–
South Australia Innovation and Investment Fund	–	–	–	–	<0.1	–
Total	104.1	123.0	150.3	137.1	126.1	131.7
Wholesale trade						
<i>Industry-specific measures</i>						
Ethanol Distribution Program	–	1.7	2.0	–	–	–
TCF Small Business Program	–	–	–	0.2	<0.1	<0.1
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	–	–	–	–	<0.1	–
<i>General export measures</i>						
Export Market Development Grants Scheme	11.6	12.5	14.3	13.8	11.1	10.3
TRADEX	3.5	3.5	2.9	2.6	1.7	1.8
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.4	1.2	0.1	<0.1
COMET Program	<0.1	0.3	0.2	0.1	0.1	–
Commercial Ready Program	0.2	–	1.6	0.8	–	–
Commercialisation Australia	–	–	–	–	0.2	1.8
Premium R&D tax concession	9.9	17.0	27.7	58.8	51.1	47.8
R&D Start	0.2	0.2	–	–	–	–
R&D tax concession	21.4	25.6	62.2	90.2	90.2	88.0
R&D tax offset for small companies	23.3	29.7	36.2	41.6	44.7	50.3
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.9	1.1	1.1	1.2	1.1	1.2
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.1	0.3	0.3
Industry Cooperative Innovation Program	0.1	–	–	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.2	<0.1	–
Small business CG tax asset exemption	1.5	3.3	2.6	2.3	2.3	2.9
Small business CG tax 50 percent reduction	12.7	13.6	21.8	11.5	10.4	10.4
Small business CG tax retirement exemption	9.4	9.7	15.4	8.2	7.8	7.8
Small business capital gains tax exemption	2.3	2.8	5.3	3.3	3.0	2.6

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures (continued)</i>						
South Australia Innovation and Investment Fund	–	–	–	–	<0.1	–
South East South Australia Innovation and Investment Fund	–	–	–	–	–	0.1
Total	97.1	121.0	193.7	236.3	224.3	225.4
Retail trade						
<i>Industry-specific measures</i>						
Ethanol Distribution Program	0.7	4.5	5.0	–	–	–
Greenhouse gas abatement program	0.5	0.2	<0.1	–	–	–
LPG Vehicle Scheme	121.8	163.2	175.8	65.2	40.9	18.8
TCF Small Business Program	–	–	–	<0.1	<0.1	–
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	–	–	–	–	<0.1	–
<i>General export measures</i>						
Export Market Development Grants Scheme	1.3	1.5	2.1	1.4	1.2	1.2
TRADEX	4.4	4.4	3.7	3.4	2.2	2.3
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
COMET Program	<0.1	0.2	0.1	<0.1	<0.1	–
Commercial Ready Program	–	–	0.2	<0.1	–	–
Commercialisation Australia	–	–	–	–	<0.1	<0.1
Premium R&D tax concession	2.4	1.9	0.7	1.7	1.5	1.4
R&D tax concession	4.7	6.0	8.8	10.1	10.1	9.8
R&D tax offset for small companies	9.3	12.5	16.9	15.6	16.8	18.9
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	1.9	2.5	2.8	2.9	2.6	2.8
Enterprise Connect Innovation Centres	–	<0.1	<0.1	<0.1	0.1	0.2
North East Tasmania Innovation and Investment Fund	–	–	–	0.1	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	0.3	<0.1	–
Small business CG tax asset exemption	5.4	3.8	3.6	8.8	8.8	11.1
Small business CG tax 50 percent reduction	32.0	37.1	58.9	34.8	31.3	31.3
Small business CG tax retirement exemption	14.5	27.1	33.0	21.3	20.1	20.1
Small business capital gains tax exemption	13.4	7.3	22.5	16.2	14.6	12.9
Total	212.3	272.3	334.3	182.0	150.2	130.9

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Accommodation and food services						
<i>General export measures</i>						
Export Market Development Grants Scheme	5.0	4.1	5.0	6.5	4.3	3.2
<i>General R&D measures</i>						
COMET Program	–	–	–	<0.1	<0.1	–
Commercialisation Australia	–	–	–	–	–	<0.1
CSIRO	<0.1	–	–	–	–	–
R&D tax concession	1.0	1.1	0.4	0.4	0.4	0.4
R&D tax offset for small companies	0.5	1.4	2.0	1.2	1.3	1.5
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.7	0.9	1.0	1.0	0.9	1.0
Australian Tourism Development Program	–	0.2	–	–	–	–
Enterprise Connect Innovation Centres	–	–	–	<0.1	<0.1	<0.1
North East Tasmania Innovation and Investment Fund	–	–	–	0.1	–	–
Small business CG tax asset exemption	3.1	6.6	8.1	0.6	0.6	0.8
Small business CG tax 50 percent reduction	21.8	32.1	33.5	21.7	19.5	19.5
Small business CG tax retirement exemption	8.6	14.5	13.3	8.6	8.1	8.1
Small business capital gains tax exemption	7.9	5.7	14.7	6.8	6.1	5.4
Total	48.7	66.6	78.0	47.1	41.3	40.0
Transport, postal and warehousing						
<i>Industry-specific measures</i>						
Bass Straight Passenger Vehicle Equalisation	28.4	30.1	35.1	36.5	36.5	34.6
Payment scheme for Airservices Australia's en route charges	6.0	5.8	4.7	4.1	4.0	4.2
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	–	–	–	–	0.4	0.3
Exceptional Circumstances – relief payments	–	–	–	–	0.9	<0.1
Interim Income Support	–	–	–	–	<0.1	<0.1
<i>General export measures</i>						
Export Market Development Grants Scheme	5.5	5.9	6.0	8.3	5.6	2.7
TRADEX	0.5	0.5	0.5	0.4	0.3	0.3

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>General investment measures</i>						
Development allowance	0.5	<0.1	–	–	–	–
Infrastructure bonds scheme	7.2	2.4	2.4	0.2	0.2	0.2
Infrastructure borrowing's tax offset scheme	3.8	3.8	0.4	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.7	0.8	–	–
COMET Program	0.1	0.1	<0.1	0.1	<0.1	<0.1
Commercial Ready Program	0.8	1.3	–	–	–	–
Commercialisation Australia	–	–	–	<0.1	<0.1	0.7
CSIRO	3.3	2.7	1.1	1.2	1.2	1.2
Premium R&D tax concession	4.8	4.8	6.2	14.1	12.2	11.4
R&D Start	<0.1	–	–	–	–	–
R&D tax concession	7.5	8.2	9.1	13.8	13.8	13.4
R&D tax offset for small companies	3.4	4.3	5.4	5.1	5.5	6.2
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	9.6	11.1	12.4	12.6	11.3	12.3
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	<0.1	<0.1	<0.1	<0.1	<0.1
Industry Cooperative Innovation Program	–	–	0.2	0.2	–	–
North East Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
Small business CG tax asset exemption	0.9	1.3	4.8	1.4	1.4	1.7
Small business CG tax 50 per cent reduction	9.2	13.4	17.1	10.5	9.4	9.4
Small business CG tax retirement exemption	5.7	9.2	13.2	5.2	4.9	4.9
Small business capital gains tax exemption	2.0	2.9	5.0	2.5	2.3	2.0
Tasmanian Innovation and Investment Fund	–	–	–	–	–	0.2
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	5.9
Total	99.2	107.9	124.4	117.2	110.1	112.0

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Information and telecommunications						
<i>Industry-specific measures</i>						
ABC and SBS Digital Interference Scheme	<0.1	<0.1	<0.1	<0.1	–	–
Community Broadcasting Program	–	–	–	–	–	<0.1
Regional Equalisation Plan	24.8	23.7	0.3	1.3	1.3	1.1
The Advanced Networks Program	12.5	–	–	–	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	2.5	22.4	27.7	27.8	19.4	19.2
<i>General investment measures</i>						
Development allowance	0.5	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	0.2	0.1	<0.1	–
COMET Program	0.6	1.1	1.2	1.0	0.6	<0.1
Commercial Ready Program	5.2	2.8	1.8	0.4	–	–
Commercialisation Australia	–	–	–	0.4	2.6	8.1
Cooperative Research Centres	3.5	4.4	4.5	4.4	4.4	4.4
CSIRO	32.8	35.7	18.2	19.2	19.6	19.6
ICT centre of excellence	24.0	26.8	27.3	25.4	25.9	25.0
Innovation Investment Fund	0.2	–	–	<0.1	<0.1	0.1
Premium R&D tax concession	2.0	1.9	2.2	5.7	5.0	4.6
Preseed fund	1.8	1.0	0.7	0.4	–	–
R&D Start	0.6	0.2	–	–	–	–
R&D tax concession	20.1	29.3	21.2	30.8	30.8	30.0
R&D tax offset for small companies	15.6	21.4	23.2	24.1	25.9	29.2
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	1.1	1.4	1.5	1.4	1.2	1.4
Enterprise Connect Innovation Centres	–	<0.1	<0.1	0.1	0.1	0.1
Industry Cooperative Innovation Program	0.4	0.2	0.5	0.3	0.3	–
Innovation Investment Fund for South Australia	–	–	0.9	0.8	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	<0.1	<0.1	–
Small business CG tax 50 percent reduction	2.0	3.2	3.1	3.4	3.1	3.1
Small business CG tax retirement exemption	1.0	1.9	0.2	–	–	–
Small business capital gains tax exemption	0.1	0.6	–	0.2	0.1	0.1
Total	151.3	178.1	134.8	147.2	140.5	146.1

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Financial and insurance services						
<i>Industry-specific measures</i>						
High Costs Claims scheme	8.8	3.2	19.5	21.4	24.5	20.3
Offshore Banking Unit tax concession	160.0	320.0	265.0	240.0	170.0	185.0
TCF Small Business Program	–	–	–	<0.1	–	–
United Medical Protection support	13.2	0.1	–	–	–	–
Venture Capital Limited Partnerships	10.0	10.5	11.5	11.5	11.5	11.5
<i>General export measures</i>						
Export Market Development Grants Scheme	1.4	0.5	0.9	1.2	0.6	0.2
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
Land transport infrastructure borrowing's tax offset scheme	1.3	1.3	0.1	–	–	–
<i>General R&D measures</i>						
COMET Program	<0.1	0.1	0.2	<0.1	<0.1	–
Commercial Ready Program	1.6	1.8	–	–	–	–
Commercialisation Australia	–	–	–	–	–	0.9
CSIRO	1.2	0.8	0.7	0.7	0.7	0.7
Innovation Investment Fund	3.9	3.1	1.9	3.0	5.3	6.9
Premium R&D tax concession	19.7	28.1	68.1	74.5	64.8	56.9
Preseed fund	1.9	2.2	–	2.0	–	–
R&D Start	0.4	–	–	–	–	–
R&D tax concession	37.7	46.5	95.6	144.2	144.2	132.2
R&D tax offset for small companies	13.0	18.0	26.2	33.6	36.1	40.6
Renewable Energy Equity Fund	0.3	0.3	–	–	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	4.5	5.6	6.0	5.6	5.0	5.5
Concessional rate of withholding tax	–	–	30.0	80.0	170.0	195.0
Enterprise Connect Innovation Centres	–	–	–	<0.1	<0.1	–
Industry Cooperative Innovation Program	–	–	0.3	–	–	–
Pooled development funds	9.0	11.0	10.0	5.0	5.0	45.0
Small business CG tax asset exemption	14.0	14.5	34.6	23.1	23.1	29.2
Small business CG tax 50 percent reduction	105.5	113.6	169.7	99.2	89.2	89.2
Small business CG tax retirement exemption	56.9	86.4	113.9	72.6	68.6	68.6
Small business capital gains tax exemption	28.4	77.6	64.4	33.7	30.3	26.9
Small business programs	–	–	0.1	<0.1	–	–
Total	492.8	745.3	918.7	851.4	849.1	914.7

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Property, professional and administration						
<i>Industry-specific measures</i>						
Biotechnology Innovation Fund	0.2	<0.1	–	–	–	–
Pharmaceuticals Partnerships Program	–	–	–	0.3	–	–
Solar cities initiative	3.0	9.1	7.2	11.7	–	–
TCF Small Business Program	–	0.3	0.3	0.5	0.3	0.3
<i>Sector-specific measures</i>						
Exceptional Circumstances – interest rate subsidy	–	–	–	–	<0.1	–
<i>General export measures</i>						
Export Market Development Grants	32.1	26.9	35.7	37.2	26.8	27.1
TRADEX	0.4	0.4	0.4	0.3	0.2	0.2
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	1.1	4.5	3.1	0.6
COMET Program	3.6	6.5	3.9	3.1	1.4	<0.1
Commercial Ready Program	26.9	23.3	36.2	11.6	3.2	0.1
Commercialisation Australia	–	–	–	1.0	10.0	13.6
Cooperative Research Centres	10.3	12.5	7.9	9.3	11.5	11.9
CSIRO	7.5	6.2	2.0	2.2	2.2	2.2
Innovation Investment Fund	3.8	4.4	2.3	1.3	2.3	3.0
National Enabling Technologies Strategy	–	–	–	0.2	0.2	0.3
Premium R&D tax concession	29.1	38.9	43.3	88.5	76.9	72.3
Preseed fund	2.1	4.3	2.2	1.9	–	–
R&D Start	5.6	0.4	1.1	0.2	–	–
R&D tax concession	78.6	73.3	103.5	139.0	139.0	137.6
R&D tax offset for small companies	40.0	55.7	69.9	96.2	103.4	130.5
Renewable Energy Development Initiative	1.1	1.0	8.8	1.4	–	–
Renewable Energy Equity Fund	0.3	1.4	–	–	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	28.4	35.1	39.7	38.4	34.5	37.4
Australian Tourism Development Program	–	1.3	–	–	–	–
Enterprise Connect Innovation Centres	–	2.8	2.8	1.4	2.6	3.7
Illawarra Region Innovation and Investment Fund	–	–	–	–	–	0.3
Indigenous Tourism Business Ready	–	–	0.4	–	–	–
Industry Cooperative Innovation Program	0.2	0.7	0.6	<0.1	<0.1	–
Innovation Investment Fund for South Australia	–	–	0.8	0.7	–	–

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures (continued)</i>						
Small business CG tax asset exemption	8.8	23.3	23.5	15.7	15.7	19.8
Small business CG tax 50 per cent reduction	71.6	98.6	136.2	80.9	72.8	72.8
Small business CG tax retirement exemption	42.7	69.7	81.6	54.9	51.9	51.9
Small business capital gains tax exemption	18.7	21.4	56.5	31.9	28.7	25.5
Small business Online Program	–	–	–	–	2.4	–
Small business programs	6.8	10.6	1.2	0.6	–	–
South Australia Innovation and Investment Fund	–	–	–	–	1.5	–
Tasmanian Innovation and Investment Fund	–	–	–	–	–	<0.1
Total	421.8	528.2	669.0	635.3	590.7	611.3
Public administration and safety						
<i>General export measures</i>						
Export Market Development Grants Scheme	–	0.3	0.4	0.3	0.2	0.1
TRADEX	0.2	0.2	0.2	0.1	<0.1	<0.1
<i>General R&D measures</i>						
COMET Program	<0.1	<0.1	<0.1	0.2	<0.1	–
Commercialisation Australia	–	–	–	–	0.2	0.1
CSIRO	13.8	12.7	25.8	27.3	27.9	27.9
Premium R&D tax concession	–	–	–	0.5	0.5	–
R&D tax concession	0.9	0.6	0.5	2.7	2.7	0.7
R&D tax offset for small companies	–	0.7	1.6	6.4	6.9	2.0
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	0.7	0.8	0.9	0.8	0.7	0.8
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	0.2	0.2	0.7	0.2	0.8
Small business CG tax 50 per cent reduction	0.4	0.4	2.0	0.8	0.7	0.7
Small business CG tax retirement exemption	0.4	0.2	1.9	0.2	0.2	0.2
Small business programs	4.3	1.6	0.5	0.2	–	–
Total	20.8	18.0	33.9	40.1	40.3	33.4

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Education and training						
<i>General export measures</i>						
Export Market Development Grants Scheme	7.4	8.6	12.3	14.9	11.1	9.2
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
COMET Program	0.2	0.3	0.2	0.1	<0.1	<0.1
Commercial Ready Program	–	<0.1	0.6	0.5	0.2	<0.1
Commercialisation Australia	–	–	–	–	0.5	0.8
CSIRO	2.0	1.1	0.7	0.7	0.7	0.7
Premium R&D tax concession	<0.1	0.5	<0.1	0.2	0.1	0.1
R&D Start	<0.1	–	–	–	–	–
R&D tax concession	0.4	0.6	0.4	0.6	0.6	0.6
R&D tax offset for small companies	3.3	2.8	4.1	4.1	4.4	5.0
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	3.7	4.8	5.4	5.4	4.8	5.3
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	0.7	0.7	1.7	1.1	2.6
Indigenous Tourism Business Ready Program	–	–	0.2	–	–	–
Small business CG tax asset exemption	–	–	–	0.1	0.1	0.2
Small business CG tax 50 percent reduction	1.8	3.6	4.7	2.2	2.0	2.0
Small business CG tax retirement exemption	0.4	1.8	4.1	2.4	2.3	2.3
Small business capital gains tax exemption	0.4	0.2	0.8	0.4	0.3	0.3
Small business Online Program	–	–	–	–	2.3	–
Small business programs	2.6	0.4	0.8	0.4	–	–
Structural Adjustment Fund for South Australia	–	–	0.2	–	–	–
Tasmanian Freight Equalisation Scheme	–	–	<0.1	<0.1	<0.1	<0.1
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	<0.1
<i>Total</i>	22.3	25.6	35.2	33.9	30.9	29.3

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Health care and social assistance						
<i>Industry-specific measures</i>						
Biotechnology Innovation Fund	<0.1	–	–	–	–	–
Premium Support scheme	50.0	23.5	16.1	17.2	13.1	11.4
<i>General export measures</i>						
Export Market Development Grants Scheme	2.1	1.4	1.8	2.1	1.7	1.6
TRADEX	0.3	0.3	0.3	0.2	0.2	0.2
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
COMET Program	0.5	1.5	0.4	0.3	0.2	<0.1
Commercial Ready Program	7.0	7.8	2.3	0.2	–	–
Commercialisation Australia	–	–	–	<0.1	0.6	1.4
Cooperative Research Centres	19.0	24.2	19.3	18.4	25.2	33.4
CSIRO	41.1	50.3	47.6	50.2	51.4	51.4
Innovation Investment Fund	2.4	–	0.6	0.7	1.2	1.6
Premium R&D tax concession	0.5	0.5	0.6	1.5	1.3	1.2
Preseed fund	2.0	1.1	0.9	0.2	–	–
R&D Start	1.8	0.2	–	–	–	–
R&D tax concession	1.7	1.6	2.6	3.6	3.6	3.5
R&D offset for small companies	4.4	5.3	6.7	8.9	9.6	10.8
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	8.0	10.4	12.7	10.4	9.4	10.2
Australian Tourism Development Program	–	<0.1	–	–	–	–
Enterprise Connect Innovation Centres	–	–	–	<0.1	–	<0.1
Industry Cooperative Innovation Program	–	–	0.5	<0.1	–	–
Small business CG tax asset exemption	1.7	3.8	0.7	1.9	1.9	2.5
Small business CG tax 50 per cent reduction	20.7	36.1	36.4	17.8	16.0	16.0
Small business CG tax retirement exemption	10.9	21.2	21.5	15.5	14.7	14.7
Small business capital gains tax exemption	6.8	6.8	7.5	4.4	3.9	3.5
Small business programs	<0.1	–	–	–	–	–
Total	181.2	195.9	178.4	153.9	154.0	163.3

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Arts and recreation services						
<i>Industry-specific measures</i>						
Australian Film Commission	52.4	53.0	–	–	–	–
Australian Film Finance Corporation	70.5	70.5	–	–	–	–
Equine Influenza Emergency Assistance Package	–	256.8	–	–	–	–
Exemption of film tax offset payments	10.0	2.0	17.0	38.0	36.0	32.0
Film Australia	13.2	13.3	–	–	–	–
Film industry tax incentives – 10B & 10A	-13.0	-13.0	-14.0	-22.0	-18.0	-17.0
Film industry offsets	29.0	69.0	128.2	242.0	152.0	204.0
Indigenous Broadcasting Program	13.6	14.0	13.7	14.4	14.7	15.0
Screen Australia	–	–	102.9	93.6	89.4	91.8
<i>General export measures</i>						
Export Market Development Grants Scheme	12.8	5.6	5.9	6.5	4.9	4.6
<i>General investment measures</i>						
Development allowance	<0.1	<0.1	–	–	–	–
<i>General R&D measures</i>						
COMET Program	0.2	0.4	<0.1	0.2	<0.1	–
Commercial Ready Program	0.2	0.2	–	–	–	–
Cooperative Research Centres	4.7	3.5	3.1	2.0	–	–
CSIRO	0.5	0.8	1.5	1.6	1.6	1.6
Premium R&D tax concession	–	–	–	0.7	0.6	0.5
R&D tax concession	0.2	0.2	0.8	1.4	1.4	1.4
R&D tax offset for small companies	1.2	1.2	1.6	2.1	2.3	2.6
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	4.4	5.9	6.3	6.1	5.5	5.9
Australian Tourism Development Program	–	0.9	–	–	–	–
Enterprise Connect Innovation Centres	–	–	–	<0.1	<0.1	<0.1
Illawarra Region Innovation and Investment Fund	–	–	–	–	–	1.9
Industry Cooperative Innovation Program	0.7	–	–	–	–	–
Small business CG tax 50 percent reduction	4.7	3.7	5.3	4.3	3.9	3.9
Small business CG tax retirement exemption	2.0	3.4	2.3	2.2	2.1	2.1
Small business capital gains tax exemption	1.3	1.3	0.8	1.1	1.0	0.9
Small business programs	0.7	–	–	–	–	–
Tasmanian Freight Equalisation Scheme	–	–	<0.1	0.2	0.2	0.1
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	<0.1
Total	209.2	492.7	275.5	394.4	297.6	351.4

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Other services						
<i>Industry-specific measures</i>						
TCF Small Business Program	–	–	–	<0.1	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	1.3	1.7	2.4	3.1	2.2	1.4
<i>General R&D measures</i>						
Clean Business Australia – Climate Ready Program	–	–	<0.1	<0.1	–	–
COMET Program	0.1	<0.1	0.1	<0.1	<0.1	–
Commercial Ready Program	0.1	<0.1	<0.1	–	–	–
CSIRO	1.2	1.3	<0.1	<0.1	<0.1	<0.1
Premium R&D tax concession	0.9	1.8	1.2	1.8	1.5	1.4
R&D tax concession	2.8	2.9	3.7	4.9	4.9	4.7
R&D tax offset for small companies	5.3	6.3	6.0	9.4	10.1	11.4
Renewable Energy Development Initiative	0.7	1.5	–	–	–	–
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	6.9	8.6	9.9	10.6	9.5	10.3
Australian Tourism Development Program	–	1.7	–	–	–	–
Enterprise Connect Innovation Centres	–	–	–	0.5	1.6	12.1
Industry Cooperative Innovation Program	0.5	<0.1	2.2	2.6	0.9	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	<0.1	<0.1	–
Small business CG tax asset exemption	1.2	1.8	1.5	1.1	1.1	1.3
Small business CG tax 50 per cent reduction	8.9	12.3	15.1	7.8	7.0	7.0
Small business CG tax retirement exemption	4.0	6.3	8.0	3.6	3.4	3.4
Small business capital gains tax exemption	3.7	2.1	5.2	1.5	1.3	1.2
Small business Online Program	–	–	–	–	2.4	–
Small business programs	1.6	0.8	0.7	0.4	–	–
South East South Australia Innovation and Investment Fund	–	–	–	–	–	<0.1
Tasmanian Innovation and Investment Fund	–	–	–	–	–	<0.1
Total	39.2	49.1	56.3	47.3	46.0	54.4

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Table A.13 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Unallocated services						
<i>Industry-specific measures</i>						
Building IT strengths	7.5	–	–	–	–	–
ICT Incubators Program	–	1.7	–	–	–	–
<i>General export measures</i>						
Tourism Australia	133.8	135.8	137.6	141.6	136.1	136.8
<i>General R&D measures</i>						
CSIRO	3.3	3.7	2.4	2.5	2.6	2.6
<i>Other measures</i>						
Australian Tourism Development Program	6.8	–	–	–	–	–
Cairns Esplanade Development	1.9	–	–	–	–	–
Clean Business Australia – Green Building Fund	–	–	–	16.7	24.0	31.9
Enterprise Connect Innovation Centres	–	–	–	–	<0.1	–
Film Licensed Investment Company Scheme	4.0	4.0	–	–	–	–
Indigenous Tourism Business Ready Program	1.1	0.4	0.6	–	–	–
National Tourism Accreditation Framework	0.5	–	–	–	–	–
North East Chinese Heritage Trail	1.2	–	–	–	–	–
Queensland Tourism Assistance Package	–	–	0.3	–	–	–
Small business Online Program	–	–	–	7.2	–	–
Stockman's Hall of Fame	0.5	0.4	–	–	–	–
Tasmanian Forest Tourism Initiative	–	–	15.2	18.1	3.3	–
The Great Green Way - Tourism Initiative	1.9	–	–	–	–	–
TQUAL grants	–	–	4.2	8.6	3.3	9.0
<i>Total</i>	<i>162.7</i>	<i>146.0</i>	<i>160.2</i>	<i>194.7</i>	<i>169.3</i>	<i>180.3</i>
Total outlays	1093.8	1414.4	1202.1	1176.5	1056.0	2091.1
Total tax expenditures	1242.8	1754.3	2237.9	2178.8	2004.6	2110.4
Total budgetary assistance	2336.5	3168.6	3440.0	3355.3	3060.6	4201.5

– Nil. Figures may not add to totals due to rounding. ^a The estimates are derived primarily from Australian Government departmental annual reports and Treasury's Tax Expenditure Statements and unpublished information provided by relevant agencies.

Source: Commission estimates.

Table A.14 Australian Government budgetary assistance, Unallocated other, 2006-07 to 2011-12^{ab}

\$ million (nominal)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Industry-specific measures</i>						
Australian Seafood Industry Council	–	<0.1	–	–	–	–
Australian Space Science Program	–	–	–	4.8	11.2	12.2
Biotechnology Innovation Fund	<0.1	–	–	–	–	–
National Energy Efficiency Initiative – Smart Grid, Smart City	–	–	–	–	33.7	51.0
National Urban Water & Desalination Plan	–	–	10.0	16.2	46.0	88.9
Pharmaceuticals Partnerships Program	–	16.6	7.3	–	–	–
Tasmanian wheat freight subsidy	0.6	0.9	0.3	0.1	–	–
TCF Small Business Program	–	–	–	–	–	0.2
<i>Sector-specific measures</i>						
Farm Help	–	–	–	–	–	<0.1
<i>General export measures</i>						
Austrade	99.0	98.0	109.2	111.4	118.8	100.3
Australian Made Campaign	0.5	0.9	0.4	1.1	–	–
Clean Energy Trade and Investment Strategy	–	–	–	5.0	5.0	4.9
EFIC national interest business	10.9	8.2	7.4	3.1	4.4	3.7
International Food & Agricultural Service	30.5	36.7	–	–	–	–
<i>General investment measures</i>						
Development allowance	2.2	0.1	–	–	–	–
Invest Australia	24.0	–	–	–	–	–
Regional headquarters program	0.5	0.5	0.5	0.5	0.5	0.5
<i>General R&D measures</i>						
Australian Centre for Renewable Energy	–	–	–	15.5	14.4	23.8
Clean Business Australia – Climate Ready Program	–	–	–	2.0	–	–
COMET Program	–	–	<0.1	<0.1	–	–
Commercial Ready Program	0.4	24.3	0.1	–	–	–
Innovation Access Program	0.8	1.1	–	–	–	–
Innovation Investment Follow-on Fund	–	–	–	40.9	17.2	1.0
Innovation Investment Fund	–	–	2.6	–	–	–
National Enabling Technologies Strategy	–	–	–	0.1	0.4	0.6
Premium R&D tax concession	0.4	1.4	2.6	3.6	3.1	2.9
Preseed fund	–	–	2.7	–	–	–
R&D Start	2.2	1.5	–	–	–	–
R&D tax concession	2.8	4.7	7.0	12.4	12.4	12.1
R&D tax offset for small companies	11.3	21.8	30.3	35.7	38.4	43.2
R&D tax offset payments – exemption	-30.0	-120.0	-140.0	-170.0	-200.0	-235.0
Renewable Energy Development Initiative	–	3.4	–	–	–	–

(continued next page)

Table A.14 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures</i>						
25 per cent entrepreneurs' tax offset	18.5	28.8	34.8	36.5	32.8	35.6
Beaconsfield Community Fund	1.0	2.4	–	–	–	–
Enterprise Connect Innovation Centres	–	0.3	0.3	1.4	3.9	–
Capital gains tax relief for statutory licences	20.0	90.0	–	–	–	–
Fishing Structural Adjustment Package – Onshore Business Restructure Program	–	5.7	–	–	–	–
Geelong Innovation & Investment Fund	–	–	–	7.0	–	–
Home Based Business Seminars	0.4	0.3	–	–	–	–
Industry Capability Network Limited	2.3	–	–	–	–	–
Industry Cooperative Innovation Program	–	2.7	–	–	–	–
Innovation Investment Fund for South Australia	–	<0.1	<0.1	<0.1	–	–
Insulation Industry Assistance Package	–	–	–	–	22.9	–
Intermediary Access Program	–	1.9	–	–	–	–
Low Emissions Technology and Abatement Program	6.7	3.1	1.7	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	–	–	–	<0.1	–	–
Port Kembla Industry Facilitation Fund	2.4	2.6	–	–	–	–
Procurement strategy	–	–	–	1.8	3.5	6.4
Regional partnerships program	17.3	18.6	14.5	6.2	0.2	–
Small Business – Simplified depreciation rules	–	–	60.0	90.0	170.0	15.0
Small Business Advisory Services	–	–	11.9	16.4	9.0	12.1
Small business CG tax asset exemption	12.9	22.2	31.2	24.2	24.2	30.6
Small business CG tax 50 percent reduction	186.0	270.3	334.7	200.3	180.3	180.3
Small business CG tax retirement exemption	78.6	163.0	191.7	113.5	107.2	107.2
Small business capital gains tax exemption	60.2	58.7	108.4	66.1	59.5	52.8
Small business programs	0.5	–	0.3	0.2	–	–
Small business Support Line	–	–	–	1.3	–	–
Structural Adjustment Fund for South Australia	10.5	7.0	–	–	–	–
Sustainable Regions program	7.1	4.7	0.9	–	–	–

(continued next page)

Table A.14 (continued)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>Other measures (continued)</i>						
Tasmanian Freight Equalisation Scheme	1.0	1.2	2.5	6.6	6.6	6.3
Taxation assistance for victims of Australian natural disasters	11.0	11.0	8.0	8.0	6.0	3.0
TCF Corporate Wear Program	56.4	66.6	74.1	93.1	85.4	85.4
Temporary Assistance for Tasmanian Exporters	–	–	–	–	–	0.9
The Small and General Business Tax Break	–	–	–	1490.0	2390.0	680.0
Tropical Cyclones Larry and Monica – business assistance	11.8	–	–	–	–	–
<i>Total</i>	<i>660.6</i>	<i>861.1</i>	<i>915.6</i>	<i>2244.9</i>	<i>3206.9</i>	<i>1326.0</i>
Total outlays	241.0	264.0	202.6	276.8	335.6	355.6
Total tax expenditures	419.6	597.1	713.0	1968.1	2871.3	970.4
Total budgetary assistance	660.6	861.1	915.6	2244.9	3206.9	1326.0

– Nil. Figures may not add to totals due to rounding. ^a The estimates are derived primarily from Australian Government departmental annual reports and Treasury's Tax Expenditure Statements and unpublished information provided by relevant agencies. ^b Includes programs or amounts of funding where the initial benefiting industry is not stated and/or has not been ascertained.

Source: Commission estimates.

B Types of intellectual property

This appendix provides supporting detail to chapter 4.

- Table B.1 lists types of intellectual property, the subject matter and features protected, the maximum life of the IP rights, the relevant acts of the Australian Parliament, major relevant international agreements applying and current government responsibility for the administration of each measure.
- Table B.2 lists some IP-related arrangements.

Table B.1 Types of intellectual property

<i>Types of protection</i>	<i>Subject matter and features protected</i>	<i>Maximum life of IP right</i>	<i>Australian Acts</i>	<i>Major international agreements</i>	<i>Government responsibility</i>
Standard patents <i>- By application and examination</i>	Device, substance, composition, method or process that are new, inventive and useful. Excluded: human beings and methods for their generation.	20 years 25 years (pharmaceuticals).	<i>Patents Act 1990</i>	Paris Convention; Patent Cooperation Treaty; Budapest Treaty; Strasbourg Agreement; TRIPS (articles 27-34); Patent Law Treaty, AUSFTA, ACI-FTA	IP Australia
Innovation patents <i>- By application, and certification (if requested)</i>	As above, except inventions only need to be different from what is known before and the difference makes a substantial contribution to the working of the invention	8 years.	<i>Patents Act 1990</i>	Paris Convention; Budapest Treaty; Strasbourg Agreement	IP Australia
Industrial designs <i>- Registered by examination</i>	New and distinctive features of shape, configuration, pattern, or ornamentation.	10 years. (Initial 5 years plus renewable for 5 years).	<i>Designs Act 2003</i>	Paris Convention; Hague Agreement ^a ; Locarno Agreement ^a TRIPS (articles 25 & 26); AUSFTA	IP Australia
Trade marks <i>- Registered by examination</i> <i>- Unregistered have Common Law standing</i>	Distinguish the goods and/or services of the trader: letter, number, word, phrase, sound, smell, shape, logo, picture and/or aspect of packaging. Certification trademarks showing goods or services certified as meeting particular standards.	Indefinite. (Initial 10 years plus further renewals 10 years at a time).	<i>Trade Marks Act 1995</i>	Madrid Protocol ^a ; Paris Convention; Nice Agreement; Trademark Law Treaty; TRIPS (articles 15-21); Singapore Treaty, AUSFTA, AANZFTA, ACI-FTA AUSFTA, ACI-FTA	IP Australia

Geographical Indications - as a Certification trade mark - on the wine GI register	Goods originating from a specific territory, region or locality with a particular quality, reputation or characteristic. Wine regions, foreign and domestic	Indefinite. (Initial 10 years plus further renewals 10 years at a time, as per trademarks). Indefinite	<i>Trade Marks Act 1995</i> <i>Wine Australia Corporation Act 1980</i>	Paris Convention; Lisbon Agreement ^a ; TRIPS (articles 22-24); AUSFTA, AANZFTA, ACI-FTA EU-Australia Wine Agreement	IP Australia Agriculture, Fisheries and Forestry
Plant Breeder's Rights - Registered by examination	New plant varieties that are distinguishable, uniform and stable. Also protects registered name and synonym.	20 years 25 years (trees or grape vines).	<i>Plant Breeder's Rights Act 1994</i>	UPOV; TRIPS (article 27)	IP Australia
Copyrights - Gratis and automatic	Original works of authorship: literary, musical, artistic, dramatic works, films, recording, broadcasting, performances.	Generally, 70 years from death of author if published, or from publication of films and sound recordings. For broadcasts, 50 years from date of broadcast.	<i>Copyright Act 1968</i>	Berne Convention; Rome Convention; WIPO Copyright Treaty; WIPO Performances and Phonograms Treaty; TRIPS (articles 9-14); AUSFTA; Beijing Treaty on Audiovisual Performance ^a	Attorney-General's
Moral Rights - Gratis and automatic	Right of attribution; right against false attribution and right of integrity.	Generally the same as copyright term of protection. (Except for film creators where the right of integrity is only for the creator's lifetime).	<i>Copyright Act 1968 (Part IX)</i>	Berne Convention; WIPO Performances and Phonograms Treaty; Beijing Treaty on Audiovisual Performance ^a	Attorney-General's
Resale Royalty Right for Visual Artists	Artists eligible to 5 per cent of the sale price when their original works are resold through the art market for \$1000 or more.	Life of artist plus 70 years after death.	<i>Resale Royalty Right for Visual Artists Act 2009.</i>	-	Office for the Arts

Table B.1 (continued)

<i>Types of protection</i>	<i>Subject matter and features protected</i>	<i>Maximum life of IP right</i>	<i>Australian Acts</i>	<i>Major international agreements</i>	<i>Government responsibility</i>
Circuit layout rights	Layout design of semiconductor chips.	20 years. (10 years from first commercial exploitation; must first use within 10 years creation).	<i>Circuit Layouts Act 1989</i>	Washington Treaty ^a ; TRIPS (articles 35-38)	Attorney-General's
Confidential information and trade secrets	Secret business information.	Indefinite.	<i>Competition and Consumer Act 2010</i>	TRIPS (articles 39 & 40)	Australian Competition and Consumer Commission
Test data submitted for regulatory approval	Medicines and pharmaceuticals.	5 years.	<i>Therapeutic Goods Act 1998 (section 25A)</i>	TRIPS (article 39.3)	Therapeutic Goods Administration
	Agricultural and veterinary chemicals.	3 to 10 years (depending on type of application).	<i>Agricultural and Veterinary Chemicals Code Act 1994</i>	TRIPS; AUSFTA	Australian Pesticides and Veterinary Medicines Authority

^a Australia is not a party: it has either not been signed, or signed but not ratified.

Table B.2 Some IP-related arrangements

<i>Area</i>	<i>Subject matter and features protected</i>	<i>Maximum life of protection</i>	<i>Australian legislation</i>	<i>Responsibility</i>
Olympics	Artistic works incorporating the Olympic symbol, or Olympic torch and flame.	Indefinite. (Initial 12 years plus further renewals 12 years at a time); 4 years (Olympic torch and flame designs).	<i>Olympic Insignia Protection Act 1987</i>	IP Australia
Scout Association	Name, uniforms, badges etc..	Indefinite	<i>Scout Association Act 1924</i>	Education, Employment and Workplace Relations
ANZAC	The word 'ANZAC' and prohibited importation of ANZAC goods.	Indefinite	<i>Protection of Word 'ANZAC' Regulations 1921; Customs (Prohibited Imports) Regulations 1956.</i>	Veterans' Affairs
Sir Donald Bradman	Unauthorised use of the name. (This is separate from the BRADMAN trademarks).	Indefinite	<i>Corporations Amendment Regulations 2000 (No 8) No. 282</i>	
Mary MacKillop	Unauthorised use of the name.	Indefinite	<i>Corporations Amendment Regulations 2010 (No.8) No. 272</i>	
Internet domain names in .au space	Administration of the .au domain space.	Licensed for a two-year period	<i>Telecommunications Act 1997</i>	.au Domain Administration Ltd
Business names registration	A registered Business name is compulsory. It is the <i>trading</i> name. It can be different from the registered <i>company</i> name.	No legal right over the Business name. (May be able to be registered as a trademark, if it qualifies). Businesses with identical names can operate across Australia. But Company names are unique.	<i>Business Names Registration Act 2011</i>	Australian Securities and Investments Commission

C Anti-dumping and countervailing activity

Dumping is said to occur when an overseas supplier exports a good to Australia at a price below its ‘normal value’ in the supplier’s home market. If dumping causes, or threatens to cause, material injury to local producers of like goods, then remedial action — mainly the imposition of special customs duties — can be taken against the imported goods concerned.

Similarly, countervailing duties can be imposed on imports which benefit from certain subsidies from an overseas government and which cause or threaten injury to a local industry producing like goods.

Australia’s anti-dumping and countervailing legislation (contained in the *Customs Act 1901*, the *Customs Tariff (Anti-Dumping) Act 1975* and the *Customs Regulations 1926*), is based on WTO agreements that, amongst other things, aim to discipline the use of anti-dumping measures as an alternative form of protection. Though WTO members are not obliged to enact such legislation, they are required to comply with the agreed requirements should they wish to take action against dumped imports.

Australia’s anti-dumping system is administered by the Australian Customs and Border Protection Service (Customs and Border Protection). It investigates claims of dumping and makes recommendations to the Minister, and also oversees anti-dumping and countervailing measures in force. The investigation process goes through several, time-limited, stages and includes appeal processes.

Under Australia’s anti-dumping rules, anti-dumping duties may be imposed up to the level of the assessed dumping margin (or the subsidy provided by an overseas government). However, under the ‘lesser duty rule’, a smaller duty sufficient to increase the price of the overseas good to a ‘non-injurious’ level may sometimes be imposed. Alternatively, the overseas supplier (and also the overseas government in countervailing cases) can make a formal price undertaking on terms that would remove the injury or the threat of injury.

Once in place, anti-dumping measures typically remain in force for five years, with scope for extensions for additional five-year periods, following further review.

C.1 Australian anti-dumping and countervailing activity

During 2011-12, 22 new investigations were *initiated* by Customs and Border Protection (table C.1). This is an increase from 10 new investigations the previous year. Also during the year, four new measures were *imposed* and three measures *expired*.

Table C.1 **Australian anti-dumping and countervailing initiations, 2011-12^a**

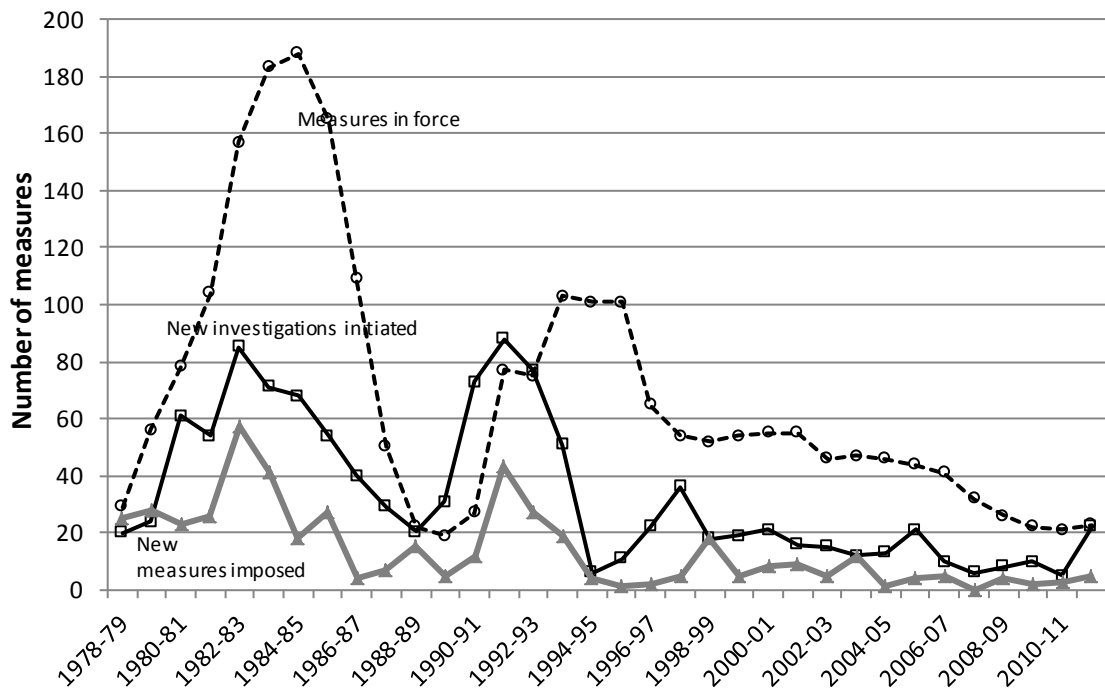
<i>Commodity</i>	<i>Industry grouping</i>	<i>Investigations^b</i>
Initiations		
Electric cables	Machinery and equipment manufacturing	P.R. China
Structural timber - coniferous	Wood and paper products	Austria, Canada, Czech Republic, Estonia, Germany, Lithuania, Sweden, United States
Hollow structural sections (HSS)	Metal product manufacturing	P.R. China Korea, Rep of, Malaysia, Taiwan, Thailand
Quicklime	Non-metallic mineral products	Thailand
Aluminium road wheels	Machinery and equipment manufacturing	P.R. China
Formulated glyphosate	Petroleum, coal, chemical and associated products	P.R. China
Polyvinyl chloride homopolymer resin	Petroleum, coal, chemical and associated products	Korea, Rep of
Hot-rolled coil steel	Metal product manufacturing	Taiwan, Korea, Rep of, Malaysia, Japan
New Measures Imposed		
Clear float glass	Non-metallic mineral products	P.R. China, Indonesia, Thailand
Pineapple, fruit (consumer)	Food, beverages and tobacco	Thailand (TPC)
Expirations		
Brandy, certain	Food, beverages and tobacco	France
Pineapple, fruit (FSI)	Food, beverages and tobacco	P.R. China, Philippines

^a Formal investigations by Customs. Complaints by industry must meet certain requirements before investigations are initiated. ^b Initiations are recorded as actions applying to one commodity from one economy.

Source: ACS (2012).

Over the decade to 2011-12, *measures in force* have declined from 46 in 2002-03 to 25 in 2011-12 (figure C.1). Over this period more than half of initiated investigations related to products in the *Metal products* and the *Petroleum, coal, chemical and associated products* industry grouping (table C.2). New measures were *imposed* about 43 per cent of the time in response to all investigations.

Figure C.1 **Australian anti-dumping and countervailing activity, 1978-79 to 2011-12^{ab}**



^a An investigation or measure is recorded as an action applying to one commodity from one economy. If multiple economies are involved, they are treated as separate actions. ^b New investigations refer to investigations by Customs and Border Protection of complaint cases that have met the screening requirements. The number of complaints raised by industry may be greater.

Source: ACS (2012).

Table C.2 Australian anti-dumping and countervailing new investigations, 2002-03 to 2011-12^a

<i>Industry grouping</i>	2009-10	2010-11	2011-12	2002-03 to 2011-12	
				<i>Number of cases</i>	<i>Per cent of total</i>
Food, beverages and tobacco	1	2	0	15	15
Wood and paper products	5	0	8	19	18
Petroleum, coal, chemical and associated products	2	3	2	26	25
Non-metallic mineral products	4	–	1	9	9
Metal product manufacturing	1	–	9	28	27
Machinery and equipment manufacturing	–	–	2	6	6
Total	13	5	22	103	100

– Nil. ^a Formal investigations by Customs. Complaints by industry must meet certain requirements before investigations are initiated. Initiations are recorded as investigations of one commodity from one economy. Cases where dumping and subsidisation are alleged for the same economy and commodity are counted as two distinct initiations.

Source: ACS (2012).

The anti-dumping and countervailing activity initiated over the decade to 2011-12 was against more than 25 countries (table C.3). Over this period, there has been a consistently higher concentration of initiations and measures against suppliers from the Asian region compared to the earlier decades. Of the 22 investigations in 2011-12, 14 relate to imports from Asia.

Table C.3 **Australian initiations of anti-dumping and countervailing cases by trading region and economy, 2002-03 to 2011-12^a**

Region/economy	2009-10	2010-11	2011-12	2002-03 to 2011-12	
				Total	Per cent ^b
North America	1	2	2	10	10
Canada	–	1	1	5	5
United States	1	1	1	5	5
South America	2	–	–	2	2
Brazil	1	–	–	1	1
Chile	1	–	–	1	1
European Union	1	–	6	22	21
Austria	–	–	1	1	1
Belgium/Luxembourg	–	–	–	1	1
Finland	–	–	–	0	0
France	–	–	–	1	1
Germany	1	–	1	5	5
Greece	–	–	–	3	3
Italy	–	–	–	4	4
Sweden	–	–	1	2	2
United Kingdom	–	–	–	0	0
Other European Union	–	–	3	5	5
Asia	9	3	14	69	67
China	5	–	4	24	23
Hong Kong	–	–	–	0	0
India	–	–	–	0	0
Indonesia	1	1	0	6	6
Japan	–	–	1	2	2
South Korea	1	1	3	14	14
Malaysia	1	–	2	7	7
Philippines	–	–	–	1	1
Singapore	–	–	–	1	1
Thailand	1	1	2	11	11
Taiwan	–	–	2	3	3
Other	–	–	–	0	0
Saudi Arabia	–	–	–	0	0
South Africa	–	–	–	0	0
Other	–	–	–	0	0
Total	13	5	22	103	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.

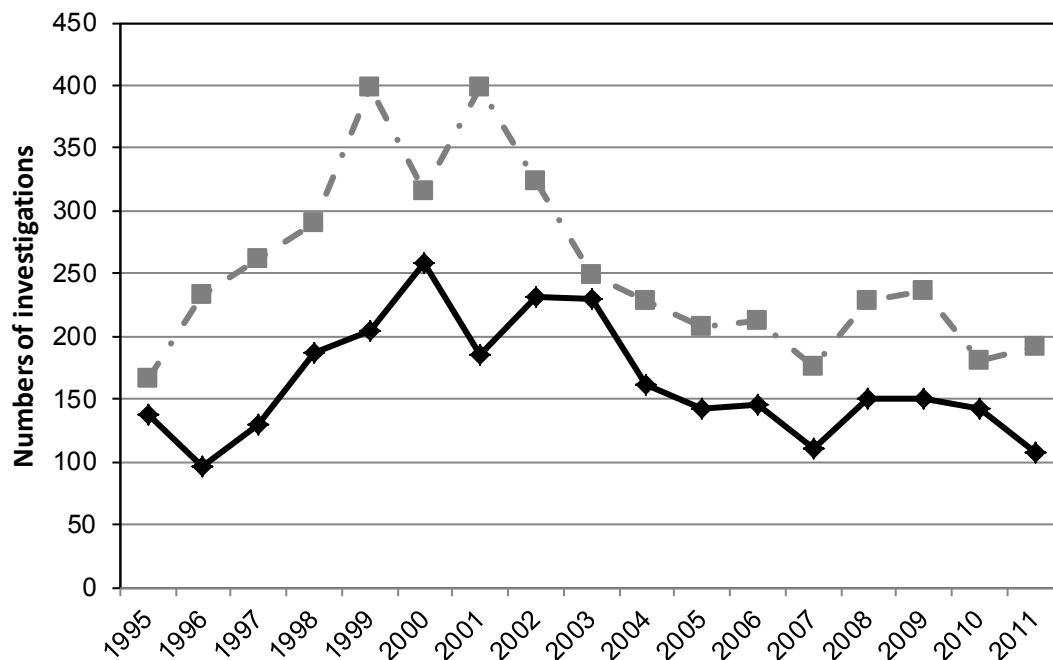
Source: ACS (2012).

C.2 International anti-dumping and countervailing activity

In the year to December 2011, there were 191 anti-dumping and countervailing cases initiated worldwide (figure C.2).¹ The most were by the United States (24), followed by the European Union (22), Australia (20), India (19) and Brazil (19). The previous year Australia had ranked seventh in terms of most investigations initiated.

Since commencement of the WTO in 1995, through to 31 December 2011, there have been over 2700 measures imposed, of which India, the United States, and the European Union accounted for roughly 40 per cent (WTO 2012). Australia ranked tenth in terms of measures imposed over the period.

Figure C.2 **Anti-dumping and countervailing global investigations and measures imposed, 1995 to 2011**



Sources: WTO (2013c), WTO (2013d), WTO (2013e), WTO (2013f).

¹ WTO data are on a calendar year basis whereas the Australian data in section C.1 is on a financial year basis.

References

- ABARES (Australian Bureau of Agricultural and Resource Economics and Sciences) 2011, *Australian fisheries statistics 2010*, Canberra.
- Abe, S. (Prime Minister of Japan) 2013, *Press Conference by Prime Minister Shinzo Abe*, 15 March, http://www.kantei.go.jp/foreign/96_abe/statement/201303/15kaiken_e.html (accessed 2 April 2013).
- ABS (Australian Bureau of Statistics) 2006, *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, Cat. no. 1292.0, ABS, Canberra.
- 2012a, *Australian National Accounts: Input-Output Tables 2008-09*, Cat. no. 5209.0.55.001, ABS, Canberra, November.
- 2012b, *Australian System of National Accounts*, Cat. no. 5204.0, ABS, Canberra, November.
- 2012c, *Balance of Payments and International Investment Position*, Australia, Cat. no. 5302.0, ABS, Canberra. September.
- 2013, Australian System of National Accounts, Table 1 Key National Accounts Aggregates and Table 56 Capital Stock by Type of Asset, ABS, Cat. no. 5204.0, Canberra.
- ACCC (Australian Competition and Consumer Commission) 2012, *Submission to Review of Copyright and the Digital Economy*, http://www.alrc.gov.au/sites/default/files/subs/165._org_acc.pdf, (accessed 26 March 2013).
- ACS (Australian Customs Service) 2012, *Australian Customs Dumping Notices*, (various editions), Canberra.
- ACIP (Advisory Council on Intellectual Property) 2010, *A Review of Enforcement of Plant Breeder's Rights*, Final Report, Barton, January.
- 2013, *Current Reviews*, <http://www.acip.gov.au/reviews.html#revdes>, (accessed 26 March 2013).
- AGs (Attorney-General's Department) 2013, 'Review of Technological Protection Measure Exceptions Made Under the Copyright Act 1968', <http://www.ag.gov.au/Consultations/Pages/ReviewofTechnologicalProtectionMeasurereexceptionsmadeundertheCopyrightAct1968.aspx>, (accessed 26 March 2013).

ALRC (Australian Law Reform Commission) 2012, *Copyright and the Digital Economy*, <http://www.alrc.gov.au/inquiries/copyright-and-digital-economy> (accessed 26 March 2012).

APEC (Asia Pacific Economic Cooperation) 2012a, *Mission Statement*, <http://www.apec.org/About-Us/About-APEC/Mission-Statement.aspx>, (accessed 11 October 2012).

— 2012b, *Leaders' Declaration*, 20th APEC Economic Leaders' Meeting, Vladivostok, Russia, 8-9 September.

ASEAN (Association of Southeast Asian Nations) 2007, *ASEAN Economic Community Blueprint*, <http://www.asean.org/news/item/declaration-on-the-asean-economic-community-blueprint> (accessed 17 April 2013).

— 2012, *Guiding Principles and Objectives for Negotiating the Regional Comprehensive Economic Partnership*, <http://www.asean.org/images/2012/documents/Guiding%20Principles%20and%20Objectives%20for%20Negotiating%20the%20Regional%20Comprehensive%20Economic%20Partnership.pdf>, (accessed 17 April 2013).

Australian Government 2011, *Trading our way to more jobs and prosperity*, Gillard Government Trade Policy Statement, Department of Foreign Affairs and Trade, April.

— 2012a, *Australia in the Asian Century*, White Paper, October.

— 2012b, *Australian Government response to the Joint Standing Committee on Treaties report: Report 126: Review of treaty tabled on 21 November 2011: Anti-Counterfeiting Trade Agreement*, November.

— 2012c, *Rural Research and Development Policy Statement*, July. http://www.daff.gov.au/__data/assets/pdf_file/0004/2176222/research-and-development-policy-statement.pdf (accessed 29 May 2013).

— 2013a, *Tax Expenditure Statement 2012*, Department of Treasury, Canberra, January.

— 2013b, *A Plan for Australian Jobs: The Australian Government's Industry and Innovations Statement*, Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, February. <http://www.aussiejobs.innovation.gov.au/documents/IS%20Full%20Statement.pdf> (accessed 19 February 2013).

Australian Government Land and Coasts Caring for our Country Review Team 2012, *Report on the Review of the Caring for our Country Initiative*, April. <http://caringforourcountryreview.com.au/document/index/1> (accessed 1 November 2012).

-
- Australian National Audit Office 2013, *Design and Implementation of the Energy Efficiency Information Grants Program*, Performance Audit, Audit Report No. 17, pp. 2012-13.
- Australian Productivity Commission and New Zealand Productivity Commission 2012, *Strengthening Trans-Tasman Economic Relations*, Joint Study, Final Report.
- Boldrin, M. and Levine, D.K. 2013, 'The case against patents', *Journal of Economic Perspectives*, vol. 27, no. 1, pp. 3–22.
- Bosland, J., Weatherall, K. and Jensen, P. 2006, 'Trade mark and counterfeit litigation in Australia', *Intellectual Property Research Institute of Australia, working paper no.18/06*.
- Brumby, J. 2012, *Review into Anti-Dumping Arrangements*, Attorney-General's Department, Canberra.
- Burke, T. (Minister for Sustainability, Environment, Water, Population and Communities) 2008, *Delivering on recreational fishing election commitment*, Media release, 16 October.
- 2012a, *Investment in irrigation infrastructure to deliver water reform*, Media release, 8 May.
- 2012b, *Gillard Government supports the Riverland*, Media release, 28 October.
- 2012c, *Fisheries Adjustment Assistance Package to support the creation of marine reserves*, Media release, 16 November.
- Business Advisory Forum 2013, *Review of Carbon Reduction and Energy Efficiency Measures: Taskforce report prepared for COAG*, March. <http://www.coag.gov.au/sites/default/files/BAF-Review-Carbon-Reduction-Energy-Efficiency-Measures.docx> (accessed 14 May 2013)
- Caine, M. and Christie, A. F. 2005, 'A quantitative analysis of Australian intellectual property law and policy-making since federation', *Australian Intellectual Property Journal*, vol. 16, pp. 185-209
- Carr, K. (Minister for Innovation, Industry, Science and Research) 2011, *IP reforms to safeguards Aussie ideas*, Media release, 22 June.
- Clare, J. (Minister for Homes Affairs) 2012, *John Brumby to report on a Commonwealth Anti-Dumping agency*, Media release, 4 July.
- Combet, G. (Minister for Industry and Innovation) 2012a, *New innovation centre to help power Australian manufacturing*, Media release, 8 May.
- 2012b, *New Auto Industry Advocate to focus on Australian made cars in fleet*, Media release, 6 December.
- 2012c, *Helping auto suppliers improve productivity*, Media release, 12 December.

-
- Ballieu, T. (Premier of Victoria) and Napthine, D. (Victorian Minister for Racing, Ports, Major Projects and Regional Cities) 2012, *\$40 million funding for Point Henry aluminium smelter*, Media release, 29 June.
- Dalla-Riva, J. (Victorian Minister for Manufacturing, Exports and Trade) and Snelling, J. (South Australian Acting Minister for Manufacturing, Innovation and Trade) 2012, *Creating new opportunities for auto suppliers*, Media release, 8 August.
- Gillard, J. (Prime Minister) and Clare, J. (Minister for Home Affairs) 2012, *Anti-dumping reforms to support Australian industry*, Media release, 4 December.
- Ryan, P. (Victorian Deputy Premier) and Dalla-Riva, J. (Victorian Minister for Manufacturing, Exports and Trade) 2012, *\$90 million paper investment supports Latrobe Valley jobs*, Media release, 10 October.
- 2013, *Backing Australian firms to win more work at home*, Media release, 17 February.
- and Swan, W. (Deputy Prime Minister and Treasurer) 2013, *Targeting small and medium sized enterprises for R&D tax support*, Media release, 17 February.
- Comtrade 2013, UN Comtrade, <http://comtrade.un.org/db/> (accessed 30 May 2013).
- Conroy, S. (Minister for Broadband, Communications and the Digital Economy) 2012a, *Gillard Government provides \$15.2 million for NBN local training services*, Media release, 4 July.
- 2012b, *Gillard Government provides \$5 million to 14 local governments to deliver e-enabled services*, Media release, 25 July.
- 2012c, *Government responds to the 2011-12 Regional Telecommunications Review report*, Media release, 23 August.
- 2012d, *Government moves to ensure quality Australian content stays on Australian television*, Media release, 30 November.
- CPB Netherlands Bureau for Economic Policy Analysis 2012, *CPB World Trade Monitor (including July 2012)*, <http://www.cpb.nl/en/number/cpb-world-trade-monitor-including-july-2012> (accessed 28 September 2012).
- Crean, S. (Minister for Regional Australia, Regional Development and Local Government), 2012a, *\$48 million for Indigenous arts, culture and languages*, Media release, 3 July.
- 2012b, *Australian interactive games fund announced to support a global industry*, Media release, 15 November.
- 2012c, *Assistance for Murray-Darling Basin communities*, Media release, 28 November.

-
- and Dreyfus, M. (Parliamentary Secretary for Climate Change and Energy Efficiency, Parliamentary Secretary for Industry and innovation) and Sidebottom, S. (Parliamentary Secretary for Agriculture, Fisheries and Forestry) 2012, *Dairy farming opportunity to turn manure into income*, Media release, 12 June.
- and — 2012, *Regions lead transition to Clean Energy Future*, Media release, 25 June.
- and Gallacher, A. (Senator for South Australia) 2012, *Wave of optimism wipes out Abbott's fear campaign*, Media release, 3 July.
- Green, B. (Tasmanian Deputy Premier) and Sidebottom, S. (Parliamentary Secretary for Agriculture, Fisheries and Forestry) 2012, *Dairy expansion drives economic diversification in Burnie*, Media release, 15 June.
- 2013, *Briquettes Out, Cleaner Energy In*, Media release, 22 February 2013.
- Cutler, T. 2008, *Venturous Australia Report: Review of the National Innovation System*, Cutler & Company Pty Ltd, North Melbourne.
- David, P.A. 1993, 'Intellectual property institutions and the panda's thumb: patents, copyrights, and trade secrets in economic theory and history', in Wallerstein, M.B., Moge, M.E. and Schoen, R.A. (eds), *Global Dimensions of Intellectual Property Rights in Science and Technology*, National Academy Press, Washington, D.C., pp. 19–61.
- DBCDE (Department of Broadband, Communications and the Digital Economy) 2013, *Digital Local Government program*, Department of Broadband, Communications and the Digital Economy, http://www.dbcde.gov.au/digital_economy/programs_and_initiatives/digital_local_government_program (accessed 30 May 2013).
- Dent, C. and Weatherill, K. 2007, 'Lawyers' decisions in Australian patent dispute settlements: an empirical perspective', *Intellectual Property Research Institute of Australia*, Working Paper no. 02/07.
- and Christie, A. 2012, 'An empirical comparison of the outcomes of patent examination in the USPTO', the EPO and IP Australia, Overview of presentation organised by IPRIA, http://www.ipria.org/events/seminar/2012/Patent_Examination/Patent_Examination.html (accessed 26 March 2013).
- DIISRTE (Department of Industry, Innovation, Science, Research and Tertiary Education) 2012, *Strengthening Australia's anti-dumping system*, Media release, 4 December.
- DFAT (Department of Foreign Affairs and Trade) 2010, 'Submission to Productivity Commission Research Report', Bilateral and Regional Trade Agreements, September.

-
- 2012, Trans-Pacific Partnership Agreement negotiations, <http://www.dfat.gov.au/fta/tpp/index.html> (accessed 11 October 2012).
- (undated), ‘Intellectual Property and Biotechnology: A training handbook, Module Seven: Plant Breeder’s Rights’, <http://www.dfat.gov.au/publications/biotech/downloads/Module07.pdf> (accessed 26 March 2013)
- DRET (Department of Resources, Energy and Tourism) 2013a, *Coal Mining Abatement Technology Support Package*, Department of Resources, Energy and Tourism, <http://www.ret.gov.au/ENERGY/CLEAN/CTAP/CMATSP/Pages/default.aspx> (accessed 30 May 2013).
- 2013b, *Ethanol Production Grants program – Program Administrative Guidelines*, Department of Resources, Energy and Tourism, <http://www.ret.gov.au/energy/Documents/Energy-Security/transport-fuels/alt-fuels/EPG-PAGs-approved-3-July-2012.pdf> (accessed 30 May 2013).
- Elhauge, E. 2008, ‘Do patent holdup and royalty stacking lead to systematically excessive royalties?’, *Journal of Competition Law & Economics*, vol. 4, no. 3, pp. 535–570.
- Emerson, C. (Minister for Trade and Competitiveness) 2013a, *EFIC reforms to help business in Asia*, Media release, 29 January.
- 2013b, *Australia welcomes Japan to Trans-Pacific Partnership negotiations*, Media release, 21 April.
- Evans, C. (Minister for Tertiary Education, Skills, Science and Research) 2012, *\$240m to tackle national research priorities*, Media release, 29 November.
- Evenett, S. J. 2012, ‘Executive Summary’, in S. J. Evenett (ed), *Debate: The 11th GTA Report on Protectionism*, Global Trade Alert, Centre for Economic Policy Research, June, ch. 2, pp. 1-18.
- Ferguson, M. (Minister for Resources and Energy and Minister for Tourism) 2012a, *Go Ahead for Large Scale Solar Power Plant in NSW*, Media release, 9 June.
- 2012b, *Funding for Australia’s Great Indoors*, Media release, 23 October.
- 2012c, *Ministers Progress Reforms under Tourism 2020*, Media release, 4 May.
- 2012d, *Promoting Australian Holidays to Asia*, Media release, 8 May.
- 2012e, *Fact Sheet – Government Support for Tourism*, Media release, 9 May.
- 2012f, *Boost for Tourism Businesses to Welcome Chinese Visitors*, Media release, 13 June.
- 2012g, *Boost for Tourism in Australia’s National Landscapes*, Media release, 6 July.

-
- 2012h, *\$1.25 Million to Help Realise Geothermal Potential*, Media release, 17 September.
- 2012i, *High Quality Tourism Projects Share in \$6.7 M*, Media release, 7 August.
- 2012j, *First Investment by Southern Cross Renewable Energy Fund*, Media release, 24 September.
- 2012k, *Island of Innovation*, Media release, 26 October.
- 2012l, *Mallee a Clean Solution*, Media release, 22 November.
- 2012m, *Australia and USA Collaboration on Building a Solar Future*, Media release, 13 December.
- 2012n, *Government Support Extends CCS Project*, Media release, 15 December.
- and Dreyfus, M. (Parliamentary Secretary for Climate Change and Energy Efficiency and Parliamentary Secretary for Industry and innovation) 2012, *Smart Energy Advice for Tourism Businesses*, Media release, 17 May.
- and O'Brien, M. (Minister for Energy and Resources (Victoria) 2012, *Support for Victorian Advanced Lignite Technologies*, Media release, 3 August.
- Combet, G. (Minister for Industry and Innovation and Minister for Climate Change and Energy Efficiency) and Crean, S. (Minister for Regional Australia, Regional Development and Local Government) 2012, *Briquette Restructuring Package*, Media release, 29 June.
- G-20 2008, *Declaration of the Summit on Financial Markets and the World Economy*, Washington DC, 15 November.
- 2012, *Communique of Ministers of Finance and Central Bank Governors of the G20*, Mexico City, 4-5 November.
- Geneva Academy 2012, 'Key Terms on Treaty Adherence', <http://www.geneva-academy.ch/RULAC/pdf/Key-definitions-relating-to-treaty-adherence.pdf> (accessed on 26 March 2013).
- Gillard, J. (Prime Minister of Australia), Smith, S. (Minister for Defence) and Clare, J. (Minister for Defence Materiel) 2012, *Next stage of future submarine project announced*, Media release, 3 May.
- Combet, G. (Minister for Industry and Innovation) and Crean, S. (Minister for Regional Australia, Regional Development and Local Government) 2013, *Gillard Government invests in 750 new jobs in Tasmania*, Media release, 1 March.
- and Key, J. (New Zealand Prime Minister) 2013, *Joint Statement by Prime Ministers Key and Gillard: February 2013*, Media release, 9 February.

-
- Swan, W. (Deputy Prime Minister and Treasurer) and Combet, G. (Minister for Industry and Innovation) 2013, *Gillard Government's \$1 billion Jobs Plan*, Media release, 17 February.
- Giuri, P., Marianni, M., Brusoni, S., Crespi, G. and Francoz, D. 2007, 'Inventors and invention processes in Europe: results from the PatVal survey', *Research Policy* no. 36.
- Goodridge, P., Haskel, J., and Mitra-Kahn, B. 2012, *Updating the value of UK copyright investment*, Research Commissioned by the Intellectual Property Office, London.
- Gowers, A. 2006, *Review of Intellectual Property*, HMSO, Norwich.
- Hall, B. 2010, 'What Economists Know, What They Do Not Know, and What They Would Like to Know', Presentation at the launch of the WIPO Seminar Series, March 26, Geneva.
- Hall, B.H. and Harhoff, D. 2012, 'Recent research on the economics of patents', *National Bureau of Economic Research*, Working Paper 17773, Cambridge.
- Handke, C. 2010, *The economics of copyright and digitisation: A report on the literature and the need for further research*, Strategic Advisory Board for Intellectual Property Policy.
- Hargreaves, I. 2011, *Digital Opportunity: A Review of Intellectual Property and Growth*, UK Government, May.
- Henkel, J. and Jell, F. 2010, 'Patent pending why faster isn't always better', SSRN Discussion Paper 1738912.
- ICSID (International Centre for Settlement of Investment Disputes) 2013, List of Pending Cases, <https://icsid.worldbank.org/ICSID/FrontServlet?requestType=GenCaseDtlsRH&actionVal=ListPending> (accessed 17 May 2013).
- IP (Intellectual Property) Australia 2012a, *Annual Report 2011-12*, Canberra.
- 2012b, Other types of IP, <http://www.ipaustralia.gov.au/get-the-right-ip/other-types-of-IP/> (accessed 26 March 2013).
- 2013a, 'Review of Pharmaceutical Patents in Australia', Terms of Reference and Conduct of Review, <http://www.ipaustralia.gov.au/about-us/public-consultations/review-pharmaceutical-patents/> (accessed 26 March, 2013).
- 2013b, Patents overview, <http://www.ipaustralia.gov.au/get-the-right-ip/patents/patent-application-process/patents-overview-standard> (accessed 31 May 2013).
- IPCRC (Intellectual Property and Competition Review Committee) 2000, *Review of Intellectual Property Legislation Under the Competition Principles Agreement*, Canberra.

-
- IPTMAA (Institute of Patent and Trade Mark Attorneys of Australia) 2013, 'Submission to Review of Pharmaceutical Patents in Australia'.
- JSCT (Joint Standing Committee on Treaties) 2012, *Review into Treaty tabled on 21 November 2011: Anti-Counterfeiting Trade Agreement (Tokyo on 1 October 2010)*, Report 126, June, Canberra.
- Keogh, M., Granger, R. and Middleton, S. 2011, *Drought Pilot Review Panel: a review of the pilot of drought reform measures in Western Australia*, http://www.daff.gov.au/__data/assets/pdf_file/0003/2005788/drought-pilot.pdf, (accessed 19 April 2013).
- Lamy, P. 2012a, *The Future of the Multilateral Trading System*, Richard Snape Lecture, Melbourne, Productivity Commission, Canberra.
- 2012b, *We need an international monetary system which facilitates international trade*, WTO Director-General Speech, 27 March.
- Larcombe, J. and Marton, N. 2012, *Final Commonwealth marine reserves network proposal: ABARES social and economic assessment*, ABARES, Canberra, August.
- League of Nations 1939, *World Economic Survey: Eighth Year 1938/39*, Economic Intelligence Service, Geneva.
- Lemley, M.A. 2012, 'Fixing the patent office', *Stanford Institute for Economic Policy Research*, Discussion Paper no. 11-014.
- and Shapiro, C. 2007, 'Patent holdup and royalty stacking', *Texas Law Review*, vol. 85, pp. 1991-2049.
- Lerner, J. 2008, 'The litigation of financial innovations', *National Bureau of Economic Research*, Working Paper 14324.
- Lloyd, P. and Maclaren, D. 2004, 'Gains and losses from regional trading arrangements: a survey', *The Economic Record*, vol. 80, no. 251, pp. 455-67.
- Ludwig, J. (Minister for Agriculture, Fisheries and Forestry) 2012a, *\$4 million in fee rebates to grain, fish and egg exporters*, Media release, 22 May.
- 2012b, *Australians to help shape our National Food Plan*, Media release, 17 July.
- 2012c, *Implementation of a national foreign ownership register for agricultural land*, Media release DAFF12/402LJ, 24 October.
- 2012d, *Working together for the future of recreational fishing*, Media release, 18 August.
- 2012e, *National agreement progresses drought reform agenda*, Media release, 26 October.

-
- and Burke, T. (Minister for Sustainability, Environment, Water, Population and Communities) 2012a, *Gillard Government commits to another five years of Caring for our Country*, Media release, 8 May.
- and — 2012b, *Industry assistance to precede marine reserves*, Media release, 14 June.
- and Dreyfus, M. (Parliamentary Secretary for Climate Change and Energy Efficiency and Parliamentary Secretary for Industry and Innovation) 2012, *Agriculture shares \$70 million in research grants*, Media release, 17 May.
- Maskus, K. E. 2000, *Intellectual Property Rights in the Global Economy*, Institute for International Economics, Washington D.C.
- McGinley, C. 2009, 'Taking the heat out of the global patent system', *Intellectual Asset Management*, vol. 31, pp. 24-29.
- McKenzie, J. 2013, 'File Sharing and Film Revenues: An Empirical Analysis', Abstract for presentation at Melbourne Institute 14 February 2013, (internet address/paper).
- Moir, B. 2011, *Foreign investment and Australian agriculture*, RIRDC, Canberra, November.
- Moir, H. 2012, 'Patent policy and innovation: do legal rules deliver effective economic outcomes?', attachment to submission to *Review of Innovation Patent inventive step*.
- Moser, P. 2013, Patents and Innovation: Evidence from economic history, *Journal of Economic Perspectives*, vol. 27, no. 1, pp. 23-44
- Mueller, E., Cockburn, I.M. and MacGarvie, M. 2010, 'Access to intellectual property for innovation: Evidence on problems and coping strategies from German firms', Tilburg Law and Economics Center (TILEC) Discussion Paper, DP 2010-042, Tilburg University.
- NCC (National Competition Council) 1999, *Review of Sections 51(2) and 51(3) of the Trade Practices Act 1974*, Final Report, Melbourne.
- O'Byrne, D (Tasmanian Minister for Economic Development) and Sidebottom, S (Parliamentary Secretary for Agriculture, Fisheries and Forestry) 2012, *Premium Fresh Tasmania*, Media release, 31 August 2012. http://www.premier.tas.gov.au/media_room/media_releases/premium_fresh_tasmania (accessed 14 May 2013).
- O'Connor, B. (Minister for Home Affairs) and Emerson, C. (Minister for Trade) 2011, *Government combats dumping and helps support local jobs*, Joint Media release, 22 June.
- 2012a, *Small business assistance in Perth's east*, Media release, 2 May.

-
- 2012b, *New tax reforms and better support for small business*, Media release, 8 May.
- 2012c, *Small business assisted under clean energy package*, Media release, 20 August.
- OECD 2008, *OECD Strategic Response to the Financial and Economic Crisis: contributions to the global effort*, Note by the Secretary-General, C(2008)191/FINAL, 23 December.
- PC (Productivity Commission) 2004a, *Trade & Assistance Review 2003-04*, Annual Report Series, Canberra.
- 2004b, *Rule of Origin under the Australia-New Zealand Closer Economic Relations Trade Agreement*, Commission Research Report, Canberra, May.
- 2005, *Review of National Competition Policy Reforms*, Inquiry Report No. 33, Canberra.
- 2007, *Public Support for Science and Innovation*, Research Report, Canberra.
- 2008, *The '2001-02' Series of assistance estimates*, Methodological Annex to Trade & Assistance Review 2005-06 and 2006-07, Canberra.
- 2009a, *Restrictions on Parallel Importation of Books*, Research Report, Canberra.
- 2009b, *Annual Report 2008-09*, Annual Report Series, Canberra.
- 2009c, *Government Drought Support*, Inquiry Report No. 46, Productivity Commission, Melbourne.
- 2009d, *Trade & Assistance Review 2007-08*, Annual Report Series, Canberra.
- 2009e, *Australia's Anti-dumping and Countervailing System*, Report no. 48, Canberra.
- 2010a, *Trade & Assistance Review 2008-09*, Annual Report Series, Canberra.
- 2010b, *Bilateral and Regional Trade Agreements*, Research Report, Canberra.
- 2011, *Rural Research and Development Corporations*, Report No. 52, Inquiry Report, Canberra.
- 2012a, *Trade & Assistance Review 2010-11*, Annual Report Series, Productivity Commission, Canberra.
- 2012b, *Australia's Export Credit Arrangements*, Report No. 58, Final Inquiry Report, Canberra.
- 2013, *Compulsory Licensing of Patents*, Inquiry Report No. 61, Canberra.
- Permanent Court of Arbitration 2013, *Philip Morris Asia Limited (Hong Kong) v. The Commonwealth of Australia*, http://www.pca-cpa.org/showpage.asp?pag_id=1494 (accessed 17 April 2013).

-
- Picard, Pierre M & van Pottelsberghe de la Potterie, Bruno, 2011, *Patent Office Governance and Patent System Quality*, Centre for Economic Policy Research (CEPR) Discussion Paper 8338, London.
- Posner, R.A. 2005, 'Intellectual property: the law and economics approach', *Journal of Economic Perspectives*, vol. 19, no. 2, pp. 57-73.
- PPRP (Pharmaceutical Patents Review Panel) 2013, *Pharmaceutical Patents Review* (Draft Report), Canberra, April.
- Prime Minister's Manufacturing Taskforce 2012, *Report of the Non-Government Members*, August. <http://www.innovation.gov.au/Industry/Manufacturing/Taskforce/Documents/SmarterManufacturing.pdf> (accessed 22 February 2013).
- PwC (PricewaterhouseCoopers) 2012, *The economic contribution of Australia's copyright industries 1996-97 to 2010-11*, Prepared for the Australian Copyright Council.
- Revesz, J. 1999, *Trade-Related Aspect of Intellectual Property Rights*, Productivity Commission Staff Research Paper, AGPS, Canberra.
- Rowley, J. W., Brower, C. N. and Lau, C. 2011, *White Industries Australia Limited v The Republic of India*, UNCITRAL, Final Award, 30 November <http://italaw.com/cases/documents/1170> (accessed 17 May 2013).
- Sanderson, J. and Adams, K. 2008, 'Are plant breeder's rights outdated? A descriptive and empirical assessment of plant breeder's right in Australia', 1987-2007, *Melbourne University Law Review*, vol. 32, pp. 980-1006.
- Sanderson, J. 2011, 'Towards a (limited) cascading right: what is the appropriate scope of protection for plant breeding?', *UNSW Law Journal*, vol. 34, no. 3, pp.1104-1121.
- Scherer, F.M. 2010, 'A half century of research on patent economics', *WIPO Journal of Analysis of Intellectual Property Issues*, vol. 2, Issue 1, pp. 20-27.
- Senate Standing Committees on Rural and Regional Affairs 2013, Examination of the Foreign Investment Review Board National Interest Test, http://www.aph.gov.au/Parliamentary_Business/Committees/Senate_Committees?url=rrat_ctte/firb_2011/index.htm (accessed 8 February 2013).
- Shapiro, C. 2010, 'Injunctions, hold up, and patent royalties', *American Law and Economics Review*, vol. 12, no. 2, pp. 509-557.
- Sidak, J.G. 2007, 'Holdup, royalty stacking and the presumption of injunctive relief for patent infringement: a reply to Lemley and Shapiro', http://works.bepress.com/j_sidak1, (accessed 26 March 2013).

-
- 2009, ‘Patent holdup and oligopsonistic collusion in standard-setting organisations’, *Journal of Competition Law & Economics*, vol. 5, no. 1, pp. 123-188.
- Soloveichik, R. 2011, *Artistic Originals as Capital Assets*, Survey of Current Business, June, Bureau of Economic Analysis, U.S. Department of Commerce.
- Swan, W. (Acting Prime Minister and Treasurer), Clare, J. (Minister for Home Affairs) and Ferguson, M. (Minister for Resources and Energy and Minister for Tourism) 2012, *Passenger Movement Charge*, Media release, 20 June.
- and Ludwig, J. (Minister for Agriculture, Fisheries and Forestry) 2013, *Fairer Finance for Aussie Farmers*, Media release, 27 April.
- UK IPO (United Kingdom Intellectual Property Office) 2012, *History of trademarks*, <http://www.ipo.gov.uk/types/tm/t-about/t-what-is/t-history.htm>, (accessed 26 March 2013).
- Weatherall, K. and Webster, E. 2009, ‘Patent infringement in Australia: results from a survey’, Intellectual Property Research Institute of Australia, Working Paper no. 10/09.
- Rotstein, F., Dent, C. and Christie, A. 2011, ‘Patent oppositions in Australia: the facts’, *University of New South Wales Law Journal*, vol. 34, no. 1, pp. 93-135.
- WIPO (World Intellectual Property Organisation) 2003, *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*, WIPO, Geneva.
- 2004, *Intellectual Property Handbook*, reprint 2008, WIPO, Geneva.
- 2012a, (<http://www.wipo.int/treaties/en/>) at 27 November.
- 2012b, *WIPO studies of the economic contribution of the copyright industries*, WIPO, Geneva.
- World Bank 2013, *World Development Indicators*, <http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators#> (accessed 8 February 2013).
- WTO (World Trade Organization) 2011, *Overview of Developments in the International Trading Environment*, Annual Report by the Director-General, <http://www.wto.org/mwg-internal/de5fs23hu73ds/progress?id=5zlcwNteRS>, (accessed 18 April 2013).
- 2012a, *Report to the TPRB from the Director-General on Trade-Related Developments*, <http://www.kanzei.or.jp/mwginternal/de5fs23hu73ds/progress?id=Haxjz0c8Y1>, (accessed 18 April 2013).
- 2012b, *World Trade Report*, Atar Roto Press, Switzerland.

-
- 2013a, Dispute Settlement: Chronological list of dispute cases, http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm, (accessed 17 April 2013).
- 2013b, Regional Trade Agreements Information System, <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx> (accessed 11 January 2013).
- 2013c, Anti-dumping initiations by reporting member http://www.wto.org/english/tratop_e/adp_e/AD_InitiationsByRepMem.pdf (accessed 23 May 2013).
- 2013d, Anti-dumping measures by reporting member, http://www.wto.org/english/tratop_e/adp_e/AD_MeasuresByRepMem.pdf (accessed 23 May 2013).
- 2013e, Countervailing initiations by reporting member, http://www.wto.org/english/tratop_e/scm_e/CV_InitiationsByRepMem.pdf (accessed 23 May 2013).
- 2013f, Countervailing measures by reporting member, http://www.wto.org/english/tratop_e/scm_e/CV_MeasuresByRepMem.pdf (accessed 23 May 2013).