

DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft
ZBW – Leibniz Information Centre for Economics

Periodical Part

Trade and assistance review / Productivity Commission ; 2017/18

Provided in Cooperation with:
Australian Government

Reference: Trade and assistance review / Productivity Commission ; 2017/18 (2019).

This Version is available at:
<http://hdl.handle.net/11159/4068>

Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics
Düsternbrooker Weg 120
24105 Kiel (Germany)
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)
<https://www.zbw.eu/econis-archiv/>

Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.



<https://zbw.eu/econis-archiv/termsfuse>

Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.



Australian Government
Productivity Commission

Trade and Assistance Review 2017-18

Productivity Commission
Annual Report Series



© Commonwealth of Australia 2019

ISBN 978-1-74037-674-7 (PDF)

ISBN 978-1-74037-675-4 (Print)



Except for the Commonwealth Coat of Arms and content supplied by third parties, this copyright work is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/3.0/au>. In essence, you are free to copy, communicate and adapt the work, as long as you attribute the work to the Productivity Commission (but not in any way that suggests the Commission endorses you or your use) and abide by the other licence terms.

Use of the Commonwealth Coat of Arms

Terms of use for the Coat of Arms are available from the [Department of the Prime Minister and Cabinet's website](#).

Third party copyright

Wherever a third party holds copyright in this material, the copyright remains with that party. Their permission may be required to use the material, please contact them directly.

Attribution

This work should be attributed as follows, *Source: Productivity Commission, Trade and Assistance Review 2017-18*.

If you have adapted, modified or transformed this work in anyway, please use the following, *Source: based on Productivity Commission data, Trade and Assistance Review 2017-18*.

An appropriate reference for this publication is:

Productivity Commission 2019, *Trade and Assistance Review 2017-18*, Annual Report Series, Canberra.

Publications enquiries

Media, Publications and Web, phone: (03) 9653 2244 or email: mpw@pc.gov.au

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).

Foreword

The world trading system has been a foundation stone of Australia's 27 years of uninterrupted economic growth. It helped deliver declining unemployment and steadily rising living standards. Sadly, that system — and the benefits it has generated — can no longer be taken for granted.

Protectionist sentiment continues to rise around the world and the language of market gain is giving way to the language of strategic rivalry. While the benefits to Australians of improving and strengthening the current system are clear, the voices of business and civil society have been heard only quietly to date. It would be an error to think that nothing need be spoken loudly in its support.

Influence of governments on the world stage begins with good policy making at home. Despite high-profile tensions between our trading partners, Australia has progressed a number of multilateral, regional and bilateral trade agreements. Yet domestic policy has continued to retreat into protectionism in some areas. Australia has one of the world's most active 'anti-dumping' regimes, for example.

The Productivity Commission is required under its Act to report annually on industry assistance and its effects on the Australian economy. The *Trade and Assistance Review 2017-18* contains the Commission's latest quantitative estimates of Australian Government assistance to industry.

The annual *Review* also provides information on tax concessions and budgetary outlays that may be construed as assistance, including their target, size, and nature. Views inevitably differ on what constitutes industry assistance and whether it is warranted. This report offers full transparency of all support measures and provides a basis for considered assessment of the benefits and costs of the arrangements.

One of the biggest developments highlighted in this year's *Review* is the proliferation of government project finance vehicles. While individual schemes may, or may not, be worthwhile, they all impose additional risk on the Australian taxpayer that has generally not been made clear.

In preparing this report, the Commission has received helpful advice and feedback from officials in Australian Government agencies, for which the Commission is very grateful.

Michael Brennan
Chair
June 2019

Contents

Foreword	iii
Abbreviations	vi
1 Key results and policy developments	1
1.1 Industry assistance estimates	2
1.2 Recent developments in industry assistance	8
1.3 The future of the world trading system	10
2 Assistance estimates	13
2.1 Tariff assistance	16
2.2 Australian Government budgetary assistance	20
2.3 Combined assistance and effective rates of assistance	30
2.4 Effective rates of assistance since 1970	34
3 The future of the world trading system	37
3.1 The world trading system: what is it and what has it achieved?	38
3.2 The challenges facing the world trading system	43
3.3 A path forward	50
4 Recent developments in industry assistance	59
4.1 Drought assistance	59
4.2 Government project finance facilities	63
5 Trade policy developments	67
5.1 Multilateral and plurilateral trade agreements	68
5.2 Bilateral and regional agreements	71
5.3 Australia's WTO disputes	74
5.4 Australia's anti-dumping and countervailing activity	74
A Detailed estimates of Australian Government assistance to industry	79
References	133

Abbreviations

ABS	Australian Bureau of Statistics
ERA	Effective rate of assistance
EU	European Union
FDI	Foreign Direct Investments
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GST	Goods and Services Tax
NAFTA	North American Free Trade Agreement
PC	Productivity Commission
R&D	Research and Development
TRIMS	Agreement on Trade-Related Investment Measures
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
WTO	World Trade Organization

1 Key results and policy developments

Key points

- The commitment to liberal trade by some of our major trading partners is in doubt and multilateralism itself is under challenge. Australia cannot afford to take for granted the effective functioning of the world trading system. Resurrecting trade barriers is not a solution; the path forward lies with improving the system we have.
- Current trade tensions have overshadowed recent less widely known successes. Average tariff rates have continued to fall; agricultural export subsidies have been abolished; customs processes are being redesigned to facilitate trade; and a government procurement agreement has been negotiated.
- The single most important step Australia can take in the face of mounting troubles in the world trading system is to keep our borders open to trade and to continue working towards freer markets. Australia could proceed by unilaterally removing 'nuisance' tariffs, lowering non-tariff barriers, simplifying rules of origin and avoiding anti-dumping duties. Australians gain most of all from reducing our *own* trade barriers, regardless of what other countries do.
- Australia must also work together with our international partners to reinvigorate the negotiation function of the World Trade Organization (WTO), to strengthen compliance with notification procedures and review and refresh the rules to handle issues relating, inter alia, to state-owned enterprises, regulatory cooperation, digital trade and intellectual property.
- On domestic industry assistance, the two main themes this year were drought assistance and the further proliferation of government financing facilities.
- Drought assistance has expanded significantly through 2018 and 2019 in the face of serious hardship to Australian farm families. Periods of crisis are difficult times to make policy. In time it will be important to step back and (again) consider the structural supports that best serve farming communities and the country as a whole.
- Large scale government finance facilities for private projects continue to proliferate. Major developments this year are the intended establishment of a \$2 billion Australian Business Securitisation Fund to increase small business borrowing and a \$1 billion expansion of Efic's mandate to include lending for infrastructure in Pacific Island nations. While these government finance vehicles do not show up in the annual budget bottom line, they create risk for Australian taxpayers and, in some cases, lower scrutiny of spending decisions.
- The Commission estimates that gross assistance to industry provided by the Australian Government was \$14.4 billion (comprising \$2.3 billion tariff assistance, \$4.8 billion budgetary outlays and \$7.3 billion in tax concession). Net assistance (after deducting the cost penalty of tariffs) was \$12.3 billion in 2017-18. This was around \$0.5 billion higher in net assistance than last year's estimate of \$11.9 billion. These estimates are conservative as they exclude harder-to-quantify assistance: favourable finance (loans and guarantees); local purchasing preferences, such as for defence equipment; and regulatory restrictions on competition.
 - The methodology used to derive the tariff assistance estimates has been changed to better reflect the increased scope of Australia's preferential trade agreements. This methodology has been back-cast to 2010-11 and is the main reason that tariff assistance estimates are lower than in previous *Reviews*.

1.1 Industry assistance estimates

The Productivity Commission has a statutory obligation to report on industry assistance arrangements each year. 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 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, from government procurement policies and preferential treatment under trade agreements.

Although assistance 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. However, to fund the subsidies, governments must increase taxes and charges, cut back on other spending, or borrow additional funds. Funding provided to a single firm also discriminates against its competitors.

Similarly, while tariffs provide some price support to domestic goods producers, they result in higher input costs for other local businesses, reducing their competitiveness. They also effectively tax consumers by imposing higher prices on the goods subject to the tariff, leaving them with 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 overcome market failure and deliver net community benefits. Similarly, some policies that have industry assistance effects may be justified on other grounds, such as the achievement of social or equity objectives. However, the way in which such assistance is provided requires transparent and rigorous assessment to minimise its unintended impacts on resource allocation.

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. To that end, the annual *Trade and Assistance Review (Review)* fulfils a transparency function of identifying existing government assistance and contemporary assistance issues, and allowing closer examination to be made when it is not obvious why such costs are being incurred.

The *Review* quantifies the assistance afforded by tariffs, direct government payments (budgetary outlays) and taxation concessions with industry policy objectives. The Commission and its predecessor organisations have estimated effective rates of industry assistance since 1968-69. Budgetary assistance (budgetary outlays and taxation concessions) was incorporated into the effective rates of assistance estimates from 1996-97. While these estimates cover a broad range of measures that afford substantive support to industry and that can be readily quantified on a consistent basis annually, the estimates do not capture all

Australian Government support for industry, nor State government assistance. They are therefore an underestimate of the total support to industry provided by government.

Total assistance was \$14.4 billion in 2017-18, around \$0.5 billion higher than 2016-17

Readily distinguishable and quantified tariff and budgetary assistance to industry was around \$14.4 billion in gross terms in 2017-18 — comprising \$2.3 billion in gross tariff assistance, \$4.8 billion of budgetary outlays, and \$7.3 billion in tax concessions (figure 1.1, top panel). In these calculations, the tariff assistance estimate is the equivalent budget outlay to the industry that would be expected to have the same effect on Australian producers' prices and volumes of production, rather than the amount of duty collected. For this year's *Review*, the Commission has changed the methodology for deriving estimates of tariff assistance to industry (box 1.1)

Box 1.1 Changes to tariff assistance estimates

The Commission has changed the methodology for deriving estimates of tariff assistance to industry. The estimates have been revised back to 2010-11, the beginning of the current series of assistance estimates.

The Commission's previous methodology used most favoured nation (MFN) tariff rates together with import values to impute duty and derive estimates of the price impacts of tariffs on both domestic and imported goods. This approach was appropriate when preferential trade agreements were few and their effect on domestic prices was more limited.

The share of imports entering Australia with a level of preferential treatment has been increasing over time in part due to the larger number of trade agreements. The new approach uses actual duty payments instead of MFN tariff rates. Actual duty payments fully reflect the uptake of concessions provided under Australia's preferential trade agreements and other tariff concessions.

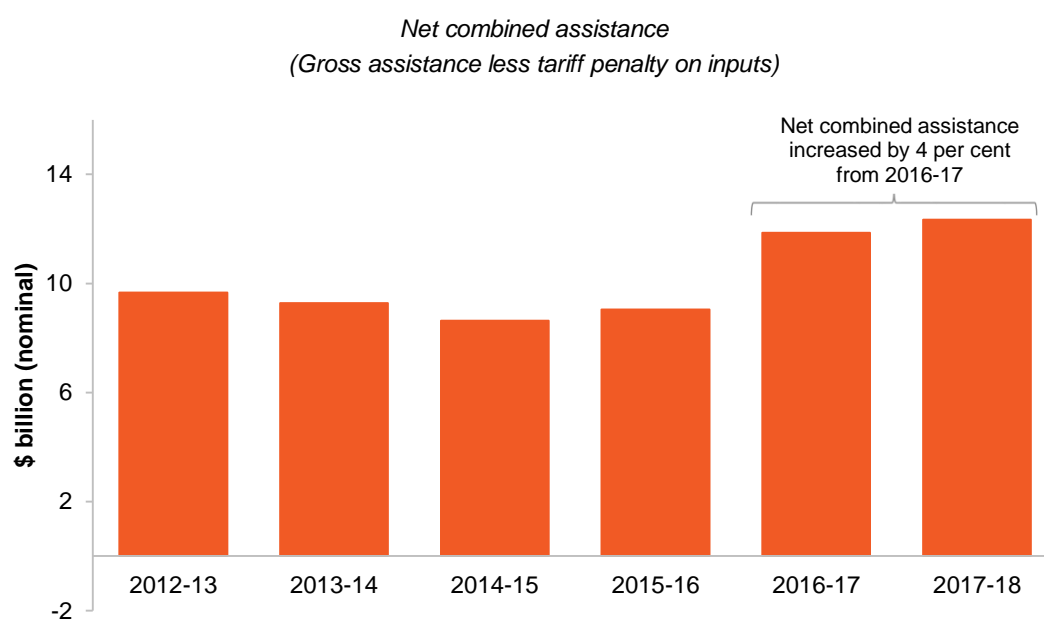
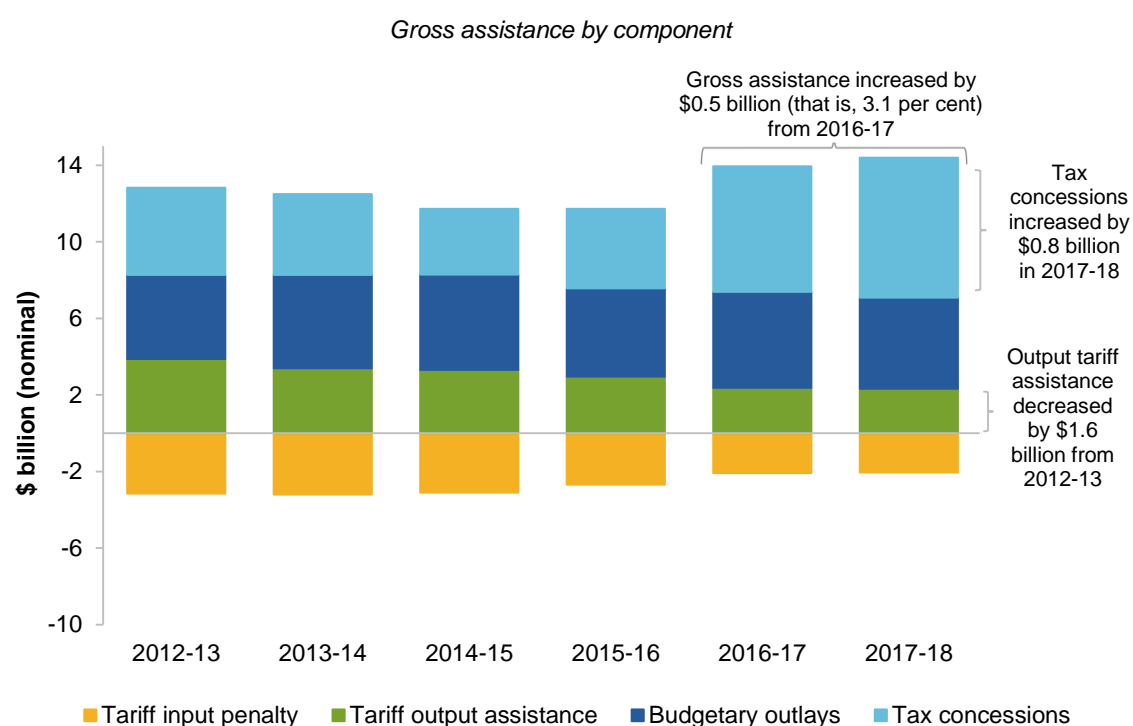
The estimated value of output tariff assistance to the manufacturing sector, the main beneficiary of tariff assistance, has fallen by more than half. For the services sector, the main sector penalised by the tariff, the input tariff penalty has also fallen by more than half. All up, net tariff assistance is about \$500 million lower under the new methodology.

After allowing for the negative effects of tariff assistance on the cost of inputs (the input tariff penalty), total estimated net combined assistance amounted to around \$12.3 billion in 2017-18, an increase of around \$0.5 billion in nominal terms (4 per cent) from 2016-17 levels (figure 1.1, bottom panel).

Output tariff assistance and the input tariff penalty have both declined significantly since 2012-13. Output tariff assistance fell from \$3.9 billion to \$2.3 billion, or 40 per cent, while the input tariff penalty has decreased by \$1.1 billion (lower tariff penalty) to \$2.1 billion, or 35 per cent. These changes reflect changes in tariffs — including the uptake of tariff

concessions available under Australia's preferential trade agreements — as well as changes in the composition of trade and the size of industries.

Figure 1.1 **Aggregate estimates of measureable assistance, 2012-13 to 2017-18**

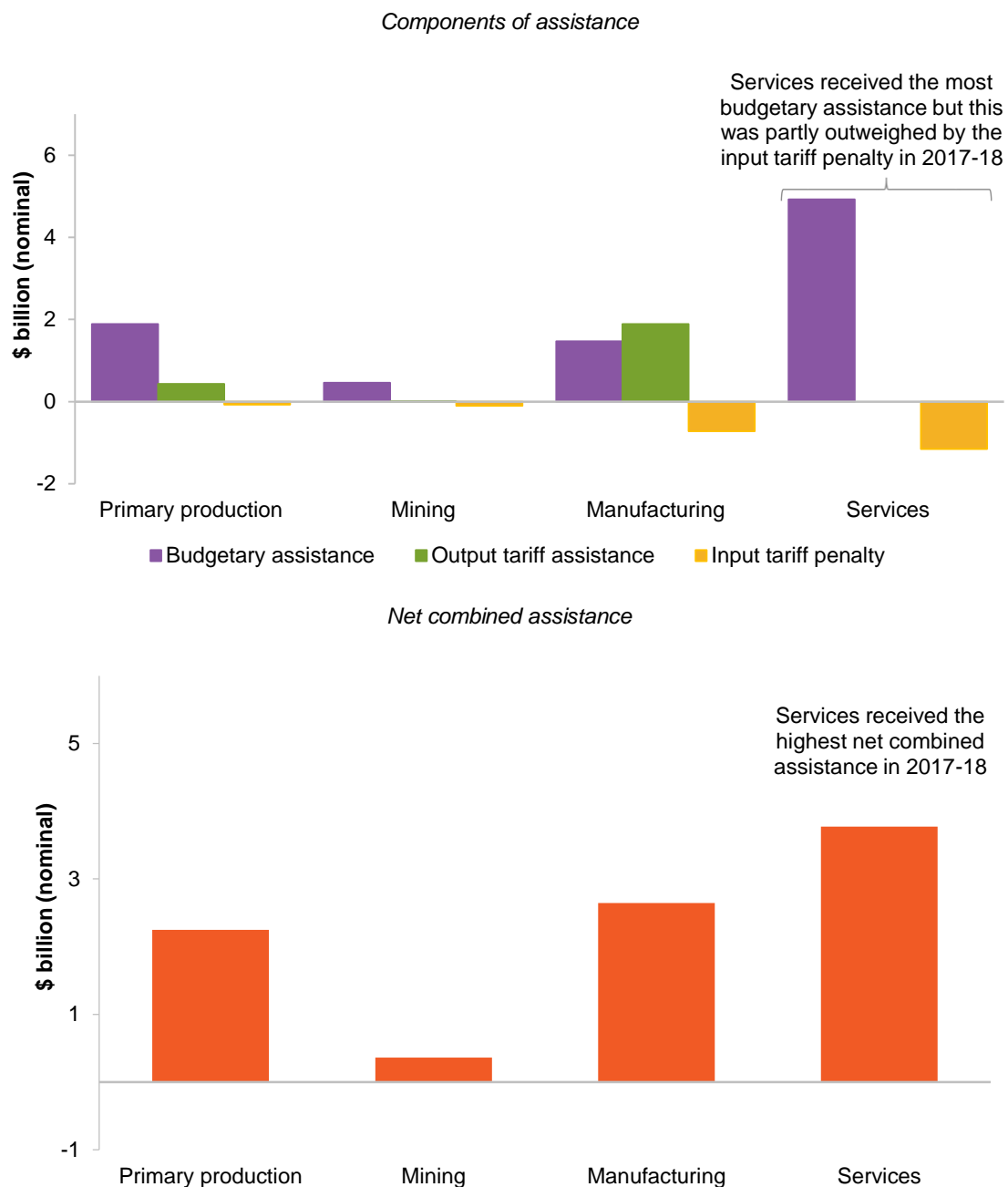


Source: Commission estimates.

Services received around 40 per cent of net assistance

The services sector received the largest amount of net assistance, comprising \$4.9 billion in budgetary assistance, partly offset by around \$1.2 billion in tariff penalty on inputs (figure 1.2). The manufacturing sector received around 30 per cent of net combined assistance.

Figure 1.2 **The incidence of assistance varies across industries, 2017-18**



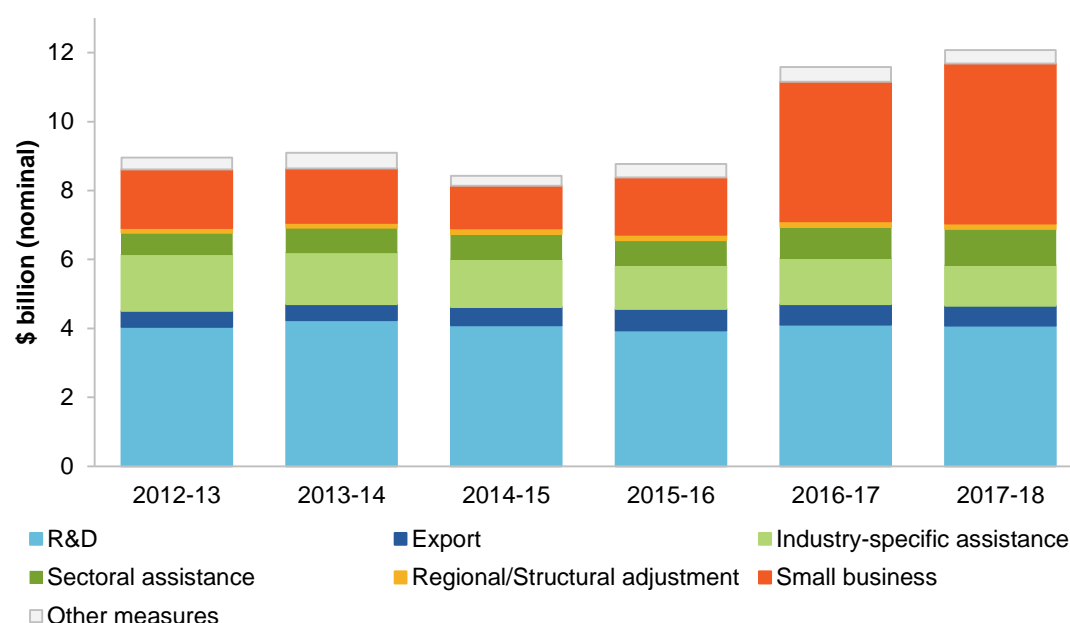
Source: Commission estimates.

Support for R&D and small business represents over 70 per cent of measured budgetary assistance

Initiatives targeting small business, such as capital gains tax discounts, simplified depreciation rules and lower company tax rates for small businesses, represented around 38 per cent (\$4.6 billion) of measured budgetary assistance (figure 1.3).

Support for business R&D has remained steady over five years (around \$4.1 billion), representing just under 34 per cent of budgetary assistance. The majority is in the form of the demand driven R&D Tax Incentive (\$2.8 billion).¹ The remainder is mostly outlays for funding of research institutions, including rural research.

Figure 1.3 Budgetary assistance by category, 2012-13 to 2017-18



Source: Commission estimates.

¹ This estimate is slightly different to that reported by the Department of Industry, Innovation and Science (DIIS) (DIIS 2018). DIIS reports the tax concession in the year in which the activity (generating the concession) occurs. The Commission (following Treasury's treatment) traditionally has reported the concession in the year in which it is received by the company. This is typically the following year after tax returns are completed (the year after the activity creating the concession occurs). Hence, discrepancies between the *Review* and department estimates will arise when a program is growing or contracting. Further, budgetary assistance estimates for the R&D Tax Incentive are not collected or reported elsewhere at the industry or sector level. The figures provided in this report are estimates only, derived from Treasury's Tax Expenditure Statements and DIIS's Science, Research and Innovation Budget Tables.

Industry-specific assistance, such as a range of selective grants and concessions for the automotive, film, ethanol and finance industries, represents the third largest group of measured assistance.

Contributing to the \$0.5 billion increase in aggregate budgetary assistance from 2016-17 to 2017-18 are:

- an increase of \$385 million in assistance afforded by the Small Business Capital Gains Tax (SBCGT) concession schemes — including the SBCGT 50 per cent reduction, 15 year asset exemption, rollover deferral and retirement exemption
- an increase of \$250 million in assistance afforded by the Farm Management Deposits Scheme (FMDS)
- an increase of \$100 million in assistance afforded by the Lower Company Tax Rate — a rate of 27.5 per cent, accessible for companies with aggregated annual turnover of less than \$25 million in 2017-18. The corporate tax rate for eligible companies will be reduced from 27.5 per cent to 26 per cent in 2020-21 before being cut to 25 per cent in 2021-22
- an increase of \$100 million for the Unincorporated Small Business Tax Discount — an 8 per cent discount on tax payable, accessible for unincorporated small businesses with turnover less than \$5 million in 2017-18 (increasing to a 13 per cent discount in 2020-21 and to 16 per cent in 2021-22).

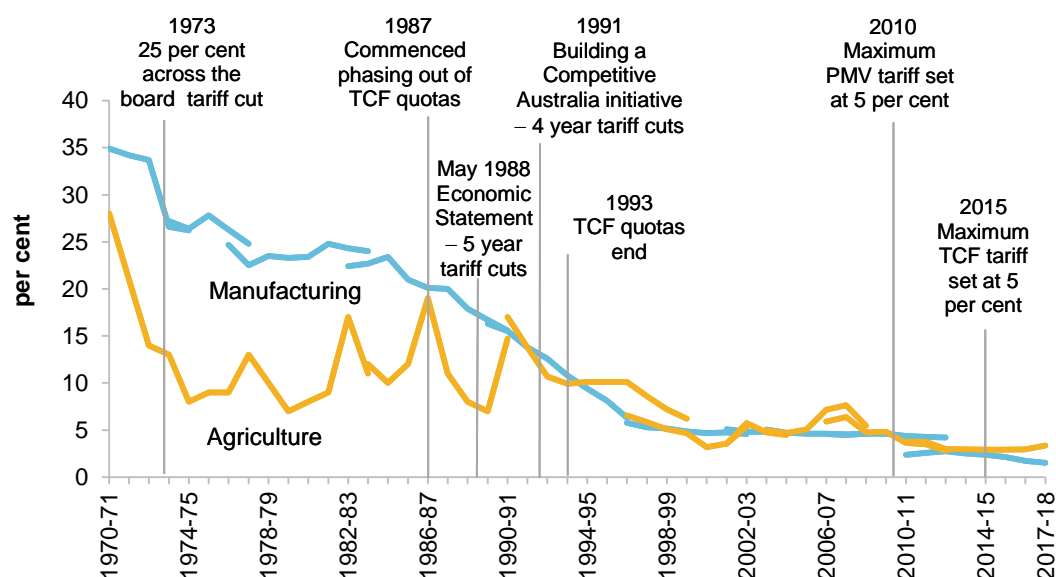
Reductions in existing programs and cessations in 2017-18 totalled \$639 million across 49 programs (some demand driven and some by government decision).

The effective rate of combined assistance fell for most industries

The effective rate of assistance measures the net combined assistance to a particular industry in proportion to that industry's output (unassisted 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. In 2017-18 the effective rate of assistance decreased for 14 of the 20 industry estimates, and the dispersion in assistance rates between the broadly defined industries are very low by historical terms (table 2.6). However, the industry estimates can hide assistance rates substantially above average at the individual company or project level, as when assistance is preferentially targeted at particular goods and services or firms (box 2.3).

The significant decline in manufacturing and agriculture assistance rates over the past 45 years is largely a consequence of trade barrier liberalisation and agriculture market reform (figure 1.4).

Figure 1.4 **Effective rates of assistance to manufacturing and agriculture^a, 1970-71 to 2017-18**



^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 (ABS 2013).

Source: Commission estimate.

1.2 Recent developments in industry assistance

While the main development in estimated assistance for 2017-18 is the increase in small business tax concessions flowing from past policy decisions, the two main new industry assistance policy developments are the numerous drought assistance measures and the further proliferation of government project financing facilities. These two developments will influence the 2018-19 assistance estimates.

Drought assistance has been predominant

Many Australian farm businesses, families and rural communities have experienced hardship during the latest drought. Both the Australian and State Governments have enacted measures in response (see tables 4.1 and 4.2, chapter 4). It is too early to form a clear picture of the take-up rates across the many drought programs, or which measures are the most desired and effective.

Much drought assistance is about getting farm businesses and families through the immediate operational and financial crisis. At the same time there are measures addressing

the medium and long term self-reliance and preparedness for managing drought. In time it will be important to step back and consider the structural supports that best serve the farming communities and the country as a whole.

The Commission has not reviewed drought assistance since 2009 and assistance measures have changed markedly since that time. That review recommended support for farm families (given effect through the Farm Household Allowance) in a suitable way and at rates consistent with social welfare payments to other families, rather than for farm businesses (through interest rate subsidies in place at the time and other measures). The Commission (as well as earlier reviews by other bodies) found that providing interest rate subsidies created a number of perverse incentives such as carrying more debt than is appropriate. That review found that farmers are generally best placed to manage their farms to cope through climatic variation, whereas assistance in place at that time undermined the incentives for farmers to manage their own risks and were ineffective in supporting sustainable farming practices.

More recent policies have reintroduced loan concessions and provided allowances to farm families at rates well above those available to other low-income families. A sober review of farm assistance that includes consideration of how best to deal with future droughts would be appropriate after normal climatic conditions return.

Large scale concessional finance facilities continue to expand

The 2016-17 *Review* highlighted the move towards large scale project finance facilities. Over the past year, this trend has continued. The often stated rationale for these finance facilities is to fill a ‘market gap’, though in general Australia has relatively deep and liquid financial markets.

Legislation was enacted in April 2019 for a new finance facility, the Australian Business Securitisation Fund, to provide more accessible and cheaper finance for small- and medium-sized enterprises (SMEs). The Commission’s 2018 inquiry into *Competition in the Australian Financial System* concluded that SME access to finance does not appear to be a major problem, with nearly 90 per cent of SMEs successfully applying for debt finance in 2015-16. However, the Australian Government noted that many SMEs without real estate or other significant collateral for debt finance may have simply not applied (Frydenberg 2019, p. 15).

Legislation was also enacted in April 2019 for a new finance facility, provided through Efic, for infrastructure in Pacific Island nations. While this facility has geo-political aspects, rather than being solely an industry assistance measure, it is a major departure from Efic’s long-running role in offering export credit products for Australian exporters. The Commission reviewed the role of Efic and the design of export credit in its 2012 report *Australia’s Export Credit Arrangements*.

The risk of poorly justified and designed government finance vehicles is tangible. They have the potential to skew industry assistance to particular firms and projects with minimal public scrutiny until deals are done. The onus should be on proponents of taxpayer-funded financing of commercial projects to demonstrate how they would serve the public interest. Even where there is an in-principle argument for government assistance, proponents should also explain why financing is the best policy option.

History has not been kind to previous efforts at government financing. In the face of past failures in these areas, it will be critical to review the various newly-introduced financing measures early in their operation to ensure that they genuinely make Australians better off and not merely benefit project proponents.

1.3 The future of the world trading system

The world trading system is under strain. Attempts to undermine the WTO's trade dispute settlement processes, rising tariffs and the cutting of bilateral deals are a threat to the system. Some of these recent tensions reflect long-standing challenges. But they have also, unfortunately, overshadowed steady progress on Australian and WTO trade agreements in recent years (box 1.2).

This year's theme chapter reviews the contribution of the world trading system — with the WTO at the centre — to Australia's prosperity. It outlines the achievements of the WTO and the challenges it faces.

Resurrecting trade barriers is not a solution to the forces testing the continued support for open markets. The path forward has to lie with improving the system we have. To date, there has not been sufficient consensus or political will in the global community to resolve the issues.

There are steps Australia can take alone and steps that we can, and are, taking in co-operation with others. One of the single most important steps Australia can take in the face of mounting troubles in the world trading system is to keep its borders open and to continue working towards freer markets. Australia could proceed in this sense unilaterally, as most of the benefit from lower non-tariff measures does not depend on our trading partners taking similar actions; we damage our own prosperity by maintaining nuisance tariffs, other trade restrictions and one of the most active anti-dumping regimes in the world.

Australia should also continue to work with our international partners to build agreement on how best to resolve long-standing and escalating challenges facing the WTO. There is a need, in the interests of all members, to reinvigorate and strengthen the WTO's negotiation and surveillance functions to ensure it continues to anchor the world trading system and supports ongoing improvements in the living standards of Australians (and others) over the decades ahead.

Box 1.2 **WTO progress towards freer markets**

The focus on current tensions in the world trading system has masked the WTO's successes concluding trade agreements on smaller agendas in the past few years. Some of these successes are of high direct importance to Australia, including:

- The plurilateral Revised Government Procurement Agreement of 2014 (in force for Australia since May 2019), which aims to give reciprocal access to foreign tenders in participating member countries.
- Conclusion of the plurilateral Expanded Information Technology Agreement in 2015 which eliminates tariffs on 201 information technology products.
- The 2015 Ministerial Decision on abolishing agricultural export subsidies.
- The Trade Facilitation Agreement which entered into force in February 2017 and will result in customs processes being redesigned to better facilitate trade.
- Negotiations for a plurilateral agreement on international electronic commerce.

Australia has also progressed regional trade agreements, which over time may positively influence the shape of future WTO negotiations. For example:

- The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) entered into force for Australia in December 2018.
- Seven chapters of the proposed Regional Comprehensive Economic Partnership (RCEP) have been agreed.

2 Assistance estimates

Key points

- In 2017-18, the Australian Government provided an estimated \$2.3 billion in output tariff assistance, \$4.8 billion in budgetary outlays and \$7.3 billion in tax concessions. After deducting the cost penalty of tariffs on imported inputs (\$2.1 billion, over 50 per cent incurred by services industries), net combined assistance to industry was \$12.3 billion.
 - The methodology used to derive the tariff assistance estimates has been changed to better reflect the increased scope of Australia's preferential trade agreements. This change is the main reason that tariff assistance estimates are lower than in previous *Reviews*.
- Aggregate budgetary assistance is estimated to have increased in 2017-18 by a further 4.2 per cent following last year's 32 per cent rise. The main reason for the increase was the expansion of tax relief to small businesses through more generous depreciation allowances and concessional tax rates. Small business assistance has now surpassed budgetary assistance to R&D.
- The effective rates of combined assistance have continued to fall for most industries.
 - Rates have fallen significantly in the motor vehicles and parts industry (from 11.8 per cent in 2012-13 to 3.6 per cent in 2017-18). They have also continued to fall in the textiles, leather, clothing and footwear industry (1.5 per cent).
 - Rates have increased for a number of primary production industries including sheep, beef cattle and grain farming (5.8 per cent), dairy cattle farming (2.3 per cent) and horticulture and fruit growing (2.1 per cent). This increase reflects drought assistance.
- The incidence of assistance varies widely between sectors.
 - Services and mining incur negative net tariff assistance, while output tariff assistance is focused on manufacturing.
 - The share of budgetary assistance to manufacturing and primary production is much higher than their share of the economy.
- Over the past 45 years, assistance to the manufacturing and agricultural sectors has fallen dramatically, and significant disparities between industries within these sectors have narrowed.
- The measured estimates are conservative as they exclude significant assistance that is difficult to quantify. This includes: favourable finance (loans, debt, equity, guarantees); local purchasing preferences for defence equipment; and regulatory restrictions on competition. It also excludes state and territory government support to industry.

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 provided by:

- import tariffs, which raise the price of imported products (mainly manufactured goods) allowing competing domestic firms to charge higher prices. The tariff assistance estimate is the equivalent budget outlay to the industry that would be expected to have the same effect on Australian producers' prices and volumes of production. The measure is not the amount of duty collected.
- Australian Government budgetary measures — divided into government subsidies (predominantly grants and concessional loans) and tax concessions. This budgetary support advantages recipient firms and industries relative to those that do not receive support.²

The estimates cover a broad range of measures that afford substantive support to industry and that can be readily quantified on a consistent annual basis. However, they do not capture all Australian Government support for industry (box 2.1). For example, the assistance provided through government regulation is not included in the estimates, nor is assistance arising from government purchasing preferences. In large part this is because the extent of these forms of assistance is difficult to estimate.

The estimates also do not include assistance from other government jurisdictions. This can be considerable. A detailed study for the 2009-10 *Review* indicated that State and Territory assistance to industry amounted to around \$4 billion in identifiable assistance in 2008-09 (PC 2011). The reported estimates in this chapter, therefore, do not cover the full extent of assistance to industry and the gap between reported values and actual assistance is potentially large.

There are also government policies that can advantage businesses that are not considered industry assistance. This arises where activities to support social or other objectives increase demand for an industry's products, or where they lower the costs of production for some businesses (box 2.1). This chapter reports on government activities that constitute industry assistance and that can be readily measured.

² The assistance estimates reported in this year's *Review* cover the period 2012-13 to 2017-18. Further information on the assistance estimation methodology, program coverage and industry allocation is to be provided in a (forthcoming) Methodological Annex to this *Review*.

Box 2.1 **What is not included in the Commission's assistance estimates**

The Commission's assistance estimates cover only those measures that selectively benefit particular firms, industries or activities, and that can be quantified given practical constraints in measurement and data availability. Consequently, there are some significant government programs which selectively confer industry assistance, but cannot be appropriately estimated. Conversely, certain businesses benefit significantly from some government arrangements, but the benefit is not classified as (preferential) industry assistance, generally because the purpose of the arrangement is a broader public objective.

Examples of industry assistance not included in the core estimates

- Regulatory restrictions on competition such as those relating to pharmacies, air services, importation of books, media and broadcasting, and importation of second hand cars
- Government purchasing preferences and local content arrangements, such as defence procurement
- Concessional debt and equity finance
- State and territory government support to industry
- Anti-dumping and countervailing duties
- Access and pricing of resources (mining, forestry, fisheries and water), if on favourable economic terms
- Support for professional sport (such as tax concessions for international tournaments in Australia and support for sporting venue redevelopment).

Some of these arrangements have been examined in detail in inquiries, research reports, and previous *Reviews*.

Examples of policies that provide a benefit to certain businesses that are not classified as industry assistance

- Superannuation concessions
- Health insurance rebate
- Government funding of private community service providers
- Indigenous business support
- Employment incentives to business
- Remote housing concessions in mining regions
- Differential tax rates in relation to excises, GST and Fringe Benefit Tax (and state payroll tax)
- Improved transport infrastructure, for example, an upgraded road in a concentrated beef producing area would be expected to lower logistics costs for beef producers, but the road is not for the sole use of beef producers.

Although not classified as assistance, evaluations of these programs should include analysis of the differential effects on businesses in an industry and across industries.

The following sections present the 2017-18 assistance estimates at the sectoral level (primary production, mining, manufacturing and services), and for 34 industry groupings. Detailed estimates are provided in appendix A. The estimates cover:

- gross and net assistance provided 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 (section 2.1)
- Australian Government budgetary measures — divided into government outlays and tax concessions, and then into eight categories (including R&D, export assistance and support to small business), which confer financial support to the recipient businesses (section 2.2)
- the combined rate of assistance, and the effective rate of assistance, which indicates the extent to which assistance to an industry enables it to attract and hold economic resources relative to other industries (section 2.3)
- trends in these sources of assistance over the four decades (section 2.4).

2.1 Tariff assistance

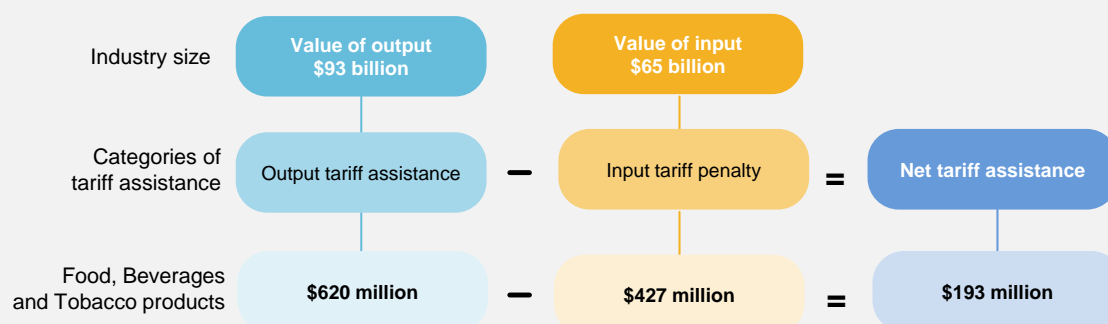
Tariffs have direct effects on the returns received by Australian producers. The Commission's estimates of tariff assistance are divided into three categories — 'output' assistance, 'input' assistance and 'net' assistance.

- 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 total net assistance provided through tariffs to industry, and is calculated as output tariff assistance less the input assistance, where input assistance is the cost penalty on business inputs imposed by tariffs (box 2.2).

For this year's *Review* the Commission has revised the methodology used to derive the tariff assistance estimates (see box 1.1).

Box 2.2 **Tariff assistance concepts applied to the food, beverage and tobacco products industry**

To illustrate the concepts of output tariff assistance, input tariff assistance (input tariff penalty) and net tariff assistance this box outlines the Commission's estimates for the food, beverage and tobacco products industry in 2017-18. The \$620 million output tariff assistance for the industry is largely derived from 5 per cent tariffs on imports of chocolate products, selected wines, and bread and pastry products. While for inputs, 5 per cent tariffs on imports of chocolate and sugar confectionary products accounted for most of the \$427 million input tariff penalty imposed on the food, beverages and tobacco products industry.



Source: Commission estimates.

The gross value of output tariff assistance declined further in 2017-18 after falls in previous years

Tariff assistance is now small compared with the size of the Australian economy. The gross value of tariff assistance to domestic production was around \$2.3 billion in 2017-18, around \$50 million lower than the previous year (table 2.1). The gross value of tariff assistance also fell from 2012-13 to 2017-18. Changes in the gross value of tariff assistance over the period reflect both changes in tariffs, trade composition and the size of industries. Tariffs for certain textile, clothing and footwear items fell from 10 per cent to 5 per cent on 1 January 2015, while as part of the WTO Information Technology Agreement, tariffs for certain information technology products fell from 5 per cent to 3.75 per cent on 1 January 2017. The estimated fall in 2013-14 reflected lower output levels in tariff-assisted activities (mainly metal and fabricated metal products, and petroleum, coal, chemical and rubber products). The reductions in 2015-16 and 2016-17 reflected tariff reductions and the uptake of tariff concessions available under Australia's preferential trade agreements.

Table 2.1 Tariff assistance^a, 2012-13 to 2017-18
\$ million (nominal)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Output assistance	3875.8	3395.4	3307.3	2957.9	2373.7	2322.1
Input penalty	-3163.3	-3205.0	-3102.9	-2690.7	-2097.5	-2057.7
Net tariff assistance	712.5	190.3	204.4	267.2	276.2	264.3

^a Nominal tariff assistance estimates are derived by re-indexing a reference series based on 2013-14 ABS input-output data, using ABS Industry Gross Value Added and supporting data at current prices, for all industries except mining. For mining, in order to abstract from the effects of terms of trade changes, the estimates are re-indexed using the ABS Industry Gross Value Added, chain volume measures. This information is subject to periodic revision by the ABS (2018).

Source: Commission estimates.

Tariff penalty on inputs

The estimated cost penalty on inputs to user industries (including primary, manufacturing and services industries) arising from tariffs was around \$2.1 billion in 2017-18 (table 2.1). This compares with a penalty of around \$3.2 billion in 2012-13. The estimated penalty increased in nominal terms in 2013-14 with the general growth in the economy and rising price levels. Since 2014-15, however, the estimated tariff penalty has declined significantly following reductions in tariffs on certain textiles, clothing and footwear items in January 2015 and the uptake of tariff concessions available under Australia's preferential trade agreements.

Net tariff assistance declined in 2017-18

After deducting the input tariff penalty from the output assistance, net tariff assistance (for the Australian economy) was estimated to be around \$264 million in 2017-18, down from over \$700 million in 2012-13 (table 2.2). This fall reflects both high relative growth in the services sector (which incurs significant tariff penalties on inputs), especially relative to the manufacturing sector (a significant beneficiary of tariff assistance), together with some reductions in tariffs applied to manufactured products and the uptake of tariff concessions available under Australia's preferential trade agreements in more recent years.

The estimated value of net tariff assistance for the manufacturing sector has fallen by around 50 per cent since 2012-13, largely reflecting the uptake of tariff concessions available under Australia's trade agreements and reductions in tariff assistance to the textiles, clothing, footwear and leather industry, and changing trade and activity levels. At the same time, the net tariff penalty on the services sector has also declined by over 40 per cent (to around \$1.2 billion), reflecting tariff concessions under Australia's trade agreements. Similarly, the net tariff penalty on the mining sector also declined over the period (figure 2.1).

The value of net tariff assistance to primary production trended lower from 2012-13 to 2013-14 but since has risen to \$355.8 million in 2017-18. While there has been year to year variation in the value of activity in the sector, the upward trend largely reflects changing trade patterns in the sheep, beef cattle and grain farming industry (which receives positive net tariff assistance).

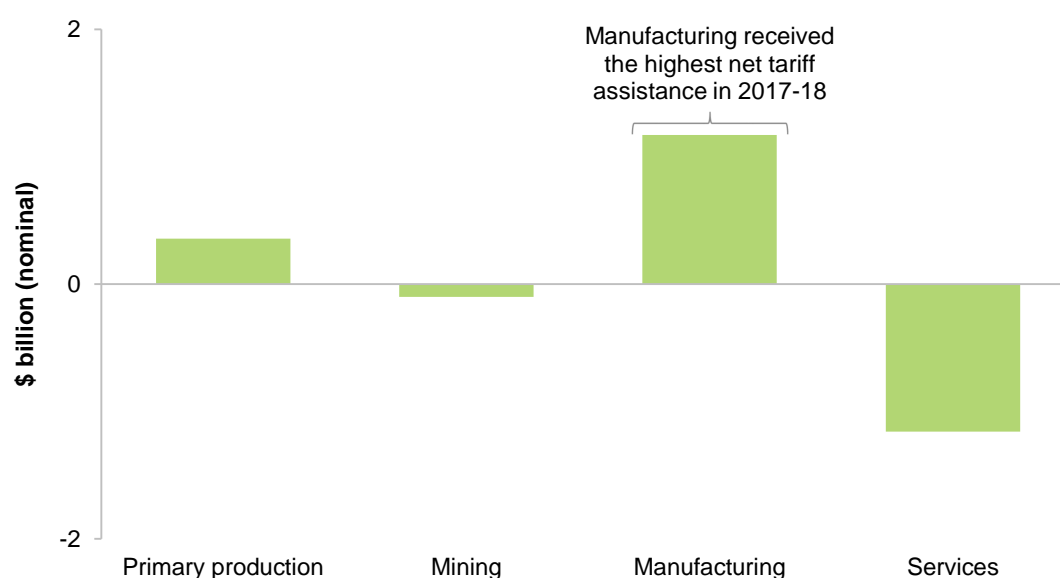
Table 2.2 Net tariff assistance by industry sector^a, 2012-13 to 2017-18
\$ million (nominal)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Primary production	272.5	157.1	195.5	239.3	338.4	355.8
Mining	-151.3	-165.2	-164.8	-148.5	-114.9	-102.1
Manufacturing	2603.9	2280.7	2180.4	1839.9	1270.6	1169.0
Services	-2012.6	-2082.3	-2006.6	-1663.6	-1217.9	-1158.4
Total	712.5	190.3	204.4	267.2	276.2	264.3

^a Nominal tariff assistance estimates are derived by re-indexing a reference series based on 2013-14 ABS input output data, using ABS Industry Gross Value Added and supporting data at current prices for all industries except mining. For mining, in order to abstract from the effects of terms of trade changes, the estimates are re-indexed using the ABS Industry Gross Value Added, chain volume measures. This information is subject to periodic revision by the ABS (2018).

Source: Commission estimates.

Figure 2.1 Net tariff assistance by industry sector, 2017-18



Source: Commission estimates.

Output tariff assistance is focused on manufacturing, while input cost penalties fall on all industries

By value, most tariff assistance on outputs is directed towards the manufacturing sector, and in particular the food, beverages and tobacco (\$620 million), metal and fabricated metal products (\$260 million), petroleum, coal, chemical and rubber products (\$205 million), and motor vehicles and parts (\$191 million) industry groups (table 2.3, left hand column).

Mining and primary production industries receive little tariff assistance on outputs, apart from the sheep, beef cattle and grain farming industry (\$384 million). Tariffs are not levied on services. On the other hand, tariffs raise the cost of production across the whole economy to the extent that businesses use inputs whose prices are affected by tariffs (table 2.3, middle column). Over half of the input penalty of tariffs is incurred by services industries. All manufacturing industries are estimated to receive positive net tariff assistance, as the value of tariff assistance on outputs outweighs the cost imposed of tariffs on inputs for each industry group (table 2.3, right hand column).

Outside the manufacturing sector, the sheep, beef cattle and grain farming and horticulture and fruit growing industries are estimated to have received positive net tariff assistance in 2017-18. The sheep, beef cattle and grain farming industry receives tariff protection through a 5 per cent tariff on imports of ground nuts (oilseeds), while the horticulture and fruit growing industry receives tariff protection through a 5 per cent tariff on imported dried grapes and dried apricots. The mining industry together with all of the services industries (and most primary production industries) incurred negative net tariff assistance in 2017-18.

2.2 Australian Government budgetary assistance

Budgetary assistance includes actual payments (outlays) and industry and sector specific tax concessions that have industry policy objectives (figure 2.2). Some measures provide financial assistance directly to firms, such as the Automotive Transformation Scheme (\$86.6 million in 2017-18) and the R&D Tax Incentive (\$2.8 billion in 2017-18), while other budgetary support measures deliver benefits indirectly to an industry via intermediate organisations such as the Rural Research and Development Corporations (\$320 million in 2017-18) and the CSIRO (\$547 million in 2017-18).³

³ The Commission's assistance estimates do not include the full government appropriation for CSIRO. Excluded are certain public research such as environmental R&D, some renewable energy R&D and general research towards expanding knowledge in various fields.

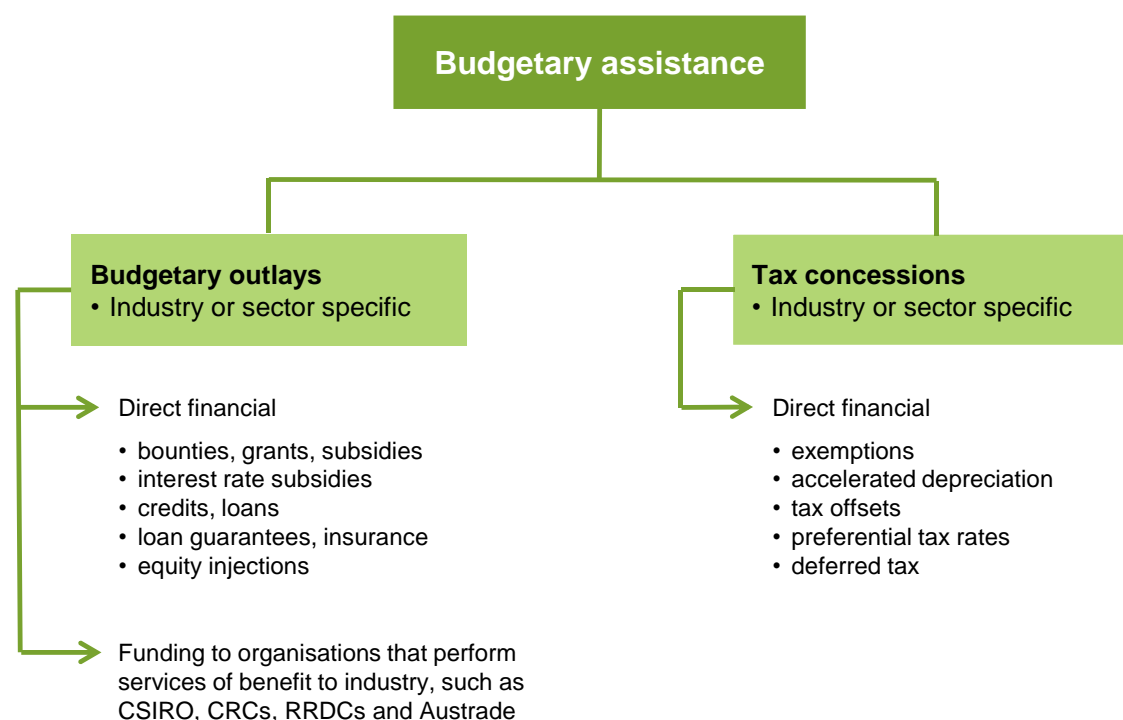
Table 2.3 Tariff assistance by industry grouping, 2017-18^{a,b}
\$ million (nominal)

<i>Industry grouping</i>	<i>Output assistance</i>	<i>Input cost penalty</i>	<i>Net tariff assistance</i>
Primary production	431.8	-76.0	355.8
Horticulture and fruit growing	37.7	-3.4	34.3
Sheep, beef cattle and grain farming	384.5	-38.6	345.9
Other crop growing	0.7	-3.2	-2.4
Dairy cattle farming	—	-4.8	-4.8
Other livestock farming	—	-6.5	-6.5
Aquaculture and fishing	0.4	-3.5	-3.0
Forestry and logging	0.2	-0.2	0.0
Primary production support services	8.1	-15.7	-7.6
Unallocated primary production	—	—	—
Mining	1.1	-103.2	-102.1
Manufacturing	1889.2	-720.2	1169.0
Food, beverages and tobacco	620.0	-427.2	192.8
Textiles, leather, clothing and footwear	35.1	-15.7	19.3
Wood and paper products	160.5	-28.0	132.5
Printing and recorded media	38.9	-7.5	31.3
Petroleum, coal, chemical and rubber prod.	205.5	-36.0	169.5
Non-metallic mineral products	78.1	-16.1	62.0
Metal and fabricated metal products	259.9	-50.9	209.0
Motor vehicles and parts	190.7	-72.9	117.9
Other transport equipment	122.1	-22.1	100.0
Machinery and equipment manufacturing	121.9	-28.0	93.9
Furniture and other manufacturing	56.7	-15.8	41.0
Unallocated manufacturing	—	—	—
Services	—	-1158.4	-1158.4
Electricity, gas, water and waste services	—	-23.3	-23.3
Construction	—	-417.1	-417.1
Wholesale trade	—	-72.4	-72.4
Retail trade	—	-46.1	-46.1
Accommodation and food services	—	-95.3	-95.3
Transport, postal and warehousing	—	-78.6	-78.6
Information, media and telecommunications	—	-20.5	-20.5
Financial and insurance services	—	-5.7	-5.7
Property, professional and admin. services	—	-129.1	-129.1
Public administration and safety	—	-43.8	-43.8
Education and training	—	-16.3	-16.3
Health care and social assistance	—	-62.8	-62.8
Arts and recreation services	—	-27.9	-27.9
Other services	—	-119.6	-119.6
Unallocated services	—	—	—
Unallocated other	—	—	—
Total	2322.1	-2057.7	264.3

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

Source: Commission estimates.

Figure 2.2 **Forms of budgetary assistance**



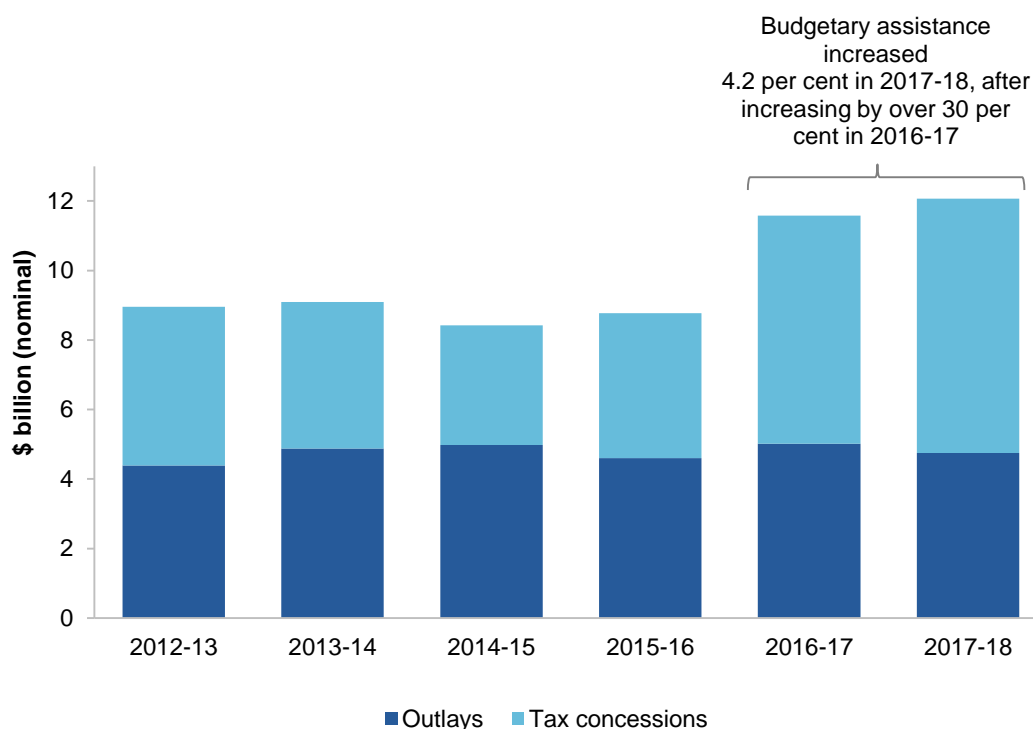
The budgetary assistance estimates are derived primarily from actual expenditures shown in departmental and agency annual reports, and the Tax Expenditures Statement (TES) compiled by the Australian Treasury. Industry and sectoral disaggregations are based primarily on supplementary information provided by relevant departments or agencies.⁴

Aggregate budgetary assistance continued to rise in 2017-18 following a significant increase in assistance the previous year.

The estimated gross value of budgetary assistance to Australian industry was \$12.1 billion in 2017-18, over 4 per cent higher than in 2016-17 (figure 2.3). In nominal terms, budgetary assistance was fairly stable between 2012-13 and 2015-16, before increasing significantly in 2016-17 by over 30 per cent to \$11.6 billion.

⁴ State and territory governments also provide substantial budgetary assistance to industry. The 2009-10 *Review* found that in 2008-09 subnational governments expended around \$1.5 billion on programs that provided grants and services to the benefit of industry (and an additional \$2.6 billion in administrative wages and expenses). This equated to around \$184 per person. Programs relating to primary industries and resources accounted for around 60 per cent of estimated industry assistance (PC 2011).

Figure 2.3 **Budgetary assistance to industry, 2012-13 to 2017-18**



Source: Commission estimates.

Contributing to the \$0.5 billion increase in aggregate budgetary assistance from 2016-17 to 2017-18 are:

- an increase of \$385 million in assistance afforded by the Small Business Capital Gains Tax (SBCGT) concession schemes — including the SBCGT 50 per cent reduction, 15 year asset exemption, rollover deferral and retirement exemption
- an increase of \$250 million in assistance afforded by the Farm Management Deposits Scheme (FMDS) — allowing eligible primary producers to set aside pre-tax income from primary production in years of high income, which can be drawn on in future years when needed. Income deposited into a FMDS account is tax deductible in the financial year the deposit is made and becomes taxable income in the financial year in which it is withdrawn
- an increase of \$100 million in assistance afforded by the Lower Company Tax Rate — a rate of 27.5 per cent, accessible for companies with annual turnover of less than \$25 million in 2017-18. The corporate tax rate for eligible companies will be reduced from 27.5 per cent to 26 per cent in 2020-21 before being cut to 25 per cent in 2021-22
- an increase of \$100 million for the Unincorporated Small Business Tax Discount — an 8 per cent discount on tax payable, accessible for unincorporated small businesses with turnover less than \$5 million in 2017-18 (increasing to a 13 per cent discount in 2020-21 and to 16 per cent in 2021-22).

Reductions in existing programs and cessations in 2017-18 totalled \$639 million across 49 programs. Some of these reductions were demand driven and some reflected policy decisions. They included:

- a fall of \$148 million in assistance afforded by the R&D Tax Incentive scheme — which is a tax offset scheme for eligible entities whose aggregated annual turnover is less than \$20 million
- a fall of \$102 million in the one-off Data Retention Industry Grants Program for eligible telecommunications service providers to meet upfront costs of implementing data retention obligations
- a fall of \$82 million in assistance afforded by the Automotive Transformation Scheme to encourage competitive investment and innovation in the Australian automotive industry.

Manufacturing and primary production received a much higher share of assistance than their share of the economy

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

In 2017-18, most budgetary assistance was afforded through outlays for the manufacturing sector while for the primary production, mining and services sectors the majority of budgetary assistance was provided through tax concessions.

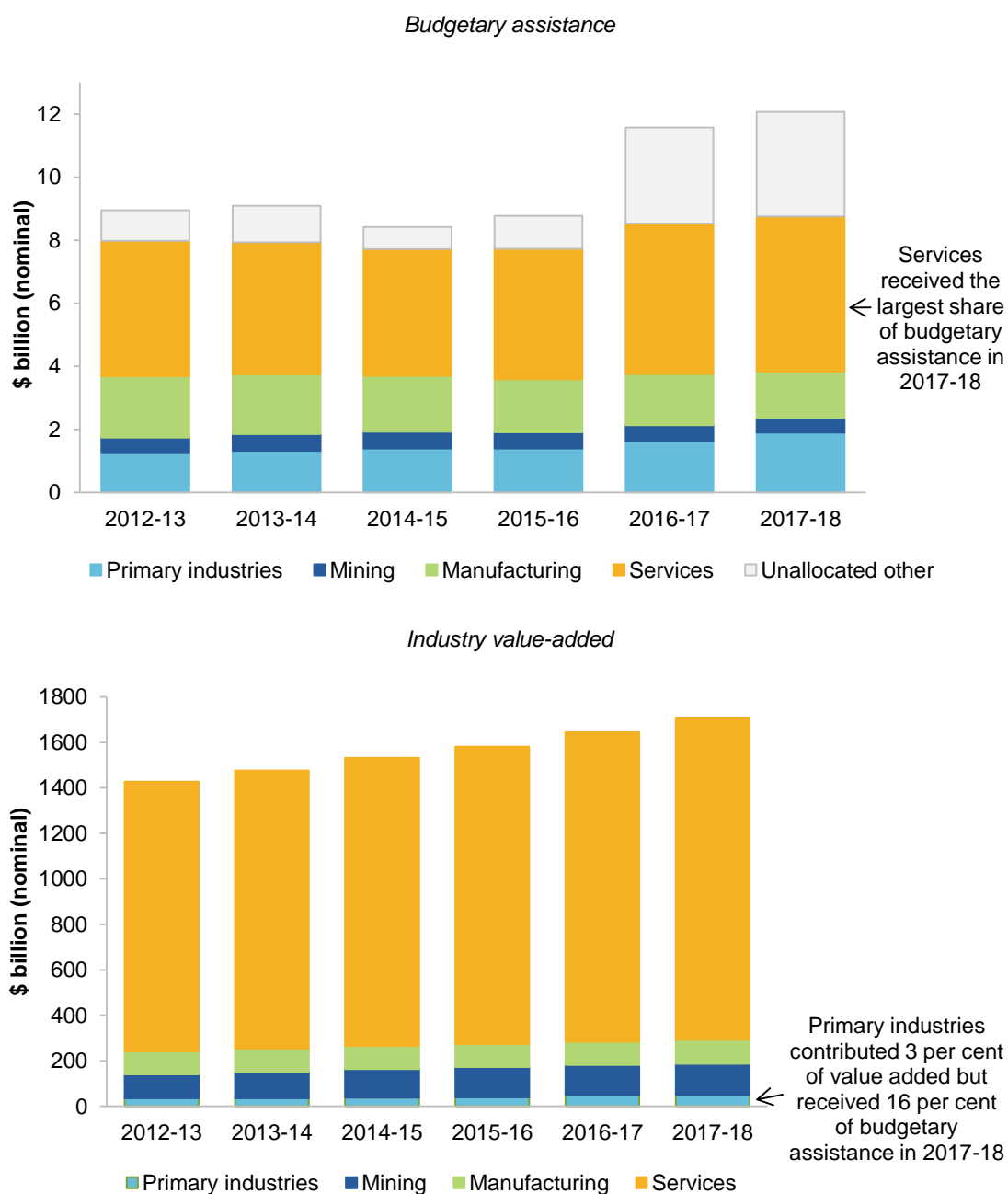
In 2017-18, the services sector received around 40 per cent of estimated budgetary assistance (figure 2.4, top panel), much lower than the sector’s share of economy wide value added (around 83 per cent) (figure 2.4, lower panel). In contrast, the manufacturing and primary production sectors, combined, received around 28 per cent of budgetary assistance while contributing around 9 per cent of economy wide value added.

The three industry groups receiving the largest levels of budgetary assistance together accounted for around 30 per cent of estimated budgetary assistance to industry in 2017-18 (table 2.4).

- Budgetary assistance was highest for the property, professional and administrative services industry (\$1.7 billion) consisting mainly of the R&D Tax Incentive scheme and the Small Business Simplified Depreciation Rules scheme
- Sheep, beef cattle and grain farming accounted for \$973 million, mainly in the form of the Farm Management Deposits scheme, rural R&D support (through CSIRO and the Rural Research and Development Corporations), and income tax averaging provisions
- Financial and insurance services was the next highest recipient (\$917 million), including through the Offshore Banking Unit tax concession and the concessional rate of withholding tax concession

- Although motor vehicles and parts received the sixteenth highest absolute level of support, accounting for \$145 million in budgetary assistance in 2017-18, it has one of the highest effective rate of assistance (absolute assistance relative to unassisted value added) of all industry groups because of the high level of assistance relative to the scale of operations.

Figure 2.4 Budgetary assistance and value-added shares by industry sector, 2012-13 to 2017-18



Source: Commission estimates.

Table 2.4 Budgetary assistance by industry grouping, 2017-18
\$ million (nominal)

	<i>Outlays</i>	<i>Tax concessions</i>	<i>Total budgetary assistance</i>
Primary production	874.3	1018.0	1892.3
Horticulture and fruit growing	109.6	117.3	226.9
Sheep, beef cattle and grain farming	275.3	698.0	973.4
Other crop growing	54.1	59.1	113.2
Dairy cattle farming	29.2	39.9	69.2
Other livestock farming	37.7	30.7	68.5
Aquaculture and fishing	79.0	18.9	97.9
Forestry and logging	14.8	25.3	40.1
Primary production services	9.0	20.4	29.4
Unallocated primary	265.6	8.3	273.9
Mining	189.8	271.3	461.1
Manufacturing	980.5	492.1	1472.6
Food, beverages and tobacco	78.1	48.4	126.5
Textile, leather, clothing and footwear	25.5	8.6	34.2
Wood and paper products	12.5	11.3	23.7
Printing and recorded media	50.1	14.4	64.5
Petroleum, coal, chemicals and rubber products	197.0	39.5	236.4
Non-metallic mineral products	15.6	7.4	23.0
Metal and fabricated metal products	80.9	115.3	196.2
Motor vehicle and parts	114.0	30.7	144.7
Other transport equipment	25.4	9.6	35.1
Machinery and equipment	207.6	51.3	258.9
Furniture and other products	26.2	4.7	30.9
Unallocated manufacturing	147.5	150.9	298.4
Services	2348.0	2581.1	4929.0
Electricity, gas, water and waste services	112.9	29.1	142.1
Construction	61.7	146.6	208.3
Wholesale trade	87.4	109.1	196.5
Retail trade	36.7	128.7	165.4
Accommodation and food services	11.1	103.9	115.1
Transport, postal and warehousing	80.5	65.4	145.8
Information, media and telecommunications	220.8	39.6	260.4
Financial and insurance services	143.3	773.8	917.0
Property, professional and administrative services	1097.0	615.2	1712.2
Public administration and safety	17.6	6.1	23.8
Education and training	24.9	13.5	38.4
Health care and social assistance	107.0	128.3	235.4
Arts and recreation services	140.4	367.1	507.5
Other services	75.1	54.8	129.9
Unallocated services	131.5	0.0	131.5
Unallocated other	360.3	2956.3	3316.6
Total	4752.8	7318.7	12071.6

^a Aquaculture and fishing includes hunting and trapping. ^b Unallocated includes programs for which details of the initial benefiting industry cannot be readily identified.

Source: Commission estimates.

Budgetary assistance not assigned to an industry sector is reported in the Unallocated other category. That assistance accounted for around 28 per cent of total estimated budgetary assistance in 2017-18. The concessional taxation for small business (\$1.4 billion), small business capital gains tax concession (\$1.2 billion) and the unincorporated small business tax discount (\$350 million) schemes, for which industry allocation data are currently not available through taxation statistics, account for nearly 90 per cent of the category. Other budgetary assistance not classified to an industry included Australian Renewable Energy Agency (ARENA) grants, Austrade,⁵ and the Textile, Clothing and Footwear (TCF) Corporate Wear Program.⁶

Small business assistance forms the largest category of budgetary assistance

Budgetary assistance is often designed to encourage particular activities (such as R&D or exports) or to support particular firms, industries or sectors. 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 those undertaken by CSIRO, Cooperative Research Centres 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 the Regional Headquarters Program.
- Industry specific measures, including the Automotive Transformation Scheme, Film Industry Offsets scheme and the Offshore Banking Unit Taxation Concession.
- Sector wide measures, such as drought relief assistance and the tax concessions under the Farm Management Deposits Scheme, in the case of the primary production sector.
- Small business programs, such as the small business capital gains tax concessions, the Small Business Simplified Depreciation Rules and concessional company taxation for small business.
- Regional assistance, including the Tasmanian Freight Equalisation Scheme, Tasmanian Jobs and Investment Fund and various structural adjustment programs with a regional focus.

⁵ Up to 2009-10, Austrade provided the Commission with information on the industry incidence of Austrade appropriation funding. This information indicated that around two-thirds of Austrade funding was directed towards the services sector, 20 per cent to manufacturing and the remainder split equally between primary production and mining. From 2010-11 Austrade allocated its resources on a market or geography basis which did not support the provision of information according to the Commission's industry classifications.

⁶ The TCF Corporate Wear program allows businesses that employ staff who wear non-compulsory uniforms to avoid paying Fringe Benefits Tax on any subsidies they make towards the uniform. Eligible uniforms are not confined to Australian production and therefore is not treated as assistance to the domestic TCF industry.

-
- A residual ‘Other’ category, including the TCF Corporate Wear Program, the Asia Marketing Fund initiative, and the Entrepreneurs’ Infrastructure Programme.

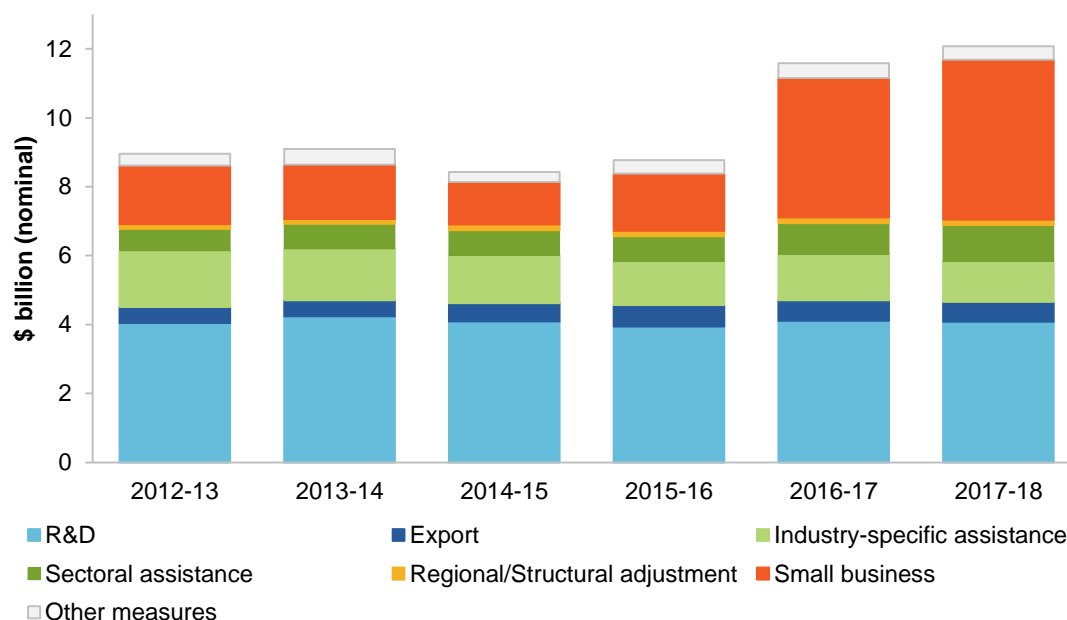
The majority of budgetary assistance in 2017-18 was directed to:

- small business (\$4.6 billion or 38 per cent) — including \$2.4 billion for the Small Business Capital Gains Tax schemes, where over 30 per cent of the concessions are claimed by the services sector with the property, professional and administrative services industry being the single largest recipient of the schemes (\$250 million), and \$1.4 billion for the Concessional taxation for small business and \$0.5 billion for the Small Business Simplified Depreciation Rules.
- R&D (\$4.1 billion or 34 per cent) — including \$2.8 billion via the R&D Tax Incentive, \$547 million for CSIRO research with most assistance going to the primary production sector (\$171 million) (of which around half of this is allocated to the sheep, beef cattle and grain farming industry) followed by the services sector (\$168 million), and \$123 million for the Cooperative Research Centres program where over half was directed towards services
- specific industries (\$1.2 billion or 10 per cent) — including \$295 million for the Offshore Banking Unit Tax Concession (allocated to financial and insurance services), \$282 million for the film industry offsets scheme (allocated to arts and recreation services), \$87 million for the Automotive Transformation Scheme (allocated to motor vehicles and parts) (figure 2.5).

Over the six year period 2012-13 to 2017-18, changes in the shares of budgetary assistance to different activities are largely accounted for by:

- significant increases in concessions under the concessional taxation for small business schemes in 2016-17
- an increase in concessions provided under the Small Business Simplified Depreciation Rules scheme in 2013-14, followed by a subsequent fall in concessions in 2014-15 and 2015-16, followed once again by a significant increase in concessions in 2016-17
- decreases in industry-specific assistance under the Automotive Transformation Scheme, and cessation of the Ethanol Production Subsidy programs.

Figure 2.5 **Budgetary assistance by category, 2012-13 to 2017-18**



Source: Commission estimates.

Some caution is required when comparing categories over time as changing shares do not necessarily reflect decisions of government to emphasise or increase one category relative to any other. For instance, changes in the take-up of small business tax concessions and R&D assistance can alter the relative shares of assistance. Another important note about relative shares across categories is that assistance programs have been allocated to the industry to which the assistance first accrues based on the nature of the support and main activities assessed as receiving that support (the ‘initial benefiting industry’), but 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 as it relates to agriculture or agricultural product processing activities.

Although there is no separate category, a number of budgetary measures included in the estimates also relate to carbon emissions reduction, renewable energy, and energy supply and use goals. These measures support a range of activities that span R&D, industry specific, sector specific and other measures. These measures amounted to \$241 million (2 per cent) of estimated budgetary assistance in 2017-18, up from \$173 million in 2015-16.

2.3 Combined assistance and effective rates of assistance

This section presents the results for combined tariff and budgetary assistance by industry group. Combined assistance is reported in terms of the net value of assistance and its components (reported for broad industries in figure 2.1) and the effective rate of assistance.

Table 2.5 summarises tariff and budgetary assistance at the industry level for 2017-18. The services sector receives the highest level of net combined assistance because of budgetary outlays and tax concessions. The assistance received by the services industries is reduced significantly by the estimated input tariff penalty (around \$1.2 billion). The primary production division also received the majority of its support from budgetary assistance, although some tariff protection continues to be afforded to a range of products in the sheep, beef cattle and grain farming industry.

By value, the highest level of combined assistance is afforded to the property, professional and administrative services industry, mainly due to budgetary assistance. Sheep, beef cattle and grain farming also receives a high level of combined assistance mainly in the form of tax concessions. The highest tariff penalty on inputs is born by the construction industry.

A time series of net combined assistance (table 2.5, right hand column) by industry grouping for the period 2012-13 to 2017-18 is presented in appendix A.

The effective rates of combined assistance have continued to fall for most industries

As noted, the effective rate of assistance (ERA) measures the net 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.

For the manufacturing sector, the estimated effective rate of assistance was 1.5 per cent in 2017-18, down from 2.7 per cent in 2012-13 (table 2.6). The effective rate for the primary sector in 2017-18 was 3.3 per cent, up from 3 per cent in 2012-13 — largely reflecting an increase in support from the Farm Management Deposits Scheme (an additional \$260 million in 2017-18). The estimated effective rate of assistance from tariff and budgetary assistance for mining is negligible.

Table 2.5 Combined assistance by industry grouping, 2017-18^a
\$ million (nominal)

	<i>Output tariff assistance</i>	<i>Input tariff penalty</i>	<i>Net tariff assistance</i>	<i>Budgetary outlays</i>	<i>Tax concess.</i>	<i>Net combined assistance</i>
Primary production	431.8	-76.0	355.8	874.3	1018.0	2248.1
Horticulture and fruit growing	37.7	-3.4	34.3	109.6	117.3	261.2
Sheep, cattle and grain farming	384.5	-38.6	345.9	275.3	698.0	1319.2
Other crop growing	0.7	-3.2	-2.4	54.1	59.1	110.7
Dairy cattle farming	—	-4.8	-4.8	29.2	39.9	64.4
Other livestock farming	—	-6.5	-6.5	37.7	30.7	61.9
Aquaculture and fishing	0.4	-3.5	-3.0	79.0	18.9	94.9
Forestry and logging	0.2	-0.2	0.0	14.8	25.3	40.1
Primary production services	8.1	-15.7	-7.6	9.0	20.4	21.8
Unallocated primary production	—	—	—	265.6	8.3	273.9
Mining	1.1	-103.2	-102.1	189.8	271.3	359.0
Manufacturing	1889.2	-720.2	1169.0	980.5	492.1	2641.6
Food, beverages and tobacco	620.0	-427.2	192.8	78.1	48.4	319.3
Textiles, clothing and footwear	35.1	-15.7	19.3	25.5	8.6	53.5
Wood and paper products	160.5	-28.0	132.5	12.5	11.3	156.3
Printing and recorded media	38.9	-7.5	31.3	50.1	14.4	95.9
Petroleum, coal and chemicals	205.5	-36.0	169.5	197.0	39.5	405.9
Non-metallic mineral products	78.1	-16.1	62.0	15.6	7.4	85.0
Metal and fabricated products	259.9	-50.9	209.0	80.9	115.3	405.2
Motor vehicles and parts	190.7	-72.9	117.9	114.0	30.7	262.5
Other transport equipment	122.1	-22.1	100.0	25.4	9.6	135.0
Machinery and equipment	121.9	-28.0	93.9	207.6	51.3	352.8
Furniture and other products	56.7	-15.8	41.0	26.2	4.7	71.9
Unallocated manufacturing	—	—	—	147.5	150.9	298.4
Services	—	-1158.4	-1158.4	2348.0	2581.1	3770.6
Electricity, gas, water and waste	—	-23.3	-23.3	112.9	29.1	118.8
Construction	—	-417.1	-417.1	61.7	146.6	-208.8
Wholesale trade	—	-72.4	-72.4	87.4	109.1	124.1
Retail trade	—	-46.1	-46.1	36.7	128.7	119.3
Accommodation & food services	—	-95.3	-95.3	11.1	103.9	19.8
Transport, postal & warehousing	—	-78.6	-78.6	80.5	65.4	67.2
Information & communications	—	-20.5	-20.5	220.8	39.6	239.9
Financial & insurance services	—	-5.7	-5.7	143.3	773.8	911.4
Property, professional & admin.	—	-129.1	-129.1	1097.0	615.2	1583.1
Public administration and safety	—	-43.8	-43.8	17.6	6.1	-20.0
Education and training	—	-16.3	-16.3	24.9	13.5	22.1
Health care & social assistance	—	-62.8	-62.8	107.0	128.3	172.5
Arts and recreation services	—	-27.9	-27.9	140.4	367.1	479.6
Other services	—	-119.6	-119.6	75.1	54.8	10.2
Unallocated services	—	—	—	131.5	0.0	131.5
Unallocated other	—	—	—	360.3	2956.3	3316.6
Total	2322.1	-2057.7	264.3	4752.8	7318.7	12335.9

— Nil. ^a Read in conjunction with notes to tables 2.1 and 2.4.

Source: Commission estimates.

Table 2.6 Effective rate of combined assistance by industry grouping, 2012-13 to 2017-18^a

Per cent

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Primary production^b	3.0	3.0	2.9	2.9	2.9	3.3
Horticulture and fruit growing	1.6	1.9	1.7	1.7	1.7	2.1
Sheep, cattle and grain farming	3.7	4.0	3.8	4.4	4.6	5.8
Other crop growing	1.7	1.8	1.3	1.5	1.0	1.0
Dairy cattle farming	1.3	1.4	1.5	1.8	1.6	2.3
Other livestock farming	1.0	0.9	0.9	0.9	0.9	1.1
Aquaculture and fishing	3.0	3.3	3.2	2.9	2.6	2.8
Forestry and logging	2.5	1.7	1.6	1.4	1.4	1.6
Primary production services	1.6	0.4	0.3	0.3	0.4	0.3
Mining	0.2	0.2	0.2	0.2	0.2	0.2
Manufacturing^b	2.7	2.5	2.4	2.1	1.7	1.5
Food, beverages and tobacco	0.8	0.9	0.9	0.8	0.6	0.7
Textiles, clothing and footwear	4.7	4.9	4.1	3.2	1.9	1.5
Wood and paper products	2.6	2.6	2.6	2.0	1.1	1.1
Printing and recorded media	2.4	2.7	2.6	2.6	2.2	2.1
Petroleum, coal, & chemicals	2.5	2.2	2.1	1.8	1.4	1.4
Non-metallic mineral products	1.9	1.7	1.8	1.5	0.9	0.8
Metal and fabricated products	4.1	3.0	2.7	2.4	1.9	1.4
Motor vehicles and parts	11.8	9.7	8.4	6.0	4.9	3.6
Other transport equipment	2.8	3.1	3.0	2.6	2.7	2.0
Machinery and equipment	2.0	1.9	1.9	2.1	2.0	2.1
Furniture and other products	4.4	4.1	3.6	2.7	1.5	1.5

^a Combined assistance comprises tariff, budgetary, and agricultural pricing assistance. ^b Sectoral estimates include assistance to the sector that has not been allocated to specific industry groupings.

Source: Commission estimates.

Higher rates continue in motor vehicles and parts but have fallen in textiles, leather, clothing and footwear

The motor vehicles and parts industry group continues to have higher effective rates of combined assistance than other manufacturing activities. The effective rate of assistance for the motor vehicles and parts industry in 2017-18 was 3.6 per cent.

In contrast, assistance for the textiles, leather, clothing and footwear industry fell to 1.5 per cent in 2017-18 following the reduction of remaining textiles, leather, clothing and footwear tariffs from 10 to 5 per cent in January 2015. Effective assistance for the industry is now around the manufacturing average.

The estimated effective rates of assistance to both industry groups have fallen significantly over recent decades following substantial reductions in tariff rates and the removal of import quotas.⁷ More recently, effective rates of assistance for these industries have fallen significantly, from 11.8 per cent for motor vehicles and parts and 4.7 per cent for textiles, leather, clothing and footwear in 2012-13, following the legislated tariff cuts for motor vehicles and parts in January 2010 and for textiles, leather, clothing and footwear in 2015 and net reductions in budgetary assistance for both industries.

Rates have risen for dairy cattle farming

The estimated effective rate of assistance for dairy cattle farming increased between 2012-13 and 2017-18 — from 1.3 per cent to 2.3 per cent. This largely reflects a significant fall in the industry's value added in more recent years. Prior to the dairy industry's deregulation in July 2000, the effective rate of combined assistance was estimated to exceed 30 per cent.

The effective rate of assistance for the sheep, beef cattle and grain farming group increased from 3.7 per cent in 2012-13 to 5.8 per cent in 2017-18. This largely reflects an increase in assistance afforded through the Farm Management Deposits Scheme (\$183 million higher in 2017-18), the Small Business Simplified Depreciation Rules tax concession (\$38 million higher in 2016-17), and income tax averaging provisions (\$28 million higher in 2016-17).

Rates have declined in forestry and logging

Effective rates of assistance to forestry and logging have stabilised in more recent years at around 1.5 per cent. This reflects more stable levels of assistance provided through programs like the small business capital gains tax concessions schemes, income tax averaging provisions and net tariff assistance to forestry and logging.

Higher effective rates at finer levels of analysis

While effective rates for agriculture and manufacturing industries are at a historic low, the effective rate of assistance for an individual company or project can be substantial. This arises when a grant program is targeted at particular goods producing and services activities and provides a subsidy equivalent for the supported projects well above the industry average (box 2.3). Advantage conferred to a specific firm or activity in this way can be highly distortionary, both within an industry as well as at the economy-wide level.

⁷ In the 1980s, tariffs on motor vehicles were 45 per cent and the highest estimated tariff rate for any one textiles, leather, clothing and footwear line item (inclusive of the effect of tariff quotas) was 125 per cent. In 1984-85 the effective rates of assistance for the motor vehicles and parts industry and textiles, leather, clothing and footwear industry were 140 per cent and 157 per cent respectively (PC 2000).

Box 2.3 **Assistance measures that provide above average levels of support**

The level of effective assistance that accrues to a company or project from a grant program is an empirical question. Unless all companies produce the same products using the same input mix, some will receive effective assistance above and some below average. So the key empirical question is how variable the rates of assistance are to companies and products within an industry. Unfortunately, the information on output, value added and inputs required to estimate effective assistance at the company level is not available on a consistent basis. However, all else equal, grant programs that afford matched funding or which target one or a small range of firms (or projects) will potentially confer higher levels of relative assistance. Some examples of government support with the potential to provide above industry average assistance levels include the following.

- Film industry offsets — government support provided by the producer tax offset (part of the Australian Screen Production Incentive) amounted to \$282 million in 2017-18. This assistance provided \$815 million for production budgets for the Australian film and television industry which amounted to around 35 per cent of production costs (SA 2018). (The comparable rates for 2013-14, 2014-15, 2015-16 and 2016-17 were 24 per cent, 16 per cent, 29 per cent, and 18 per cent, respectively). The film industry also receives assistance from the state and territory government film support programs and Screen Australia.
- Tasmanian Freight Equalisation Scheme — around 50 per cent of the total amount claimed goes to 10 recipients (PC 2014).
- Ethanol production subsidy — between 2003-04 and 2013-14, participants in the program ranged from between 1 and 5 firms, with a single firm receiving over 70 per cent of funding over the life of the program (ANAO 2015).
- Co-investment grants — over the three years to 2013-14, nearly \$50 million in co-investment grants was paid to four firms by the Australian Government. These payments can confer high levels of assistance at the individual firm or project level (PC 2015).
- Regional business investment grants — payments have typically been up to 50 per cent of the project costs, conferring high effective rates of assistance to recipients.
- Local submarine assembly — the effective rate of assistance for building the proposed submarines locally, at a reported premium of around 30 per cent more than an overseas assembly, has been estimated to be around 300 per cent, perhaps a record high (PC 2016a).

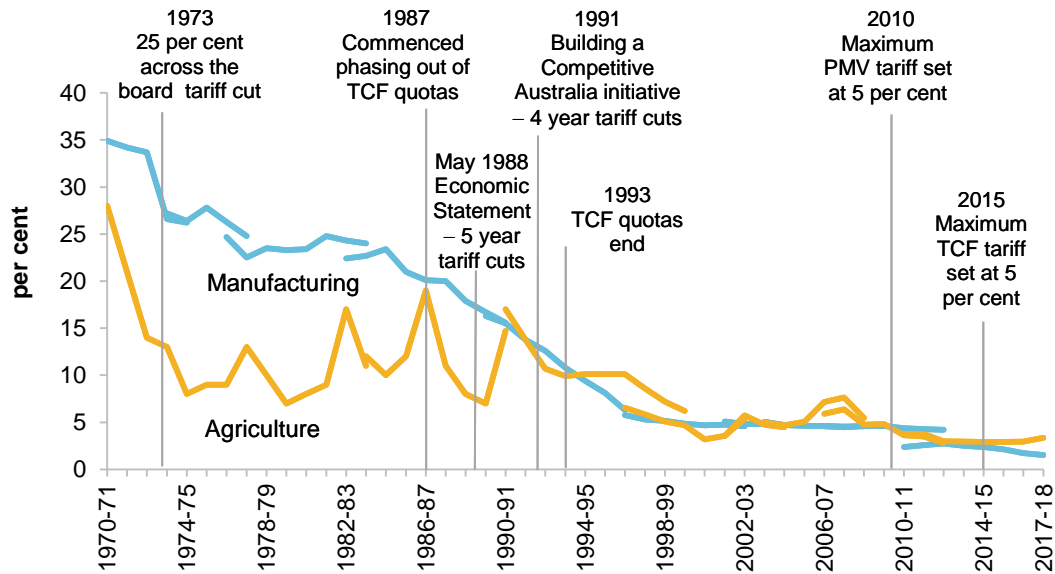
2.4 **Effective rates of assistance since 1970**

The Commission has estimated effective rates of 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 of assistance 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 2008-09 benchmarked series are reported for the years 2006-07 to 2012-13. Estimates for the current 2013-14 benchmark series are reported for the years 2010-11 to 2017-18.

Figure 2.6 Effective rates of assistance to manufacturing and agriculture,^a 1970-71 to 2017-18



^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 (ABS 2013).

Source: Commission estimates.

Assistance to manufacturing has fallen dramatically over the past 45 years

The estimates indicate a significant fall in measured assistance to the manufacturing sector over the past 45 years. 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. In more recent years, the effective rate of assistance to manufacturing has fallen to below 2 per cent.

Major influences on this fall over the past four decades have been the 25 per cent across the board tariff cut of 1973, the removal of all quantitative import restrictions (except for textiles, clothing and footwear) by 1988, and the broad programs of tariff reductions that commenced in the late 1980s. Under the *May 1988 Economic Statement* the Government introduced an across the board program to phase down all tariffs (except for passenger motor vehicles and textiles, clothing and footwear activities which had their own tariff reduction programs) to either 10 per cent or 15 per cent by 1992.

Reductions in general tariff rates were continued with the 1991 *Building a Competitive Australia* initiative which reduced general tariff rates from 15 and 10 per cent to a single rate of 5 per cent over the four years from 1992 to 1996. As part of the initiative, tariffs on passenger motor vehicles were reduced to 15 per cent by 2000. For textiles, clothing and footwear activities import quotas were abolished by 1993 and tariffs phased down to a maximum of 25 per cent by 2000.

Subsequent falls in effective assistance to manufacturing have been associated mainly with reductions in tariff assistance to the textile, clothing and footwear, and passenger motor vehicle industries. Tariffs on passenger motor vehicles were further reduced from the 15 per cent set in January 2000 to 10 per cent in January 2005 and 5 per cent in January 2010. After the termination of tariff quotas in 1993 and the phasing of tariffs to a maximum of 25 per cent by the year 2000, maximum TCF tariffs were reduced to 17.5 per cent in January 2005, 10 per cent in January 2010, and 5 per cent in January 2015.

Assistance to the agricultural sector hides significant disparities across agricultural activities

For agriculture, the estimated effective rate of assistance (as calculated in the first series) was over 25 per cent in 1970-71. 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 domestic support prices and world prices (used for assistance benchmarks) as well as the impact of drought and other factors on output.

The agricultural sector average, however, hides enormous disparity across agricultural activities. For example, effective rates of assistance to tobacco growing exceeded 250 per cent in the early 1970s, subsequently falling to 24 per cent in 1986-87 and then increasing again to over 250 per cent between 1992-93 and 1994-95. Effective rates of assistance to egg production also exceeded 25 per cent through much of the 1970s and early 1980s, while effective rates of assistance to the dairy industry were over 200 per cent in 1986-87. In contrast, extensive cropping, excluding wheat, recorded relatively low effective rates of assistance over the entire period.

Some rates of assistance have varied significantly over time. The effective rate of assistance to the sheep, beef cattle and grain farming industry steadily declined from around 12 per cent in 1990-91 to around 2 per cent in 1999-2000, before recovering to around 7 per cent in 2007-08. It was 5.8 per cent in 2017-18.

3 The future of the world trading system

Key points

- The world trading system is under greater strain than at any time since the 1930s.
- Most prominently, the United States has levied tariffs on steel and aluminium imports, under the cover of national security grounds, as well as Chinese and Mexican imports more generally, and it has blocked appointments to the WTO's dispute settlement Appellate Body. China has reciprocated with tariffs of its own, and a cloud hangs over trading relations between the world's three largest trading economies (China and the EU with the United States).
- These strains come on top of broader, longer-standing factors constraining the WTO. There is a fundamental lack of consensus among members on a range of issues, and discontent in parts of the community with the world trading system and globalisation more generally. While these forces do not, at present, constitute an existential threat to the world trading system, its authority and credibility are at risk.
- These forces have overshadowed recent less widely known successes. The average tariff rate has continued to fall, agricultural export subsidies have been abolished, customs processes are being redesigned to facilitate trade, a government procurement agreement has been negotiated and the dispute resolution system has worked remarkably effectively.
- Nonetheless, Australia cannot afford to take for granted that continued progress will be made given some of the deep seated problems besetting the world trading system. Equally, resurrecting trade barriers is not a solution to the forces testing the support for open markets.
- The path forward lies with improving the system we have. This involves both measures that Australia can take alone and measures Australia could pursue in cooperation with others.
- The single most important policy setting for Australia in the face of mounting troubles in the world trading system is to keep our own borders open to trade and investment and to continue working towards freer markets.
 - There is ample scope for the Australian Government to remove 'nuisance' tariffs, lower non-tariff barriers, simplify rules of origin and avoid anti-dumping duties.
 - Better consultation and engagement with the community on prospective trade agreements and on the rationale for free trade would also foster public confidence in open markets.
- Australia should also continue to work with other countries to build consensus on how to resolve long-standing and escalating challenges facing the WTO.
 - There is a need to reinvigorate the negotiation function of the WTO, including plurilateral, sectoral and regional agreements that allow, or work towards 'most favoured nation' treatment and resolving the deadlock on 'special and differential treatment'.
 - There is also a need to strengthen compliance with notification procedures and review and refresh the rules to handle issues relating, inter alia, to state owned enterprises, regulatory cooperation, digital trade and intellectual property.
- It is encouraging that Australia and other countries are striving within the WTO and in other fora to enable the world trading system to move forward. The importance of strengthening in an even-handed manner the rules-based system governing international trade, which has underpinned the growth in world trade, boosted living standards and prevented a relapse into protectionism for the past 70 years should not be underestimated.

The world trading system is part of the multilateral economic order that the United States has led and championed since the end of the Second World War. It is a rules-based, not results-based, system based on the principles of non-discrimination, transparency and reciprocity. The norms are codified and pervade global, regional and bilateral agreements and country-level policies.

The system provides predictability and mechanisms to avert or resolve trade disputes and gives all nations and businesses regardless of their size the confidence that success in international trade depends on the merits and competitiveness of the goods and services they provide, not their political clout. It has proven effective in progressively lowering trade barriers, which has been a source of economic growth, lifted living standards and contributed to poverty reduction within and across nations.

In recent years, however, the world trading system has come under greater strain than at any time since the 1930s. Most prominently, the United States has levied tariffs on steel and aluminium imports, under the cover of national security grounds, and on US\$250 billion of imports from China. It has used its significant economic power to renegotiate bilateral and regional agreements with Korea, Mexico and Canada and, more recently, it has announced tariffs on imports from Mexico in an attempt to force greater surveillance of the US border. It has also blocked appointments to the World Trade Organisation's (WTO) dispute settlement Appellate Body. China has reciprocated with tariffs of its own, and a cloud hangs over trading relations between the EU and the United States.

These current trade tensions come on top of a longer standing and broader phenomenon. There is a fundamental lack of consensus among members on a range of issues that is preventing the WTO from moving forward. And in parts of the community there is discontent with the world trading system and globalisation more generally. While these forces do not, at present, constitute an existential threat to the world trading system, its authority and credibility are taking a hiding.

It begs the question: what does the future hold if the United States and others further disengage from the rules-based order? To shed light on this question and to highlight what is at stake, this review outlines the key components and features of the world trading system and what it has achieved. It then considers the challenges facing the system in general and the WTO in particular, concluding that the path forward has to lie with improving the system we have. The final section identifies some areas where Australia can take action alone, as well as in cooperation with other countries to reinvigorate the world trading system.

3.1 The world trading system: what is it and what has it achieved?

Key features of the trading system

The modern global trading system originated with the 1947 General Agreement on Tariffs and Trade (GATT) and formed part of a new post-war international economic order. It laid down

the principles and rules governing trade between nations and was designed to avoid a repeat of the protectionist policies of the 1930s that contributed to the depth of the Great Depression.

The GATT, and later the WTO, arrangements centre around two principles: transparency and non-discrimination. The principle of non-discrimination applies both at the border and behind the border. With respect to non-discrimination at the border, member states commit to provide each other '*Most Favoured Nation*' (MFN) treatment: the best general tariff rate you provide to anyone, you must provide to everyone.

Non-discrimination behind the border commits member states to the notion of *National Treatment*. It affords the same treatment to foreign nationals and goods as for a country's own nationals and goods, requiring no less favourable treatment once they have passed the border. The system allows some exceptions to the non-discrimination principle (for example, safeguards and anti-dumping), but seeks to contain them with strictures on their application.

Reciprocity is another principle embedded in the world trading system's norms. Nations that remove or lower barriers to trade can expect other nations to do the same. Again, multiple exemptions exist. The most notable allows developing economies to delay implementation of agreements to lower barriers to trade and in some circumstances to maintain them indefinitely. Moreover, reciprocity can operate in both directions. A country that is aggrieved, for instance, by another member state engaging in a practice or policy that effectively undoes the gains from a previous agreement, can raise a complaint and may be allowed to retaliate.

The simple principles of non-discrimination and reciprocity have far-reaching implications. They allow small and medium-sized countries like Australia to engage with other countries on equal grounds, providing access to markets on terms that they most likely could not have negotiated bilaterally. The MFN rule, for example, has allowed Australia to benefit automatically from trade deals negotiated between others. And the notion of reciprocity linked our own cuts in tariffs to cuts in tariffs abroad, playing off the interests of firms seeking protection against those of exporters seeking to expand their markets. Each successive round of tariff cuts strengthened further the economic importance of exporters and weakened that of protectionists. Baldwin described it as a 'Juggernaut' building political economy momentum for the next round of cuts (Baldwin 2016).

The world trading system did not have a permanent body until the WTO was established in 1995. Its three main roles are to:

- oversee a system of monitoring and reporting on trade and trade-related policy developments
- serve as a forum to negotiate reductions in barriers to trade
- hear and settle trade disputes.

The trading system also encompasses bilateral and regional trade agreements (which are notified to the WTO). These agreements often embody the norms of the multilateral system, and in more recent years, go beyond it, to cover new issues, such as the principles that

surround digital trade and data flows. They also have limitations due to the potential for trade diversion, costly rules of origin and may preserve many of the most distorting tariff peaks. Australia has signed 11 bilateral and regional trade agreements covering 67 per cent of our trade; with negotiations underway that could increase this share to around 80 per cent.

A third level of the global trading system encompasses the trade policy decisions that countries take unilaterally (provided they are consistent with the principle of non-discrimination). Australia has played a prominent and leading role at this level of the world trading system. A country's own barriers to trade generally have a more distorting effect on the allocation of its resources and on incentives to be productive and innovative than the trade barriers of other countries. Being among the first countries to recognise this, much of Australia's liberalisation has been unilateral, undertaken voluntarily, rather than in return for reciprocal concessions from other countries.

What has the world trade system achieved?

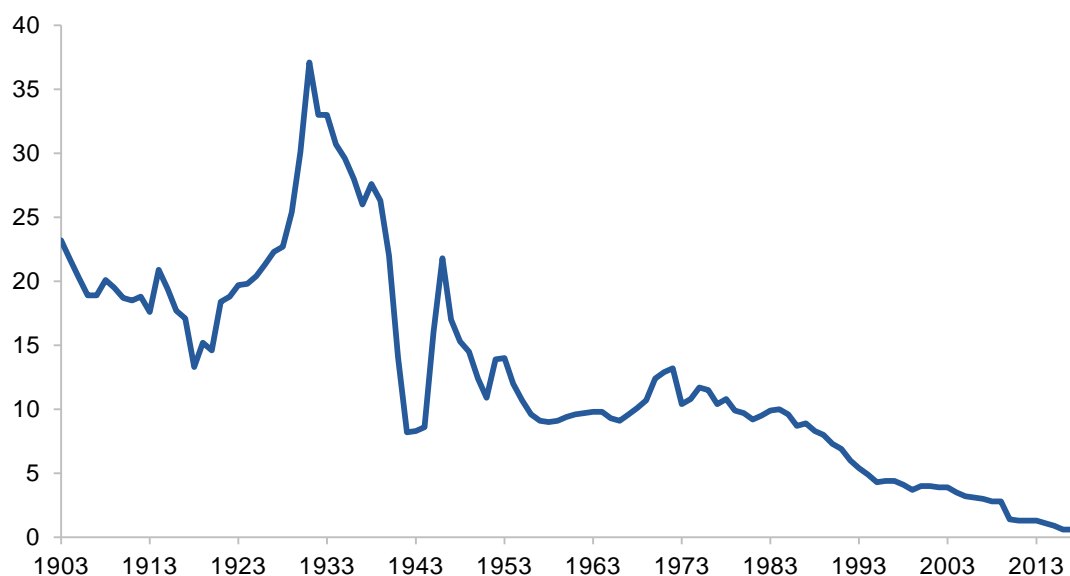
The world trading system's set of multilaterally agreed rules and disciplines has provided the framework for lowering tariffs and other restrictive trade measures, and keeping them low. Successive rounds of negotiations led to a process of multilateral liberalisation (except in agriculture, which was not on the negotiating table), expanded the set of rules to include agreements on services (GATS), intellectual property rights (TRIPS), foreign investment (TRIMS) and upgraded the dispute settlement system.

Since the trading system's inception, Australia's (and others') tariff rates have steadily declined to average less than 1 per cent (figure 3.1), and zero for a large share of imports. Over the same period, the number of states participating in the WTO has grown to 164 members (a further 22 are seeking to join it), representing 98 per cent of world trade. By many measures, it has been a remarkable success. As Baldwin put it:

‘WTO is a smash hit by the standards of international organisations. It presides over a rule[s]-based trading system based on norms that are almost universally accepted and respected. Disputes are adjudicated by an international court whose rulings are almost universally implemented despite a lack of enforcement powers. Its membership is almost universal and it makes decisions by consensus. Most importantly it achieved its mission: the establishment of an open and rules-based trading system’. (Baldwin 2010, p. 8)

The share of trade in global production has risen steadily (figure 3.2), and with that more closely integrated Australia's economy with its trading partners. Australian consumers see the benefits each day in terms of wider choices and lower prices. Supermarket shelves, for example, are stocked with Californian oranges, Italian kiwi fruit and — thanks to a WTO ruling against Australian import restrictions — even New Zealand apples. The prices of cars, clothing, footwear and most electronic goods have fallen in real terms over the past 30 years, boosting household purchasing power.

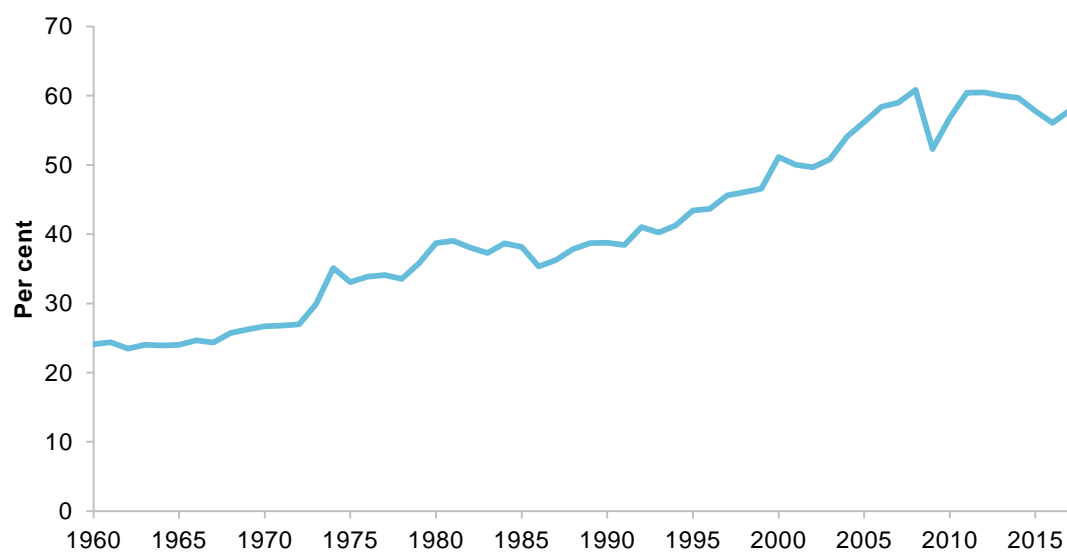
Figure 3.1 Australia's average tariff is now close to zero^a
Per cent of import value



^a Includes excise 2003-04 to 2009-10. Excludes excise 2010-11 to 2017-18

Sources: : 1903-04 to 2004-05 (Lloyd (2008), table 5, columns 3 and 4)); 2005-06 to 2017-18 (Commission estimates).

Figure 3.2 Global trade integration has steadily increased
Exports plus imports of goods and services as a share of GDP



Source: World Bank.

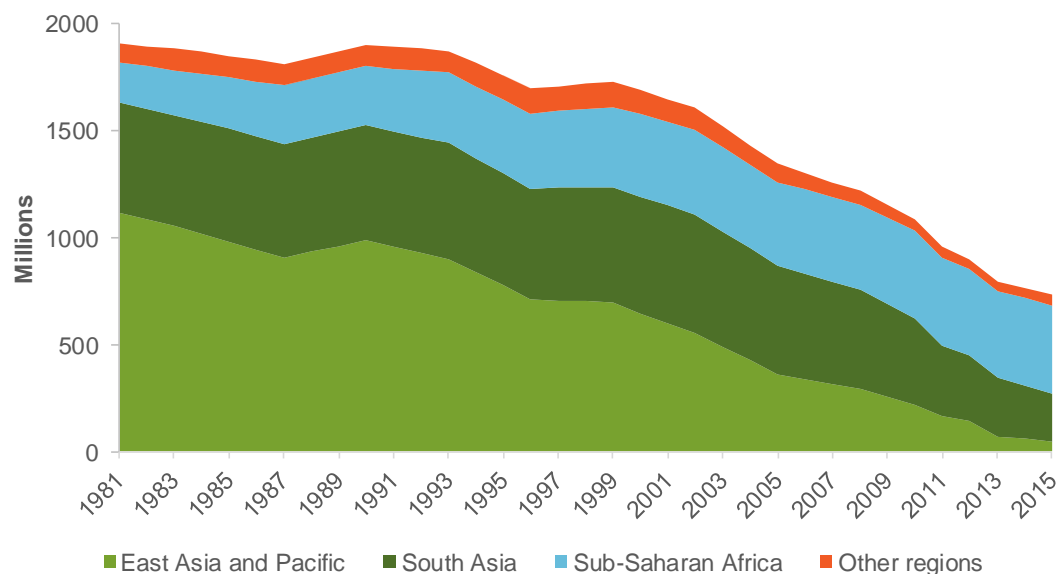
Australian businesses have also benefited. Lower tariffs and other trade-restrictive measures mean lower input costs for many businesses. For example, every business that uses a car – from trades’ people, taxi operators to driving schools and many others – has benefited from the large reduction in tariffs and quotas over the past few decades. Exporting businesses have been some of largest beneficiaries, stemming from both lower input costs and a lower Australian dollar (as high tariffs act to prop up the exchange rate). Successful Australian firms have enjoyed higher productivity growth and higher wages. Growth in trade with China alone may have raised Australian incomes by as much as 2 per cent (Ahn and Duval 2017).

The process of global integration (together with other microeconomic reforms) has been a powerful force driving Australia’s sustained economic performance, as Australian businesses have increasingly come under pressure to compete with foreign suppliers. While this can be disruptive for individual businesses, the weight of evidence shows that competitive pressures spur innovation (Soames, Brunker and Talgaswatta 2011), transform work practices (Holmes and Schmitz 2010) and improve management practices (Bloom and van Reenen 2010). For Australia as a whole, income growth has been substantial and the gains broadly shared across the community (PC 2018a).

Integration has also changed the structure of the Australian economy. The boom in coal and iron ore prices, driven by demand from China, saw a large increase in mining investment and expansion of these exports. Education has also grown to be our third largest export industry. On the other hand, disruption in manufacturing has continued to reduce its share of the overall economy, a process that has included the prominent closure of the car assembly industry, and closure of some heavy manufacturing facilities such as in aluminium and petroleum refining industries.

In many developing and emerging-market economies the effects of global integration have been more rapid and even more profound. Trade creates employment in export-facing manufacturing and services, which helps facilitate the movement of people out of often low-productivity agriculture. It rewards investment in education and allows workers to climb up the skill ladder. The World Bank estimates that over the past quarter-century, more than a billion people have lifted themselves out of poverty, in many cases by seizing the opportunities trade has created (World Bank 2018; figure 3.3). The largest gains have been in Asia, including impressive economic growth in ASEAN countries such as Indonesia, Thailand and Vietnam.

Figure 3.3 More than a billion people lifted out of extreme poverty
Number of people earning less than US \$1.90 PPP per day



Source: Commission estimates based on World Bank Poverty and Equity Database.

3.2 The challenges facing the world trading system

Despite the world trading system's strengths and many accomplishments, it has come under increasing strain over the past few decades, and is facing multiple challenges that extend to its core, the WTO.

No broad multilateral agreement has been concluded since 1994, the body of rules and procedures of the organisation has not kept pace with the changing nature of trade - notably the rise of global supply chains and digital trade - and the timely compliance with transparency procedures is slipping. Moreover, the use of tariffs and other protectionist measures has lifted since the global financial crisis and there are clear risks that the trend towards more protectionist policies could accelerate.

It is unclear how these forces will influence countries' trade policies. However, developments to date suggest the maintenance of the status quo is unlikely. Some fear major backsliding on protection and a breakdown of the rules-based multilateral system in favour of 'managed' trade. Others think change will be at the margin and aimed at bridging the divides on the specific issues at the source of the troubles with the world trading system.

A descent towards managed trade?

Donald Trump's presidential campaign and his electoral victory in 2016 foreshadowed a fundamental shift in the United States' trade policy. He stated that trade deficits cost American jobs, especially in the manufacturing sector, and are largely the result of the unfair trade practices of other countries (Trump 2017a).

His election on the back of a promise to 'put America first' and 'bring back manufacturing jobs' was coupled with promises of measures that would be a departure from US openness and leadership in the international trading system. In his inaugural address, Trump declared:

Every decision on trade ... will be made to benefit American workers and families. We must protect our borders from the ravages of other countries making our products, stealing our companies, and destroying our jobs ... We will bring back our jobs. We will bring back our borders. We will bring back our wealth. And we will bring back our dreams (Trump 2017b).

His words were followed through with decisions that left few doubting his bravado. Three days after his inauguration he withdrew the United States from the completed, but yet to be ratified Trans-Pacific Partnership agreement. A similar, but less publicised fate met the Transatlantic Trade and Investment Partnership negotiations. Then the United States levied tariffs on steel and aluminium imports from most steel producing countries (except Australia) on national security grounds and imposed further tariffs on imports from China, citing intellectual property concerns. The President also threatened higher tariffs on motor vehicle imports and initiated a renegotiation of trade agreements with Canada, Mexico and Korea, menacing to withdraw completely if they were not concluded to his satisfaction.

This change of course in US trade policy in part reflects long-standing frustration held by successive US administrations (and some other countries) with the inability to reach consensus within the WTO on how to address some fundamental and protracted issues facing the world trading system (discussed below).

Nonetheless, the US actions were met with responses and have created uncertainty about future trade relations, which in itself is costly. China reciprocated with tariffs of its own and many countries are challenging in the WTO the decision to levy tariffs on steel and aluminium. Meanwhile, appointments to the WTO's dispute settlement Appellate Body remain blocked by the United States and a cloud hangs over the bilateral trading relations between the world's three largest trading economies (China and the EU with the United States).

Some commentators fear these developments set a dangerous precedent and risk the United States repudiating the rules-based trading system in favour of managed trade, where strength replaces rules as the basis for trade relations (Bown and Irwin 2018, Kirchner 2018). It is partially manifest in US demands for China to buy more US exports in an effort to reduce the bilateral trade deficit. And last year South Korea agreed to limit its annual steel shipments to the United States to 70 per cent of its average deliveries over the previous three years.

Managed trade can manifest in various guises, including voluntary export restraint agreements targeting specific industries, local content rules and stipulating the conditions of

labour deployed in foreign production (for example, a minimum wage level). The latter requirement was introduced in the recently negotiated US-Mexico-Canada Agreement that replaced NAFTA. Moreover, often agreements set vague targets, such as ‘levelling the playing field’ or ‘trading fairly’ that increase the risk of disputes at a later stage. Managed trade agreements implicitly reject the idea that trade is mutually beneficial.

Voluntary export restraints have been used in specific sectors on several occasions, without displacing the rules-based trading system. Prominent examples include the Multi-Fibre Arrangement (MFA) which limited textile trade from developing to developed economies between 1974 and 2004, Japan reducing the number of its cars exported to the United States in the early 1990s, and the 1986 Semiconductor Arrangement between Japan and the United States (box 3.1).

Box 3.1 Unintended consequences of managing semiconductor trade

In the 1970s the United States dominated the world market in semiconductors. By the 1980s, however, Japanese producers were steadily gaining market share, accounting for around 90 per cent of US sales for some types of semiconductor.

Bowing to pressure from the United States, Japan in 1986 agreed to limit its exports of semiconductors to America. The Arrangement followed complaints from the US semiconductor industry that it faced unfair competition from Japanese firms and needed temporary protection.

The Arrangement stipulated, *inter alia*, that Japanese producers set the price at which they sell chips in conjunction with the US government; regulated sales by Japanese semiconductor firms in third countries and promoted the sales of US made chips in Japan.

Not surprisingly, semiconductor imports from Japan fell and prices rose. This in turn hurt the competitiveness of US-made computers. Since Japanese computer producers (and those in other countries) were able to buy semiconductors for less than their US competitors could, the Arrangement made it possible for Japan (and others) to compete more effectively in the US computer market. While some jobs were created in the US semiconductor industry, many more were lost in the US computer industry.

The Arrangement was renewed in 1991 and expired in 1996, following an agreement among WTO members in 1995 to no longer use voluntary export restraints.

Sources: Denzau (1988), Johnson (1991).

These examples of managed trade schemes have typically been short lived, and they create losses in the countries that seek to manage trade, as well as among their trading partners and third countries. On the latter, for example, the plan for China to buy more agricultural products from the United States may mean they buy less from Australia. They also disrupt existing business ties, compel companies to search for new suppliers and ultimately result in competitive disadvantage for more industries than they favour. The higher costs flow through to consumers as higher prices and lower living standards.

The poor past experience with instances of managed trade and the pronouncements from President Trump that he would withdraw from the WTO if ‘they don’t shape up’

(Micklethwait et al. 2018, cited by Bown and Irwin 2018) has prompted some to contemplate how the world trading system would look with a widespread shift to managed trade.

Bown and Irwin (2018) argue that such a move would free the United States from its obligation to apply MFN tariffs on imports from other WTO members. They then outline an extreme scenario where all negotiated tariff reductions since the first trade agreement was reached under the Reciprocal Trade Agreements Act of 1934 are rescinded (US preferential trade agreements negotiated outside this Act would be unaffected). This would imply a return to the Smoot-Hawley tariff.

The Commission simulated a scenario approximating this extreme case. It entails the United States unilaterally increasing tariffs about ten-fold to 1930s levels while retaining the trade agreements with Australia, Canada, Mexico and Korea. These actions would generate an ‘economic own goal’, with US living standards falling by almost $\frac{3}{4}$ per cent and large declines in both imports and exports. Other countries that did not retain trade preferences would also be adversely affected. These impacts are based on the assumption that other countries do not retaliate. Scenarios where countries retaliate involve much greater economic costs (PC 2017a).

Of course, simulations of this kind are highly stylised and unable to capture the many complexities in a country’s trading relations. What they do, however, is reinforce the conclusion that a descent towards managed trade would be detrimental to every player in the global economy.

Troubles at the core of the trading system

While a radical reshaping of the world trading system towards managed trade is an unlikely scenario, there are enduring concerns at the core of the world trading system that pose equal or even greater risks to the future of that system. They reflect a more general dissatisfaction with the system and relate to some longstanding issues in each of the three areas of WTO responsibility: monitoring; negotiations; and dispute settlement. There are also geo-strategic forces at play.

The system itself, however, is not broken and remains the foundation of global trade policy. In fact, the WTO has secured a number of less widely known successes in recent years (box 3.2).

Box 3.2 **WTO progress towards freer markets**

The focus on current tensions in the world trading system has masked the WTO's successes concluding trade agreements on smaller agendas in the past few years. Some of these successes are of high direct importance to Australia, including:

- The plurilateral Revised Government Procurement Agreement of 2014 (in force for Australia since May 2019), which aims to give reciprocal access to foreign tenders in participating member countries.
- Conclusion of the plurilateral Expanded Information Technology Agreement in 2015 which eliminates tariffs on 201 information technology products.
- The 2015 Ministerial Decision on abolishing agricultural export subsidies.
- The Trade Facilitation Agreement which entered into force in February 2017 and will result in customs processes being redesigned to better facilitate trade.
- Negotiations for a plurilateral agreement on international electronic commerce.

Australia has also played a role in progressing regional trade agreements, which over time may positively influence the shape of future WTO negotiations. For example:

- The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) entered into force for Australia in December 2018.
- Seven chapters of the proposed Regional Comprehensive Economic Partnership (RCEP) have been agreed.

Monitoring is partial and is not timely

The WTO requires all members to report on changes in policies affecting trade and investment, in line with their commitments made on accession. The notification system is a valued transparency measure that allows every member state to engage in dialogue with other members. It helps businesses to navigate their way through regulations abroad, and when it works well, it restrains countries from applying new trade-distorting measures and defuses potential disputes.

However, in order for the notification system to work well, it requires timely notification and open discussion of the issues in good faith. On this point, there is broad agreement that member states' compliance with their notification requirements is falling short. In October 2018, nearly half of the 164 WTO members had not yet lodged their subsidy notifications that were due in 2017 and about a third had still to deliver their notifications due in 2013 (WTO 2018). As a result, many countries' trade practices remain opaque, making it difficult to monitor compliance with WTO rules and seek their enforcement.

Some members also consider that monitoring is not covering all of the issues it should and the information that is provided is underutilised and incomplete. A prominent example is where state-owned enterprises are the actors granting subsidies (through state-owned banks granting low interest loans, for instance). They play a substantial role in the Chinese economy, accounting for around 14 per cent of employment (Asia Society 2019), and are

dominant in industries such as energy, transport equipment and banking. Concerns have also been raised around Chinese technology and intellectual property acquisition practices.

Trade negotiations have stumbled

Whereas the GATT saw successive rounds of wide-spread tariff cutting, trade negotiations at the WTO have not proceeded as successfully. While there has been important progress on trade facilitation and agricultural export subsidies, the Doha Round launched at the 2001 WTO ministerial council, with a comprehensive, single undertaking (binding all members) agenda and particularly focussed on developing countries, is now moribund.

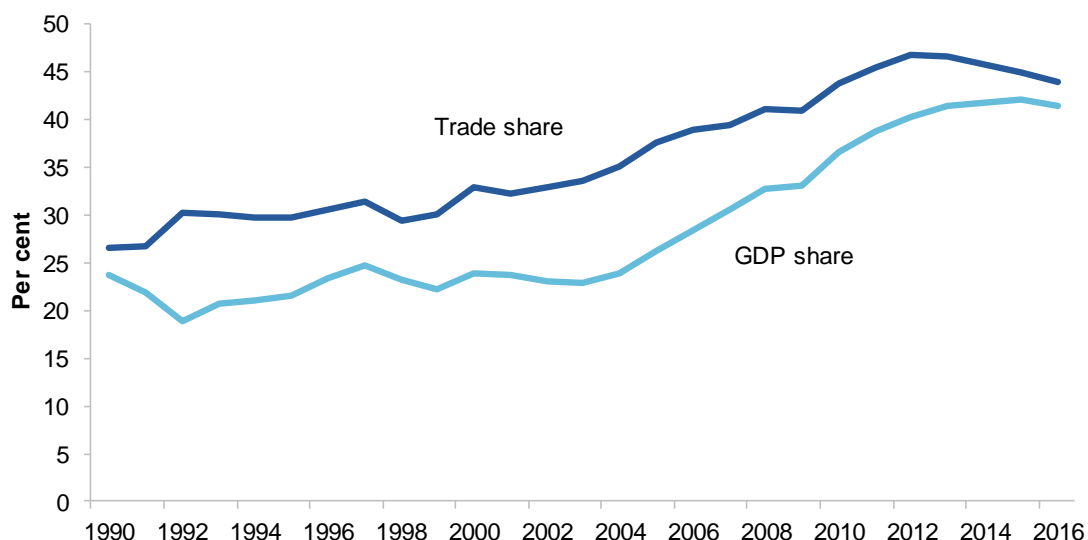
Negotiations stumbled for many reasons. The ‘juggernaut’ dynamic of previous rounds has arguably become a victim of its own success. With most tariffs having reached low single digit levels, the prospect of further reductions in applied rates is relatively less attractive. Exporting businesses are therefore less active in calling for the removal of trade restrictions at the border. Agriculture is the major exception to low tariffs, but here building a coalition of reform-minded members to counter opposition to free trade in agriculture remains exceptionally difficult. Tackling non-tariff barriers and barriers to services trade is also a prospective area for agreement, but as deals may be seen to encroach on national sovereignty, it has proved a lot harder to establish the sufficient consensus needed to finalise a deal.

The shifting composition of WTO members towards developing economies also makes it difficult to reach a deal across a broad trade agenda. Since the last successful multilateral negotiation was launched in 1986 (Uruguay Round), more than 70 developing nations have joined. New members with different preferences make coalitions of developing countries against granting access to their own market more likely. But the real leverage to stall negotiations stems from developing countries benefitting from ‘special and differential treatment’ under the WTO.

‘Special and differential treatment’ can include weaker requirements for market access and longer timetables for implementing agreements, as well as help with building capacity to carry out WTO work, handle disputes and implement technical standards. It means developing countries can benefit from WTO agreements that lower trade restrictions without reciprocating. At the same time, the WTO’s consensus principle has given developing nation coalitions more blocking power by virtue of their large number.

While most WTO members accept a degree of differential treatment, the issue is that countries self-identify as ‘developing’; there are no established mechanisms for ‘graduation’ to ‘developed’ status. This has been a slow burner issue for the WTO, as for many years after the creation of the rules-based trading system developing country markets were limited in size. But this has changed over the past two decades. The developing country share of world output has doubled since the finalisation of the Uruguay Round and its share of global trade has also risen sharply (figure 3.4). A failure to reach consensus on how to resolve this issue will diminish the cohesion of the WTO and hold up its ability to move forward.

Figure 3.4 A rising share of developing countries in world GDP and trade
Share of world gross domestic product



Source: IMF World Economic Outlook, October 2018.

The dispute resolution mechanism is under threat

The WTO provides a system to settle disputes on behalf of any member claiming to be harmed by policies of another in violation of a treaty obligation. The process facilitates consultation between the parties, adjudication by panels consisting of representatives of other members and, if necessary, an Appellate Body.

The arrangements work well, playing an effective role in defusing tensions and avoiding tit-for-tat cycles of retaliation. A recent prominent example was the rare earths dispute (box 3.2). More broadly, there have been nearly 600 cases heard, with most adverse findings resulting in countries bringing their measures into conformity (Reich 2017, WTO 2019a). The WTO system stands in contrast to various dispute settlement arrangements under preferential trade agreements, which are perceived to offer less certainty, do not have established processes and secretariats and have not built the same jurisprudence base.

Notwithstanding high regard for the WTO's dispute settlement system, the Appellate Body has been a focus of recent criticism. The United States has raised a number of procedural concerns (such as the body's disregard for the agreed 90-day deadline for appeals), objections to the way the system operates (such as the body issuing advisory opinions beyond those necessary to resolve disputes, consideration of cases de novo, and a view that previous reports should be taken as precedents), and substantive concerns with the body's interpretation of WTO agreements in a manner they argue goes beyond the rights and

obligations that were negotiated by members. There is a fundamental lack of consensus among members on these matters.

Against this background, the US government has steadfastly refused to confirm new appointments to the Appellate Body. It remains unclear what change the US Administration would need to see to unblock appointments. If a solution to the standoff is not found soon, the Appellate Body will cease to operate by the end of this year, when the terms of the two incumbents expire.

Box 3.2 The rare earths dispute brought to the WTO

Political tensions flare up from time to time and sometimes spill over into trade policy. Following a territorial dispute with Japan and the arrest of a Chinese fishing captain, China banned exports of rare earth metals to Japan. This case was resolved after Japan, the United States and Europe took action against China in the WTO and China accepted the ruling against it.

The case is a good example of the dispute resolution system in action. The case involved Chinese export duties and quotas, together with restrictions on who can export molybdenum and tungsten.

China argued that the restrictions were related to the conservation of its exhaustible natural resources, and necessary to reduce pollution caused by mining. The complainants argued that the restrictions were designed to provide Chinese industry with protected access to the materials. For some of these materials, China is a dominant global supplier and export restrictions severely affect the operations of foreign manufacturers.

Both the initial panel and the Appellate Body found that the restrictions were in breach of China's WTO obligations.

Sources: Bradsher (2010), WTO (2015).

3.3 A path forward

With the commitment to free trade by some of our trading partners now in doubt and multilateralism itself under challenge, Australia can no longer afford to take for granted the effective functioning of the world trading system. Equally, resurrecting trade barriers is not a solution to the forces testing the continued support for open markets. The path forward has to lie with improving the system we have.

This review, however, is not the place to enter the debate about details of specific reform proposals to the WTO. Suffice to say that many consultations and proposals, including by Australia, are being put forward within the WTO and in other fora. Instead we apply a broader lens, outlining an approach that could help achieve better outcomes for Australians (and others) and foster public confidence in open market policies. It involves both measures that Australia can take alone and measures Australia could pursue in cooperation with others.

What can Australia do alone?

The single most important policy setting for Australia in the face of mounting troubles in the world trading system is to keep our own borders open to trade and investment and to continue working towards freer markets. Australia has successfully pursued this direction in the past.

Three specific areas that would move Australia in this direction and send out a clear and strong message of support for the rules-based trading system are worthy of consideration. They are to: lower remaining trade barriers; periodically review the design and adequacy of foreign investment screening processes; and bolster government efforts to explain how and why the community benefits from trade liberalisation.

At the same time, governments should pursue broader policies that strengthen the economy's resilience and the workforce's adaptability to technological changes, and that create an environment that spreads the benefits of globalisation more inclusively. These companion policies are discussed in PC (2017a).

Ample scope to lower Australia's own trade barriers

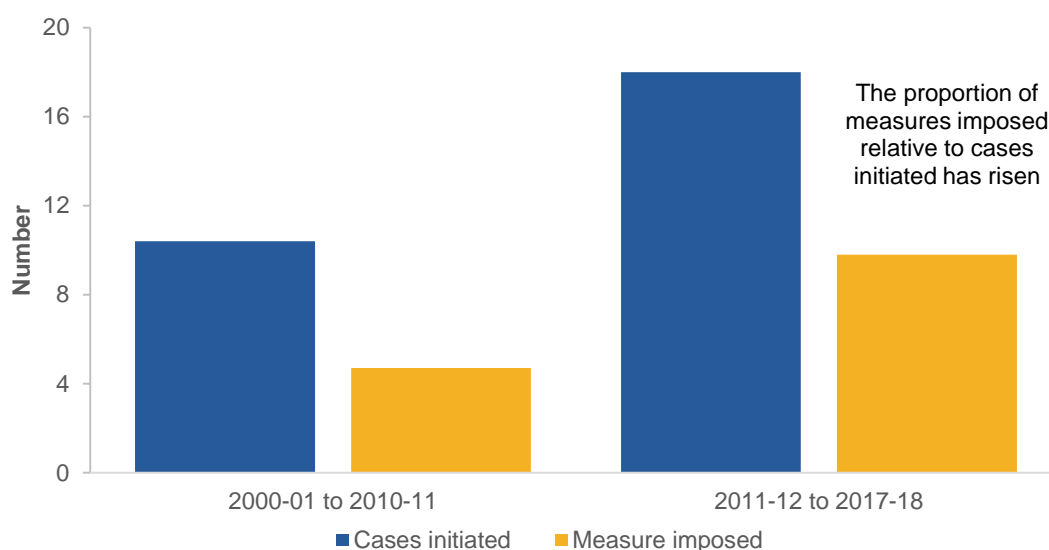
Notwithstanding Australia's much lower levels of assistance than in the past, ample scope remains to reduce obstacles to trade. Over 11 per cent of our imports in 2017-18 attracted an MFN tariff rate of 5 per cent, and over the past decade Australia has intensified its use of anti-dumping duties (figure 3.5). Furthermore, there is still less than full take-up of preferential trade agreement tariff preferences for imports into Australia, in part due to the compliance costs of satisfying the rules of origin (RoO) (Crook and Gordon 2017).

It is open to the Australian Government to remove trade restrictions and to avoid introducing new measures. One option would be to start with the many non-tariff barriers that lie behind the border. They take the form of domestic laws, regulations and practices and can particularly act to restrict trade in services. For example, burdensome licensing requirements in sectors such as architectural and engineering services can increase administrative costs on foreign companies or prevent them from practicing in Australia. Since many of these measures are the domain of state governments, the Council of Australian Governments (COAG) could be the body that initiates a process to identify, remodel or remove trade-restricting non-tariff barriers.

Another approach is to extend tariff and other concessions made in preferential trade agreements to other trading partners — that is, make them non-discriminatory or 'most favoured nation'. If achievable, this would remove the costs associated with complex RoOs on Australian imports, as they would effectively become redundant. A step further would be to remove 'nuisance' tariffs altogether.

Commission analysis has shown that a country gains most of all from reducing its *own* trade barriers, especially non-tariff barriers, regardless of what other countries do (box 3.3 and PC 2010).

Figure 3.5 Australia has intensified its recourse to anti-dumping duties
Anti-dumping activities before and after legislative changes in 2011



Source: Commission calculations.

Box 3.3 The benefits from unilateral liberalisation mostly accrue to the country itself

To illustrate the size of the benefits and their country distribution from unilateral trade liberalisation the Commission simulated a scenario where Australia removes all tariffs and reduces non-tariff barriers and regulatory barriers to services trade on an MFN basis.^a

The impact of this change is positive, boosting global economic activity by about US\$13.8 billion. Australia accrues about 85 per cent of this global increase in economic activity, equivalent to a 0.9 per cent increase in Australia's GDP. Measures of Australia's real income and purchasing power also rise.

The improvement in welfare reflects the more efficient allocation of resource allocation and the lower prices that flow from competition from foreign sources.

Removing non-tariff barriers generally improves welfare, independent of their impacts on trade. While they do not depend on trading partners taking similar action, it might be easier to implement such changes as part of a concerted regional effort.

To illustrate, a second simulation examined the effects of Australia and like-minded countries (RCEP for illustrative purposes) together removing all tariffs and decreasing non-tariff barriers and regulatory barriers to services trade on an MFN basis. In this case, RCEP countries benefit, like Australia, with higher economic activity and welfare. Moreover, the higher level of economic activity in RCEP countries boosts Australia's trade with the region, lifting Australia's overall gain by the equivalent of a further ½ per cent of our GDP (US\$6.2 billion).

^a For details about the model and the mechanisms driving the simulation, refer to PC (2017b).

Sources: Productivity Commission estimates; PC (2017a); PC (2017b).

It is noteworthy that according to Global Trade Alert, anti-dumping cases have been the single largest source of new trade restrictive measures introduced by Australia since 2009, despite their poor justification (PC 2016b). This in part reflects a series of legislative and administrative changes between 2011 and 2015 that made it easier for parties to make an anti-dumping case and more likely that duties would be granted, and at higher levels and stay in place longer (PC 2016b, table B.2). While anti-dumping duties are WTO-consistent and overall small in value when compared with general tariffs, their incidence is highly concentrated on a few firms. This makes their impact on the economy particularly harmful. They should be avoided.

The prevalence of global supply chains strengthens the case for unilateral action. Some links in the chain provide services, others provide goods, but they *all* contribute to the production of the final product. The ability to participate in global supply chains depends on being able to competitively source foreign inputs; foreign inputs are a complement to domestic value added in exports rather than a substitute for them. Regarding tariffs and market access as negotiating coin to be used in exchange for access to a partner's market or protection for domestic producers misses the point of global supply chains and is self-defeating.

Effective FDI screening

Foreign investment is also critical as a way into a global supply chain — as direct investment is often essential to trade — and leads to other benefits like technology diffusion. At the same time, some direct investments can pose a risk to national security or impose costs. Recognising these costs and benefits, Australia's foreign investment policy regime aims to prevent foreign direct investments (FDI) that are not in the national interest. It is not designed to provide protectionist measures to benefit Australian industries, but may have unintended consequences that do so.

Barriers to foreign investment are hard to measure on a consistent basis, due to the myriad ways a government might discriminate against foreign investors. There may be outright limits in specific sectors on equity ownership by foreigners, greater conditionality attached to regulatory approvals, or poor review processes that can act to stop a potential cross-border investment from even proceeding to the approval stage. In recent years, heightened national security concerns connected with critical infrastructure have led the Australian Government to add further foreign investment scrutiny by establishing the Critical Infrastructure Centre in 2017.

The theme chapter in last year's *Review* looked at the trade and investment implications of national security measures. It identified the 'very little visibility of the costs created by national security measures' (PC 2018b, p. 43). Consistent, transparent and predictable foreign investment processes, which also preserve our vital national security interests, matter for our reputation as an attractive destination for international investors. The Commission will be looking at FDI patterns and its policy implications in next year's *Review*.

Stronger engagement with the community

Some of the community disenchantment with the world trading system stems from within Australia. Past work of the Commission highlighted how bilateral agreements had not delivered the expected benefits in terms of increased trade or earned the broad support of the community (PC 2010). While market access under more recent trade agreements has expanded significantly, public misconceptions about the benefits and costs of such agreements continue to abound.

Higher quality consultation processes with the community would help to achieve better outcomes from our trade and investment agreements. Confidentiality agreements could be used to enable formal consultation on draft treaty text with stakeholder bodies during the negotiation process.

Similarly, once a draft agreement is completed, it could be exposed to public scrutiny before it is signed. These consultation practices would build a better appreciation of the choices and their respective pros and cons, combat perceptions that secrecy during negotiations leads to sub-optimal outcomes for some members of the community and foster public confidence in open markets.

More generally, governments need to recognise that the case for open markets cannot be taken for granted. Better engagement with the community around the rationale for free trade and clearer communication about policies to manage the costs of adjustment, and to support a more inclusive sharing of the benefits from open markets is needed to build community acceptance for open markets. Without this acceptance, it will prove very difficult for governments to continue implementing trade and investment liberalisation policies.

For engagement to be meaningful, however, it must not just focus on the positive news stories. It needs to better explain how, and why, the community overall benefits from trade liberalisation, while recognising there will sometimes be members of the community who lose out. At the same time, the community needs to understand what is at stake if tariffs and other barriers to trade are reinstated. The Commission's 2017 *Rising Protectionism* study included empirical analysis of the effects on Australian households of a global trade war. Two other recent notable examples of outreach by the Australian Government are the Department of Foreign Affairs and Trade's 2018 publication, *Benefits of trade and investment*, and work by the Department of Industry, Innovation and Science (Tuhin and Swanepoel 2017) that illustrated that exporters are more productive and pay higher wages than firms focused solely on the domestic market.

What can Australia do in co-operation with others?

Discontent with the world trading system and globalisation more generally is a broad phenomenon across parts of communities. While Australia can do a lot on its own, it should also continue to work with our international partners to address the existing shortcomings and tackle the new issues facing the world trading system. This is an ongoing task, but the current circumstances make it imperative to act decisively now.

Australia is well placed to make the case, and be a champion for change. Traditionally, we have punched above our weight at the WTO and we have a reputation as an honest broker. Australia initiated the Cairns Group of exporters that secured the ‘tariffication’ of agricultural quotas during the Uruguay Round. More recently our work with other like-minded countries helped to reach an agreement that commits members to remove agricultural export subsidies, and currently we are playing a leading role in the negotiation of an e-commerce plurilateral agreement at the WTO.

Efforts of this kind have typically been led by a small number of countries, but delivered improved outcomes for all. While it helps if some large economic powers are part of the process, it is not essential for it to work. They succeed because they build the case for reform through the careful and impartial compilation of the evidence, assessing the options and, through this process, gradually coalescing member states to support and adopt change.

While this approach to building consensus can be slow and does not always work, it is preferable to the alternative of managed trade blocs, or alliance structures that lack transparency or dispense with, and sometimes undermine, the well-accepted principles that underpin the rules-based trading system.

Australia will be best served by continuing to work with like-minded countries in efforts to build a new consensus on how to improve the world trading system through meetings of trade ministers, the G20 and other regional groups. For example, reform-minded trade ministers met in Ottawa last October (box 3.4) and set out some broad areas where collaboration could likely lead to tangible improvements. Less obvious to the public is the ongoing effort in Geneva by Australian officials and other WTO members’ representatives to develop and build support for reform proposals.

Using this as a starting point, the Commission sees two prospective areas for fruitful collaboration that would help to improve the functioning of the world trading system. First of all, pursue opportunities to reinvigorate the negotiation function of the WTO. Second, take stock of how well the existing agreements and notification procedures are performing to identify prospective areas for improvement, and how to get there.

Box 3.4 **The Ottawa ministerial on WTO reform**

With the WTO facing a number of challenges that are putting the world trading system under stress, in October 2018 Canada convened trade ministers from 12 WTO members, including Australia, that are committed to supporting and strengthening the multilateral trading system.

The purpose of the meeting was to initiate a dialogue aimed at identifying concrete actions to enhance and improve the WTO. The ministers' communiqué included five main messages. They:

- stressed the indispensable role the WTO plays in facilitating and safeguarding trade
- underscored the dispute settlement system as a central pillar of the WTO. It ensures rights and obligations are enforceable. They acknowledged that concerns have been raised about the system and are willing to discuss ways to safeguard and strengthen the system
- emphasised the need to reinvigorate the negotiating function. In particular, the need to conclude negotiations on fisheries in 2019, with an intent to strengthen disciplines on subsidies that contribute to over-fishing
- highlighted the need to address modern economic and trade issues and tackle unfinished business to ensure the relevance of the WTO
- recognised the poor record of compliance with notification obligations, which play a central role in ensuring WTO members understand the policy actions taken by their partners in a timely manner and called for a strengthening of the monitoring and transparency of members' trade policies.

The full text of the communiqué can be accessed here: <https://www.canada.ca/en/global-affairs/news/2018/10/joint-communiqué-of-the-ottawa-ministerial-on-wto-reform.html>.

Reinvigorate the WTO negotiation function

Well-designed trade agreements enable more businesses and people to participate in and benefit from the expanded opportunities they offer. The largest prospective benefits come from agreements negotiated with an extensive group of economies on a multilateral basis. However, on the multilateral front, the Doha Round of negotiations has come to a standstill and this situation is unlikely to change.

The failure of the Doha Round has acted like a litmus test for the broader malaise in the global trading system, and overshadowed the WTO's less widely known successes. Several multilateral and plurilateral agreements (that bind all members) on less comprehensive agendas have been concluded (box 3.2), average tariff rates have continued to fall, as countries implement earlier commitments, and (notwithstanding procedural concerns raised by the United States) the WTO's dispute resolution system works remarkably well, commanding very high rates of compliance with rulings and defusing stoushes that might otherwise degenerate into broader political conflicts.

These accomplishments in the WTO, and the Trans-Pacific Partnership regional agreement that developed outside of it (despite the United States withdrawing its support), suggest plurilateral agreements negotiated between subsets of WTO members are a means to reach a consensus on further liberalisation and to update rules that have not kept pace with technological and other changes in the trading environment (for example, digital trade).

Plurilateral agreements can be inclusive or exclusive (box 3.5). The inclusive (or critical mass) variety has less restrictive trade preference arrangements, and exclusive agreements negotiated under the auspices of the WTO offer some benefits. In particular, they provide a pathway through which non-participant countries can subsequently opt to accede to a completed agreement.

Box 3.5 Types of WTO sector-specific agreements

There are two main types of sector-specific agreements.

- *Inclusive* (or critical mass) agreements are negotiated on a most favoured nation (MFN) basis and typically come into effect when signatories account for 90 per cent or more of world trade in the product area in question. The Information Technology Agreement is an example, and illustrates the potential for plurilateral agreements to act as a stepping stone to multilateral liberalisation. Partners to the original agreement, concluded in 1996, numbered 29. Over time, the number of participants has increased to 82, accounting for 97 per cent of world trade in information technology products (WTO 2017, p. 2).
- *Exclusive* agreements are negotiated on a non-MFN basis. Benefits are restricted to participants, which may make them easier to negotiate. The Agreement on Government Procurement is an example.

Source: Draper and Dube (2013).

Australia has invariably been a participant in plurilateral and sector-specific negotiations and should continue to work with like-minded WTO members in the negotiation of such agreements, especially those that allow most favoured nation treatment. This approach can bring many of the benefits of liberalisation and act as a stepping stone to multilateral liberalisation. Importantly, they also provide flexibility, promoting some momentum for the willing to move forward together.

Towards a better rules-based trade system

The WTO has failed to keep pace with the changing nature of trade, notably the rise of sophisticated global supply chains and digital trade. In response, many members are negotiating on a bilateral basis to make progress where they are able. Australia has been a player in this trend, and now has eleven preferential trade agreements in force (and a further four agreed, but yet to enter into force), the more recent ones with provisions covering areas like regulatory co-operation, standards and government procurement.

The combination of an inadequate commitment to WTO processes and a lack of a consensus on the rules needed to handle new issues is undermining its authority and status at the centre of the world trading system. Indications of this are highlighted by US grievances about Chinese state owned enterprises allegedly having an unfair competitive advantage. Other member states cite their dispassion with the agreement on trade-related aspects of intellectual property rights (TRIPs), and yet others take exception with the ability of a member to self-declare as a developing economy and thereby lower their level of commitment (section 3.2).

These issues invariably are not breaches of WTO accession commitments, but reflect an apparent inability of the members to engage and resolve in good faith these and other matters as they arise. Nor are they straightforward, raising tricky conceptual issues relating to competitive neutrality, trade secrets and transparency. In short, there is an ongoing need for a balanced and informed debate among members on how to reinvigorate the whole trading system.

In this regard, Australia in collaboration with other member states could exert some influence and play a proactive role by putting forward proposals for discussion outside the formal bargaining processes of the WTO (but not necessarily outside the WTO), to help bridge the impasses facing the world trading system. Specifically:

- We have experience operating an independent competitive neutrality complaints mechanism over unfair competition from significant government business activities or state-owned enterprises. A model of a similar kind could be examined, as part of a broader dialogue on competition issues, for its feasibility within the WTO architecture. Another example lies with Australia's mutual recognition arrangements that allow different regulatory arrangements without impeding trade unnecessarily.
- As noted earlier, we have experience dismantling trade barriers of our own accord. We could lead, or sponsor through international agencies, technical assistance work in developing countries to promote awareness of domestic gains from unilateral liberalisation, and to share our experience and expertise with the tools of analysis, such as effective rates of assistance, that supported the case for open markets.
- We could initiate a process to develop and build consensus on a framework for classifying economies and when they transition to a developed economy status. This would help to bolster the integrity of the WTO's 'special and differential' treatment provisions. There is also scope to orchestrate a dialogue on how to incorporate into WTO agreements the advances made in agreements negotiated outside the WTO fold, such as with digital trade and standards.
- We could pursue at the WTO the long overdue cause of reviewing existing WTO agreements. Review provisions in the TRIPs Agreement (Article 71.1), for example, provide a mechanism to initiate an international dialogue on IP reform every two years; it has never been used.

The Commission recognises that initiating such processes is much easier said than done. Moreover, if advanced within a negotiating environment, it entails risks of backsliding, as once an agreement is reopened all aspects of it are 'on the table'. However, the importance of strengthening in an even-handed manner the rules-based system governing international trade, which has underpinned the growth in world trade and prevented a relapse into protectionism for the past 70 years, cannot be underestimated. As Christine Lagarde, Managing Director of the IMF put it:

'we need to reform the global trade system to make it even better, fairer, and stronger for all nations and all people. That means fixing the system, together, not tearing it apart.'
(Lagarde 2018, p. 2)

4 Recent developments in industry assistance

Key points

- While industry assistance takes many forms, two main themes this year were drought assistance and the further proliferation of government financing vehicles.
- Drought destroys farm families' incomes and policy to support affected families is well justified, in step with government support for other families that are doing it tough.
- The benefit of sustaining farm businesses through climatic cycles is more nuanced. The Commission last reviewed drought policy in 2009. It found that measures in place at that time to provide interest rate subsidies on farm loans undermined the incentives for farmers to manage their own risks and were ineffective in supporting sustainable farming practices. Poorly designed policy can sometimes do more harm than good.
- Continuing a recent trend, the Australian Government is establishing two more large scale project finance facilities — a \$2 billion Australian Business Securitisation Fund to increase small business borrowing and a \$1 billion expansion of Efic's mandate to include lending for infrastructure in Pacific Island nations.
- In the face of past failures in these areas and mounting financial risk to Australian taxpayers, a review of the newly-introduced financing measures early in their operation is needed to ensure that they genuinely make Australians better off, and that they do not merely benefit project proponents.

The *Trade and Assistance Review* selectively reports on recent developments in industry assistance, with a focus on announcements of prospective assistance that in time may be included in the Commissions' measured assistance (chapter 2). Notable developments in industry assistance this year include:

- the multi-faceted response to drought by both the Australian Government and state and territory governments; and
- the further proliferation of government financing vehicles, with new schemes for small business and expanded investment mandates for some existing facilities.

4.1 Drought assistance

Many Australian farm businesses, families and rural communities have experienced hardship during the latest drought. Since June 2018, the Australian Government has announced a broad package of support for farmers in drought affected areas (tables 4.1 and 4.2). This

includes extending the availability of the Farm Household Allowance, making supplementary payments of \$12 000 per household (in September 2018 and March 2019), increasing the maximum size of concessional loans, funding local community infrastructure and other projects and providing financial and counselling services. The NSW and Queensland Governments have also announced significant financial support this year for farmers, including concessional loans, and subsidies for freight of fodder, water or livestock for agistment.

Table 4.1 2018 drought assistance measures and timeline

<i>Month of 2018</i>	<i>Announcements</i>	<i>Nature and recipient assistance</i>
June	Funding for Rural Financial Counselling Service (RFCS)	Additional funding for RFCS provider contract extensions (\$17 million) and increased demand (\$3 million).
	Farm Household Assistance (FHA) eligibility extension	Extended access to FHA from three to four cumulative years.
July	Weed and wild dogs control	\$9 million to help fight weeds and wild dogs in drought-affected areas via local councils.
	Farm liaison pilot	\$750 000 funding for a pilot for a Farm Liaison Officer program
August	Lump sums	Two lump sum payments for those on FHA and conditional on the periods in 2018 and 2019 that they are receiving the FHA. The lump sums are up to \$7000 for single farmers and \$12 000 for couples.
	Increased FHA eligibility	Increased the threshold for the farm assets test for FHA eligibility from \$2.6 million to \$5 million
	Forage asset tax deductions	Immediate deduction rather than depreciate over three years for forage storage assets.
September	RFCS funding	An increase of \$1.3 million in funding for RFCS in Queensland.
	Drought Communities Program	Additional funding of \$75 million for local infrastructure and other projects, using local contractors
	Concessional loans	Doubling the maximum loan from up to \$1 million to up to \$2 million. Increasing total available loans to \$500 million per year.
October	Assistance for FHA applications	Application forms cut by a third and eligibility criteria clearer.
	RFCS funding increased	To assist with the growing demand for FHA applications, funding was increased for the RFCS by \$5 million.
December	Future Drought Fund	\$500 million for the establishment of the Future Drought Fund with up to \$100 million a year to be drawn down for drought resilience projects
	On-farm Emergency Water Infrastructure Rebate	\$50 million over 3 years. Rebates will be 25 per cent of the costs for new infrastructure, such as tanks and troughs associated with stock watering, water pumps and associated electronic systems, desilting dams, drilling new stock water bores.

Table 4.2 Summary of State drought assistance programs

<i>State</i>	<i>Program</i>	<i>Details</i>
New South Wales	Animal Welfare Transport Subsidy	Animal Welfare Transport Subsidy: 50% of costs up to a maximum of \$20 000 pa.
	Donated fodder transport	Donated Fodder Transport: 100% of costs up to \$5 per km up to 1 500 km.
	Drought Transport Subsidy	Drought Transport Subsidy: 50% of the cost up to a maximum of \$5 per km and up to 1 500 km per journey, up to a total of \$40 000 over 18 months.
	Farm Business Skills Professional Development Program	Workshops designed to help farmer's become more resilient and better prepared for future droughts.
	Fee and permit waivers	Bee Site Permit waiver; Class 1 Agricultural Vehicle Registration waiver; Certain grazing permit waivers; Heavy Vehicle Access Permits fee waiver; NSW Local Land Services Rates; Water Licences financial assistance; Wild Dog Fence waiver.
	Drought Assistance Fund	One-off \$50 000 interest-free loan for up to seven years with no repayments in the first two years to assist new farmers experiencing drought hardship to implement systems to enhance sustainability, and can include infrastructure as well as purchasing fodder and water.
	Farm Innovation Fund	\$650 million (Originally \$150 million) for loans up to \$250 000 at 2.5% per year for up to 20 years. Is intended to improve permanent farm infrastructure, ensure long term productivity and sustainable land use and aid in meeting changes to seasonal conditions.
Queensland	Drought Relief Assistance Scheme	Up to \$40 000 subsidies per farm for transporting water, transporting fodder and returning stock from agistment.
Victoria	Improving access to emergency water supply points (EWSPs)	\$1 million of funding for the network of EWSPs for stock and domestic purposes during dry seasonal conditions.
	On-farm drought infrastructure support grants	Expanded funding to \$18.2 million for grants of up to \$5000 to provide dollar-for-dollar assistance in implementing on-farm infrastructure that improve drought management.
	Farm Business Assistance program	\$5.6 million of funding, which aims to provide immediate financial relief and alleviate some cost-of-living pressures.
	Farm Support Fund	\$1 million of funding to provide discretionary support for those who may not be eligible for the Farm Business Assistance program.

Australia has always had a variable climate. It is not unusual for government support to expand during periods of drought, though there is value in stepping back and considering the structural support that best serves the farming communities and the country as a whole. The Commission's most recent extended work was the Government Drought Support inquiry report published in May 2009. The Commission found that drought assistance programs existing at that time did not help farmers improve their self-reliance, preparedness and climate change management. Indeed, the expectation of government

support, acted like implicit insurance (without requiring a premium) and potentially altered the behaviour of some farmers.

Two aspects of the Commission's earlier work are relevant to recent policy developments.

First, the Commission was critical of the then Exceptional Circumstances Interest Rate Subsidy (ECIRS), which provided business support to farms that were considered to be viable in the long term, but were in financial difficulties due to an exceptional event. The Commission (as well as earlier reviews by other bodies) found that the scheme, in providing concessional interest rates, created a number of perverse incentives and unintended outcomes that made it ineffective in achieving its stated objective of building farmers' self-reliance to manage climate variability and preparedness for droughts. These included:

- there was no evidence that farmers' access to capital differed significantly from that faced by other small businesses and, in particular, given the average recipient had an equity level of over 80 per cent of asset value they would have been able to access commercial carry-on finance in the event of a drought
- it provided a windfall gain to farms receiving the subsidy and an unjustifiable competitive advantage to recipient farmers compared with non-recipients
- it created an incentive to build debt or not reduce debt
- the value of the subsidy may have been capitalised into farm prices creating a barrier to entry of new farmers who wish to purchase land
- it may have created a disincentive to diversify income sources off-farm.

In response to this review, the ECIRS was closed on 30 June 2012. However, since then, new Australian Government-funded loan schemes have been created, most recently under the administration of the Rural Investment Corporation. While the Commission has not reviewed these new loans schemes, they deserve the same scrutiny as the earlier ECIRS received, including considering whether it is the best-targeted approach to supporting farmers and whether it acts to support, or undermine, the sustainability of the farming sector.

Second, the Commission recommended that Australian Government support should be provided to farm households in hardship. It recommended providing a similar level of income support to farming families as are available to other Australians in need, but with asset limits that better reflect the farmers' situation. Subsequent to the Commission's inquiry, the then Australian Government discontinued hardship payments to farmers in drought declared regions, opting rather for a suite of policies that included the introduction of a farm household support payment.

The recent drought has seen the FHA extended to include cash grants out of step with income support available to other Australians and that should be better thought of as industry assistance. State government subsidies for fodder act similarly. As the Commission explained in its drought inquiry, such measures reduce the incentives for farmers to manage their properties well over climatic cycles and may also reduce the incentives to destock during periods of drought.

4.2 Government project finance facilities

The 2016-17 *Review* noted the move towards Australian Government provision of project finance as a form of industry assistance. Over the past year, this trend has continued with additional schemes announced and existing ones expanded.

Large-scale finance vehicles have the potential to skew industry assistance to particular firms and projects with minimal public scrutiny until deals are done. These facilities often have the stated rationale to fill a ‘market gap’ for finance, and so necessarily extend finance on terms more favourable than available from commercial lenders. In general, though, Australia has relatively deep and liquid financial markets. The onus then is on proponents of taxpayer-funded financing of commercial projects to demonstrate how this would serve the public interest. Even where there is an in-principle argument for government assistance, proponents should also explain why financing is the best policy option.

History has not been kind to previous efforts at government financing. In the face of past failures in these areas, it will be critical to review the various newly-introduced financing measures early in their operation to ensure that they genuinely make Australians better off, and that they do not merely benefit project proponents.

A new Australian Business Securitisation Fund

The Australian Government announced in November 2018 a \$2 billion facility to assist small and medium sized businesses with more accessible and cheaper finance (Frydenberg 2018) and legislation was enacted in April 2019. The assistance will be indirect: the fund will invest in the securitisation markets, which may assist smaller banks and non-bank lenders to provide additional funding to SMEs.

The Commission’s inquiry report into *Competition in the Australian Financial System*, released in August 2018 concluded:

Access to debt finance is not a problem for most small businesses that apply for it. Nearly 90% of SMEs that applied for debt finance in 2015-16 were successful. (p. 438)

New businesses, which are typically small, do find it more difficult than established businesses to access debt finance ... These difficulties reflect the lack of financial and trading information lenders have to assess the credit worthiness of the business, including the business and management skills of the owner(s). (p. 435)

The Inquiry explored options for improving access and terms for SMEs finance.

In establishing the new SME facility the Australian Government noted that caution is required when interpreting the 2015-16 lending data as many SMEs without real estate collateral for debt finance may have simply not applied (Frydenberg 2019, p. 15)

A new Business Growth Fund

The Australian Government announced in November 2018 that it would encourage the creation of a private-sector owned Business Growth Fund, aimed at longer-term equity funding to small business (Frydenberg 2018). Treasury (2019) explained the rationale:

Many small businesses find it difficult to attract passive equity investment which enables them to grow without taking on additional debt or giving up control of their business.

An Australian Business Growth Fund would be expected to follow similar international precedents. By way of example, since its establishment in 2011, the United Kingdom's Business Growth Fund has invested \$2.7 billion in a range of sectors across the economy.

The proposed structure of the fund is for Australian banks and superannuation funds to inject equity capital into the Australian Business Growth Fund which in turn invests in Australian small businesses.

Mandate extended for the Northern Australia Infrastructure Facility

The Northern Australia Infrastructure Facility (NAIF) was established in 2016 as a \$5 billion financing facility for infrastructure projects in northern Australia. NAIF's primary financing mechanism is the provision of fixed rate, Australian dollar loans. Interest rates and payback period are determined separately for each individual project. NAIF has the ability to provide concessions on the basis that such concessions are limited to the minimum necessary for a project to proceed.

Following an independent review of the investment mandate of the NAIF, the Australian Government announced in April 2018 it will amend the original mandate 'to increase its flexibility and improve its potential to support projects' (Canavan 2018). The principal changes were:

- an increase in the proportion of a project that NAIF can finance, from 50 per cent originally to 100 per cent. The review found that in some cases 50 per cent threshold may be insufficient to fill the financing gap
- 'loosening the gap test'. The review found that the mandatory criteria that financial assistance is only provided if it is necessary to enable the project to proceed, or proceed earlier than otherwise able, was imposing unnecessary and onerous requirements to demonstrate a genuine finance gap
- expanding the types of infrastructure that will be eligible to include 'foundational' infrastructure in regional and remote areas.

The Government will also further consider the review's recommendation that the NAIF be able to take equity in projects as part of the broader review scheduled for 2019.

A new Australian Infrastructure Financing Facility for the Pacific

In November 2018 the Prime Minister announced an extra \$1 billion for the Export Finance and Insurance Commission (Efic) to support infrastructure in the Pacific, and legislation was enacted in April 2019. While this facility has geo-political aspects, rather than being solely an industry assistance measure, it is a substantial change in Efic's role of providing loans, bonds, guarantees, and insurance directly to Australian exporters. In introducing the enabling legislation, the Minister explained the link to exporters:

The bill grants Efic a new power to finance overseas infrastructure projects, based on a broad Australian benefits tests, enabling it to finance overseas infrastructure projects that result in positive outcomes for Australia both now and in the future. This will enable Efic to take account of previously unrecognised benefits that will flow to Australia or Australians over time as a result of Efic financing, such as a greater Australian participation in supply chains; access to new markets for Australian businesses; more Australian jobs, payments, dividends or other financial proceeds from overseas to Australia; or stronger relationships with our regional partners, especially in the Pacific. (Coulston 2018)

This follows expansions in Efic's mandate in 2016 to allow it to lend directly and to a broader range of small and medium-sized enterprises (SMEs) and in 2017 to enable it to assist onshore resource projects and related infrastructure. Efic also administers the \$3.8 billion Defence Export Facility, which made its first loan in December 2018 to finance the construction of a new manufacturing facility in Canberra (Australian Defence Force 2018). The Commission reviewed the role of Efic and the design of export credit in its 2012 report *Australia's Export Credit Arrangements*.

Change in investment mandate for the Clean Energy Finance Corporation

The Clean Energy Finance Corporation (CEFC) aims to help lower carbon emissions by investing in renewable energy, energy efficiency and low emission technologies that would otherwise not be viable in the private market. In December 2018 the Government issued a new investment mandate designed to support the development of a market for firming-up intermittent sources of renewable energy and to prioritise investments that support more reliable, 24/7 power (Taylor 2018). An additional provision requires the CEFC to prioritise its investments with a view to support increased reliability and security of electricity supplies.

5 Trade policy developments

Key points

- The greatest benefits from trade liberalisation come about through multilateral agreements. However, with WTO multilateral negotiations unable to advance, the best prospect for further liberalisation is likely to be through plurilateral or ‘mega-regional’ agreements, especially those that allow most favoured nation treatment.
- Australia continues to be active in subject-by-subject plurilateral agreements. After three years of negotiation, Australia’s accession bid to join the WTO Agreement on Government Procurement was accepted in October 2018 and came into force in May 2019. It is also leading negotiations on e-commerce and trade in services.
- Australia has also pursued regional trade agreements.
 - The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) entered into force for Australia in December 2018.
 - Seven chapters have been agreed for the Regional Comprehensive Economic Partnership (RCEP).
- In the past year, Australia has also further increased its coverage of bilateral trade agreements, having signed agreements with Hong Kong and Indonesia.

This chapter reports on trade policy developments since the *2016-17 Trade and Assistance Review* (published in April 2018).

While it is widely acknowledged that the benefits of trade liberalisation are greatest when undertaken on a multilateral, ‘Most Favoured Nation’ basis, progress on multilateral negotiations at the WTO has proved difficult. The Commission has previously indicated there is value in Australia (and other like-minded countries) continuing to intensify trade liberalisation efforts, with an emphasis on large-scale ‘plurilateral agreements’ covering particular trade topics (PC 2017a). Progress on these negotiations continues.

It is envisaged that these negotiations will lead to voluntary agreement between willing members and offer the promise, over time, of expanding to cover more of the WTO membership. A major development this year is that Australia has been invited to accede to the WTO Agreement on Government Procurement. Australia is also playing a leadership role in facilitating negotiations around trade in services and e-commerce. Plurilateral negotiations provide the greatest prospect to reduce trade costs today and, over time, there may be scope to broaden their geographic coverage.

5.1 Multilateral and plurilateral trade agreements

The success of the WTO multilateral Trade Facilitation Agreement

The Trade Facilitation Agreement (TFA) concluded at the 9th WTO Doha Round Ministerial Conference in 2013 entered into force on 22 February 2017 following its ratification by two-thirds of the WTO membership. The Agreement aims to reduce red tape by streamlining customs processes and improving transparency about rules affecting international trade, making it easier for businesses to enter overseas markets. It included assistance to help developing countries to reduce regulatory impediments to trade over time.

The TFA was estimated to reduce trade transaction costs by up to 15 per cent (Moise and Sorescu 2013). All developed countries committed to apply the substantive portions of the TFA from the date it takes effect, while developing countries committed to apply those substantive provisions of the TFA they are able to. More than half of the developing membership notified soon after signing that they would implement around 80 per cent of the TFA's measures from the moment it enters into force, and most of the remainder in 2 to 3 years after that (Neufeld 2016).

Scope for improvement in Australia's trade facilitation arrangements

A wide range of parties — from the Export Council of Australia to the Commonwealth Parliament's Joint Standing Committee on Trade and Investment Growth — have expressed the view in recent years that Australia's customs systems are struggling to keep up with the digitalisation of global trade, and that complying with Customs regulations is one of the main factors slowing down trade processes and creating inefficiencies for exporting and importing businesses. In part, this appears to be due to legacy database systems used by the Department of Home Affairs.

The Australian Government provided \$10.5 million in 2018-19 to the Department of Home Affairs to 'transform and modernise Australia's international trade supply chain to deliver more efficient and secure trade processing.' (Australian Government 2018, p. 133). This will be dedicated in large part to the completion of an initial business case to provide a 'single window' for international trade documentation, creating a system that is seamless, digital, automated and user-friendly. The Department of Home Affairs is also implementing a 'Trusted Trader' scheme that provides faster customs processing, with around 150 companies already accredited.

Australia joins the WTO Government Procurement Agreement

Australia's bid to join the WTO's plurilateral Agreement on Government Procurement (GPA) was accepted in October 2018 and came into force in May 2019 (box 5.1). The aim of the GPA is to mutually open government procurement markets among its parties. The GPA's principles are transparency and non-discrimination, requiring members to offer other

members' suppliers conditions 'no less favourable' than domestic suppliers, and provide review procedures for suppliers to raise complaints about tender processes.

The domestic treaty making process was completed in March 2019 and the agreement came into force in May 2019. Some features of Australia's commitments are:

- It applies to most Australian Government procurements over SDR130,000 (about \$250,000) for goods and services and SDR5 million (about \$9.8 million) for construction services.
- There are some specific exceptions from coverage in Australia's offer, such as: preference to benefit small and medium enterprises; protection of essential security, including Defence materiel procurement and support of military forces overseas; and health and welfare services.
- The threshold for state and territory governments for goods and services is higher, at around \$700,000 and each jurisdiction has also nominated exceptions which are included in the terms of Australia's accession.
- In some instances, the GPA improves on Australia's government procurement outcomes from existing trade agreements, such as broadening access under the Australia-United States FTA by including access to additional US state tenders.
- Accession to the GPA will also provide new opportunities for Australian businesses to bid for government procurement services contracts in countries with which Australia does not have existing trade agreements, for example, accounting, auditing and taxation services in the European Union, Norway, Switzerland, Chinese Taipei, Armenia, Iceland, Israel, Liechtenstein, Moldova, Montenegro, and Ukraine.

Box 5.1 The GPA: An ongoing WTO success story

The GPA dates back to the Tokyo Round of GATT negotiations and first came into force for signatories in 1979. It is an example of a closed plurilateral: WTO members can choose whether or not to participate, and the benefits of open access to tender processes only apply to members' companies applying to members' government tenders. Nevertheless, it has grown over time to cover 47 WTO members and evolved to meet their changing needs. The most recent revision of the GPA, completed in 2014, provides an example of the role the WTO can play in facilitating negotiation.

The framework of the agreement is designed to fill the gaps not covered by the General Agreement on Trade and Services (GATS) and the General Agreement on Tariffs and Trade (GATT), but individual members have flexibility in designing their commitments. It allows for a tailored approach so members are able to avoid coverage by the Agreement that might be too politically sensitive or problematic on public policy grounds. This pragmatic design is one of the elements of its success, as it encourages flexibility for countries that may not sign on to a more rigid coverage. Developing countries are permitted time to phase-out barriers to foreign tenders.

Source: Anderson and Muller (2017).

Towards a critical mass Trade in Services Agreement (TiSA)

The Trade in Services Agreement (TiSA) is a plurilateral agreement in development since 2012 with negotiations jointly led by Australia, the European Union and the United States. There are currently 23 TiSA parties (50 economies) accounting for around 70 per cent of global services trade. The TiSA is being designed to build on the WTO General Agreement on Trade in Services (GATS), while also incorporating elements from more recent preferential trade agreements. The last negotiation meeting was in 2016.

Effort to reduce tariffs under an Environmental Goods Agreement

The Environmental Goods Agreement (EGA) is an attempt by some WTO members to reduce tariffs on goods that benefit the environment. The agreement aims to build on the list of 54 environmental goods that APEC leaders agreed for tariff reduction in 2012.

Australia chairs the EGA negotiations. Other participating WTO members include Canada, China, Costa Rica, the European Union and its 28 member states, Hong Kong, Iceland, Israel, Japan, Korea, New Zealand, Norway, Singapore, Switzerland, Chinese Taipei, Turkey and the United States. The last negotiation meeting was in 2016.

Adapting trade rules to the Digital Age

The WTO has been considering how to adapt trade rules to the digital age for some time. In 1998, the WTO adopted a ‘Declaration on Global Electronic Commerce’, which resulted in the establishment of a work program on e-commerce. However, the Doha Round did not include negotiations on an e-commerce agreement or to specifically adapt other agreements to e-commerce.

At the 11th WTO Ministerial Conference in December 2017, more than 70 countries, including Australia, agreed to initiate exploratory work towards future WTO negotiations on trade-related aspects of electronic commerce, including services trade aspects of the e-commerce agenda. In March 2019, the initial plurilateral negotiating round was held, largely dealing with the logistics of how negotiations will proceed. A threshold decision is what will be within the scope of negotiations, as the definition of e-commerce and digital trade is not clear-cut (box 5.2).

The ‘B20’ business taskforce considered e-commerce ahead of the 2017 G20 Leaders’ Summit in Hamburg. They highlighted a number of undesirable policy directions such as the international trend towards tougher data localisation regimes and requirements to share software source codes or encryption keys in return for market access. They argued that exceptions for national security and critical infrastructure would need to be clearly defined and transparent (PC 2018b). The taskforce also called for an appropriate liability regime for Internet intermediaries and telecommunications service providers.

Box 5.2 **Towards a definition of digital trade**

Digital trade is a wide-ranging term for which no single generally accepted definition exists. It relates to the following areas:

- Trade in ICT goods and services that can be delivered either physically or digitally. This area ranges from telecommunications infrastructure to over-the-top content (OTT) services
- Cross-border e-commerce: trade in goods, services and products that is conducted partly or wholly over the Internet (websites, apps, and electronic data interchange). E-commerce takes place between businesses and consumers (B2C), between businesses (B2B), between businesses and public authorities (B2G), and between consumers (C2C). E-commerce can be further classified into the following: physical e-commerce (the process of selling physically delivered services and goods over the Internet); and digital e-commerce (products that in the past were physically delivered but can now be digitally distributed, for example, digitalized software, music and films)
- Cross-border data flows: the transfer of all kinds of electronic data, both commercial and non-commercial.

These three areas of digital trade overlap with one another. Trade in ICT services takes place for the most part via e-commerce and any form of cross-border e-commerce involves data flows. Neither international e-commerce nor data transmission is possible without networkable ICT infrastructure and end-user devices.

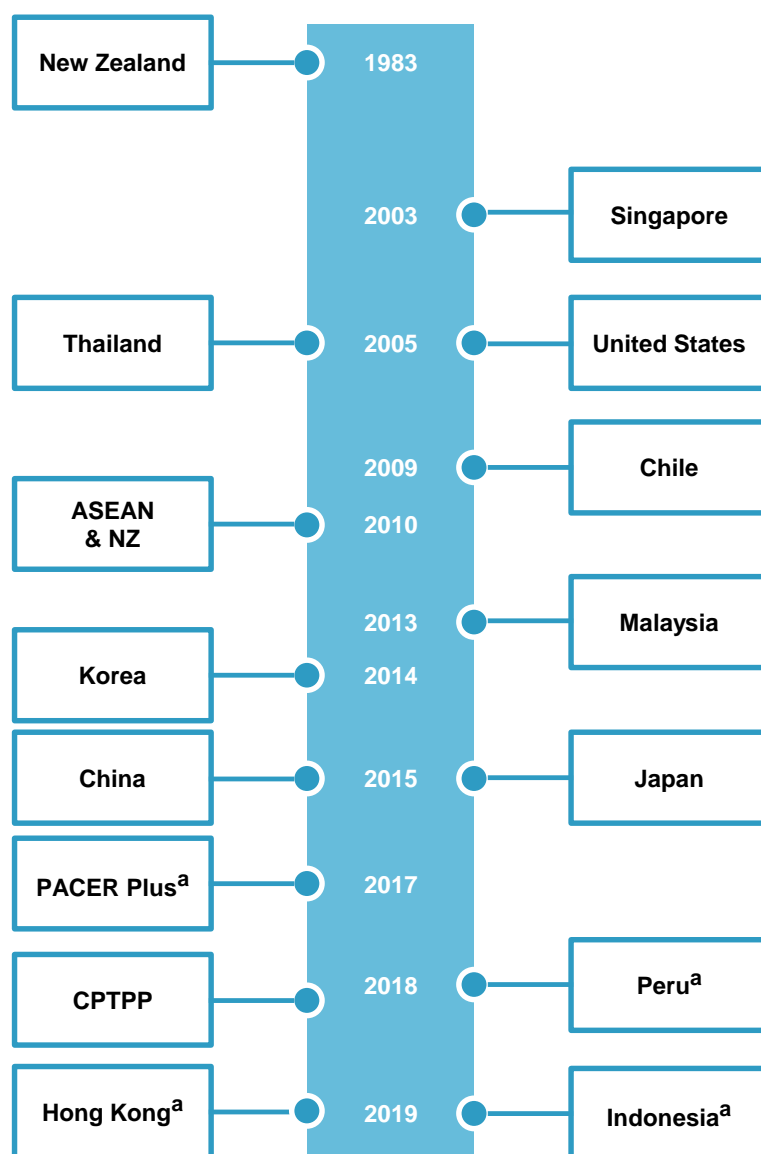
Source: B20 Taskforce (2017, p. 22).

Many recent regional and bilateral trade agreements have included standards on e-commerce. At present, Australia has e-commerce/digital trade chapters in 10 of its 12 concluded FTAs, with provisions centred around transparency, privacy protection, keeping tariffs off electronic transmissions, and — in particular — removing ‘data localisation’ requirements (that is, prohibitions on the cross-border transfers of information by electronic means). However, some of the provisions are agreed on a ‘best endeavours’ basis. Accordingly, a recent joint Australia and New Zealand report on growing the digital economy called for both countries to implement the agreements in the spirit in which they were signed — to facilitate free digital trade — rather than rely on exceptions and caveats to comply with the letter of the agreements without making meaningful progress (APC and NZPC 2019).

5.2 Bilateral and regional agreements

Australia has signed 15 bilateral and regional preference agreements, 11 of which are in force and the other 4 are proceeding through ratification processes (figure 5.1). Since the 2016-17 *Review*, Australia has concluded bilateral trade agreements with Hong Kong and Indonesia.

Figure 5.1 **Australia's bilateral and regional trade agreements**



^a Agreement signed but not yet in force (at 30 May 2019).

- Australia and Hong Kong announced the conclusion of negotiations for the Australia-Hong Kong Free Trade Agreement on 15 November 2018. The agreement provides certainty for Australian businesses rather than immediate changes in costs. Hong Kong agreed to bind all tariffs at zero, their current rate, from entry into force, which eliminates the risk that Hong Kong could otherwise in the future increase tariffs to their current WTO non-zero bound rates.
- Australia and Indonesia signed the Indonesia-Australia Closer Economic Partnership Agreement on 4 March 2019. The Agreement will allow 99 per cent of Australia's goods exports to enter Indonesia either duty free or with significantly improved preferential arrangements and streamline issuance of import permits for products such as live cattle,

frozen beef, sheep meat, feed grains, rolled steel coil, citrus products, carrots and potatoes — import licenses are a major irritant for many Australian exporters into Indonesia. All Indonesia's goods exports will enter Australia duty free.

Negotiations are also underway on two prospective bilateral agreements with the EU and India.

Commencement for Australia of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (TPP-11)

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) is an agreement between 11 countries — Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Peru, New Zealand, Singapore and Vietnam — that was signed on 8 March 2018 in Santiago, Chile.

For Australia, the CPTPP entered into force on 30 December 2018 (along with Canada, Japan, Mexico, New Zealand, and Singapore). For Vietnam it commenced on 14 January 2019, and for Brunei Darussalam, Chile, Malaysia and Peru it will commence 60 days after they complete their respective ratification processes.

In welcoming its entry into force, the Australian Trade Minister noted that 98 per cent of tariffs in the region will be set to zero, including eliminating or substantially reducing tariffs on ‘many of Australia’s key goods exports including wine, beef, dairy, wheat, sugar, and manufactured goods such as leather products, paper and medical equipment’ (Birmingham 2018). Australia agreed to remove tariffs on imports from TPP-11 members, with 93 per cent of tariff lines set to zero at entry into force of the agreement and phased reduction of almost all remaining tariffs over the following three to four years. Foreign investment screening thresholds in non-sensitive sectors will also be increased.

Seven chapters agreed for the Regional Comprehensive Economic Partnership

The Regional Comprehensive Economic Partnership (RCEP) is an ASEAN-centred proposal for a regional free trade area, which would initially include the ten ASEAN member states and those countries which have existing FTAs with ASEAN – Australia, China, India, Japan, Republic of Korea and New Zealand. RCEP negotiations were launched in November 2012. The 16 RCEP participating countries account for almost half of the world’s population, almost 30 per cent of global GDP and over a quarter of world exports.

The 24th round of negotiations was held in October 2018 in Auckland, New Zealand, and concluded five chapters, adding to two previously agreed. They cover: economic and technical cooperation, small and medium enterprises, customs procedures and trade facilitation, government procurement, institutional provisions, sanitary and phytosanitary measures, and standards, technical regulations and conformity assessment procedures.

In November 2018, the 2nd RCEP Summit was held in Singapore, with the Joint Leader's Statement reaffirming their:

... commitment made at the launch of the negotiations to achieve a modern, comprehensive, high-quality and mutually beneficial economic partnership agreement establishing an open trade and investment environment in the region to facilitate the expansion of regional trade and investment and contribute to global economic growth and development.

5.3 Australia's WTO disputes

Dispute settlement is a central element of the WTO to help make the global trading system more secure and predictable. The arrangements are the responsibility of the Dispute Settlement Body (DSB) and are based on clearly-defined rules. Since 1995, around 580 disputes have been lodged by WTO members. Not all proceeded past the formal 'requests for consultations' to establishment of a dispute panel. Australia has been a complainant in 9 cases, and a respondent to 16 complaints (tables 5.1 and 5.2). It currently has two cases as complainant in progress (against Canadian restrictions on the sale of imported wine and against Indian sugar subsidies) and two as a respondent (against anti-dumping duties on Indonesian paper and Tobacco Plain Packaging involving the Dominican Republic and Honduras).

5.4 Australia's anti-dumping and countervailing activity

Notwithstanding the poor justification for anti-dumping measures (PC 2016b), their use has been rising (figure 5.2) and successive changes to the policy regime (in 2011, 2012 and 2014) made it easier for parties to seek protection and for duties to be imposed, and at higher levels and for longer (PC 2016b, chapter 5 and table B.1). More recently, legislative changes in 2017 may have the effect of extending the anti-dumping duties that would have been reviewed and repealed after 12 months where dumping activity has stopped.

Since 1995, Australia has been the 8th largest imposer of anti-dumping measures, with 151 measures notified to the WTO as at 31 December 2017 (WTO 2019c). Chinese and Korean imports have most often attracted dumping duties (26 and 20 cases respectively). The three largest instigators of anti-dumping taxes have been India (656), the USA (427) and the EU (325). Over 100 WTO members have not imposed an anti-dumping measure.

In 2017, Australia was the third most active country, with 14 new measures notified, behind India (47) and the USA (33). As at 31 December 2018 Australia had in force 83 anti-dumping measures — up from 23 in June 2010 before the series of policy changes (ADC 2018). Steel products accounted for 49 measures, followed by paper products (9).

The *WTO Agreement on Subsidies and Countervailing Measures* also allows countries to impose 'countervailing duties' where imports receive subsidies in their country of production. Since 1995, Australia has been the 4th largest imposer of countervailing

measures, with 15 measures notified to the WTO as at 31 December 2017 (WTO 2019). The three largest users have been the USA (122), the EU (38), and Canada (29).

Table 5.1 Australia as the complainant

The nine cases Australia has brought as a complainant

<i>Year</i>	<i>Country</i>	<i>Issue</i>	<i>Outcome</i>
2019	India	Measures concerning sugar and sugarcane.	Consultation requested.
2018	Canada	Measures Governing the Sale of Wine.	Panel established and first written submission filed.
2003	European Communities	Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs.	The EC changed its regulations in March 2006. Australia informed the WTO that it did not consider that the DSBs recommendations had been fully implemented.
2002	European Communities	Export Subsidies on Sugar.	In favour of Australia.
2000	United States ^a	Continued Dumping and Subsidy Offset Act of 2000.	In favour of Australia. In December 2004 Australia reached an understanding with the US with respect to the dispute.
1999	United States	Safeguard Measure on Imports of Fresh, Chilled or Frozen Lamb from Australia.	In favour of Australia. Implementation notified in November 2001.
1999	Republic of Korea	Measures Affecting Imports of Fresh, Chilled and Frozen Beef.	In favour of Australia. Implementation completed by September 2001.
1997	India	Quantitative Restrictions on Imports of Agricultural, Textile and Industrial Products.	Mutually agreed solution before request for a panel.
1996	Hungary ^b	Export Subsidies in respect of Agricultural Products.	Mutually agreed solution in 1997 after a panel was established. Hungary was required to seek a waiver of certain of its WTO obligations.

^a Joint complainants with Brazil, China, European Communities, India, Indonesia, Japan, Korea and Thailand. ^b Joint complainants with Argentina, Canada, New Zealand, Thailand, United States.

Source: WTO (2019b).

Table 5.2 Australia as the respondent

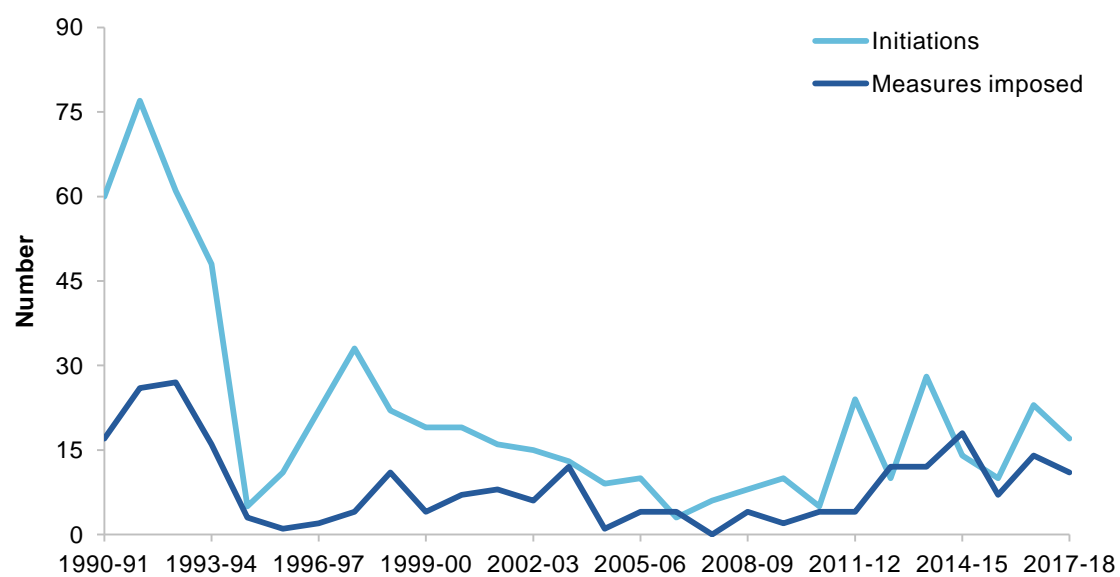
The 16 cases where Australia has been subject to dispute settlement action

	<i>Country</i>	<i>Issue</i>	<i>Outcome</i>
2017	Indonesia	Anti-Dumping Measures on A4 Copy Paper	Second Hearing concluded (May 2019). Panel report expected late 2019/2020.
2012/2013	Indonesia, Cuba, Dominican Republic, Honduras, Ukraine ^a	Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging	Panel report in favour of Australia. The Dominican Republic and Honduras appealed the Panel's decision. The Panel reports in the disputes initiated by Cuba and Indonesia were adopted by the DSB on 27 August 2018.
2007	New Zealand	Measures Affecting the Importation of Apples from New Zealand	Panel report and Appellate Body report in favour of NZ. Implementations notified 2011.
2003	European Communities	Quarantine Regime for Imports	Panel established in 2003 but did not proceed. Mutually agreed solution notified in 2007.
2002	Philippines	Certain Measures Affecting the Importation of Fresh Pineapple	Philippines did not pursue beyond consultations.
2002	Philippines	Certain Measures Affecting the Importation of Fresh Fruit and Vegetables	Panel established in 2003, but not composed. Philippines did not pursue dispute beyond panel request.
1998	United States	Subsidies Provided to Producers and Exporters of Automotive Leather	Panel report in favour of USA. Compliance notified in 2000.
1998	Switzerland	Anti-Dumping Measures on Imports of Coated Woodfree Paper Sheets	Mutually agreed solution notified in 1998, after Australia terminated the measures in dispute.
1997	United States	Subsidies Provided to Producers and Exporters of Automotive Leather	Panel established in 1998, reported in favour of the US in 1999. Mutually agreed solution reached in 2000.
1996	United States	Textile, Clothing and Footwear Import Credit Scheme	Not pursued beyond the 1996 request for consultations.
1995	United States	Measures Affecting the Importation of Salmonids	Panel established and then suspended after amendments to the measures in dispute. Mutually agreed solution notified in 2000.
1995	Canada	Measures Affecting Importation of Salmon	Panel report and Appellate Body report in favour of Canada. Compliance notified in 2000.

^a Separate cases on the same issue brought by each country independently.

Source: WTO (2019b).

Figure 5.2 Australian anti-dumping activity 1989-90 to 2017-18



Source: Commission estimate.

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 2012-13 to 2017-18.

Tables A.1 to A.3 provide estimates of net tariff assistance, budgetary assistance and net combined assistance by industry grouping. 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.

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

Estimates prior to 2017-18 may differ from those originally published, due to revisions.

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

Tables in this appendix are also available on the Commission’s website (www.pc.gov.au/research/ongoing/trade-assistance).

Table A.1 Net tariff assistance by industry grouping, 2012-13 to 2017-18^a
\$ million (nominal)

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary production	272.5	157.1	195.5	239.3	338.4	355.8
Horticulture and fruit growing	50.9	39.0	37.2	37.0	38.6	34.3
Sheep, beef cattle and grain farming	240.8	147.0	187.5	231.6	326.9	345.9
Other crop growing	-1.6	-1.7	-1.5	-1.5	-2.1	-2.4
Dairy cattle farming	-5.7	-5.5	-6.1	-6.0	-6.0	-4.8
Other livestock farming	-5.4	-4.9	-6.2	-6.7	-7.0	-6.5
Aquaculture and fishing	-3.1	-3.3	-3.7	-4.1	-4.1	-3.0
Forestry and logging	1.2	0.4	1.2	0.6	0.2	0.0
Primary production support services	-4.6	-13.8	-12.9	-11.6	-8.1	-7.6
Unallocated primary production ^b	—	—	—	—	—	—
Mining	-151.3	-165.2	-164.8	-148.5	-114.9	-102.1
Manufacturing	2603.9	2280.7	2180.4	1839.9	1270.6	1169.0
Food, beverages and tobacco	203.0	230.5	215.3	187.7	163.2	192.8
Textiles, leather, clothing and footwear	92.1	94.8	82.5	52.7	26.7	19.3
Wood and paper products	259.0	272.9	294.7	241.7	118.2	132.5
Printing and recorded media	56.4	64.9	68.9	52.7	30.7	31.3
Petroleum, coal, chemical and rubber	387.2	297.6	289.0	270.5	179.4	169.5
Non-metallic mineral products	155.1	129.2	153.1	126.2	65.0	62.0
Metal and fabricated metal products	760.8	537.2	488.9	442.3	274.2	209.0
Motor vehicles and parts	219.7	254.3	167.4	135.2	127.1	117.9
Other transport equipment	183.5	121.3	163.1	129.3	147.4	100.0
Machinery & equipment manufacturing	150.3	141.8	124.1	97.6	94.3	93.9
Furniture and other manufacturing	136.6	136.1	133.3	104.0	44.3	41.0
Unallocated manufacturing ^b	—	—	—	—	—	—
Services	-2012.6	-2082.3	-2006.6	-1663.6	-1217.9	-1158.4
Electricity, gas, water & waste services	-42.4	-42.3	-40.4	-32.7	-24.6	-23.3
Construction	-769.0	-808.5	-824.2	-681.6	-448.4	-417.1
Wholesale trade	-140.7	-140.0	-128.1	-106.3	-77.0	-72.4
Retail trade	-75.4	-75.3	-70.8	-61.1	-46.3	-46.1
Accommodation & food services	-99.9	-96.8	-99.0	-97.7	-88.4	-95.3
Transport, postal & warehousing	-139.5	-137.7	-121.4	-93.9	-85.1	-78.6
Information & telecommunications	-42.5	-45.0	-43.8	-35.3	-22.4	-20.5
Financial and insurance services	-8.2	-8.9	-9.4	-8.2	-5.6	-5.7
Property, professional & admin.	-201.1	-207.0	-204.2	-174.0	-132.7	-129.1
Public administration and safety	-88.1	-91.7	-84.8	-71.9	-50.6	-43.8
Education and training	-25.8	-27.2	-26.6	-22.9	-16.7	-16.3
Health care and social assistance	-129.6	-134.8	-122.0	-95.9	-68.8	-62.8
Arts and recreation services	-37.5	-39.3	-39.4	-35.3	-27.1	-27.9
Other services	-212.9	-227.8	-192.5	-146.8	-124.1	-119.6
Unallocated services ^b	—	—	—	—	—	—
Unallocated other^b	—	—	—	—	—	—
Total	712.5	190.3	204.4	267.2	276.2	264.3

— Nil. Figures may not add to totals due to rounding. ^a Tariff assistance estimates are derived using ABS Industry Gross Value Added and other supporting data. ^b Unallocated includes budgetary measures where details of beneficiaries are unknown. These categories are not applicable for tariff assistance.

Source: Commission estimates.

Table A.2 Budgetary assistance by industry grouping, 2012-13 to 2017-18
\$ million (nominal)

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary production	1245.6	1319.9	1395.5	1386.9	1633.0	1892.3
Horticulture and fruit growing	130.8	134.0	125.7	144.6	172.6	226.9
Sheep, beef cattle and grain farming	526.4	607.3	603.2	624.2	744.5	973.4
Other crop growing	94.5	103.0	81.7	90.5	98.6	113.2
Dairy cattle farming	51.5	61.0	74.5	75.6	63.6	69.2
Other livestock farming	46.6	43.6	51.2	56.7	60.7	68.5
Aquaculture and fishing	71.1	75.3	83.9	86.7	91.1	97.9
Forestry and logging	46.7	27.2	27.4	27.6	32.5	40.1
Primary production support services	27.3	30.5	27.0	26.8	31.8	29.4
Unallocated primary production ^a	250.6	238.1	320.9	254.2	337.7	273.9
Mining	487.5	532.0	527.2	519.5	495.8	461.1
Manufacturing	1948.3	1897.6	1779.9	1682.4	1624.3	1472.6
Food, beverages and tobacco	128.0	190.0	173.1	149.3	124.3	126.5
Textiles, leather, clothing and footwear	57.4	62.6	56.0	51.3	35.1	34.2
Wood and paper products	29.1	22.7	19.4	17.2	27.6	23.7
Printing and recorded media	47.4	52.8	51.9	60.0	64.6	64.5
Petroleum, coal, chemical and rubber	336.8	344.9	316.1	235.4	224.8	236.4
Non-metallic mineral products	24.1	35.6	26.3	24.2	23.9	23.0
Metal and fabricated metal products	363.5	302.7	256.9	209.4	249.4	196.2
Motor vehicles and parts	459.3	403.3	351.8	299.5	239.2	144.7
Other transport equipment	24.7	23.9	30.7	42.7	33.4	35.1
Machinery & equipment manufacturing	239.7	229.7	237.1	244.0	249.4	258.9
Furniture and other manufacturing	35.1	31.5	22.7	22.2	28.0	30.9
Unallocated manufacturing ^a	203.2	197.9	238.0	327.1	324.6	298.4
Services	4301.5	4184.1	4020.7	4135.8	4779.0	4929.0
Electricity, gas, water & waste services	144.1	172.0	226.6	127.6	141.4	142.1
Construction	199.8	167.0	116.1	99.0	220.2	208.3
Wholesale trade	205.1	186.7	187.6	160.7	186.5	196.5
Retail trade	129.9	116.9	115.7	109.6	146.9	165.4
Accommodation & food services	70.9	77.6	78.7	67.5	99.8	115.1
Transport, postal & warehousing	181.5	132.3	99.9	91.1	148.4	145.8
Information & telecommunications	394.6	250.4	233.1	232.8	380.7	260.4
Financial and insurance services	836.8	927.3	932.1	1046.5	927.8	917.0
Property, professional & admin.	1250.1	1248.5	1286.0	1293.6	1541.1	1712.2
Public administration and safety	16.8	14.7	17.9	19.9	26.6	23.8
Education and training	35.6	29.9	31.2	27.5	36.8	38.4
Health care and social assistance	184.7	198.1	192.1	182.4	206.5	235.4
Arts and recreation services	414.0	448.9	327.5	495.7	505.5	507.5
Other services	66.9	57.0	37.3	37.6	68.2	129.9
Unallocated services ^a	170.8	156.8	138.9	144.1	142.4	131.5
Unallocated other^a	972.1	1160.4	700.4	1049.9	3048.5	3316.6
Total	8955.0	9093.9	8423.8	8774.5	11580.5	12071.6

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

Source: Commission estimates.

**Table A.3 Net combined assistance by industry grouping,
2012-13 to 2017-18^a**
\$ million (nominal)

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary production	1518.1	1476.9	1591.0	1626.2	1971.4	2248.1
Horticulture and fruit growing	181.7	173.0	162.8	181.6	211.3	261.2
Sheep, beef cattle and grain farming	767.2	754.3	790.7	855.8	1071.4	1319.2
Other crop growing	93.0	101.2	80.2	89.0	96.4	110.7
Dairy cattle farming	45.8	55.4	68.3	69.6	57.6	64.4
Other livestock farming	41.2	38.8	45.1	50.1	53.7	61.9
Aquaculture and fishing	68.0	71.9	80.2	82.6	87.0	94.9
Forestry and logging	47.9	27.5	28.6	28.2	32.7	40.1
Primary production support services	22.6	16.7	14.1	15.3	23.7	21.8
Unallocated primary production ^b	250.6	238.1	320.9	254.2	337.7	273.9
Mining	336.2	366.8	362.4	370.9	380.9	359.0
Manufacturing	4552.2	4178.2	3960.3	3522.3	2894.9	2641.6
Food, beverages and tobacco	331.0	420.5	388.4	337.0	287.5	319.3
Textiles, leather, clothing and footwear	149.5	157.4	138.5	104.1	61.8	53.5
Wood and paper products	288.2	295.5	314.0	258.9	145.8	156.3
Printing and recorded media	103.8	117.8	120.9	112.7	95.3	95.9
Petroleum, coal, chemical and rubber	724.0	642.5	605.1	505.9	404.2	405.9
Non-metallic mineral products	179.2	164.8	179.5	150.4	88.9	85.0
Metal and fabricated metal products	1124.3	839.9	745.8	651.7	523.6	405.2
Motor vehicles and parts	679.1	657.6	519.3	434.8	366.3	262.5
Other transport equipment	208.2	145.3	193.8	172.0	180.8	135.0
Machinery & equipment manufacturing	390.1	371.4	361.2	341.6	343.7	352.8
Furniture and other manufacturing	171.7	167.6	156.0	126.2	72.4	71.9
Unallocated manufacturing ^b	203.2	197.9	238.0	327.1	324.6	298.4
Services	2288.9	2101.8	2014.1	2472.2	3561.1	3770.6
Electricity, gas, water & waste services	101.7	129.7	186.1	94.9	116.8	118.8
Construction	-569.2	-641.4	-708.0	-582.6	-228.2	-208.8
Wholesale trade	64.4	46.7	59.5	54.4	109.5	124.1
Retail trade	54.4	41.7	44.9	48.5	100.6	119.3
Accommodation & food services	-28.9	-19.2	-20.3	-30.1	11.4	19.8
Transport, postal & warehousing	42.0	-5.4	-21.5	-2.8	63.3	67.2
Information & telecommunications	352.1	205.3	189.2	197.5	358.3	239.9
Financial and insurance services	828.6	918.4	922.7	1038.4	922.3	911.4
Property, professional & admin.	1049.0	1041.4	1081.9	1119.6	1408.4	1583.1
Public administration and safety	-71.3	-76.9	-66.9	-52.0	-24.0	-20.0
Education and training	9.8	2.7	4.6	4.6	20.2	22.1
Health care and social assistance	55.1	63.3	70.1	86.5	137.7	172.5
Arts and recreation services	376.5	409.6	288.1	460.3	478.4	479.6
Other services	-146.0	-170.8	-155.2	-109.1	-55.9	10.2
Unallocated services ^b	170.8	156.8	138.9	144.1	142.4	131.5
Unallocated other^b	972.1	1160.4	700.4	1049.9	3048.5	3316.6
Total	9667.5	9284.2	8628.2	9041.6	11856.7	12335.9

– Nil. Figures may not add to totals due to rounding. ^a Tariff assistance estimates are derived using ABS Industry Gross Value Added and other supporting data. ^b Unallocated includes budgetary measures where details of beneficiaries are unknown.

Source: Commission estimates.

**Table A.4 Output tariff assistance by industry grouping,
2012-13 to 2017-18^a**
\$ million (nominal)

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary production	334.5	223.0	262.9	310.3	418.2	431.8
Horticulture and fruit growing	55.1	42.6	40.5	40.4	42.4	37.7
Sheep, beef cattle and grain farming	275.0	173.5	216.9	262.3	365.3	384.5
Other crop growing	0.5	0.5	0.5	0.4	0.6	0.7
Dairy cattle farming	—	—	—	—	—	—
Other livestock farming	—	—	—	—	—	—
Aquaculture and fishing	1.1	0.7	1.2	0.7	0.5	0.4
Forestry and logging	1.4	0.5	1.4	0.8	0.4	0.2
Primary production support services	1.3	5.1	2.5	5.6	9.0	8.1
Unallocated primary production ^b	—	—	—	—	—	—
Mining	1.1	1.2	0.9	0.6	1.3	1.1
Manufacturing	3540.2	3171.2	3043.4	2647.0	1954.1	1889.2
Food, beverages and tobacco	585.4	563.2	560.3	556.6	531.1	620.0
Textiles, leather, clothing and footwear	119.1	120.9	106.9	72.4	42.1	35.1
Wood and paper products	295.0	310.3	336.3	278.3	142.2	160.5
Printing and recorded media	71.6	81.2	85.5	65.1	38.3	38.9
Petroleum, coal, chemical and rubber	458.6	372.4	357.3	325.1	216.4	205.5
Non-metallic mineral products	185.9	161.0	185.0	152.9	83.8	78.1
Metal and fabricated metal products	870.5	636.4	586.3	529.7	332.2	259.9
Motor vehicles and parts	346.8	407.5	279.0	232.6	207.4	190.7
Other transport equipment	231.9	151.2	204.2	165.1	174.2	122.1
Machinery & equipment manufacturing	213.7	204.3	181.8	141.5	126.1	121.9
Furniture and other manufacturing	161.7	162.8	160.9	127.8	60.3	56.7
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	3875.8	3395.4	3307.3	2957.9	2373.7	2322.1

— Nil. Figures may not add to totals due to rounding. ^a Tariff assistance estimates are derived using ABS Industry Gross Value Added and other supporting data. ^b Unallocated includes budgetary measures where details of beneficiaries are unknown. These categories are not applicable for tariff assistance.

Source: Commission estimates.

Table A.5 Input tariff penalty by industry grouping, 2012-13 to 2017-18^a
\$ million (nominal)

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary production	-62.0	-65.9	-67.5	-70.9	-79.9	-76.0
Horticulture and fruit growing	-4.3	-3.6	-3.3	-3.4	-3.8	-3.4
Sheep, beef cattle and grain farming	-34.2	-26.5	-29.3	-30.7	-38.4	-38.6
Other crop growing	-2.1	-2.2	-2.0	-2.0	-2.8	-3.2
Dairy cattle farming	-5.7	-5.5	-6.1	-6.0	-6.0	-4.8
Other livestock farming	-5.4	-4.9	-6.2	-6.7	-7.0	-6.5
Aquaculture and fishing	-4.2	-4.0	-4.9	-4.8	-4.6	-3.5
Forestry and logging	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Primary production support services	-6.0	-18.9	-15.4	-17.2	-17.1	-15.7
Unallocated primary production ^b	–	–	–	–	–	–
Mining	-152.4	-166.3	-165.7	-149.2	-116.2	-103.2
Manufacturing	-936.3	-890.6	-863.1	-807.0	-683.5	-720.2
Food, beverages and tobacco	-382.4	-332.7	-345.0	-368.9	-368.0	-427.2
Textiles, leather, clothing and footwear	-27.0	-26.1	-24.4	-19.7	-15.3	-15.7
Wood and paper products	-36.0	-37.4	-41.7	-36.6	-24.0	-28.0
Printing and recorded media	-15.1	-16.3	-16.5	-12.4	-7.5	-7.5
Petroleum, coal, chemical and rubber	-71.4	-74.8	-68.3	-54.6	-37.0	-36.0
Non-metallic mineral products	-30.8	-31.8	-31.8	-26.7	-18.7	-16.1
Metal and fabricated metal products	-109.7	-99.2	-97.4	-87.4	-58.0	-50.9
Motor vehicles and parts	-127.1	-153.1	-111.6	-97.3	-80.4	-72.9
Other transport equipment	-48.3	-29.9	-41.1	-35.8	-26.8	-22.1
Machinery & equipment manufacturing	-63.3	-62.5	-57.7	-43.9	-31.8	-28.0
Furniture and other manufacturing	-25.1	-26.7	-27.6	-23.8	-15.9	-15.8
Unallocated manufacturing ^b	–	–	–	–	–	–
Services	-2012.6	-2082.3	-2006.6	-1663.6	-1217.9	-1158.4
Electricity, gas, water & waste services	-42.4	-42.3	-40.4	-32.7	-24.6	-23.3
Construction	-769.0	-808.5	-824.2	-681.6	-448.4	-417.1
Wholesale trade	-140.7	-140.0	-128.1	-106.3	-77.0	-72.4
Retail trade	-75.4	-75.3	-70.8	-61.1	-46.3	-46.1
Accommodation & food services	-99.9	-96.8	-99.0	-97.7	-88.4	-95.3
Transport, postal & warehousing	-139.5	-137.7	-121.4	-93.9	-85.1	-78.6
Information & telecommunications	-42.5	-45.0	-43.8	-35.3	-22.4	-20.5
Financial and insurance services	-8.2	-8.9	-9.4	-8.2	-5.6	-5.7
Property, professional & admin.	-201.1	-207.0	-204.2	-174.0	-132.7	-129.1
Public administration and safety	-88.1	-91.7	-84.8	-71.9	-50.6	-43.8
Education and training	-25.8	-27.2	-26.6	-22.9	-16.7	-16.3
Health care and social assistance	-129.6	-134.8	-122.0	-95.9	-68.8	-62.8
Arts and recreation services	-37.5	-39.3	-39.4	-35.3	-27.1	-27.9
Other services	-212.9	-227.8	-192.5	-146.8	-124.1	-119.6
Unallocated services ^b	–	–	–	–	–	–
Unallocated other^b	–	–	–	–	–	–
Total	-3163.3	-3205.0	-3102.9	-2690.7	-2097.5	-2057.7

– Nil. Figures may not add to totals due to rounding. ^a Tariff assistance estimates are derived using ABS Industry Gross Value Added and other supporting data. ^b Unallocated includes budgetary measures where details of beneficiaries are unknown. These categories are not applicable for tariff assistance.

Source: Commission estimates.

Table A.6 Budgetary outlays by industry grouping, 2012-13 to 2017-18
\$ million (nominal)

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary production	757.0	812.7	878.6	803.9	894.9	874.3
Horticulture and fruit growing	81.1	85.0	74.3	85.5	93.8	109.6
Sheep, beef cattle and grain farming	216.9	286.0	275.2	245.4	248.5	275.3
Other crop growing	45.6	53.9	53.4	57.0	52.0	54.1
Dairy cattle farming	29.8	36.3	35.5	33.8	31.8	29.2
Other livestock farming	32.6	28.4	36.3	39.4	37.2	37.7
Aquaculture and fishing	60.3	63.3	65.6	71.0	74.6	79.0
Forestry and logging	37.2	15.5	13.4	14.1	15.8	14.8
Primary production support services	7.7	8.9	6.9	7.9	7.7	9.0
Unallocated primary production ^a	245.8	235.5	317.9	249.9	333.5	265.6
Mining	205.9	270.1	235.2	206.9	224.0	189.8
Manufacturing	1264.2	1329.9	1293.3	1177.3	1118.5	980.5
Food, beverages and tobacco	65.4	112.9	100.4	95.4	77.4	78.1
Textiles, leather, clothing and footwear	48.6	53.4	49.5	44.2	22.9	25.5
Wood and paper products	18.7	12.6	12.8	8.5	12.8	12.5
Printing and recorded media	38.3	44.3	46.2	48.7	51.3	50.1
Petroleum, coal, chemical and rubber	265.4	293.8	277.5	199.0	192.1	197.0
Non-metallic mineral products	16.5	28.3	21.4	19.9	17.6	15.6
Metal and fabricated metal products	71.4	73.2	79.6	87.7	119.6	80.9
Motor vehicles and parts	421.0	369.5	320.7	264.5	203.9	114.0
Other transport equipment	19.4	19.2	23.5	26.2	24.9	25.4
Machinery & equipment manufacturing	140.5	167.5	194.7	203.8	201.9	207.6
Furniture and other manufacturing	29.6	25.4	20.7	20.7	23.8	26.2
Unallocated manufacturing ^a	129.4	129.8	146.4	158.6	170.4	147.5
Services	1864.7	2030.3	2154.0	2130.9	2416.5	2348.0
Electricity, gas, water & waste services	107.9	145.0	207.9	107.0	114.9	112.9
Construction	56.8	65.2	71.8	66.3	72.5	61.7
Wholesale trade	69.0	72.6	81.0	85.3	92.3	87.4
Retail trade	31.4	29.5	34.1	37.4	41.9	36.7
Accommodation & food services	6.6	6.5	8.5	9.2	8.1	11.1
Transport, postal & warehousing	50.1	55.4	63.0	66.5	77.9	80.5
Information & telecommunications	175.7	191.1	203.4	198.4	334.7	220.8
Financial and insurance services	87.1	93.5	114.2	119.1	122.0	143.3
Property, professional & admin.	794.5	884.3	952.2	1021.5	1091.2	1097.0
Public administration and safety	10.6	9.5	15.9	16.8	20.6	17.6
Education and training	22.1	21.9	22.6	23.0	24.9	24.9
Health care and social assistance	123.8	137.6	110.2	109.2	104.8	107.0
Arts and recreation services	131.8	136.3	112.2	107.1	147.6	140.4
Other services	26.4	25.0	18.2	20.1	20.6	75.1
Unallocated services ^a	170.8	156.8	138.9	144.1	142.4	131.5
Unallocated other^a	297.5	436.0	415.7	281.4	359.1	360.3
Total	4389.2	4879.1	4976.8	4600.3	5013.0	4752.8

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

Source: Commission estimates.

**Table A.7 Budgetary tax concessions by industry grouping,
2012-13 to 2017-18**

\$ million (nominal)

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary production	488.6	507.2	516.9	583.0	738.1	1018.0
Horticulture and fruit growing	49.7	49.0	51.3	59.1	78.8	117.3
Sheep, beef cattle and grain farming	309.5	321.3	328.0	378.8	496.0	698.0
Other crop growing	48.9	49.0	28.4	33.5	46.6	59.1
Dairy cattle farming	21.8	24.7	39.0	41.9	31.7	39.9
Other livestock farming	14.0	15.2	14.9	17.4	23.4	30.7
Aquaculture and fishing	10.8	12.0	18.3	15.7	16.6	18.9
Forestry and logging	9.5	11.7	14.1	13.5	16.7	25.3
Primary production support services	19.5	21.6	20.0	18.9	24.0	20.4
Unallocated primary production ^a	4.8	2.7	3.0	4.3	4.2	8.3
Mining	281.6	261.9	292.0	312.6	271.8	271.3
Manufacturing	684.1	567.7	486.6	505.1	505.8	492.1
Food, beverages and tobacco	62.6	77.1	72.8	53.9	47.0	48.4
Textiles, leather, clothing and footwear	8.8	9.2	6.4	7.2	12.2	8.6
Wood and paper products	10.5	10.0	6.6	8.7	14.7	11.3
Printing and recorded media	9.1	8.6	5.8	11.3	13.3	14.4
Petroleum, coal, chemical and rubber	71.4	51.1	38.6	36.5	32.7	39.5
Non-metallic mineral products	7.5	7.3	4.9	4.3	6.3	7.4
Metal and fabricated metal products	292.1	229.5	177.3	121.7	129.8	115.3
Motor vehicles and parts	38.3	33.8	31.1	35.0	35.3	30.7
Other transport equipment	5.2	4.8	7.2	16.4	8.5	9.6
Machinery & equipment manufacturing	99.3	62.1	42.4	40.2	47.5	51.3
Furniture and other manufacturing	5.5	6.1	2.0	1.5	4.2	4.7
Unallocated manufacturing ^a	73.8	68.0	91.6	168.5	154.2	150.9
Services	2436.8	2153.7	1866.7	2004.9	2362.5	2581.1
Electricity, gas, water & waste services	36.3	27.0	18.7	20.6	26.5	29.1
Construction	143.0	101.8	44.4	32.7	147.7	146.6
Wholesale trade	136.1	114.1	106.5	75.5	94.2	109.1
Retail trade	98.5	87.4	81.5	72.2	105.0	128.7
Accommodation & food services	64.3	71.0	70.2	58.4	91.7	103.9
Transport, postal & warehousing	131.3	76.9	36.9	24.6	70.5	65.4
Information & telecommunications	218.9	59.3	29.7	34.4	46.0	39.6
Financial and insurance services	749.6	833.8	818.0	927.5	805.9	773.8
Property, professional & admin.	455.6	364.2	333.8	272.2	449.9	615.2
Public administration and safety	6.2	5.2	2.0	3.0	5.9	6.1
Education and training	13.5	8.0	8.6	4.5	11.9	13.5
Health care and social assistance	60.9	60.4	82.0	73.2	101.7	128.3
Arts and recreation services	282.2	312.6	215.3	388.6	357.9	367.1
Other services	40.5	32.0	19.1	17.5	47.6	54.8
Unallocated services ^a	–	–	–	–	–	–
Unallocated other^a	674.7	724.4	284.7	768.6	2689.4	2956.3
Total	4565.8	4214.8	3447.0	4174.2	6567.5	7318.7

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

Source: Commission estimates.

**Table A.8 Nominal rate of combined assistance on outputs
by industry grouping, 2012-13 to 2017-18^a**

Per cent

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary Production^b	0.5	0.3	0.4	0.4	0.4	0.5
Horticulture and fruit growing	0.4	0.4	0.3	0.3	0.3	0.2
Sheep, beef cattle and grain farming	0.8	0.6	0.7	0.9	1.0	1.1
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	0.2	0.1	0.2	0.1	0.1	0.1
Forestry and logging	0.2	0.2	0.2	0.2	0.2	0.2
Primary production support services	0.1	0.1	0.0	0.1	0.1	0.1
Mining	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing^b	1.1	1.0	1.0	0.8	0.6	0.6
Food, beverages and tobacco	0.7	0.6	0.6	0.6	0.6	0.6
Textiles, leather, clothing and footwear	2.4	2.4	2.1	1.5	0.9	0.8
Wood and paper products	1.7	1.7	1.8	1.4	0.7	0.7
Printing and recorded media	1.2	1.4	1.4	1.1	0.7	0.6
Petroleum, coal, chemical and rubber	0.8	0.7	0.7	0.5	0.4	0.3
Non-Metallic mineral products	1.2	1.0	1.1	1.0	0.5	0.5
Metal and fabricated metal products	1.4	0.9	0.8	0.8	0.5	0.4
Motor vehicles and parts	2.7	2.7	2.0	1.4	1.3	1.2
Other transport equipment	1.8	1.8	1.8	1.4	1.5	1.1
Machinery and equipment manufacturing	0.8	0.7	0.7	0.6	0.5	0.5
Furniture and other manufacturing	2.5	2.3	2.2	1.6	0.8	0.8

– Nil. Figures may not add to totals due to rounding. ^a Combined assistance comprises tariff and budgetary 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, 2012-13 to 2017-18^a**

Per cent

<i>Industry grouping</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Primary Production^b	0.2	0.2	0.2	0.2	0.2	0.2
Horticulture and fruit growing	0.1	0.1	0.1	0.1	0.1	0.1
Sheep, beef cattle and grain farming	0.3	0.2	0.2	0.3	0.3	0.3
Other crop growing	0.1	0.1	0.1	0.0	0.1	0.1
Dairy cattle farming	0.3	0.2	0.2	0.3	0.3	0.3
Other livestock farming	0.3	0.3	0.3	0.3	0.3	0.3
Aquaculture and fishing	0.4	0.4	0.4	0.3	0.3	0.2
Forestry and logging	0.0	0.0	0.0	0.0	0.0	0.0
Primary production support services	0.4	0.4	0.4	0.3	0.3	0.2
Mining	0.4	0.4	0.4	0.3	0.2	0.2
Manufacturing^b	0.5	0.5	0.4	0.3	0.3	0.3
Food, beverages and tobacco	0.8	0.7	0.7	0.8	0.7	0.8
Textile, leather, clothing and footwear	1.1	1.1	0.9	0.7	0.5	0.5
Wood and paper products	0.6	0.6	0.6	0.5	0.3	0.4
Printing and recorded media	0.9	1.0	0.9	0.7	0.5	0.4
Petroleum, coal, chemical and rubber	0.1	0.2	0.1	0.1	0.1	0.1
Non-Metallic mineral products	0.5	0.5	0.5	0.4	0.3	0.2
Metal and fabricated metal products	0.3	0.2	0.2	0.2	0.1	0.1
Motor vehicle and parts	1.5	1.5	1.1	0.7	0.6	0.5
Other transport equipment	0.9	0.8	0.8	0.7	0.5	0.4
Machinery and equipment manufacturing	0.6	0.6	0.6	0.5	0.4	0.3
Furniture and other manufacturing	0.8	0.8	0.8	0.7	0.4	0.4

– Nil. Figures may not add to totals due to rounding. ^a Combined assistance comprises tariff and budgetary 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, 2012-13 to 2017-18^a

\$ million (nominal)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Horticulture and fruit growing						
<i>Industry-specific measures</i>						
Australian Wine Industry Support	0.5	0.5	–	–	–	–
Export and Regional Wine Support Package	–	–	–	–	0.7	17.3
Premium Fresh Tasmania - assistance	0.5	–	–	–	–	–
Tax deductions for grape vines	-6.0	-6.0	-6.0	-5.0	-4.0	–
Tax deduction for horticultural plantations	6.0	–	–	–	–	–
Wine Australia Corporation	2.7	2.9	–	–	–	–
<i>Sector-specific measures</i>						
Carbon Farming Futures	0.2	5.2	4.1	1.9	1.5	–
Drought Assistance Package - concessional loans	–	–	<0.1	<0.1	<0.1	–
Farm Finance - concessional loans	–	0.7	0.1	0.1	<0.1	<0.1
Farm Management Deposits Scheme	18.2	17.8	19.9	26.2	26.6	53.2
Improved Access to Agricultural and Veterinary Chemicals	–	–	–	–	1.4	1.1
Income tax averaging provisions	15.3	19.1	18.8	18.4	17.1	17.5
Rural Financial Counselling Service	2.1	2.3	2.2	1.7	1.3	1.0
Tax deduction for conserving or conveying water	5.2	4.6	0.1	1.3	9.5	16.4
<i>Rural R&D measures</i>						
Grape and Wine R&D	9.7	11.9	12.1	12.1	12.0	13.1
Horticulture Australia Limited R&D	41.4	41.9	29.2	41.7	45.5	51.3
Rural Industries R&D Corporation	2.2	2.3	1.6	1.2	1.5	0.8
<i>General export measures</i>						
Export Market Development Grants Scheme	1.0	0.8	1.0	1.0	0.9	0.9
<i>General R&D measures</i>						
Commercialisation Australia	<0.1	–	0.8	<0.1	–	–
CSIRO	7.3	2.5	7.2	7.8	9.1	9.2
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.1
R&D tax concession	1.5	0.5	0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	0.9	1.6	4.5	4.2	3.5	1.4
R&D Tax Incentive - refundable tax offset	12.3	13.9	15.2	16.2	17.1	12.8

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.8	0.8	0.5	–
Enterprise Connect Innovation Centres	<0.1	<0.1	<0.1	–	–	–
Entrepreneurs' Infrastructure Programme – Accelerating Commercialisation	–	–	–	–	–	0.2
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	<0.1	0.1	0.2
Small business capital gains tax rollover deferral	0.6	0.7	1.2	1.1	1.6	1.8
The Small Business and General Business Tax Break	0.4	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.7	2.5	-2.4	-3.3	5.2	5.2
Small business capital gains tax 15-year asset exemption	2.2	2.6	5.2	6.0	8.2	8.7
Small business capital gains tax retirement exemption	2.2	2.3	4.0	4.5	4.1	5.2
Small business capital gains tax 50 per cent reduction	3.4	3.4	5.9	5.6	6.9	8.0
South East South Australia Innovation and Investment Fund	0.9	–	–	–	–	–
25 per cent entrepreneurs' tax offset	0.5	–	–	–	–	–
Tasmanian Innovation and Investment Fund	0.3	0.1	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.7	2.2	1.6
<i>Total</i>	130.8	134.0	125.7	144.6	172.6	226.9
Sheep, beef cattle and grain farming						
<i>Industry-specific measures</i>						
Beef Australia 2015	–	2.5	–	–	–	–
Beef Week and the Beef Australia Expo	–	–	–	–	–	2.4
Northern Australia Rice Industry	–	–	–	–	–	1.0
<i>Sector-specific measures</i>						
Carbon Farming Futures	10.3	40.5	30.2	4.4	3.6	–
Carbon Farming Initiative	–	0.2	–	0.8	–	–
Drought Assistance Package - concessional loans	–	2.0	1.3	1.7	1.5	–
Farm Finance - concessional loans	–	7.2	1.0	1.0	0.6	0.7
Farm Management Deposits Scheme	103.7	100.4	120.2	172.2	183.1	367.9
Improved Access to Agricultural and Veterinary Chemicals	–	–	–	–	0.2	0.2
Income tax averaging provisions	86.7	108.3	107.2	104.4	132.3	135.5
Managing Farm Risk Program	–	–	–	<0.1	0.1	<0.1
Rural Financial Counselling Service	7.8	11.3	11.0	10.0	10.0	9.5
Tax deduction for conserving or conveying water	40.0	35.0	2.4	5.0	18.8	15.0

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Rural R&D measures</i>						
Wool R&D	13.3	13.0	12.5	13.4	14.7	17.9
Grains R&D Corporation	62.8	68.6	68.0	70.2	73.3	71.3
Meat and Livestock Australia R&D	38.3	46.7	46.5	44.0	52.1	80.4
Rural Industries R&D Corporation	2.6	3.8	4.0	3.2	3.8	5.3
<i>General export measures</i>						
Export Market Development Grants Scheme	0.4	0.5	0.8	0.5	0.7	0.7
<i>General R&D measures</i>						
Cooperative Research Centres	3.7	0.2	3.3	4.8	4.9	3.4
CSIRO	70.7	81.4	90.7	85.0	76.0	76.6
Entrepreneurs' Programme - Innovation Connections	—	—	—	—	—	0.1
R&D tax concession	1.1	0.4	0.1	—	—	—
R&D Tax Incentive - non-refundable tax offset	4.4	6.4	2.2	0.5	1.3	1.7
R&D Tax Incentive - refundable tax offset	3.7	4.2	4.6	4.9	5.2	4.6
<i>Other measures</i>						
Enterprise Connect Innovation Centres	<0.1	0.1	<0.1	—	—	—
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	<0.1	0.3	0.5	0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	—
Live Animal Exports Business Assistance	2.3	3.1	0.3	—	—	—
Small business capital gains tax rollover deferral	9.2	9.7	16.9	16.3	22.9	25.4
The Small Business and General Business Tax Break	20.0	2.4	—	—	—	—
Small Business - Simplified depreciation rules	-2.8	10.3	-10.2	-14.8	23.5	23.5
Small business capital gains tax 15-year asset exemption	13.8	15.8	32.1	37.1	50.6	53.5
Small business capital gains tax retirement exemption	12.5	12.8	22.5	25.1	23.2	29.0
Small business capital gains tax 50 per cent reduction	19.8	19.8	34.6	32.9	40.2	46.5
25 per cent entrepreneurs' tax offset	1.3	—	—	—	—	—
Tasmanian Freight Equalisation Scheme	0.9	0.9	0.9	1.1	1.2	1.2
Total	526.4	607.3	603.2	624.2	744.5	973.4
Other crop growing						
<i>Sector-specific measures</i>						
Carbon Farming Futures	2.3	3.7	3.0	5.4	4.1	—
Drought Assistance Package - concessional loans	—	—	0.2	0.2	0.4	—
Farm Finance - concessional loans	—	1.0	0.2	0.2	0.2	0.2

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Sector-specific measures (continued)</i>						
Farm Management Deposits Scheme	9.0	10.1	11.8	16.8	17.8	36.0
Improved Access to Agricultural and Veterinary Chemicals	—	—	0.3	1.7	0.7	—
Income tax averaging provisions	6.3	7.9	7.0	6.8	5.6	7.8
Rural Financial Counselling Service	0.6	0.8	0.8	0.8	1.0	0.9
Tax deduction for conserving or conveying water	28.9	25.2	2.1	2.4	10.9	2.1
<i>Rural R&D measures</i>						
Cotton R&D Corporation	11.8	11.2	7.3	6.1	6.1	9.1
Rural Industries R&D Corporation	0.7	0.6	0.6	0.6	0.7	2.5
Sugar R&D Corporation	4.3	6.7	6.1	6.6	7.6	6.7
<i>General export measures</i>						
Export Market Development Grants Scheme	0.6	0.6	0.8	0.8	0.9	0.9
<i>General R&D measures</i>						
Commercialisation Australia	0.1	0.1	—	—	—	—
Cooperative Research Centres	—	—	—	—	—	1.6
CSIRO	23.2	27.0	31.7	31.9	27.5	27.7
Entrepreneurs' Programme - Innovation Connections	—	—	—	—	—	0.1
R&D tax concession	0.3	0.1	<0.1	—	—	—
R&D Tax Incentive - non-refundable tax offset	—	0.4	0.3	0.6	0.7	0.3
R&D Tax Incentive - refundable tax offset	1.9	2.2	2.4	2.6	2.7	4.5
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	0.2	0.2	0.1	—
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	<0.1
Small business capital gains tax rollover deferral	0.5	0.6	1.0	1.0	1.3	1.5
The Small Business and General Business Tax Break	0.3	<0.1	—	—	—	—
Small Business - Simplified depreciation rules	-0.2	0.8	-0.8	-1.1	1.8	1.8
Small business capital gains tax 15-year asset exemption	0.6	0.7	1.4	1.6	2.2	2.3
Small business capital gains tax retirement exemption	0.7	0.7	1.3	1.5	1.3	1.7
Small business capital gains tax 50 per cent reduction	2.4	2.4	4.2	4.0	4.9	5.6
25 per cent entrepreneurs' tax offset	0.1	—	—	—	—	—
Total	94.5	103.0	81.7	90.5	98.6	113.2

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Dairy cattle farming						
<i>Sector-specific measures</i>						
Carbon Farming Futures	1.9	6.5	4.3	2.3	2.3	–
Drought Assistance Package - concessional loans	–	–	<0.1	0.1	0.1	–
Farm Finance - concessional loans	–	0.7	0.2	0.2	0.8	0.6
Farm Management Deposits Scheme	9.5	9.9	10.7	14.2	11.9	22.0
Improved Access to Agricultural and Veterinary Chemicals	–	–	–	–	0.1	0.2
Income tax averaging provisions	6.1	7.7	22.4	21.8	7.1	5.1
Rural Financial Counselling Service	1.6	1.6	1.4	2.3	3.9	4.0
Tax deduction for conserving or conveying water	2.2	1.9	0.1	0.5	2.4	1.3
<i>Rural R&D measures</i>						
Dairy Australia R&D	19.3	20.4	21.0	22.7	21.6	20.5
<i>General export measures</i>						
Export Market Development Grants Scheme	–	0.1	0.1	0.1	0.1	0.1
TRADEX	0.4	0.4	0.4	0.4	0.4	0.3
<i>General R&D measures</i>						
Cooperative Research Centres	4.8	4.8	4.0	1.6	–	–
CSIRO	1.8	1.7	4.1	4.1	2.6	2.6
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.1
R&D Tax Incentive - refundable tax offset	0.4	0.4	0.5	0.5	0.5	1.2
<i>Other measures</i>						
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	–
Small business capital gains tax rollover deferral	0.5	0.5	0.9	0.8	1.2	1.3
The Small Business and General Business Tax Break	0.1	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.3	1.2	-1.1	-1.5	2.4	2.4
Small business capital gains tax retirement exemption	1.0	1.0	1.7	2.0	1.8	2.3
Small business capital gains tax 50 per cent reduction	2.2	2.2	3.9	3.7	4.5	5.2
25 per cent entrepreneurs' tax offset	0.1	–	–	–	–	–
Total	51.5	61.0	74.5	75.6	63.6	69.2

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Other livestock farming						
<i>Sector-specific measures</i>						
Carbon Farming Futures	5.1	1.1	0.7	0.6	0.5	–
Drought Assistance Package - concessional loans	–	–	<0.1	<0.1	<0.1	–
Farm Finance - concessional loans	–	0.1	<0.1	<0.1	<0.1	<0.1
Farm Management Deposits Scheme	4.8	4.2	4.4	6.4	6.4	12.6
Improved Access to Agricultural and Veterinary Chemicals	–	–	–	–	0.1	0.4
Income tax averaging provisions	4.2	5.3	7.2	7.0	7.4	7.8
Rural Financial Counselling Service	0.7	0.8	0.5	0.4	0.3	0.3
Tax deduction for conserving or conveying water	1.0	0.8	0.1	0.7	2.4	1.9
<i>Rural R&D measures</i>						
Egg Research and Development	1.8	1.9	1.5	1.7	1.9	2.6
Pig Research and Development	4.6	4.8	4.9	5.3	5.1	5.3
Rural Industries R&D Corporation	4.8	3.8	3.1	3.2	3.8	6.3
<i>General export measures</i>						
Export Market Development Grants Scheme	0.6	0.4	0.3	0.3	0.3	0.3
<i>General R&D measures</i>						
Cooperative Research Centres	7.2	7.0	6.6	6.6	5.1	3.2
CSIRO	3.1	3.0	12.5	14.6	13.1	13.2
R&D tax concession	1.8	0.6	0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	0.1	1.4	0.5	1.1	1.3	1.9
R&D Tax Incentive - refundable tax offset	4.9	5.6	6.1	6.5	6.9	6.0
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.2	0.2	0.1	–
Enterprise Connect Innovation Centres	<0.1	–	–	–	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	–	0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	–
Small business capital gains tax rollover deferral	0.2	0.2	0.4	0.4	0.5	0.6
The Small Business and General Business Tax Break	0.2	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.3	0.9	-0.9	-1.3	2.0	2.0
Small business capital gains tax retirement exemption	0.7	0.8	1.3	1.5	1.4	1.7

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Small business capital gains tax 50 per cent reduction	1.0	1.0	1.7	1.7	2.0	2.4
25 per cent entrepreneurs' tax offset	0.3	–	–	–	–	–
<i>Total</i>	<i>46.6</i>	<i>43.6</i>	<i>51.2</i>	<i>56.7</i>	<i>60.7</i>	<i>68.5</i>
Aquaculture and fishing						
<i>Sector-specific measures</i>						
Improved Access to Agricultural and Veterinary Chemicals	–	–	–	–	–	<0.1
Income tax averaging provisions	7.0	8.7	14.2	13.8	9.7	11.0
Rural Financial Counselling Service	0.1	0.1	0.1	0.2	0.4	0.3
Tax deduction for conserving or conveying water	0.3	0.3	<0.1	<0.1	0.4	0.6
<i>Rural R&D measures</i>						
Fisheries R&D Corporation	17.2	17.9	18.7	20.1	21.8	22.7
Fisheries Resources Research Fund	2.1	2.0	0.3	0.4	1.0	0.5
<i>General export measures</i>						
Export Market Development Grants Scheme	0.4	0.3	0.3	0.2	0.6	0.6
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General R&D measures</i>						
Commercialisation Australia	1.7	2.1	0.7	<0.1	–	–
Cooperative Research Centres	5.1	4.8	–	–	–	1.8
CSIRO	13.9	15.0	22.3	24.4	22.8	22.9
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.1
Premium R&D tax concession	0.4	0.2	–	–	–	–
R&D tax concession	1.3	0.4	0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	0.2	0.5	2.6	0.8	2.5	3.0
R&D Tax Incentive - refundable tax offset	15.1	17.0	18.7	19.9	21.0	23.7
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.3	0.3	0.5	–
Enterprise Connect Innovation Centres	<0.1	<0.1	<0.1	–	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	<0.1	0.4	0.8	0.9
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.1	<0.1	0.1

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Small business capital gains tax rollover deferral	0.2	0.2	0.3	0.3	0.5	0.5
Small Business - Simplified depreciation rules	-0.2	0.7	-0.7	-1.0	1.5	1.5
Small business capital gains tax retirement exemption	0.2	0.2	0.3	0.3	0.3	0.3
Small business capital gains tax 50 per cent reduction	0.8	0.8	1.5	1.4	1.7	2.0
25 per cent entrepreneurs' tax offset	0.7	—	—	—	—	—
Tasmanian Freight Equalisation Scheme	4.1	3.8	4.1	4.8	5.1	5.5
Tasmanian Innovation and Investment Fund	0.7	0.2	—	—	—	—
Tasmanian Jobs and Investment Fund	—	—	—	0.3	0.6	—
<i>Total</i>	<i>71.1</i>	<i>75.3</i>	<i>83.9</i>	<i>86.7</i>	<i>91.1</i>	<i>97.9</i>
Forestry and logging						
<i>Industry-specific measures</i>						
Tasmanian Forests Agreement - Implementation Package	20.3	—	—	—	—	—
Tasmanian Forest Industry Adjustment Package	0.3	—	—	—	—	—
<i>Sector-specific measures</i>						
Carbon Farming Futures	0.8	—	—	—	—	—
Carbon Farming Initiative	—	<0.1	—	0.1	—	—
Farm Finance - concessional loans	—	<0.1	—	—	—	—
Income tax averaging provisions	3.2	4.0	3.9	3.8	3.5	2.6
Rural Financial Counselling Service	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Tax deduction for conserving or conveying water	0.3	0.3	<0.1	<0.1	<0.1	7.4
<i>Rural R&D measures</i>						
Forest and Wood Products R&D	1.8	2.2	2.0	2.3	2.8	1.6
<i>General export measures</i>						
Export Market Development Grants Scheme	—	0.2	0.2	0.2	0.1	0.1
<i>General R&D measures</i>						
CSIRO	8.5	7.8	5.4	4.8	5.9	5.9
R&D tax concession	0.1	<0.1	<0.1	—	—	—
R&D Tax Incentive - non-refundable tax offset	—	0.7	0.3	—	0.1	<0.1
R&D Tax Incentive - refundable tax offset	1.2	1.4	1.5	1.6	1.7	1.6

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	<0.1	<0.1	<0.1
Small business capital gains tax rollover deferral	1.1	1.1	2.0	1.9	2.7	3.0
Small Business - Simplified depreciation rules	-0.2	0.7	-0.6	-0.8	1.1	1.1
Small business capital gains tax retirement exemption	1.8	1.9	3.3	3.6	3.4	4.2
Small business capital gains tax 50 per cent reduction	3.0	3.0	5.2	4.9	6.0	7.0
25 per cent entrepreneurs' tax offset	0.2	–	–	–	–	–
Tasmanian Freight Equalisation Scheme	4.2	3.9	4.2	4.9	5.2	5.6
Tasmanian Jobs and Investment Fund	–	–	–	0.1	–	–
Total	46.7	27.2	27.4	27.6	32.5	40.1
Primary production support services						
<i>Sector-specific measures</i>						
Carbon Farming Futures	–	2.5	–	–	–	–
Carbon Farming Initiative	1.8	–	–	–	–	–
Income tax averaging provisions	11.2	14.0	14.4	14.0	12.3	7.8
Tax deduction for conserving or conveying water	2.2	1.9	0.1	0.1	0.5	0.4
<i>General export measures</i>						
Export Market Development Grants Scheme	0.4	0.6	0.8	0.8	0.7	0.7
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General R&D measures</i>						
Commercialisation Australia	0.4	0.3	<0.1	0.1	–	–
Cooperative Research Centres	–	–	–	–	–	0.5
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.3
R&D tax concession	0.9	0.3	0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	1.1	1.0	1.3	1.4	1.7	1.8
R&D Tax Incentive - refundable tax offset	4.9	5.5	6.0	6.4	6.8	6.1

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Enterprise Connect Innovation Centres	–	<0.1	<0.1	–	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	<0.1	0.3	<0.1	1.0
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.1	<0.1	0.1
Illawarra Region Innovation and Investment Fund	0.3	–	–	–	–	–
Small business capital gains tax rollover deferral	1.0	1.0	1.8	1.7	2.4	2.7
Small Business - Simplified depreciation rules	-0.3	1.3	-1.2	-1.8	3.0	3.0
Small business capital gains tax retirement exemption	0.5	0.5	0.8	0.9	0.9	1.1
Small business capital gains tax 50 per cent reduction	1.6	1.6	2.8	2.6	3.2	3.7
25 per cent entrepreneurs' tax offset	1.5	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.2	0.2	0.2
<i>Total</i>	27.3	30.5	27.0	26.8	31.8	29.4
Unallocated primary production						
<i>Industry-specific measures</i>						
Australian Animal Health Laboratory	7.5	7.7	7.8	7.9	8.0	8.2
Exotic Disease Preparedness Program	0.6	–	–	–	–	–
Other Exotic Disease Preparedness Program	–	–	0.6	0.6	0.6	0.6
<i>Sector-specific measures</i>						
Climate Change Adjustment Program	0.6	–	–	–	–	–
Caring for our country - Landcare	35.1	17.2	11.9	5.9	3.5	–
Drought assistance - Murray Darling Basin grants to irrigators	0.1	–	0.1	–	–	–
Drought assistance - professional advice	<0.1	–	–	–	–	–
Drought assistance - re-establishment assistance	2.2	–	–	–	–	–
Drought Concessional Loans Scheme - Administration	–	–	–	–	–	2.1
Drought Assistance Package - concessional loans	–	–	<0.1	<0.1	–	–
Drought Recovery Concessional Loans Scheme - Administration	–	–	–	–	0.2	0.2
Exceptional Circumstances - relief payments	1.6	<0.1	–	–	–	–
Environmental Stewardship Program	11.0	14.0	11.3	10.3	9.9	9.9
Farm Business Concessional Loans Scheme	–	–	–	–	3.6	5.3
Farm Co-operatives and Collaboration Pilot - Stronger Farmers, Stronger Economy	–	–	–	0.7	6.9	6.4
Farm Finance - concessional loans	–	–	<0.1	<0.1	–	–

(continued next page)

Table A.10 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Sector-specific measures (continued)</i>						
Farm Management Deposits Scheme	4.8	2.7	3.0	4.3	4.2	8.3
Leadership in Agriculture Industries Fund	–	–	–	–	–	3.8
Murray-Darling Basin Regional Economic Diversification Program	–	10.0	24.9	27.5	22.7	5.1
Rural Financial Counselling Service	0.6	0.5	0.8	0.6	0.5	0.5
Support for Small Exporters - A Competitive Agricultural Sector	–	–	1.3	2.3	2.3	1.3
Sustainable Rural Water Use and Infrastructure Program	140.5	143.7	192.3	121.6	214.7	159.1
<i>Rural R&D measures</i>						
Boosting Farm Profits Through Rural R&D - A Competitive Agricultural Sector	–	–	19.3	29.3	18.4	13.6
Rural Industries R&D Corporation	4.4	4.2	3.5	3.7	4.4	0.1
<i>General R&D measures</i>						
Cooperative Research Centres	9.3	6.9	8.8	4.6	4.8	15.3
CSIRO	15.5	15.2	18.9	15.8	12.8	12.9
<i>Other measures</i>						
Indigenous Carbon Farming Fund	0.9	1.5	0.4	0.4	0.4	–
Tasmanian Freight Equalisation Scheme	15.9	14.6	16.0	18.6	19.7	21.1
<i>Total</i>	<i>250.6</i>	<i>238.1</i>	<i>320.9</i>	<i>254.2</i>	<i>337.7</i>	<i>273.9</i>
Total outlays	757.0	812.7	878.6	803.9	894.9	874.3
Total tax concessions	488.6	507.2	516.9	583.0	738.1	1018.0
Total budgetary assistance	1245.6	1319.9	1395.5	1386.9	1633.0	1892.3

– 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.11 Australian Government budgetary assistance to mining, 2012-13 to 2017-18^a
\$ million (nominal)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Industry-specific measures</i>						
Coal Mining Abatement Support Package	1.0	24.0	14.0	–	–	–
National Low Emissions Coal Initiative	22.7	43.8	31.6	4.4	2.6	–
<i>Sector-specific measures</i>						
Capital expenditure deduction for mining	2.0	2.0	2.0	2.0	–	–
Exploration Development Incentive	–	–	21.1	13.7	13.3	–
Industry Growth Centres	–	–	0.6	4.3	7.3	–
Junior Minerals Exploration Incentive	–	–	–	–	–	15.0
<i>General export measures</i>						
Export Market Development Grants Scheme	1.2	2.0	2.4	1.8	1.8	1.8
TRADEX	0.3	0.3	0.3	0.4	0.4	0.3
<i>General R&D measures</i>						
Commercialisation Australia	1.9	2.5	0.8	–	–	–
Cooperative Research Centres	10.7	11.3	8.8	8.6	13.6	7.9
CSIRO	80.7	87.3	68.2	71.7	75.6	76.1
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.6
Premium R&D tax concession	24.2	10.1	–	–	–	–
R&D tax concession	112.7	38.3	6.8	–	–	–
R&D Tax Incentive – non-refundable tax offset	138.5	206.8	260.6	296.4	253.9	240.6
R&D Tax Incentive – refundable tax offset	87.2	98.8	108.3	115.5	121.9	100.8

(continued next page).

Table A.11 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Others measures</i>						
Advanced Manufacturing Growth Fund	–	–	–	–	–	0.2
Enterprise Connect Innovation Centres	0.2	0.2	0.1	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	<0.1	0.2	0.9	1.8
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.1	0.3	0.1	0.2
Small business capital gains tax rollover deferral	–	–	0.6	0.1	0.1	5.9
The Small Business and General Business Tax Break	<0.1	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.2	0.7	-0.7	-1.0	1.7	1.7
Small business capital gains tax 15-year asset exemption	–	–	0.3	0.1	<0.1	<0.1
Small business capital gains tax retirement exemption	0.9	0.9	0.3	0.1	0.5	0.7
Small business capital gains tax 50 per cent reduction	2.8	2.8	0.7	0.9	1.9	7.0
South East South Australia Innovation and Investment Fund	0.1	–	–	–	–	–
25 per cent entrepreneurs' tax offset	0.3	–	–	–	–	–
Tasmanian Freight Equalisation Scheme	0.2	0.2	0.2	0.3	0.3	0.3
<i>Total</i>	<i>487.5</i>	<i>532.0</i>	<i>527.2</i>	<i>519.5</i>	<i>495.8</i>	<i>461.1</i>
Total outlays	205.9	270.1	235.2	206.9	224.0	189.8
Total tax concessions	281.6	261.9	292.0	312.6	271.8	271.3
Total budgetary assistance	487.5	532.0	527.2	519.5	495.8	461.1

– 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, 2012-13 to 2017-18^a

\$ million (nominal)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Food, beverages and tobacco						
<i>Industry-specific measures</i>						
Australian Wine Industry Support	0.5	0.5	–	–	–	–
Brandy preferential excise rate	4.0	4.0	5.0	5.0	4.0	5.0
Bindaree Beef assistance	–	–	0.4	11.1	–	–
Clean Technology Investment - Food and Foundries Program	20.8	61.1	35.7	17.1	0.1	–
Export and Regional Wine Support Package	–	–	–	–	–	17.3
Wine Australia Corporation	2.7	2.9	–	–	–	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	–	0.2	–	–	–	–
Industry Growth Centres	–	–	0.6	4.3	7.3	–
Manufacturing Transition Grants Programme	–	–	0.2	1.5	0.2	–
Next Generation Manufacturing Investment Programme	–	–	–	0.6	1.3	1.3
Victorian Innovation and Investment Fund - Ford Assistance	–	–	2.0	1.8	6.0	3.6
<i>General export measures</i>						
Export Market Development Grants Scheme	6.6	4.9	7.6	6.3	7.1	7.1
TRADEX	0.5	0.5	0.5	0.6	0.6	0.5
<i>General R&D measures</i>						
Commercialisation Australia	1.4	3.0	2.3	0.1	–	–
CSIRO	3.1	2.6	11.7	10.9	12.5	12.6
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.4
Manufacturing Technology Innovation Centre	–	4.0	1.7	–	–	–
Premium R&D tax concession	4.2	1.8	–	–	–	–
R&D tax concession	18.2	6.2	1.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	22.2	53.1	57.1	39.5	30.1	26.1
R&D Tax Incentive - refundable tax offset	28.9	32.7	35.9	38.2	40.4	33.4

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	1.5	1.5	0.6	–
Advanced Manufacturing Growth Fund	–	–	–	–	–	0.2
Enterprise Connect Innovation Centres	0.6	0.7	0.7	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	<0.1	0.4	0.5	0.3
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.2	0.8	0.9	1.7
Illawarra Region Innovation and Investment Fund	0.2	–	–	–	–	–
Small business capital gains tax rollover deferral	1.5	1.6	2.9	2.4	2.3	6.1
The Small Business and General Business Tax Break	3.8	0.5	–	–	–	–
Small Business - Simplified depreciation rules	-0.3	1.2	-1.2	-1.7	3.0	3.0
Small business capital gains tax retirement exemption	3.4	3.5	3.7	3.9	3.9	3.7
Small business capital gains tax 50 per cent reduction	4.8	4.8	3.6	4.3	3.1	4.1
South East South Australia Innovation and Investment Fund	<0.1	–	–	–	–	–
25 per cent entrepreneurs' tax offset	0.3	–	–	–	–	–
Tasmanian Innovation and Investment Fund	0.5	0.3	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.8	0.6	0.2
Total	128.0	190.0	173.1	149.3	124.3	126.5
Textile, leather, clothing and footwear						
<i>Industry-specific measures</i>						
Clothing and Household Textile Building Innovative Capability Program	22.3	22.0	21.8	21.2	–	–
TCF Strategic Capability Program	7.2	7.2	2.6	–	–	–
TCF Structural Adjustment Scheme	1.3	1.3	1.0	–	–	–
TCF Small Business Program	1.8	2.5	2.3	–	–	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	0.3	4.3	1.0	0.2	–	–
Next Generation Manufacturing Investment Programme	–	–	–	0.4	1.1	1.5
<i>General export measures</i>						
Export Market Development Grants Scheme	6.4	5.6	7.6	7.2	8.3	8.3
TRADEX	3.9	3.9	4.2	4.8	4.4	3.9

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>General R&D measures</i>						
Commercialisation Australia	0.1	0.1	–	–	–	–
CSIRO	4.1	3.9	7.2	8.7	6.9	7.0
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.2
Manufacturing Technology Innovation Centre	–	1.2	–	–	–	–
Premium R&D tax concession	0.3	0.1	–	–	–	–
R&D tax concession	1.1	0.4	0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	1.2	2.7	1.4	1.8	5.0	1.5
R&D Tax Incentive - refundable tax offset	4.6	5.2	5.7	6.1	6.4	8.4
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.1	0.1	0.1	–
Enterprise Connect Innovation Centres	0.4	0.2	0.2	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.1	0.1	0.2
Small business capital gains tax rollover deferral	0.1	0.2	0.3	0.2	0.2	0.6
The Small Business and General Business Tax Break	0.4	0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.2	0.7	-0.6	-0.9	1.5	1.5
Small business capital gains tax retirement exemption	0.6	0.6	0.7	0.7	0.7	0.7
Small business capital gains tax 50 per cent reduction	0.6	0.6	0.4	0.5	0.4	0.5
25 per cent entrepreneurs' tax offset	0.7	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	<0.1	–	<0.1
<i>Total</i>	<i>57.4</i>	<i>62.6</i>	<i>56.0</i>	<i>51.3</i>	<i>35.1</i>	<i>34.2</i>
Wood and paper products						
<i>Industry-specific measures</i>						
Australian Paper's Maryville Pulp and Paper - Assistance	4.2	2.9	2.4	–	–	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	8.0	3.7	2.8	0.1	–	–
Next Generation Manufacturing Investment Programme	–	–	–	0.5	2.3	0.6
Victorian Innovation and Investment Fund – Ford Assistance	–	–	0.8	0.8	2.8	0.7

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Rural R&D measures</i>						
Forest and Wood Products R&D	0.9	0.7	1.3	1.5	1.7	2.8
<i>General export measures</i>						
Export Market Development Grants Scheme	0.3	0.3	0.2	0.2	0.3	0.3
TRADEX	0.4	0.4	0.4	0.5	0.4	0.4
<i>General R&D measures</i>						
CSIRO	0.7	0.7	0.7	0.8	0.9	0.9
Premium R&D tax concession	<0.1	<0.1	–	–	–	–
R&D tax concession	3.3	1.1	0.2	–	–	–
R&D Tax Incentive - non-refundable tax offset	2.2	4.3	3.3	5.4	9.7	6.0
R&D Tax Incentive - refundable tax offset	3.2	3.6	4.0	4.3	4.5	6.3
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.1	0.1	<0.1	–
Enterprise Connect Innovation Centres	0.4	0.4	0.4	0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	–	0.4
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.1	0.2	0.1	0.2
Small Business - Simplified depreciation rules	-0.2	0.6	-0.6	-0.8	1.5	1.5
Small business capital gains tax retirement exemption	1.7	1.7	1.8	1.9	1.9	1.8
Small business capital gains tax 50 per cent reduction	2.0	2.0	1.5	1.7	1.3	1.6
South East South Australia Innovation and Investment Fund	0.6	–	–	–	–	–
25 per cent entrepreneurs' tax offset	1.1	–	–	–	–	–
Tasmanian Innovation and Investment Fund	0.3	0.1	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.2	0.1	0.1
Total	29.1	22.7	19.4	17.2	27.6	23.7
Printing and recorded media						
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	1.9	3.1	0.5	–	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	0.1	0.2	0.6	0.7	0.8	0.8
TRADEX	0.1	0.1	0.2	0.2	0.2	0.1

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>General R&D measures</i>						
Premium R&D tax concession	0.3	0.1	–	–	–	–
R&D tax concession	0.9	0.3	0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	1.3	1.5	1.0	6.2	6.9	7.5
R&D Tax Incentive - refundable tax offset	36.1	40.8	44.8	47.8	50.4	49.2
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.2	0.2	0.2	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.1	0.2	0.1	0.1
The Small Business and General Business Tax Break	0.4	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.2	0.6	-0.6	-0.8	1.4	1.4
Small business capital gains tax retirement exemption	2.3	2.3	2.5	2.6	2.6	2.5
Small business capital gains tax 50 per cent reduction	3.5	3.5	2.6	3.1	2.3	2.9
25 per cent entrepreneurs' tax offset	0.4	–	–	–	–	–
Tasmanian Innovation and Investment Fund	<0.1	<0.1	–	–	–	–
<i>Total</i>	<i>47.4</i>	<i>52.8</i>	<i>51.9</i>	<i>60.0</i>	<i>64.6</i>	<i>64.5</i>
Petroleum, coal, chemical and rubber products						
<i>Industry-specific measures</i>						
Australian Tropical Medicine Commercialisation Grants	–	–	–	7.0	–	–
CSL - Commonwealth assistance	8.0	2.1	–	–	–	–
Clean Technology Investment - Food and Foundries Program	–	<0.1	–	–	–	–
Ethanol production subsidy	108.9	102.5	103.5	–	–	–
Product Stewardship for Oil Program	33.4	40.0	49.0	63.0	72.0	75.0
Small scale mammalian cell production facility	4.0	–	–	–	–	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	8.0	19.2	6.4	1.7	–	–
Manufacturing Transition Grants Programme	–	–	0.5	4.1	2.9	–
Next Generation Manufacturing Investment Programme	–	–	–	3.4	3.5	6.8
Victorian Innovation and Investment Fund - Ford Assistance	–	–	0.1	0.1	0.2	<0.1

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>General export measures</i>						
Export Market Development Grants Scheme	6.2	5.4	6.5	5.4	5.5	5.5
TRADEX	1.4	1.4	1.5	1.8	1.6	1.4
<i>General R&D measures</i>						
Commercialisation Australia	3.5	2.3	2.5	0.2	–	–
Cooperative Research Centres	2.6	10.0	4.1	3.7	1.2	2.5
CSIRO	33.2	44.6	33.5	34.0	26.0	26.2
Clean Technology Innovation Program	–	1.4	0.9	–	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.7
Innovation Investment Fund	1.4	1.6	1.6	1.4	1.4	2.7
Manufacturing Technology Innovation Centre	–	2.4	–	–	–	–
Premium R&D tax concession	3.9	1.6	–	–	–	–
R&D tax concession	18.1	6.2	1.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	46.1	40.4	35.6	34.5	29.2	36.0
R&D Tax Incentive - refundable tax offset	54.7	61.9	67.8	72.3	76.4	74.1
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.3	0.3	–	–
Advanced Manufacturing Growth Fund	–	–	–	–	–	0.8
Enterprise Connect Innovation Centres	0.8	0.5	0.5	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.2	1.7	2.5	2.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.1	0.4	0.3	0.5
Illawarra Region Innovation and Investment Fund	0.8	–	–	–	–	–
The Small Business and General Business Tax Break	0.6	0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.1	0.5	-0.4	-0.7	1.2	1.2
Small business capital gains tax 50 per cent reduction	1.0	1.0	0.8	0.9	0.7	0.9
25 per cent entrepreneurs' tax offset	0.4	–	–	–	–	–
Tasmanian Innovation and Investment Fund	<0.1	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.1	0.1	–
<i>Total</i>	<i>336.8</i>	<i>344.9</i>	<i>316.1</i>	<i>235.4</i>	<i>224.8</i>	<i>236.4</i>

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Non-Metallic mineral products						
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	5.7	16.8	6.2	1.0	–	–
Manufacturing Transition Grants Programme	–	–	0.5	3.7	2.0	–
Next Generation Manufacturing Investment Programme	–	–	–	0.6	1.5	–
Victorian Innovation and Investment Fund - Ford Assistance	–	–	0.4	0.4	–	0.1
<i>General export measures</i>						
Export Market Development Grants Scheme	0.3	0.6	0.6	0.9	0.5	0.5
TRADEX	0.2	0.2	0.2	0.2	0.2	0.2
<i>General R&D measures</i>						
Commercialisation Australia	0.6	0.3	1.7	0.1	–	–
CSIRO	1.9	1.8	2.4	2.9	2.7	2.8
Clean Technology Innovation Program	0.1	–	–	–	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.1
Premium R&D tax concession	<0.1	<0.1	–	–	–	–
R&D tax concession	2.9	1.0	0.2	–	–	–
R&D Tax Incentive - non-refundable tax offset	3.0	5.4	4.6	4.2	5.1	6.2
R&D Tax Incentive - refundable tax offset	7.6	8.6	9.4	10.1	10.6	11.7
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	–	–	0.1	–
Advanced Manufacturing Growth Fund	–	–	–	–	–	0.4
Enterprise Connect Innovation Centres	0.1	0.2	0.1	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	<0.1	<0.1	<0.1	<0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.2	0.1	0.1
Illawarra Region Innovation and Investment Fund	0.1	–	–	–	–	–
The Small Business and General Business Tax Break	0.7	0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.1	0.3	-0.3	-0.4	0.8	0.8
Small business capital gains tax 50 per cent reduction	0.4	0.4	0.3	0.4	0.3	0.3
South East South Australia Innovation and Investment Fund	0.2	–	–	–	–	–
25 per cent entrepreneurs' tax offset	0.4	–	–	–	–	–
Tasmanian Innovation and Investment Fund	–	<0.1	–	–	–	–
Total	24.1	35.6	26.3	24.2	23.9	23.0

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Metal and fabricated metal products						
<i>Industry-specific measures</i>						
Alcoa Portland Assistance	–	–	–	–	30.0	–
Clean Technology Investment - Food and Foundries Program	0.9	1.0	0.7	–	–	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	3.1	2.4	1.6	0.1	–	–
Manufacturing Transition Grants Programme	–	–	0.6	4.7	1.8	–
Next Generation Manufacturing Investment Programme	–	–	–	2.7	4.0	1.3
Victorian Innovation and Investment Fund - Ford Assistance	–	–	0.6	0.5	1.2	–
<i>General export measures</i>						
Export Market Development Grants Scheme	2.2	2.6	2.6	2.7	2.0	2.0
TRADEX	1.2	1.2	1.3	1.5	1.3	1.2
<i>General R&D measures</i>						
Commercialisation Australia	2.4	1.6	0.8	0.1	–	–
CSIRO	31.9	31.9	36.4	37.6	39.6	39.9
Clean Technology Innovation Program	0.1	0.2	0.1	–	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.5
Innovation Investment Fund	0.3	0.3	0.3	0.3	0.3	0.5
Premium R&D tax concession	6.8	2.8	–	–	–	–
R&D tax concession	22.5	7.6	1.3	–	–	–
R&D Tax Incentive - non-refundable tax offset	256.9	213.7	173.6	119.6	122.5	107.2
R&D Tax Incentive - refundable tax offset	28.1	31.9	34.9	37.3	39.3	34.3
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	<0.1	<0.1	0.3	–
Advanced Manufacturing Growth Fund	–	–	–	–	–	0.3
Enterprise Connect Innovation Centres	1.0	1.1	0.8	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.1	0.5	0.1	1.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.2	0.7	0.5	0.9
Illawarra Region Innovation and Investment Fund	0.1	–	–	–	–	–

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Small business capital gains tax rollover deferral	0.3	0.3	0.5	0.4	0.4	1.1
The Small Business and General Business Tax Break	1.2	0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.4	1.5	-1.4	-2.1	3.6	3.6
Small business capital gains tax retirement exemption	1.0	1.0	1.1	1.1	1.2	1.1
Small business capital gains tax 50 per cent reduction	1.3	1.3	1.0	1.1	0.8	1.1
South East South Australia Innovation and Investment Fund	0.5	–	–	–	–	–
25 per cent entrepreneurs' tax offset	1.4	–	–	–	–	–
Tasmanian Innovation and Investment Fund	0.7	0.1	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.5	0.4	<0.1
<i>Total</i>	363.5	302.7	256.9	209.4	249.4	196.2
Motor vehicles and parts						
<i>Industry-specific measures</i>						
Automotive Transformation Scheme	334.4	332.8	269.4	222.7	168.5	86.6
Automotive New Markets Initiative	2.9	6.3	3.8	0.3	–	–
Automotive Supply Chain Development Program	4.4	–	–	–	–	–
Automotive Diversification Programme	–	–	2.2	8.8	4.3	1.7
Encouraging Innovation in Advanced Manufacturing	–	–	–	–	–	1.6
Green Car Innovation Fund	47.4	6.0	0.1	–	–	–
Toyota Major Facelift Vehicle and Supplier Grant	–	–	15.5	2.1	1.0	0.7
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	0.8	1.8	0.4	–	–	–
Manufacturing Transition Grants Programme	–	–	0.1	1.1	0.3	–
Next Generation Manufacturing Investment Programme	–	–	–	1.2	1.2	1.0
Victorian Innovation and Investment Fund - Ford Assistance	–	–	1.4	1.2	1.2	0.5
<i>General export measures</i>						
Export Market Development Grants Scheme	1.0	0.9	0.9	0.7	0.4	0.4
TRADEX	25.6	25.4	27.1	31.3	28.7	25.2
<i>General R&D measures</i>						
Commercialisation Australia	0.8	0.1	<0.1	–	–	–
Cooperative Research Centres	10.7	1.1	6.1	4.4	3.6	–

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>General R&D measures (continued)</i>						
CSIRO	2.2	1.8	–	–	–	–
Premium R&D tax concession	1.0	0.4	–	–	–	–
R&D tax concession	6.9	2.3	0.4	–	–	–
R&D Tax Incentive - non-refundable tax offset	3.3	3.9	2.8	2.8	5.0	3.6
R&D Tax Incentive - refundable tax offset	16.5	18.6	20.4	21.8	23.0	20.2
<i>Other measures</i>						
Advanced Manufacturing Growth Fund	–	–	–	–	–	0.1
Enterprise Connect Innovation Centres	0.1	0.1	0.1	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	0.2	1.0
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.1	0.1	0.2
Small Business - Simplified depreciation rules	-0.1	0.2	-0.2	-0.4	0.7	0.7
Small business capital gains tax 50 per cent reduction	1.4	1.4	1.1	1.3	0.9	1.2
25 per cent entrepreneurs' tax offset	0.1	–	–	–	–	–
Total	459.3	403.3	351.8	299.5	239.2	144.7
Other transport equipment						
<i>Sector-specific measures</i>						
Next Generation Manufacturing Investment Programme	–	–	–	–	–	2.6
Victorian Innovation and Investment Fund - Ford Assistance	–	–	1.3	1.2	0.5	0.2
<i>General export measures</i>						
Export Market Development Grants Scheme	1.0	0.5	1.0	0.8	1.1	1.1
TRADEX	0.1	0.1	0.1	0.1	0.1	0.1
<i>General R&D measures</i>						
Commercialisation Australia	0.5	0.3	0.3	0.1	–	–
Cooperative Research Centres	6.0	5.3	5.3	6.7	6.6	3.1
CSIRO	3.5	3.5	4.6	4.6	3.8	3.8
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.1
Premium R&D tax concession	0.3	0.1	–	–	–	–
R&D tax concession	2.3	0.8	0.1	–	–	–
R&D Tax Incentive – non-refundable tax offset	1.0	2.6	6.7	16.1	7.2	8.2
R&D Tax Incentive - refundable tax offset	8.3	9.3	10.2	10.9	11.5	12.1

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.6	0.6	–	–
Enterprise Connect Innovation Centres	0.1	0.1	0.1	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.1	1.1	1.2	1.4
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.2	0.1	0.1
The Small Business and General Business Tax Break	0.3	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.1	0.3	-0.3	-0.4	0.7	0.7
Small business capital gains tax 50 per cent reduction	0.7	0.7	0.5	0.6	0.5	0.6
25 per cent entrepreneurs' tax offset	0.4	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	<0.1	–	0.9
<i>Total</i>	<i>24.7</i>	<i>23.9</i>	<i>30.7</i>	<i>42.7</i>	<i>33.4</i>	<i>35.1</i>
Machinery and equipment manufacturing						
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	1.3	1.9	1.6	0.2	–	–
Manufacturing Transition Grants Programme	–	–	0.5	4.0	1.4	–
Next Generation Manufacturing Investment Programme	–	–	–	1.8	7.2	5.7
Victorian Innovation and Investment Fund - Ford Assistance	–	–	1.5	1.4	0.2	–
<i>General export measures</i>						
Export Market Development Grants Scheme	8.1	8.9	11.7	10.0	9.3	9.3
TRADEX	3.1	3.1	3.3	3.8	3.5	3.1
<i>General R&D measures</i>						
Commercialisation Australia	12.6	12.4	6.2	0.9	–	–
Cooperative Research Centres	–	–	3.3	6.2	–	9.0
CSIRO	5.0	6.9	25.5	23.6	18.0	18.1
Clean Technology Innovation Program	0.8	10.3	4.3	1.1	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	1.5
Premium R&D tax concession	5.2	2.2	–	–	–	–
R&D tax concessions	24.3	8.3	1.5	–	–	–
R&D Tax Incentive – non-refundable tax offset	63.5	46.2	37.6	36.6	40.8	44.8
R&D Tax Incentive - refundable tax offset	111.5	126.2	138.4	147.5	155.8	154.1

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Advanced Manufacturing Growth Fund	–	–	–	–	–	0.7
Enterprise Connect Innovation Centres	0.9	0.9	0.7	0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.7	6.1	9.4	8.0
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.3	0.9	0.5	1.1
Illawarra Region Innovation and Investment Fund	0.1	–	–	–	–	–
The Small Business and General Business Tax Break	1.7	0.2	–	–	–	–
Small Business - Simplified depreciation rules	-0.2	0.9	-0.9	-1.3	2.4	2.4
Small business capital gains tax 50 per cent reduction	1.2	1.2	0.9	1.1	0.8	1.0
25 per cent entrepreneurs' tax offset	0.4	–	–	–	–	–
Tasmanian Innovation and Investment Fund	<0.1	<0.1	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	0.2	0.1
Total	239.7	229.7	237.1	244.0	249.4	258.9
Furniture and other manufacturing						
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	0.1	1.1	0.3	–	–	–
Manufacturing Transition Grants Programme	–	–	0.1	1.0	1.1	–
Next Generation Manufacturing Investment Programme	–	–	–	0.3	0.3	0.9
Victorian Innovation and Investment Fund - Ford Assistance	–	–	0.5	0.5	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	6.1	4.5	6.0	4.6	4.3	4.3
TRADEX	1.2	1.2	1.3	1.5	1.4	1.2
<i>General R&D measures</i>						
Commercialisation Australia	3.0	2.2	0.9	–	–	–
Cooperative Research Centres	6.8	2.1	–	–	–	5.2
CSIRO	4.5	4.4	1.9	1.5	5.8	5.8
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.2
Manufacturing Technology Innovation Centre	–	1.2	–	–	–	–
Premium R&D tax concession	0.1	0.1	–	–	–	–
R&D tax concession	1.0	0.3	0.1	–	–	–

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>General R&D measures (continued)</i>						
R&D Tax Incentive - non-refundable tax offset	1.1	2.7	0.7	0.2	0.4	0.8
R&D Tax Incentive – refundable tax offset	8.5	9.6	10.5	11.2	11.8	9.3
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.2	0.2	0.3	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.1	1.2	0.2	0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.1	0.3	0.2	0.3
Illawarra Region Innovation and Investment Fund	0.2	–	–	–	–	–
The Small Business and General Business Tax Break	0.3	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.2	0.8	-0.7	-1.1	1.8	1.8
Small business capital gains tax 50 per cent reduction	1.0	1.0	0.7	0.8	0.6	0.8
25 per cent entrepreneurs' tax offset	0.9	–	–	–	–	–
Tasmanian Innovation and Investment Fund	0.1	<0.1	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	<0.1	–
Total	35.1	31.5	22.7	22.2	28.0	30.9
Unallocated manufacturing						
<i>Industry-specific measures</i>						
Industry Skilling Program Enhancement	0.2	0.2	0.2	–	0.7	1.5
New Aircraft Combat Capability	2.0	2.0	0.9	2.8	2.7	2.8
Priority Industry Capability Innovation Program	10.4	–	–	–	–	–
Skilling Australian Defence Industry	16.9	12.2	6.6	5.5	–	–
<i>Sector-specific measures</i>						
Industry Growth Centres	–	–	2.1	15.0	21.6	–
Victorian Innovation and Investment Fund - Ford Assistance	–	–	–	–	–	-0.6
<i>General export measures</i>						
Duty Drawback	69.1	62.7	86.4	161.3	146.9	144.3
<i>General R&D measures</i>						
Centre for Defence Industry Capability Program	–	–	–	–	0.4	1.4
Cooperative Research Centres	–	–	3.2	5.6	12.6	9.4
CSIRO	12.3	12.0	10.8	11.7	15.1	15.2
Defence Materials Technology Centre	6.8	6.8	4.5	6.1	7.0	6.7
Manufacturing Technology Innovation Centre	2.9	1.2	2.6	–	–	–

(continued next page)

Table A.12 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Enterprise Connect Innovation Centres	<0.1	–	–	–	–	–
Illawarra Region Innovation and Investment Fund	–	–	–	0.8	–	–
Melbourne's North Innovation and Investment Fund	–	18.8	6.2	–	–	–
Small business capital gains tax 15-year asset exemption	4.6	5.3	5.2	7.2	7.3	6.7
Tasmanian Freight Equalisation Scheme	78.0	71.4	78.5	91.1	96.6	103.4
Tasmanian Jobs and Growth Package	–	5.1	30.9	19.4	13.8	7.1
Tasmanian Jobs and Investment Fund	–	–	–	0.5	–	0.4
<i>Total</i>	<i>203.2</i>	<i>197.9</i>	<i>238.0</i>	<i>327.1</i>	<i>324.6</i>	<i>298.4</i>
Total outlays	1264.2	1329.9	1293.3	1177.3	1118.5	980.5
Total tax concessions	684.1	567.7	486.6	505.1	505.8	492.1
Total budgetary assistance	1948.3	1897.6	1779.9	1682.4	1624.3	1472.6

– 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, 2012-13 to 2017-18^a

\$ million (nominal)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Electricity, gas, water and waste services						
<i>Industry-specific measures</i>						
Carbon Capture and Storage Flagships Program	13.8	27.1	56.2	18.1	26.2	32.0
Diamond Energy Assistance	–	0.3	0.3	–	–	–
Energy Brix Australia Corporation	9.1	36.0	61.4	–	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	0.3	0.4	0.4	0.7	0.7	0.7
TRADEX	0.1	0.1	0.1	0.1	0.1	0.1
<i>General R&D measures</i>						
Commercialisation Australia	0.4	2.3	0.9	0.3	–	–
CSIRO	52.0	39.7	50.4	47.8	43.9	44.2
Clean Technology Innovation Program	0.2	4.3	0.3	0.3	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.3
Innovation Investment Fund	3.3	3.9	3.8	3.3	3.4	6.4
Premium R&D tax concession	3.7	1.5	–	–	–	–
R&D tax concession	8.6	2.9	0.5	–	–	–
R&D Tax Incentive - non-refundable tax offset	23.2	21.4	14.8	15.4	20.0	17.6
R&D Tax Incentive - refundable tax offset	27.4	31.0	34.0	36.2	38.3	29.1
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.2	0.1	0.2	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	<0.1	0.1	1.2	0.2
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.2	<0.1	<0.1
Illawarra Region Innovation and Investment Fund	1.2	–	–	–	–	–
Small business capital gains tax rollover deferral	–	–	0.8	1.8	0.5	0.2
Small Business - Simplified depreciation rules	-0.1	0.5	-0.5	-0.8	1.4	1.4
Small business capital gains tax 15-year asset exemption	–	–	0.3	0.7	0.7	3.1
Small business capital gains tax retirement exemption	–	–	0.9	0.9	1.3	3.9

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Small business capital gains tax 50 per cent reduction	0.5	0.5	1.8	2.4	2.5	2.9
South East South Australia Innovation and Investment Fund	0.1	—	—	—	—	—
25 per cent entrepreneurs' tax offset	0.4	—	—	—	—	—
Tasmanian Jobs and Investment Fund	—	—	—	—	1.2	—
Total	144.1	172.0	226.6	127.6	141.4	142.1
Construction						
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	4.0	1.8	0.6	—	—	—
<i>General export measures</i>						
Export Market Development Grants Scheme	0.3	0.9	1.5	1.1	0.8	0.8
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General R&D measures</i>						
Commercialisation Australia	0.3	2.9	1.8	0.2	—	—
Cooperative Research Centres	2.0	2.8	8.6	1.7	4.5	6.3
CSIRO	2.6	3.0	—	—	—	—
Clean Technology Innovation Program	—	0.1	<0.1	—	—	—
Entrepreneurs' Programme - Innovation Connections	—	—	—	—	—	0.1
Premium R&D tax concession	4.1	1.7	—	—	—	—
R&D tax concession	18.4	6.2	1.1	—	—	—
R&D Tax Incentive – non-refundable tax offset	30.5	31.5	40.1	39.8	33.5	17.5
R&D Tax Incentive - refundable tax offset	47.0	53.2	58.3	62.2	65.7	52.7
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	0.1	0.1	—	—
Enterprise Connect Innovation Centres	0.5	0.5	0.7	<0.1	—	—
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	<0.1	0.1	0.8	1.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	0.2	0.9	0.8	0.9
Incubator Support Programme	—	—	—	—	—	<0.1

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Small business capital gains tax rollover deferral	1.5	1.5	6.3	4.3	3.5	7.5
The Small Business and General Business Tax Break	20.2	2.4	–	–	–	–
Small Business - Simplified depreciation rules	-9.0	32.5	-32.7	-49.5	83.0	83.0
Small business capital gains tax 15-year asset exemption	3.0	3.4	3.1	7.5	7.2	11.1
Small business capital gains tax retirement exemption	6.4	6.6	10.2	12.7	10.8	9.7
Small business capital gains tax 50 per cent reduction	16.0	16.0	16.3	17.8	9.7	17.7
South East South Australia Innovation and Investment Fund	<0.1	–	–	–	–	–
25 per cent entrepreneurs' tax offset	52.0	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.1	<0.1	–
<i>Total</i>	<i>199.8</i>	<i>167.0</i>	<i>116.1</i>	<i>99.0</i>	<i>220.2</i>	<i>208.3</i>
Wholesale trade						
<i>Industry-specific measures</i>						
TCF Small Business Program	<0.1	–	–	–	–	–
<i>Sector-specific measures</i>						
Next Generation Manufacturing Investment Programme	–	–	–	–	0.5	0.4
Victorian Innovation and Investment Fund - Ford Assistance	–	–	0.2	0.2	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	10.6	8.6	10.9	10.8	11.0	11.0
TRADEX	1.9	1.9	2.0	2.3	2.1	1.9
<i>General R&D measures</i>						
Commercialisation Australia	0.8	0.5	0.1	–	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.2
Premium R&D tax concession	8.6	3.6	–	–	–	–
R&D tax concession	41.0	13.9	2.5	–	–	–
R&D Tax Incentive – non-refundable tax offset	27.1	59.2	76.2	47.8	47.3	54.8
R&D Tax Incentive - refundable tax offset	55.8	63.2	69.3	73.8	78.0	74.4
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.2	0.2	<0.1	–
Enterprise Connect Innovation Centres	0.3	0.3	0.3	<0.1	–	–

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	1.3	0.9
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	0.1	0.3	1.2	0.5
Small business capital gains tax rollover deferral	—	—	5.0	2.7	2.6	3.9
The Small Business and General Business Tax Break	33.7	4.0	—	—	—	—
Small Business - Simplified depreciation rules	-1.7	6.3	-6.2	-9.2	16.9	16.9
Small business capital gains tax 15-year asset exemption	3.3	3.8	3.3	5.4	6.2	8.0
Small business capital gains tax retirement exemption	7.8	8.0	10.0	11.7	9.5	10.6
Small business capital gains tax 50 per cent reduction	13.5	13.5	13.8	14.8	9.6	13.0
South East South Australia Innovation and Investment Fund	1.5	—	—	—	—	—
25 per cent entrepreneurs' tax offset	1.1	—	—	—	—	—
Tasmanian Jobs and Investment Fund	—	—	—	—	0.3	—
Total	205.1	186.7	187.6	160.7	186.5	196.5
Retail trade						
<i>Industry-specific measures</i>						
LPG Vehicle Scheme	5.2	—	—	—	—	—
TCF Small Business Program	<0.1	—	—	—	—	—
<i>Sector-specific measures</i>						
Victorian Innovation and Investment Fund - Ford Assistance	—	—	0.7	0.6	1.8	—
<i>General export measures</i>						
Export Market Development Grants Scheme	1.0	1.6	2.6	3.4	5.3	5.3
TRADEX	2.4	2.4	2.6	2.9	2.7	2.4
<i>General R&D measures</i>						
Commercialisation Australia	0.6	0.2	0.6	0.4	—	—
Entrepreneurs' Programme - Innovation Connections	—	—	—	—	—	<0.1
Premium R&D tax concession	0.9	0.4	—	—	—	—
R&D tax concession	6.2	2.1	0.4	—	—	—
R&D Tax Incentive - non-refundable tax offset	22.4	11.0	8.0	8.4	8.2	8.3
R&D Tax Incentive - refundable tax offset	24.3	27.5	30.2	32.2	34.0	31.2

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.1	0.2	0.1	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.1	0.6	0.2	0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.1	0.5	0.2
Small business capital gains tax rollover deferral	6.6	6.9	15.4	10.7	8.8	15.8
The Small Business and General Business Tax Break	9.2	1.1	–	–	–	–
Small Business - Simplified depreciation rules	-3.3	11.8	-11.5	-16.7	29.2	29.2
Small business capital gains tax 15-year asset exemption	2.3	2.6	11.7	9.9	9.8	10.5
Small business capital gains tax retirement exemption	17.5	17.9	20.5	20.2	17.4	19.9
Small business capital gains tax 50 per cent reduction	31.2	31.2	34.5	36.6	28.9	42.7
South East South Australia Innovation and Investment Fund	0.2	–	–	–	–	–
25 per cent entrepreneurs' tax offset	3.1	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.1	0.1	–
<i>Total</i>	<i>129.9</i>	<i>116.9</i>	<i>115.7</i>	<i>109.6</i>	<i>146.9</i>	<i>165.4</i>
Accommodation and food services						
<i>General export measures</i>						
Export Market Development Grants Scheme	3.3	2.8	4.3	4.1	3.4	3.4
<i>General R&D measures</i>						
Commercialisation Australia	<0.1	–	–	–	–	–
R&D tax concession	0.3	0.1	<0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	3.3	1.4	0.8	0.6	0.8	1.0
R&D Tax Incentive - refundable tax offset	3.0	3.4	3.7	4.0	4.2	6.3
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	0.2	0.2	<0.1	–
Enterprise Connect Innovation Centres	0.3	0.3	0.2	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.1	0.1	0.1
Small business capital gains tax rollover deferral	12.1	12.7	13.6	9.2	11.6	16.6
The Small Business and General Business Tax Break	1.6	0.2	–	–	–	–

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Small Business - Simplified depreciation rules	-2.1	7.8	-8.0	-12.2	20.8	20.8
Small business capital gains tax 15-year asset exemption	0.9	1.0	10.4	9.7	6.4	10.3
Small business capital gains tax retirement exemption	13.4	13.7	18.7	17.2	14.6	17.7
Small business capital gains tax 50 per cent reduction	34.1	34.1	34.8	33.9	37.5	37.5
25 per cent entrepreneurs' tax offset	0.8	—	—	—	—	—
Tasmanian Jobs and Investment Fund	—	—	—	0.8	0.3	1.3
Total	70.9	77.6	78.7	67.5	99.8	115.1
Transport, postal and warehousing						
<i>Industry-specific measures</i>						
Payment scheme for Airservices Australia's en route charges	1.0	1.0	1.3	1.3	1.5	1.6
Bass Strait Passenger Vehicle Equalisation	34.5	37.5	40.9	44.1	47.8	49.7
<i>General export measures</i>						
Export Market Development Grants Scheme	2.6	2.1	3.0	2.3	1.9	1.9
TRADEX	0.3	0.3	0.3	0.4	0.3	0.3
<i>General R&D measures</i>						
Commercialisation Australia	0.6	<0.1	<0.1	—	—	—
CSIRO	1.4	3.5	4.8	4.7	12.6	12.7
Premium R&D tax concession	3.8	1.6	—	—	—	—
R&D tax concession	10.2	3.5	0.6	—	—	—
R&D Tax Incentive - non-refundable tax offset	51.7	42.1	24.7	18.3	11.9	6.4
R&D Tax Incentive - refundable tax offset	9.7	11.0	12.0	12.8	13.5	13.6
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	0.4	0.4	—	—
Enterprise Connect Innovation Centres	0.1	0.3	0.5	0.1	—	—
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	0.1	0.3
Entrepreneurs Infrastructure Programme – Business Management Skills	—	—	0.2	0.6	0.2	0.3

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Illawarra Region Innovation and Investment Fund	<0.1	–	–	–	–	–
Small business capital gains tax rollover deferral	–	–	3.3	2.5	2.0	3.9
The Small Business and General Business Tax Break	43.9	5.3	–	–	–	–
Small Business - Simplified depreciation rules	-3.4	12.3	-12.3	-18.7	32.2	32.2
Small business capital gains tax 15-year asset exemption	1.9	2.2	3.5	6.5	5.9	3.1
Small business capital gains tax retirement exemption	1.4	1.4	7.0	6.2	7.1	7.1
Small business capital gains tax 50 per cent reduction	8.3	8.3	9.6	9.6	11.0	12.4
25 per cent entrepreneurs' tax offset	13.3	–	–	–	–	–
Tasmanian Innovation and Investment Fund	0.2	<0.1	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.3	0.4	0.4
<i>Total</i>	<i>181.5</i>	<i>132.3</i>	<i>99.9</i>	<i>91.1</i>	<i>148.4</i>	<i>145.8</i>
Information, media and telecommunications						
<i>Industry-specific measures</i>						
Community Broadcasting Program	14.9	18.2	29.1	16.7	15.5	21.6
Data Retention Industry Grants Programme	–	–	–	–	120.1	18.3
Rebate for broadcasting licence fees	155.0	–	–	–	–	–
Regional Equalisation Plan	1.0	4.7	4.6	1.0	1.0	–
Vodafone Hutchison Australia - Tasmania Call Centre Expansion	4.0	–	–	–	–	–
<i>Sector-specific measures</i>						
Industry Growth Centres	–	–	–	–	4.2	–
<i>General export measures</i>						
Export Market Development Grants Scheme	18.2	17.0	17.3	18.5	17.0	17.1
<i>General R&D measures</i>						
Commercialisation Australia	9.3	11.1	8.2	1.0	–	–
Cooperative Research Centres	4.4	4.4	–	–	–	–
CSIRO	17.0	21.9	23.1	24.9	56.0	56.4
Clean Technology Innovation Program	0.8	1.1	0.1	–	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.2
ICT centre of excellence	23.8	22.5	21.4	21.0	–	–
Innovation Investment Fund	0.1	0.2	0.2	0.1	0.1	0.3
Premium R&D tax concession	7.9	3.3	–	–	–	–
R&D tax concession	17.5	5.9	1.0	–	–	–
R&D Tax Incentive - non-refundable tax offset	32.3	41.9	22.6	28.8	32.5	31.3
R&D Tax Incentive - refundable tax offset	83.0	94.0	103.1	109.9	116.1	101.6

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.1	0.1	0.2	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.6	5.8	5.6	5.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.1	0.4	<0.1	0.3
Illawarra Region Innovation and Investment Fund	0.1	–	–	–	–	–
Small business capital gains tax rollover deferral	–	–	0.4	1.3	1.5	0.2
The Small Business and General Business Tax Break	1.2	0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.5	1.8	-1.8	-2.8	4.7	4.7
Small business capital gains tax 15-year asset exemption	–	–	0.1	1.0	0.3	0.2
Small business capital gains tax retirement exemption	–	–	0.8	1.1	1.2	1.4
Small business capital gains tax 50 per cent reduction	1.5	1.5	1.9	3.9	4.9	1.7
25 per cent entrepreneurs' tax offset	3.0	–	–	–	–	–
Tasmanian Economic Diversification Projects - OfficeMax	–	0.6	–	–	–	–
<i>Total</i>	394.6	250.4	233.1	232.8	380.7	260.4
Financial and insurance services						
<i>Industry-specific measures</i>						
High Costs Claims Scheme	33.4	30.1	47.2	49.9	47.7	58.6
Offshore banking unit tax concession	185.0	200.0	240.0	285.0	315.0	295.0
Venture capital limited partnerships	11.5	11.5	11.5	11.5	11.5	11.5
<i>General export measures</i>						
Export Market Development Grants Scheme	0.8	1.1	1.2	1.0	1.2	1.2
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General R&D measures</i>						
Commercialisation Australia	1.1	1.2	0.5	0.1	–	–
CSIRO	–	2.3	1.8	1.8	3.1	3.2
Innovation Investment Fund	8.1	9.5	9.2	8.0	8.3	15.8
Premium R&D tax concession	19.6	8.2	–	–	–	–
R&D tax concession	81.5	27.9	4.9	–	–	–
R&D Tax Incentive - non-refundable tax offset	177.6	190.5	122.1	64.9	41.3	28.5
R&D Tax Incentive - refundable tax offset	43.6	49.4	54.2	57.7	61.0	64.5

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Concessional rate of withholding tax	140.0	295.0	220.0	300.0	305.0	275.0
Enterprise Connect Innovation Centres	<0.1	–	<0.1	–	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	<0.1	0.4	0.3	<0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	<0.1	0.1	–
Pooled development funds	0.5	–	–	–	–	–
Small business capital gains tax rollover deferral	13.1	13.8	31.5	19.1	13.3	31.6
The Small Business and General Business Tax Break	63.4	7.6	–	–	–	–
Small Business - Simplified depreciation rules	-4.5	16.9	-17.6	-27.2	44.9	44.9
Small business capital gains tax 15-year asset exemption	5.8	6.7	37.2	80.3	13.1	16.4
Small business capital gains tax retirement exemption	28.4	29.2	76.3	92.4	25.2	26.9
Small business capital gains tax 50 per cent reduction	26.5	26.5	92.0	101.5	36.5	43.8
25 per cent entrepreneurs' tax offset	1.2	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	0.4	–
Total	836.8	927.3	932.1	1046.5	927.8	917.0
Property, professional and administrative services						
<i>Industry-specific measures</i>						
TCF Small Business Program	0.6	0.3	0.3	–	–	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	0.2	–	–	–	–	–
Industry Growth Centres	–	–	–	–	–	12.3
Manufacturing Transition Grants Programme	–	–	0.2	1.3	0.8	–
Next Generation Manufacturing Investment Programme	–	–	–	1.8	0.4	2.3
Victorian Innovation and Investment Fund - Ford Assistance	–	–	0.2	0.2	–	–
<i>General export measures</i>						
Export Market Development Grants Scheme	25.7	22.5	26.9	25.1	24.9	24.9
TRADEX	0.2	0.2	0.2	0.3	0.3	0.2
<i>General R&D measures</i>						
Commercialisation Australia	18.7	16.3	5.9	1.2	–	–
Cooperative Research Centres	12.4	7.9	7.8	11.5	21.6	22.7
CSIRO	1.8	1.9	–	–	–	–
Clean Technology Innovation Program	0.3	2.2	0.4	–	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	2.7

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>General R&D measures (continued)</i>						
Innovation Investment Fund	3.6	4.1	4.0	3.5	3.6	6.9
Manufacturing Technology Innovation Centre	—	2.0	—	—	—	—
National Enabling Technologies Strategy	0.5	—	—	—	—	—
Premium R&D tax concession	23.2	9.6	—	—	—	—
R&D tax concession	87.5	29.7	5.2	—	—	—
R&D Tax Incentive - non-refundable tax offset	148.9	124.0	107.6	89.6	103.1	102.7
R&D Tax Incentive - refundable tax offset	727.5	823.6	902.9	962.8	1016.7	1004.6
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	0.1	0.1	—	—
Enterprise Connect Innovation Centres	2.4	3.3	1.7	0.1	—	—
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	1.4	12.2	20.7	16.4
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	0.5	1.8	2.0	1.7
Illawarra Region Innovation and Investment Fund	0.8	—	—	—	—	—
Incubator Support Programme	—	—	—	—	—	2.4
Small business capital gains tax rollover deferral	19.5	20.4	39.9	35.4	31.3	71.1
The Small Business and General Business Tax Break	27.1	3.3	—	—	—	—
Small Business - Simplified depreciation rules	-14.8	54.3	-54.9	-82.5	135.7	135.7
Small business capital gains tax 15-year asset exemption	13.1	15.0	40.1	34.8	30.2	72.8
Small business capital gains tax retirement exemption	39.0	40.0	82.5	81.4	61.1	85.3
Small business capital gains tax 50 per cent reduction	67.6	67.6	113.1	113.2	88.3	147.4
South East South Australia Innovation and Investment Fund	0.1	—	—	—	—	—
25 per cent entrepreneurs' tax offset	44.4	—	—	—	—	—
Tasmanian Innovation and Investment Fund	—	<0.1	—	—	—	—
Tasmanian Jobs and Investment Fund	—	—	—	—	0.5	—
Total	1250.1	1248.5	1286.0	1293.6	1541.1	1712.2
Public administration and safety						
<i>Sector-specific measures</i>						
Next Generation Manufacturing Investment Programme	—	—	—	0.5	1.5	—

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>General export measures</i>						
Export Market Development Grants Scheme	0.2	0.1	0.2	0.2	0.2	0.2
TRADEX	0.1	0.1	0.1	0.1	0.1	0.1
<i>General R&D measures</i>						
Commercialisation Australia	0.3	0.1	0.2	0.1	–	–
CSIRO	5.1	3.7	9.3	9.5	11.7	11.7
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	<0.1
Premium R&D tax concession	0.3	0.1	–	–	–	–
R&D tax concession	0.7	0.2	<0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	2.5	2.2	1.0	2.2	2.1	1.2
R&D Tax Incentive - refundable tax offset	4.9	5.6	6.1	6.5	6.9	5.2
<i>Other measures</i>						
Enterprise Connect Innovation Centres	<0.1	<0.1	–	–	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	0.4	0.4
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	<0.1
Incubator Support Programme	–	–	–	–	–	<0.1
Small business capital gains tax rollover deferral	–	–	0.2	0.1	0.1	0.3
The Small Business and General Business Tax Break	<0.1	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.2	0.7	-0.7	-1.0	1.7	1.7
Small business capital gains tax 15-year asset exemption	–	–	<0.1	0.2	0.6	1.3
Small business capital gains tax retirement exemption	–	–	0.4	0.6	0.5	0.3
Small business capital gains tax 50 per cent reduction	1.8	1.8	0.8	0.9	0.8	1.3
25 per cent entrepreneurs' tax offset	1.1	–	–	–	–	–
Total	16.8	14.7	17.9	19.9	26.6	23.8
Education and training						
<i>General export measures</i>						
Export Market Development Grants Scheme	7.6	7.0	8.0	7.4	7.0	7.0
<i>General R&D measures</i>						
Commercialisation Australia	1.2	0.2	0.5	<0.1	–	–
CSIRO	3.1	3.1	1.5	1.2	2.3	2.3
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	2.1
Premium R&D tax concession	0.1	<0.1	–	–	–	–
R&D tax concession	0.7	0.2	<0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	1.6	0.3	1.1	0.2	0.2	0.2
R&D Tax Incentive - refundable tax offset	10.0	11.3	12.4	13.2	14.0	11.7

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.1	0.1	0.1	0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.1	0.7	1.2	0.8
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	<0.1	0.1	<0.1
Incubator Support Programme	–	–	–	–	–	0.5
Small business capital gains tax rollover deferral	–	–	2.3	1.6	0.7	1.0
The Small Business and General Business Tax Break	0.9	0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.7	2.5	-2.6	-3.9	6.6	6.6
Small business capital gains tax 15-year asset exemption	0.2	0.2	1.2	0.5	0.3	0.6
Small business capital gains tax retirement exemption	–	–	2.6	2.0	1.2	1.8
Small business capital gains tax 50 per cent reduction	4.6	4.6	4.0	4.1	3.0	3.3
South East South Australia Innovation and Investment Fund	0.1	–	–	–	–	–
25 per cent entrepreneurs' tax offset	6.2	–	–	–	–	–
Tasmanian Freight Equalisation Scheme	0.1	0.1	0.1	0.1	0.1	0.1
Tasmanian Jobs and Investment Fund	–	–	–	0.1	0.3	0.3
Total	35.6	29.9	31.2	27.5	36.8	38.4
Health care and social assistance						
<i>Industry-specific measures</i>						
Premium Support Scheme	9.3	9.3	7.8	8.0	7.6	8.2
<i>General export measures</i>						
Export Market Development Grants Scheme	1.2	2.2	2.2	1.6	2.0	2.0
TRADEX	0.2	0.2	0.2	0.2	0.2	0.2
<i>General R&D measures</i>						
Commercialisation Australia	1.5	3.2	2.9	0.8	–	–
Cooperative Research Centres	35.4	43.8	38.0	37.4	32.0	31.1
CSIRO	53.4	55.4	33.4	32.5	33.8	34.0
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	0.3
Innovation Investment Fund	1.9	2.2	2.2	1.9	1.9	3.7
Premium R&D tax concession	0.3	0.1	–	–	–	–
R&D tax concession	1.9	0.6	0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	2.3	4.4	4.2	3.0	3.3	3.2
R&D Tax Incentive - refundable tax offset	18.9	21.4	23.5	25.0	26.4	26.0

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Advanced Manufacturing Growth Fund	–	–	–	–	–	0.1
Enterprise Connect Innovation Centres	0.1	<0.1	<0.1	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.2	2.0	1.0	1.5
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	<0.1	0.1	0.2
Illawarra Region Innovation and Investment Fund	2.0	–	–	–	–	–
Small business capital gains tax rollover deferral	1.0	1.0	14.9	6.4	9.1	14.1
The Small Business and General Business Tax Break	4.8	0.6	–	–	–	–
Small Business - Simplified depreciation rules	-2.8	10.8	-11.3	-17.3	28.9	28.9
Small business capital gains tax 15-year asset exemption	2.8	3.2	8.4	9.6	10.0	10.5
Small business capital gains tax retirement exemption	18.7	19.1	26.5	26.7	21.2	25.8
Small business capital gains tax 50 per cent reduction	20.4	20.4	38.9	44.7	29.1	45.7
25 per cent entrepreneurs' tax offset	11.6	–	–	–	–	–
<i>Total</i>	<i>184.7</i>	<i>198.1</i>	<i>192.1</i>	<i>182.4</i>	<i>206.5</i>	<i>235.4</i>
Arts and recreation services						
<i>Industry-specific measures</i>						
Funding for major films - Alien: Covenant and Thor: Ragnarok	–	–	–	–	17.6	29.7
Funding for major films - Pirates of the Caribbean: Dead Men tell No Tales	–	–	–	–	21.6	–
Tax incentives for film investment	-14.0	-11.0	-9.0	-7.0	-6.0	–
Exemption of film tax offset payments	55.0	61.0	69.0	50.0	62.0	58.0
Indigenous Broadcasting Program	15.4	16.0	–	–	–	–
Film industry offsets	226.0	252.0	143.0	325.2	279.7	281.8
Screen Australia	98.1	101.1	89.9	84.4	84.4	81.8
<i>General export measures</i>						
Export Market Development Grants Scheme	4.1	5.1	7.1	6.5	6.9	6.9
<i>General R&D measures</i>						
Commercialisation Australia	0.1	0.1	–	–	–	–
CSIRO	1.1	1.3	1.3	1.3	1.3	1.3
Premium R&D tax concession	0.1	<0.1	–	–	–	–
R&D tax concession	1.2	0.4	0.1	–	–	–
R&D Tax Incentive - non-refundable tax offset	1.3	2.6	5.3	8.1	7.7	8.1
R&D Tax Incentive - refundable tax offset	10.9	12.3	13.5	14.4	15.2	20.1

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.1	0.2	0.1	<0.1	–	–
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.1	0.2	0.1	<0.1
Illawarra Region Innovation and Investment Fund	1.8	–	–	–	–	–
Small business capital gains tax rollover deferral	–	–	1.3	1.3	1.3	1.6
The Small Business and General Business Tax Break	0.2	<0.1	–	–	–	–
Small Business - Simplified depreciation rules	-0.7	2.6	-2.6	-3.8	6.1	6.1
Small business capital gains tax 15-year asset exemption	–	–	2.6	5.9	1.1	2.3
Small business capital gains tax retirement exemption	–	–	1.8	2.3	2.2	2.0
Small business capital gains tax 50 per cent reduction	4.9	4.9	3.9	6.7	3.8	7.2
25 per cent entrepreneurs' tax offset	8.2	–	–	–	–	–
Tasmanian Freight Equalisation Scheme	0.2	0.2	0.2	0.2	0.2	0.2
Tasmanian Jobs and Investment Fund	–	–	–	–	0.2	0.2
Total	414.0	448.9	327.5	495.7	505.5	507.5
Other services						
<i>Sector-specific measures</i>						
Industry Growth Centres	–	–	–	–	–	54.0
<i>General export measures</i>						
Export Market Development Grants Scheme	1.6	2.3	3.2	3.6	3.5	3.5
<i>General R&D measures</i>						
Enterprise Connect Innovation Centres	–	–	–	–	–	<0.1
Premium R&D tax concession	0.7	0.3	–	–	–	–
R&D tax concession	3.2	1.1	0.2	–	–	–
R&D Tax Incentive - non-refundable tax offset	7.6	8.9	4.6	0.8	1.2	0.7
R&D Tax Incentive - refundable tax offset	11.8	13.4	14.7	15.7	16.5	16.5
<i>Other measures</i>						
Enterprise Connect Innovation Centres	12.7	9.3	0.1	–	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.1	0.8	0.2	0.3
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	<0.1	0.1	0.2	0.4
Incubator Support Programme	–	–	–	–	–	0.4

(continued next page)

Table A.13 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Small business capital gains tax rollover deferral	–	–	3.3	3.1	3.4	4.3
The Small Business and General Business Tax Break	5.7	0.7	–	–	–	–
Small Business - Simplified depreciation rules	-2.4	8.6	-8.7	-13.1	21.3	21.3
Small business capital gains tax 15-year asset exemption	1.5	1.7	2.6	5.7	4.6	6.3
Small business capital gains tax retirement exemption	1.8	1.9	6.0	8.5	6.4	7.5
Small business capital gains tax 50 per cent reduction	8.8	8.8	11.1	12.4	10.7	14.6
South East South Australia Innovation and Investment Fund	0.3	–	–	–	–	–
25 per cent entrepreneurs' tax offset	13.6	–	–	–	–	–
Tasmanian Innovation and Investment Fund	<0.1	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.1	0.2	–
<i>Total</i>	66.9	57.0	37.3	37.6	68.2	129.9
Unallocated services						
<i>General export measures</i>						
Tourism Australia	129.7	130.4	138.9	144.0	140.3	129.3
<i>General R&D measures</i>						
CSIRO	1.2	1.3	–	–	2.2	2.2
<i>Other measures</i>						
Clean Business Australia - Green Building Fund	24.7	6.0	–	–	–	–
Tourism Industry Regional Development	7.0	9.9	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	0.1	–	–
TQUAL Grants	8.3	9.3	–	–	–	–
<i>Total</i>	170.8	156.8	138.9	144.1	142.4	131.5
Total outlays	1864.7	2030.3	2154.0	2130.9	2416.5	2348.0
Total tax concessions	2436.8	2153.7	1866.7	2004.9	2362.5	2581.1
Total budgetary assistance	4301.5	4184.1	4020.7	4135.8	4779.0	4929.0

– 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.

Source: Commission estimates.

**Table A.14 Australian Government budgetary assistance,
unallocated other, 2012-13 to 2017-18^{a,b}**
\$ million (nominal)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Industry-specific measures</i>						
Asian Business Engagement Plan	–	1.8	1.4	0.6	0.2	–
Australian Space Science Program	12.7	–	–	–	–	–
Clean Technology Investment - Food and Foundries Program	–	–	0.4	–	–	–
National Urban Water and Desalination Plan	64.2	18.7	23.2	1.0	–	–
National Energy Efficiency Initiative - Smart Grid, Smart City	9.1	–	–	–	–	–
TCF Small Business Program	<0.1	–	–	–	–	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	–	–	1.1	–	–	–
Manufacturing Transition Grants Programme	–	–	–	–	1.1	–
Next Generation Manufacturing Investment Programme	–	–	–	–	3.6	–
<i>General export measures</i>						
Austrade	101.5	112.1	115.7	136.5	123.5	120.3
<i>General investment measures</i>						
Regional headquarters program	0.5	–	–	–	–	–
<i>General R&D measures</i>						
Australian Renewable Energy Agency	59.6	261.9	244.4	114.6	192.1	209.1
Commercialisation Australia	–	0.2	–	–	–	–
Clean Technology Innovation Program	–	–	0.9	–	–	–
Entrepreneurs' Programme - Innovation Connections	–	–	–	–	–	3.0
Innovation Investment Follow-on Fund	2.2	0.1	0.1	–	–	–
Manufacturing Technology Innovation Centre	0.8	–	–	–	–	–
National Enabling Technologies Strategy	0.3	–	–	–	–	–
R&D Tax Incentive – non-refundable tax offset	10.9	23.2	0.2	0.3	–	–
R&D Tax Incentive – refundable tax offset	0.1	0.1	0.1	0.1	0.1	0.6
R&D tax offset payments - exemption	-200.0	-135.0	-85.0	-50.0	-25.0	–
<i>Other measures</i>						
Asialink Business	–	–	–	3.4	3.5	3.3
Australian Government Innovation and Investment Fund – Tasmania	–	–	–	–	0.7	–
Asia Marketing Fund	8.5	12.5	13.5	14.0	14.0	14.0
Asia Pacific Partnership on Clean Development and Climate	0.2	–	–	–	–	–
Concessional taxation for small business - Lower company tax rate	–	–	–	200.0	1300.0	1400.0

(continued next page)

Table A.14 (continued)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<i>Other measures (continued)</i>						
Digital Enterprise Program	1.9	5.2	0.3	–	–	–
Enterprise Connect Innovation Centres	–	–	6.7	0.1	–	–
Energy Efficiency Information Grants	20.8	9.5	–	–	–	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	0.1	1.1	9.5	–
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	0.3	1.2	<0.1	0.1
Illawarra Region Innovation and Investment Fund	0.1	–	–	–	–	–
Small Business Advisory Services Program	8.0	7.1	–	–	–	–
Small business capital gains tax rollover deferral	131.1	137.6	52.8	123.8	154.2	157.4
The Small Business and General Business Tax Break	7.6	0.9	–	–	–	–
Small Business - Simplified depreciation rules	-1.2	4.0	-2.9	-4.1	6.2	6.2
Small business capital gains tax 15-year asset exemption	79.1	90.8	36.4	85.4	190.1	242.3
Small business capital gains tax retirement exemption	216.3	222.0	100.5	156.3	323.1	304.0
Small business capital gains tax 50 per cent reduction	285.5	285.5	149.7	223.9	460.8	466.4
25 per cent entrepreneurs' tax offset	28.6	–	–	–	–	–
Taxation assistance for victims of Australian natural disasters	31.0	10.0	3.0	3.0	–	–
TCF corporate wear program	85.4	85.4	30.0	30.0	30.0	30.0
Tasmanian Freight Equalisation Scheme	7.5	6.8	7.5	8.7	9.2	9.9
Tasmanian Jobs and Investment Fund	–	–	–	–	1.5	–
Unincorporated Small Business Tax Discount	–	–	–	–	250.0	350.0
Total outlays	297.5	436.0	415.7	281.4	359.1	360.3
Total tax concessions	674.7	724.4	284.7	768.6	2689.4	2956.3
Total budgetary assistance	972.1	1160.4	700.4	1049.9	3048.5	3316.6

– 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. ^b Includes programs or amounts of funding where the initial benefiting industry is not stated and/or has not been ascertained.

Source: Commission estimates.

References

- ABS (Australian Bureau of Statistics) 2013, Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 (Revision 2.0), Cat. no. 1292.0.
- 2018, Australian System of National Accounts 2017-18, Cat. no. 5204.0.
- ADC (Anti-Dumping Commission) 2018, Performance Indicators 2018-19 Financial Year (31 December 2018), https://www.industry.gov.au/sites/default/files/2019-05/performance_indicators_december_2018.pdf (accessed 26 April 2019).
- Ahn, J. and Duval, R. 2017, 'Trading with China: Productivity gains, job losses', *Economics Letters*, Vol. 160, issue C, pp. 38–42.
- ANAO (Australian National Audit Office) 2015, *The Ethanol Production Grants Program, 2014-15*, Report No. 18.
- Anderson, R. and Muller, A. 2017, 'The Revised WTO Agreement on Government Procurement (GPA): Key design features and significance for global trade and development', *Georgetown Journal of International Law*, Vol. 48, pp. 949–1008.
- APC and NZPC (Australian Productivity Commission and New Zealand Productivity Commission) 2019, *Growing the digital economy in Australia and New Zealand. Maximising opportunities for SMEs*, Joint Research Report.
- Asia Society 2019, The China Dashboard, State-Owned Enterprise, Winter 2019, <https://chinadashboard.asiasociety.org/winter-2019/page/state-owned-enterprise> (accessed 26 April 2019).
- Australian Government 2018, *Budget 2018-19*, Budget Measures, Budget Paper No. 2, May.
- B20 Taskforce 2017, *Creating Benefits for All: Driving Inclusive Growth through Trade and Investment*, Trade and Investment Policy Paper.
- Baldwin, R. 2010, 'Understanding the GATT's wins and the WTO's woes', *Policy Insight* No 49, Centre for Economic Policy Research, June.
- 2016, 'The World Trade Organization and the Future of Multilateralism', *Journal of Economic Perspectives*, vol. 30, no. 1, pp. 95–116.
- Birmingham, S. (Minister for Trade) 2018, *TPP-11 kicks-off, delivering benefits for Aussie farmers and businesses*, Media Release, 30 December.
- Bloom, N. and van Reenen, J., 2010, 'Why do management practices differ across firms and countries', *Journal of Economic Perspectives*, vol. 24, no. 1, pp. 203–24.
- Bown, C. and Irwin, D. 2018, *What Might a Trump Withdrawal from the World Trade Organization Mean for US Tariffs?*, Peterson Institute for International Economics, Policy Brief 18-23, November.

-
- Bradsher, K. 2010, *China to Tighten Limits on Rare Earth Exports*, New York Times, Global Business, December 28, <https://www.nytimes.com/2010/12/29/business/global/29-rare.html> (accessed 26 April 2019).
- Crook, W. and Gordon, J. 2017, *Rules of Origin: can the noodle bowl of trade agreements be untangled?*, Productivity Commission Staff Research Note, Canberra.
- Coulton, M. (Assistant Minister for Trade, Tourism and Investment) 2019, *Export Finance and Insurance Corporation Amendment (Support for Infrastructure Financing) Bill 2019*, Second Reading, 13 February, House Hansard, p. 13193.
- Denzau, A 1988, *Trade protection comes to the valley – Silicon Valley*, Center for the Study of American Business, Washington University, June.
- DIIS (Department of Industry, Innovation and Science) 2018, *Science, Research and Innovation Budget Tables 2018-19*, Canberra.
- Draper, P. and Dube, M. (2013), *Plurilaterals and the Multilateral Trading System*, background paper for the E15 Expert Group on Regional Trade Agreements and Plurilateral Approaches, International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, December, <http://e15initiative.org/wp-content/uploads/2015/09/E15-RTAs-Draper-and-Dube-Final.pdf> (accessed 26 April 2019).
- Frydenberg, J. (Treasurer) 2018, *\$2 billion fund to transform small business access to funding*, Joint media release with Senator the Hon Michaelia Cash (Minister for Small and Family Business, Skills and Vocational Education), 14 November.
- 2019, *Australian Business Securitisation Fund Bill 2019*, Explanatory Memorandum.
- Holmes, T. and Schmitz, J. 2010, ‘Competition and productivity: a review of evidence’, Staff Report no 439, Federal Reserve Bank of Minneapolis, February.
- Horn, H., Mavrodis, P. and Sapir, A. 2009, ‘Beyond the WTO? An Anatomy of EU and US Preferential Trade Agreements’, *Centre for Economic Policy Research working paper*, DP7317, June.
- Johnson, B. 1991, *The US-Japan Semiconductor Agreement: Keeping Up the Managed Trade Agenda*, The Heritage Foundation, January 24, <https://www.heritage.org/asia/report/the-us-japan-semiconductor-agreement-keeping-the-managedtrade-agenda> (accessed 24 April 2019).
- Kirchner, S. 2018, *Trump is fighting trade war against economic fundamentals*, United States Studies Centre, 23 May, <https://www.ussc.edu.au/analysis/trump-is-fighting-trade-war-against-economic-fundamentals> (accessed 24 April 2019).
- Lagarde, C. 2018, *Address to the Board of Governors of the Fund, at the Joint Annual Discussion, International Monetary Fund and World Bank Group*, Indonesia, October 12, <https://www.worldbank.org/content/dam/meetings/external/annualmeeting/GS1803-MDOPEN-E-Final.pdf> (accessed 26 April 2019).
- Lloyd, P. 2008, ‘100 years of tariff protection in Australia’, *Australian Economic History Review*, Vol. 48, No. 2.
- Micklethwait, J. Talev, M. and Jacobs, J. 2018, *Trump Threatens to Pull U.S. Out of WTO If It Doesn't 'Shape Up'*, Bloomberg, 30 August.

-
- Moïsé, E and Sorescu, S. 2013. 'Trade Facilitation Indicators: The Potential Impact of Trade Facilitation on Developing Countries' Trade,' OECD Trade Policy Papers 144, OECD Publishing.
- Neufeld, N. 2016, *Implementing the Trade Facilitation Agreement: From Vision to Reality*, WTO Working Paper ERSD-2016-14, 29 September.
- PC (Productivity Commission) 2000, *Review of Australia's General Tariff Arrangements*, Report no. 12, Canberra.
- 2010, *Bilateral and Regional Trade Agreements*, Research Report, Canberra.
- 2011, *Trade and Assistance Review 2009-10*, Annual Report Series, Canberra.
- 2014, *Tasmanian Shipping and Freight*, Report no. 69, Canberra.
- 2015, *Trade and Assistance Review 2013-14*, Annual Report Series, Canberra.
- 2016a, *Trade and Assistance Review 2014-15*, Annual Report Series, Canberra.
- 2016b, *Developments in Anti-Dumping Arrangements*, Commission Research Paper, Canberra.
- 2017a, *Rising Protectionism: Challenges, threats and opportunities for Australia*, Commission Research Paper, Canberra.
- 2017b, *Modelling protectionist trade policies*, Technical Supplement to the Research Paper: Rising Protectionism, July.
- 2017c, *Trade and Assistance Review 2015-16*, Annual Report Series, Canberra.
- 2018a, *Rising inequality? A stocktake of the evidence*, Commission Research Paper, Canberra.
- 2018b, *Trade and Assistance Review 2016-17*, Annual Report Series, Canberra.
- Reich, A. 2017, *The effectiveness of the WTO dispute settlement system: A statistical analysis*, European University Institute working paper, Department of Law, LAW 2017/11, http://cadmus.eui.eu/bitstream/handle/1814/47045/LAW_2017_11.pdf?sequence=1 (accessed 24 April 2019).
- SA (Screen Australia) 2018, *Drama Production Activity Summary*, <https://www.screenaustralia.gov.au/fact-finders/production-trends/all-drama-production/activity-summary> (accessed 19 March 2019).
- Soames L., Brunker, D. and Talgaswatta, T. 2011, *Competition, Innovation and Productivity in Australian Businesses*, Productivity Commission and Australian Bureau of Statistics joint research paper.
- Treasury 2019, *Business Growth Fund*, <https://treasury.gov.au/small-business/bgf> (accessed 23 May 2019).
- Trump, D. 2017a, *Remarks by President Trump et al. at Signing of Trade Executive Orders*, The White House, <https://www.whitehouse.gov/the-press-office/2017/03/31/remarks-president-trump-et-al-signing-trade-executive-orders> (accessed 7 July 2017).
- 2017b, *The Inaugural Address*, The White House, <https://www.whitehouse.gov/inaugural-address> (accessed 5 June 2017).
-

Tuhin, R. and Swanepoel, J. 2017, *Export Behaviour and Business Performance: Evidence from Australian Microdata*, Research Paper, 7/2016, Department of Industry, Innovation and Science, Canberra.

WTO (World Trade Organization) 2015, *Dispute Settlement DS431*, China — Measures related to the exportation of rare earths, tungsten and molybdenum, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds431_e.htm (accessed 15 April 2019).

— 2017, *20 years of the Information Technology Agreement*, https://www.wto.org/english/res_e/publications_e/ita20years2017_e.htm (accessed 15 April 2019).

— 2018, *Subsidies Committee members express concerns on lack of notifications*, 23 October, https://www.wto.org/english/news_e/news18_e/scm_26oct18_e.htm (accessed 15 April 2019).

— 2019a, *Dispute settlement activity — some figures*, https://www.wto.org/english/tratop_e/dispu_e/disputstats_e.htm (accessed 15 April 2019).

— 2019b, *Disputes by member*, https://www.wto.org/english/tratop_e/dispu_e/dispu_by_country_e.htm (accessed 15 April 2019).

— 2019c, *Anti-dumping measures by reporting member*, https://www.wto.org/english/tratop_e/adp_e/adp_e.htm (accessed 15 April 2019).