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Australian Government
Productivity Commission

Trade & Assistance Review 2015-16

Productivity Commission
Annual Report Series



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The Productivity Commission

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

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

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

Foreword

The Productivity Commission is required under its Act to report annually on industry assistance and its effects on the economy. The *Trade & Assistance Review 2015-16* contains the Commission's latest quantitative estimates of Australian Government assistance to industry.

This year's review also explores how recent developments such as the Northern Australia Infrastructure Facility, assistance responses to Arrium going into receivership and other events in the Upper Spencer Gulf, government proposals for investment in electricity generation and storage, and a 'back to the future' reregulation of Queensland sugar marketing, could confer industry assistance in the future.

Views inevitably differ on what constitutes industry assistance and whether it is warranted. Fundamental to these questions is transparency of measures. The annual *Review* seeks to identify government arrangements that may be construed as assistance, as well as their target, size, and nature. This information provides a basis for considered assessment of the benefits and costs of the arrangements.

The report also summarises recent developments in trade policy. It provides a brief glimpse of modelling results from a recent Commission report on the affect protection could have on Australia, and how it should respond. It also argues the case, yet again, for Australia to remove its remaining tariffs, drawing on a recent research report on rules of origin.

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

Peter Harris
Chairman

July 2017

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Abbreviations and explanations

Abbreviations

ERA	Effective rate of assistance
GPA	WTO Government Procurement Agreement
PC	Productivity Commission
NSE	Net subsidy equivalent
R&D	Research and Development
TPP	Trans Pacific Partnership
TiSA	Trade in Services Agreement
WTO	World Trade Organization

Explanations

Billion	The convention used for a billion is a thousand million (10^9).
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Key points

- For 2015-16, estimated assistance to industry (provided by the Australian Government) was \$15.0 billion in *gross* terms.
 - It comprised \$6.8 billion in tariff assistance, \$4.6 billion in budgetary outlays and \$3.7 billion in tax concessions. While tariff assistance is inherently distortionary, not all budgetary outlays create distortions.
- After deducting the cost penalty of tariffs on imported inputs (\$5.9 billion, two-thirds incurred by services industries), *net* assistance to industry was \$9.1 billion.
- The incidence of assistance varies widely between sectors.
 - Manufacturing received an estimated \$6.2 billion in net assistance (largely due to tariff protection), Primary production received an estimated \$1.6 billion (mostly through budgetary assistance), and Mining received a small positive net assistance (\$0.3 billion).
 - The measured industry assistance arrangements imposed a very small net cost on services industries (as the tariff cost penalty on inputs of \$3.8 billion only just exceeded budgetary assistance of \$3.8 billion).
- Of the eight categories of measured budgetary industry assistance the two largest are:
 - R&D support (generally available to all industries and specific to rural industry), which made up around 47 per cent (\$3.9 billion) of assistance, the majority of which relates to the R&D Tax Incentive (around \$2.8 billion).
 - Industry specific assistance, which consists of a range of grants and concessions, such as for the automotive, film, finance and ethanol industries, makes up 15 per cent (\$1.2 billion) of measured assistance.
- 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, such as for defence equipment; and regulatory restrictions on competition. It also excludes state and territory government support to industry.
- Four significant recent developments that may involve significant industry assistance are the:
 - establishment of the \$5 billion Northern Australia Infrastructure Facility (NAIF)
 - provision of company-specific and regional assistance in response to Arrium (steel) entering administration
 - announcements regarding specific investments in electricity generation and storage assets
 - reregulation of sugar marketing in Queensland, and conferring charity status on Queensland Sugar Ltd.
- Australia (and the world) is at an important juncture in trade policy.
 - The Doha disappointment does not mean multilateral approaches are doomed or should be put on the back-burner. On the contrary, there has been multilateral (and mega-regional) success.
 - This success between like-minded countries should embolden further efforts. In the current climate of global trade angst there is an imperative to intensify efforts at multilateral and mega-regional reform.
 - The benefits of bilateral trade preferences are much less than anticipated, including because of the use of other tariff concessions, and costly and protective Rules of Origin.
 - Unilateral elimination of Australia's remaining tariffs is long overdue — Australian firms and consumers would avoid the higher input costs of around \$6 billion a year.

1 Key results and their interpretation

1.1 What is industry assistance?

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, extending beyond direct government grants and subsidies to particular firms or industries. It also includes import tariffs, regulatory restrictions on competition, tax concessions, concessional finance, provision of subsidised services by government agencies, government procurement preferences, and guaranteed prices.

Not all government measures that provide direct selective support to business are included in measured assistance. In some cases this is because the support is effectively the government ‘purchasing’ an outcome on behalf of the community. For example, payments from the Emissions Reduction Fund (under the Direct Action Plan) for reducing carbon emissions are not considered assistance.¹ In other cases, it is because it is too hard to estimate the assistance provided. For example, payments to farmers for projects aimed at improving the application of fertiliser to reduce pollution from run-off in the Great Barrier Reef could deliver benefits to farmers in savings on fertiliser costs. But where farmers also contribute to the costs, and fertiliser savings vary across farmers, such assistance is too difficult to reliably measure. State and territory assistance is also not included in the measures. Overall, therefore, measured assistance should be regarded as a lower bound to the actual assistance provided by governments to business.

Other policies that target community outcomes can provide an indirect pecuniary benefit to some businesses, but do not fall within the ambit of traditional industry assistance. Superannuation tax concessions, for example, clearly provide significant benefits to the finance sector in demand growth, but the concessions are provided to individuals and not to firms.

Inevitably, there will be different views about whether some policies provide assistance. The fuel tax credit is one such measure. It is not considered assistance as the excise tax on fuel is purported to be a mechanism to pay for roads, which are not used by those receiving the fuel rebate. Should roads be generally priced, as discussed in the Commission’s *Public*

¹ However, if it costs a firm less than the payment to make the reduction in emissions (or they would have done it anyway) then this would constitute assistance (though difficult to measure). If carbon reduction policy involved a regulated limit on the carbon that could be emitted, then emission reduction payments would be considered assistance. Thus context and basic policy matters.

Infrastructure inquiry report (PC 2014a), the taxation of fuel would change, perhaps towards a recognition of the negative externalities of fuel consumption. A diesel fuel rebate under those conditions would constitute assistance.

Labelling a policy as ‘assistance’ does not mean it is necessarily ‘bad’. Some measures, such as support for R&D, can have knowledge and skill spillovers that benefit firms and industries beyond the recipients. Other measures can address regional problems, facilitating industry adjustment through helping workers transition, or aiding firm exit where assets are stranded. Ultimately, only a detailed evaluation can confirm the overall net impact of any assistance measure. This *Trade and Assistance Review* provides a starting point by identifying, and where possible measuring, the assistance provided by trade and industry policies. It provides the information to start asking the questions about whether the public is well served by the assistance provided and the way in which it is provided.

1.2 Key findings

Total assistance was \$15 billion in 2015-16, slightly lower than 2014-15

Readily distinguishable and quantified tariff and budgetary assistance to industry was just over \$15.0 billion in gross terms in 2015-16 — comprising \$6.8 billion in gross tariff assistance, \$4.6 billion of budgetary outlays, and \$3.7 billion in tax concessions (figure 1.1, top panel).²

Estimated assistance in gross terms fell by around \$0.1 billion from 2014-15 in nominal terms (around 0.4 per cent), no change in real terms.

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 \$9.1 billion in 2015-16, an decline of \$0.1 billion in nominal terms (1.1 per cent) from 2014-15 levels (figure 1.1, bottom panel).

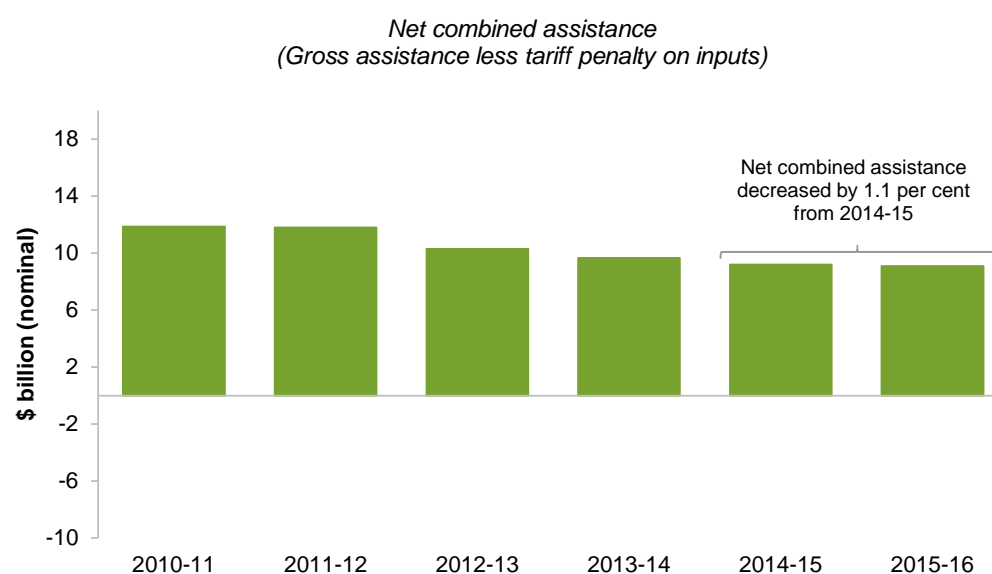
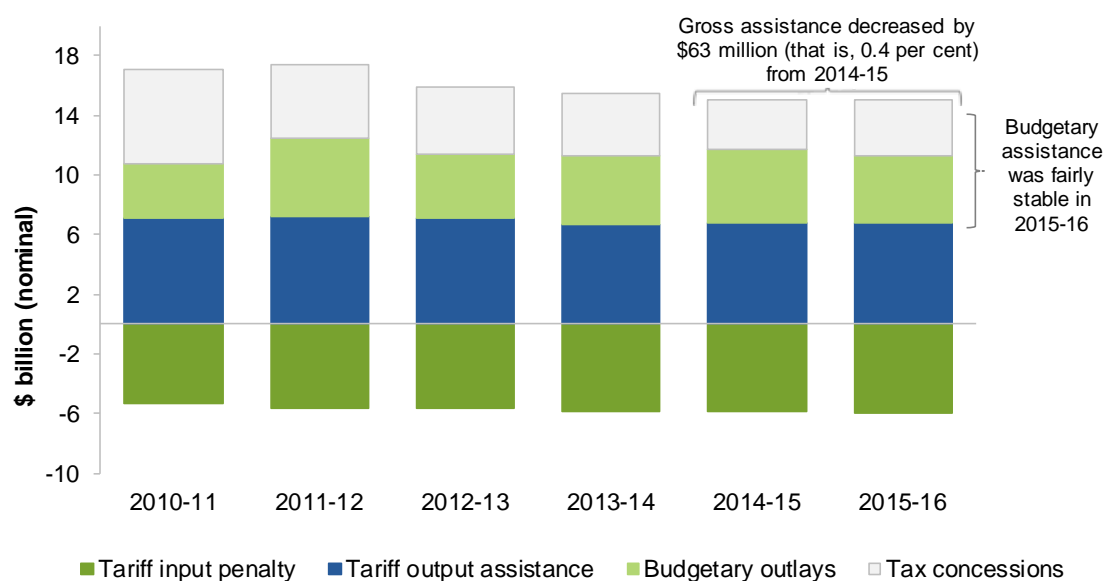
Around 45 per cent of the \$15 billion is tariff assistance, which has an adverse distortionary effect on an economy-wide basis. Industries protected by tariffs use more resources (capital and labour) than they would if not protected by the tariff. Tariffs also penalise industries, notably services, that use imported inputs, reducing their ability to compete for capital and labour.

The remainder of the \$15 billion is budgetary assistance which, while costly to the budget, is not inherently distortionary. For example, measures targeted at *potential* market failures (such as in R&D) and which genuinely induces ‘additional’ activity may deliver net benefits, including to industries beyond those directly assisted. However, some budgetary assistance

² Due to an error in estimating the budgetary cost and the tax concession cost of the R&D Tax Incentive since it was introduced in 2012-13, the level of assistance is higher than reported in the 2014-15 Review. This Review revises the data since 2012-13. The reduction in assistance between 2011-12 and 2012-13 was lower than previously reported but this does not affect the recent trends.

is likely to be distortionary, such as non-competitive grants to a single firm or narrowly defined industry, which competes with firms outside this industry.

Figure 1.1 **Aggregate estimates of measurable assistance, 2010-11 to 2015-16**



Source: Commission estimates.

Manufacturing receives around 56 per cent of gross and 77 per cent of total net assistance³

Manufacturing receives by far the highest net combined assistance, by virtue of tariff assistance (figure 1.2). The services sector records negative net assistance, as it incurs about two-thirds of the input cost penalty posed by manufacturing tariffs.

Support for R&D represents about 47 per cent of measured budgetary assistance

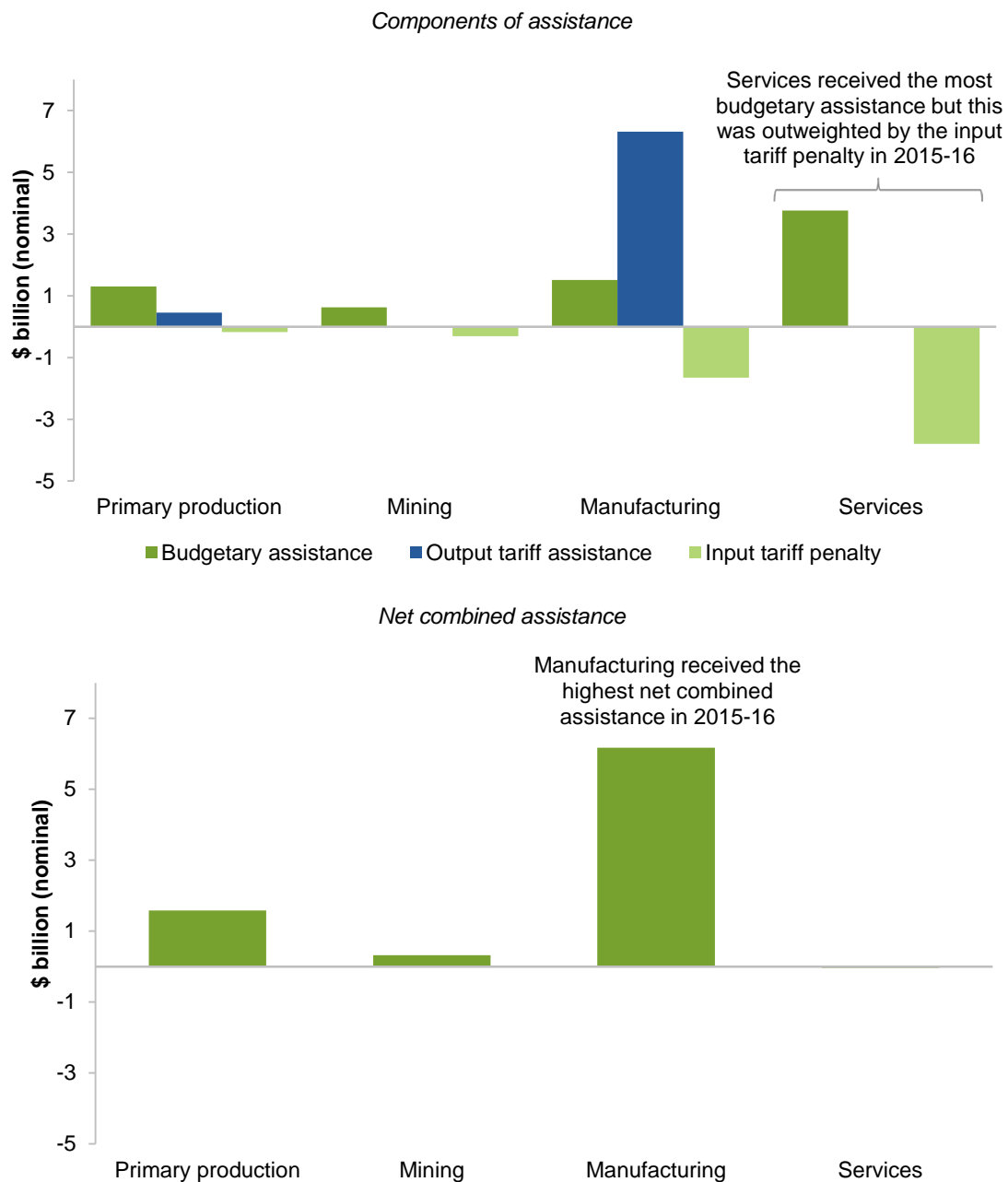
Support for business R&D continues to be the largest type of industry assistance delivered through budgetary measures (figure 1.3), representing just under 47 per cent (\$3.9 billion) of budgetary assistance. The majority is in the form of the demand-driven R&D Tax Incentive (\$2.8 billion).⁴ The remainder is mostly outlays for research institution funding, including rural research.

Industry specific assistance, such as a range of selective grants and concessions for the automotive, film, ethanol and finance industries, represented 15 per cent (\$1.2 billion) of measured assistance. Initiatives targeting small business, such as capital gains tax discounts, are the third largest category. The main change in aggregate budgetary assistance since 2010–11 was the \$1.3 billion decline from 2011–12 to 2012–13. The principal reductions related to the winding up of the: Energy Security Fund (\$1 billion); Small Business and General Business Tax Break (\$470 million); Coal sector jobs package (\$219 million); Steel transformation plan (\$164 million); Farm management deposits scheme (\$80 million); and the Green Car Innovation Fund (\$78 million). Offsetting part of these reductions was the introduction of the R&D Tax Incentive (\$2.5 billion), which replaced the R&D Tax Concession (which fell by \$620 million) and Premium R&D Tax Concession (fell by \$320 million) and R&D Tax offset (a net reduction of \$690 million) programs.

³ These are the shares of assistance that can be allocated to a sector, which is 88 per cent of net assistance and 93 per cent of gross assistance.

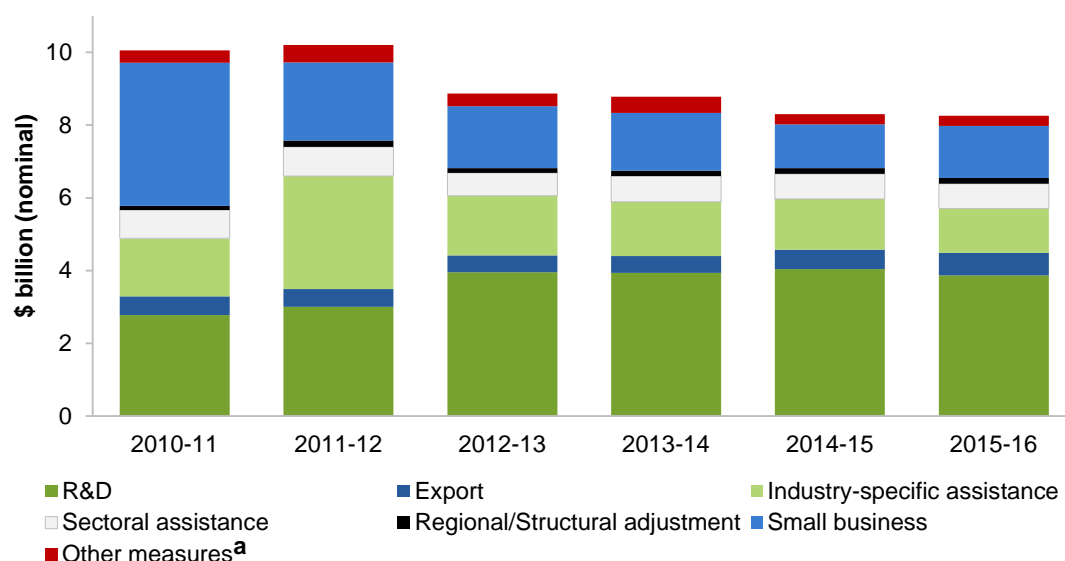
⁴ This estimate is lower than that reported by the Department of Industry, Innovation and Science (DIIS), which for 2015–16 was \$3.2 billion. DIIS reports the tax concession in the year in which the activity (generating the concession) occurs. The Commission (following Treasury's treatment) traditionally 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.

Figure 1.2 **The incidence of assistance varies widely across industries, 2015-16**



Source: Commission estimates.

Figure 1.3 Budgetary assistance by category, 2010-11 to 2015-16



^a Includes investment measures.

Source: Commission estimates.

Recent 'reactive' industry assistance

Over the past 40 years the industry assistance landscape has changed in fundamental ways. Tariff and import quota protection has been markedly reduced to relatively minimal levels. Complex and costly agricultural production, marketing and pricing have been unwound so that market prices and costs drive economic decisions. The last agricultural quota and price control system, which was for potatoes in Western Australia, was removed on 1 July 2016. And highly selective and preferential grants, subsidies and bounties provided to specific industries and firms are not as prevalent. The reforms were driven both unilaterally and by requirements of multilateral agreements (such as the elimination of export subsidies).

The industry assistance landscape of today is characterised by an emphasis on business R&D, facilitation of regional adjustment, small business targeting, WTO compliant export assistance, and support to achieve environmental objectives. Tax concessions and concessional finance⁵ aside, budgetary assistance is more likely to take the form of competitive grants or other merit-based selection processes apply. Nevertheless, non-merit specific assistance to industries and firms has not completely disappeared.

The long term big picture of the changing nature of industry assistance has been driven by government recognition in the 1980s and 1990s of the efficiency costs of the old-style

⁵ Government guarantees also allow firms to access credit at a lower cost than would otherwise be the case, so confer a benefit even if the guarantee is not called on.

protectionist framework. Yet, the size and nature of industry assistance in Australia continues to be heavily influenced by reactions to periodic events and disruptions. For instance, the global financial crisis, periodic droughts, the setting of carbon emission reduction objectives, and the commitment to meet environmental water objectives, have all prompted significant changes in industry assistance. Most recently, the global supply glut affecting the steel industry encouraged costly anti-dumping assistance and firm specific assistance to BlueScope Steel and Arrium.

This *Trade & Assistance Review* takes a closer look at four recent developments that may well provide significant industry assistance. These are discussed in more detail in chapter 3.

- Establishment of the \$5 billion Northern Australia Infrastructure Facility (NAIF). The justification for assistance to private projects and the selection of recipients are perennial threshold issues. The justification for such a facility rests on the government judgment (and in turn, that of the NAIF Board in selecting the specific projects) that sufficient private finance is not forthcoming (at all, on the right terms, or quickly enough). The finance aims to get the firm over the construction hurdle, after which the project will have a lower risk profile and be able to refinance the loan on commercial terms. If the NAIF is to be successful, it must ensure that the business case for all proposed investments demonstrates their ability to cover the operational costs of the infrastructure and the costs of servicing the loan at market rates in the future.
- The provision of company-specific and regional assistance, in response to Arrium (steel) entering administration. This comes off the back of difficulties for other significant local employers in the Upper Spencer Gulf Region. Before administration, Arrium had been conferred assistance by both the South Australian and Australian governments including through extensive antidumping duties on imported steel, waiver of mining royalties, and procurement of local steel for government projects. After administration, government offers of prospective grants and finance to any new owner of the company were announced. Whether this combination of firm-specific assistance will guarantee a long term future for Arrium in the region is doubtful. The *Review* has previously concluded that direct support to ‘struggling’ firms has demonstrated little long term success, and the manufacturers and employers eventually exit. As with previous cases of regional structural adjustment, governments have also provided assistance to help workers in the Upper Spencer Gulf adjust to the loss of jobs, and to boost alternative economic activities in the region. Previous *Review* examination of similar regional stories (cf, PC 2015, appendix C, and PC 2013, chapter 4) have emphasised that little evaluation has taken place on whether the substantial government support, either in ‘rescuing’ existing companies, in helping workers adjust to the loss of jobs, or in boosting alternative economic activities in the region, have been effective in achieving these objectives. A broader question, that is highly relevant to the Commission’s study on *Transitioning Regional Economies* (PC 2017a), is what effect, if any, industry assistance can have in developing resilient regions (and not just temporary dampening of the impact of closing firms).
- Governments have made major announcements regarding specific investments in electricity generation and storage assets. Whether these projects will proceed is

uncertain, but there is a risk that they will lead to the wrong infrastructure in the wrong place and the electricity consumer will end up paying higher prices as a result. Given the need to work with industry, elements of industry assistance can arise. Assistance sometimes can take the form of ‘co-investments’, where public money is provided to private firms often in return for commitments around investment, production or jobs. But some of the projects, such as elements of the South Australian Energy Plan, could entail significant direct government ‘investment’ in (and ownership of) electricity generation and storage assets. And, while not necessarily ‘assistance’ to the recipient industry, government investment in electricity market assets can result in assets that do not have to earn a commercial rate of return. This can undermine competitive neutrality. More problematically, such entities have in the past provided energy at below market prices (assistance) to some ‘base load’ customers which has resulted in long term legacy problems. An example is Alcoa in Portland in Victoria, which has received substantial government subsidies following the end of ‘cheap’ power from the now closed Hazelwood electricity plant.

- The re-regulation of sugar marketing in Queensland in 2015 aimed to extend the control of marketing that had been embedded in a 10-year contract prior to the industry deregulation in 2006. Recently the miller came to a negotiated agreement on marketing with Queensland Sugar Ltd, that reduces this control, and the Queensland government has indicated that they will seek to repeal the legislation. The extraordinary granting of charity status to Queensland Sugar Ltd, which for all purposes acts as a private sector firm, confers considerable tax advantages that are unwarranted and constitute industry assistance and violate competitive neutrality principles.

An important juncture in trade policy

The multilateral Doha Round will not be achieved

The 10th WTO Ministerial Conference (Nairobi, December 2016) signalled that the unfinished 2001 multilateral Doha Round is effectively over, conceding that a ‘single undertaking’, with agreement by all parties on all items, will not be achieved.

But there has been some multilateral success and further progress is in train

Despite the Doha disappointment, there are multilateral (and mega-regional) success stories. There has been agreement to eliminate all agricultural export subsidies; entry into force of the Trade Facilitation Agreement; agreed tariff reductions for ICT products under the Expanded Information Technology Agreement; progress with building on the 2012 APEC Environmental Goods Agreement; entry into force in 2014 of the Government Procurement Agreement (which required 75 per cent of countries to ratify to come into force); and progress on the Trade in Services Agreement. This success between like-minded countries should embolden further efforts.

There is an imperative to intensify trade liberalisation efforts: responding to global trade uncertainty and angst

The trade policy prescriptions floated in the USA during the election campaign and with the election of President Trump have created significant global trade uncertainty. To date the only actual decision of the Trump administration has been to withdraw the United States from the Trans-Pacific Partnership (TPP). However, a number of protectionist policies that pose a risk to the largely open, rules based, global trade regime, have been raised by the administration.

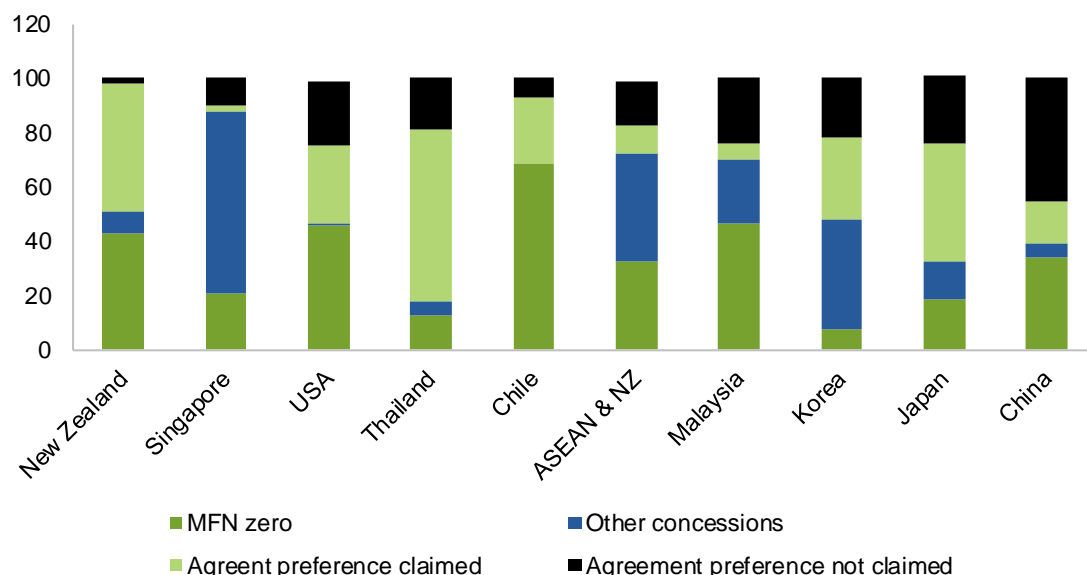
The Commission has recently released a study that models the impact for Australia, as well as the rest of the world, of a number of scenarios based on some of the policy options that have been floated at various points in time (PC 2017b). The analysis demonstrates that regardless of rising protection in other countries, Australia is best placed by not joining in with reciprocal measures. Moreover, Australia is better off if the remaining tariffs are removed, and the more 'like-minded' countries that it can persuade to join it in this approach, the better for Australia and for these countries.

The benefit of bilateral trade preferences are less than anticipated

Bilateral trade agreements have not delivered the cheaper imports to the extent anticipated by some. This may be because the preferences have in some cases simply replaced other tariff concession arrangements (and vice-versa); 'rules of origin' production transformation tests and compliance costs have limited the use of preferences, and the post tariff concession price advantage over existing lower cost suppliers (with tariff) is small. Recent empirical work has found that multilateral and unilateral tariff reductions are more likely to be passed-on, suggesting that more tariff 'rent' is 'pocketed' by the importer/exporter under bilateral agreements.

In 2015-16, an estimated one quarter of imports into Australia from preferential trade agreement (PTA) partners used the agreement concession. The other three-quarters of imports from trade agreement partners entered Australia under three other tariff arrangements: zero-MFN tariffs (32 per cent); full-MFN tariff (29 per cent) and other tariff concessions (12 per cent), mainly Tariff Concessions Orders. The pattern varies significantly across trade agreements (figure 1.4).

Figure 1.4 Imports into Australia, 2015-16
By type of tariff entry and trade agreement



Source: Crook and Gordon (2017)

A similar comprehensive analysis of Australia's exports to trade agreement partners has not been made. Anecdotally, export volumes of certain products to certain countries have increased since trade agreements came into force.

Unilaterally eliminating Australia's remaining tariffs is long overdue, and will save significant costs

The hiatus since 1996 in eliminating Australia's MFN (general rate) tariffs has been economically and administratively costly. Tariffs raise the costs of intermediate inputs by around \$6 billion per year and inflate consumer prices. The costs of tariffs go beyond this impost, including the administration costs incurred by Customs in applying tariffs, and delivering concessions, the compliance costs to business in fulfilling tariff related requirements, and the resources expended by DFAT on protracted negotiation on Australia's bilateral import preferences. With the growth of preferential trade agreements, in addition to long standing tariff concession schemes, the projected revenue from tariffs continues to decline. Yet in a competitive market penalties on imported inputs imposed by tariffs can reduce a firm's competitiveness at home and abroad. So tariffs continue to advantage a few at a cost to many.

Australia had endured 20 years of unnecessary economic distortion, administration and compliance costs. It is time to follow the advice of the Commission in 1996, which was to complete the job and reduce all tariffs to zero.

About this Review

This edition of *Trade & Assistance Review* is organised as follows:

- Chapter 2 (and the supporting appendix A) contains the Commission's latest estimates of Australian Government assistance to industry, for the year to 30 June 2016. This continues a time series of assistance estimates dating back four decades. This long series provides a clear illustration of the patterns of industry support through time and the reform of trade barriers.
- Chapter 3 reports on material announcements and developments in industry assistance since around May 2015, such as proposed new programs, recent expenditures under established schemes, and reviews. This provides some insight into potential changes in measured assistance.
- Chapter 4 outlines recent developments in trade policy, distinguishing between multilateral, regional and bilateral platforms. It also contains, for the first time, data on the different types of tariff treatment of imports (zero-MFN, positive MFN, trade agreement concessions, and other concession schemes). The chapter concludes with a summary of past unilateral tariff reductions and the case for unilaterally removing remaining tariffs.

2 Assistance estimates

Key points

- For 2015-16, estimated *gross* assistance to industry (provided by the Australian Government) comprised \$6.8 billion in output tariff assistance, \$4.6 billion in budgetary outlays and \$3.7 billion in tax concessions. After deducting the cost penalty of tariffs on imported inputs (\$5.9 billion, two-thirds incurred by services industries), *net* assistance to industry was \$9.1 billion.
 - The gross value of tariff output assistance levelled off in 2015-16 after falls in previous years, while the input tariff penalty has risen slowly over time, leading to a fall in net tariff assistance but at a slowing rate.
 - Aggregate budgetary assistance was fairly stable in 2015-16 after declining by almost 20 per cent since 2010-11.
- The incidence of assistance varies widely between sectors.
 - Negative net tariff assistance has been rising for services and mining, while output tariff assistance is focused on manufacturing and input cost penalties fall on all sectors.
 - The share of budgetary assistance to manufacturing and primary production is much higher than their share of the economy.
- R&D support remains the largest category of budgetary assistance, which represented around 47 per cent (\$3.9 billion), the majority of which relates to the R&D Tax Incentive (around \$2.8 billion).
- The effective rates of combined assistance has continued to fall for most industries.
 - Despite a small decline, high rates continue in motor vehicles and parts (9.5 per cent). They have continued to fall in textiles, leather, clothing and footwear (4.0 per cent), and most other manufacturing industries, with the exception of Metal and fabricated metal products, which rose to 4.0 per cent.
 - Rates have fallen for dairy cattle farming (1.4 per cent) and sheep, beef cattle and grain farming (3.4 per cent).
- Over the last 45 years, assistance to manufacturing has fallen dramatically while the agricultural sector hides significant disparities across activities.
- 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
- 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.⁶

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 increases demand for an industry's products, or where it lowers the costs of production for some businesses (box 2.1). This chapter reports on government activities that constitute industry assistance and that can be measured.

The estimates reported in this chapter cover the years 2010-11 to 2015-16. The estimates presented this year mark the commencement of a new series and incorporate revisions in underlying data sources (box 2.2). As such, they differ from the estimates published in the previous edition of the *Trade & Assistance Review*. Further information on the assistance estimation methodology, program coverage, industry allocation and implementation of the new input-output series is to be provided in a (forthcoming) Methodological Annex to this *Review*.

⁶ The assistance estimates reported in this year's *Review* cover the period 2010-11 to 2015-16.

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 program should include analysis of the differential effects on businesses in an industry and across industries.

Box 2.2 The ‘new series’ of assistance estimates

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

The Commission’s previous series of tariff assistance estimates (last published in *Trade & Assistance Review 2014-15*) were benchmarked to the Australian Bureau of Statistics (ABS) input-output and import data for the year 2008-09. For the new series, the Commission has re-benchmarked its estimates to ABS input-output and import data for the year 2013-14 (ABS 2016a).

Because of structural changes in the economy between input-output years and data revisions, estimated tariff assistance to outputs and tax penalty to inputs varies between series. The main changes from the 2008-09 benchmark to the 2013-14 benchmark are:

- lower output of tariff assisted activities (mainly textiles, clothing and footwear and motor vehicles) lowering the level of output assistance
- a shift towards inputs with lower or zero tariffs (including services inputs) which acts to lower the input penalty incurred.

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

The following sections present the 2015-16 assistance estimates at the sectoral level (primary production, mining, manufacturing and services), and for detailed 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. Around 50 per cent of product items in Australia's MFN tariff schedule (at the HS 8 digit level) have a 5 per cent import tariff.

- 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 2.3).

The gross value of output assistance levelled off in 2015-16 after falls in previous years

The gross value of tariff assistance to domestic production was around \$6.8 billion in 2015-16, around the same level as in the previous year (table 2.1). The gross value of tariff assistance fell from 2010-11 to 2015-16. Changes in the gross value of tariff assistance over the period reflect both changes in tariffs and activity levels. Tariffs for certain *Textile, clothing and footwear* items fell from 10 per cent to 5 per cent on 1 January 2015. 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*).

Box 2.3 Tariff assistance to the *Food, Beverage and Tobacco products* industry in 2015-16

As an example, the estimates of output tariff assistance, input tariff assistance (input tariff penalty) and net tariff assistance are provided for the *Food, Beverage and Tobacco products* industry.

Industry size	Value of output \$91 billion		Value of inputs \$65 billion		
Categories of tariff assistance	Output tariff assistance	—	Input tariff penalty	=	Net tariff assistance
Food, Beverages and Tobacco products	\$2 billion	—	\$0.69 billion	=	\$1.31 billion

Source: Commission estimates.

Table 2.1 Tariff assistance, 2010-11 to 2015-16^a
\$ million (nominal)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Output assistance	7 083.6	7 194.2	7 089.7	6 725.0	6 779.9	6 763.5
Input penalty	-5 282.1	-5 612.0	-5 657.8	-5 838.1	-5 888.0	-5 924.2
Net tariff assistance	1 801.5	1 582.2	1 431.9	886.9	892.0	839.3

^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 (ABS 2016b).

Source: Commission estimates.

The input penalty has risen slowly over time

The estimated cost penalty on inputs to user industries (including primary, manufacturing and services industries) arising from tariffs was around \$5.9 billion in 2015-16 (table 2.2). This compares with a penalty of around \$5.3 billion in 2010-11. The estimated penalty has increased in nominal terms with the general growth in the economy and rising price levels. This increase was moderated in 2014-15 and 2015-16 by reductions in tariffs on certain *textiles, clothing and footwear* (TCF) items in January 2015. The moderating impact of lower tariffs on the input penalty, however, is less obvious than for past tariff reductions as the majority of these TCF products are final consumption items.

Net tariff assistance continues to decline, at a slowing rate

After deducting the tariff input penalty from the output assistance, net tariff assistance (for the Australian economy) was estimated to be around \$0.8 billion in 2015-16, down from around \$1.8 billion in 2010-11 (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.

Negative net tariff assistance has been rising for services and mining

The estimated value of net tariff assistance for the manufacturing sector has fallen by around 7 per cent since 2010-11, largely reflecting reductions in tariff assistance to the *Textiles, clothing, footwear and leather*, and changing activity levels in tariff-assisted activities. At the same time, the net tariff penalty on the services sector has increased by 19 per cent (to nearly \$4 billion), reflecting growth in the use of tariff-assisted manufactures as the services sector has expanded. Similarly, the net tariff penalty on the mining sector also increased over the period (figure 2.1).

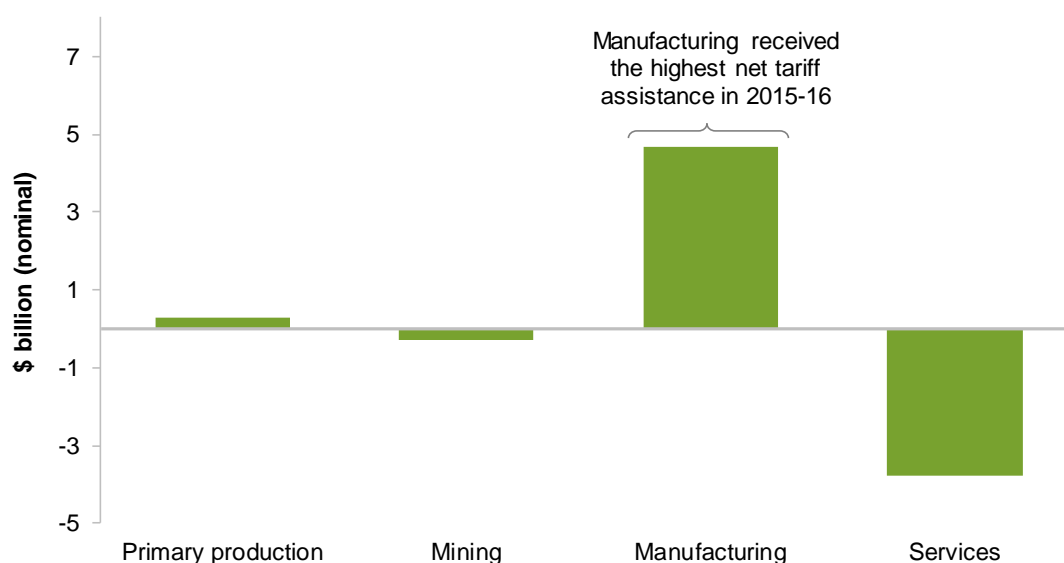
Table 2.2 Net tariff assistance by industry sector, 2010-11 to 2015-16^a
\$ million (nominal)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Primary production	212.4	228.8	269.2	212.6	248.4	276.8
Mining	-220.4	-237.0	-259.1	-284.2	-296.7	-305.0
Manufacturing	4 996.0	5 048.5	5 012.3	4 671.3	4 690.8	4 660.6
Services	-3 186.5	-3 458.0	-3 590.5	-3 712.8	-3 750.5	-3 793.1
Total	1 801.5	1 582.2	1 431.9	886.9	892.0	839.3

^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 (ABS 2016b).

Source: Commission estimates.

Figure 2.1 Net tariff assistance by industry sector, 2015-16



Source: Commission estimates.

The value of net tariff assistance to primary production trended higher over the period to 2012-13 but in 2013-14 fell to around that recorded in 2010-11. The upward trend continued in 2014-15 and 2015-16. While there has been year-to-year changes in the value of activity in the sector, the upward trends reflect the *Horticulture and fruit growing* and *Forestry and logging* industries (industries that receive positive net tariff assistance) growing more in absolute terms than other primary production industries (industries that, as a group, incur negative net tariff assistance). This trend reversed in 2013-14, especially for *Horticulture and fruit growing*.

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* (\$2 billion), *Metal and fabricated metal products* (\$1 billion), *Wood and paper products* (\$0.7 billion), and *Petroleum, coal, chemical and rubber products* (\$0.6 billion) industry groups (table 2.3, left hand column).

Mining and primary production industries receive little tariff assistance on outputs, and tariffs are not levied on services. On the other hand, tariffs impose input cost penalties on all industries (because of their cost-raising effects on inputs) (table 2.3, middle column). Around two thirds of the input penalty on 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 impost 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*, *Horticulture and fruit growing* and *Forestry and logging* industries are also estimated to have received positive net tariff assistance in 2015-16. This reflects the incidence of a 5 per cent tariff on certain imports such as nuts, grapes and softwood conifers which affords protection to local producers of these import competing products.

The *Mining* industry together with all of the services industries (and most primary production industries) incurred negative net tariff assistance in 2015-16.

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 (\$223 million in 2015-16) and the R&D Tax Incentive (\$2.8 billion in 2015-16), while other budgetary support measures deliver benefits indirectly to an industry via intermediate organisations such as the Rural Research and Development Corporations (\$260 million in 2015-16) and the CSIRO (\$520 million in 2015-16).⁷

⁷ 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.

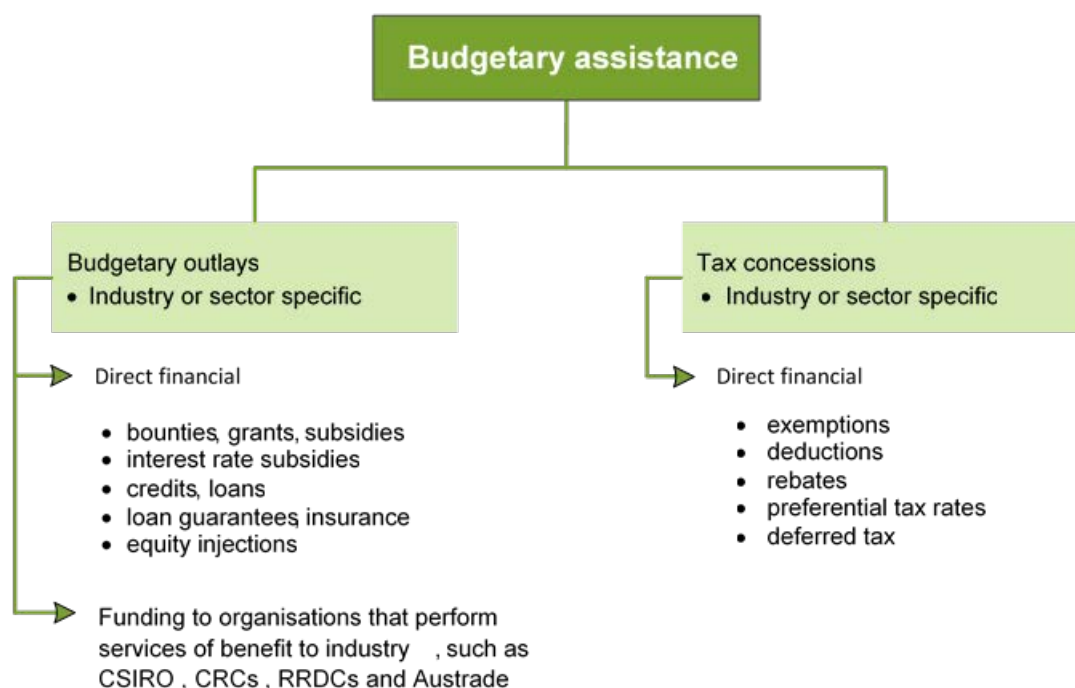
Table 2.3 Tariff assistance by industry grouping, 2015-16^{a,b}
\$ million (nominal)

<i>Industry grouping</i>	<i>Output assistance</i>	<i>Input cost penalty</i>	<i>Net tariff assistance</i>
Primary production	450.2	-173.4	276.8
Horticulture and fruit growing	135.2	-9.3	125.9
Sheep, beef cattle and grain farming	272.7	-76.9	195.8
Other crop growing	1.0	-3.8	-2.9
Dairy cattle farming	—	-13.1	-13.1
Other livestock farming	—	-16.2	-16.2
Aquaculture and fishing	2.0	-8.4	-6.4
Forestry and logging	16.8	-1.9	14.9
Primary production support services	22.6	-43.7	-21.1
Unallocated primary production	—	—	—
Mining	1.6	-306.6	-305.0
Manufacturing	6311.7	-1651.1	4660.6
Food, beverages and tobacco	1997.7	-690.0	1307.7
Textiles, leather, clothing and footwear	116.0	-30.5	85.5
Wood and paper products	691.7	-116.8	574.9
Printing and recorded media	102.9	-27.8	75.1
Petroleum, coal, chemical and rubber prod.	643.5	-138.2	505.4
Non-metallic mineral products	351.5	-59.1	292.3
Metal and fabricated metal products	1015.2	-166.1	849.1
Motor vehicles and parts	556.2	-214.5	341.8
Other transport equipment	180.9	-49.7	131.2
Machinery and equipment manufacturing	440.0	-109.5	330.5
Furniture and other manufacturing	216.2	-49.0	167.2
Unallocated manufacturing	—	—	—
Services	—	-3793.1	-3793.1
Electricity, gas, water and waste services	—	-67.2	-67.2
Construction	—	-1551.1	-1551.1
Wholesale trade	—	-227.0	-227.0
Retail trade	—	-142.4	-142.4
Accommodation and food services	—	-294.3	-294.3
Transport, postal and warehousing	—	-211.1	-211.1
Information, media and telecommunications	—	-70.2	-70.2
Financial and insurance services	—	-15.1	-15.1
Property, professional and admin. services	—	-377.2	-377.2
Public administration and safety	—	-140.4	-140.4
Education and training	—	-49.8	-49.8
Health care and social assistance	—	-216.9	-216.9
Arts and recreation services	—	-76.7	-76.7
Other services	—	-353.7	-353.7
Unallocated services	—	—	—
Unallocated other	—	—	—
Total	6763.5	-5924.2	839.3

— Nil. ^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**



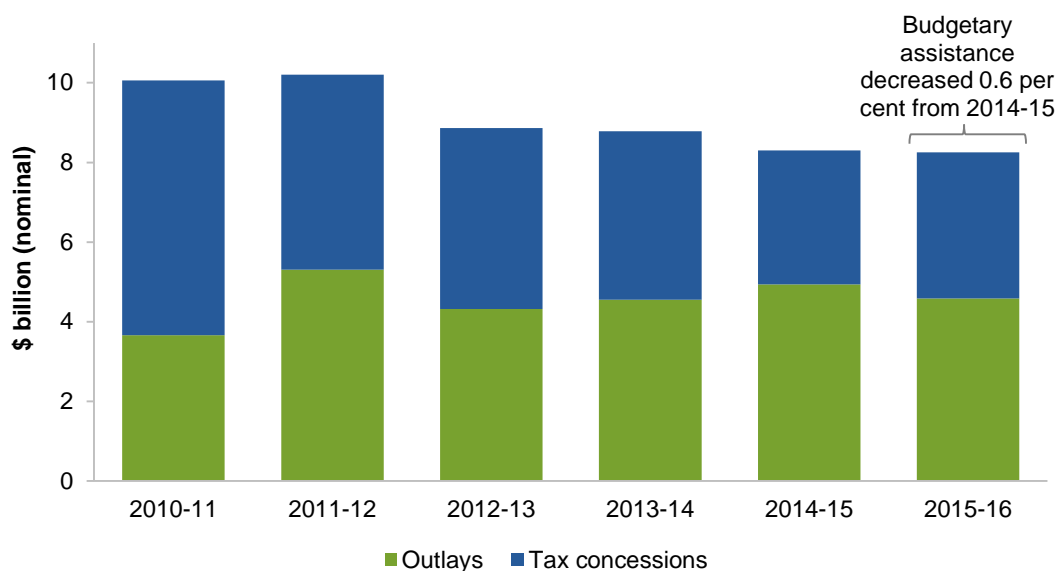
The budgetary assistance estimates are derived primarily from actual expenditures shown in departmental and agency annual reports, and the Tax Expenditures Statement (TES) compiled by the Australian Treasury. Industry and sectoral disaggregations are based primarily on supplementary information provided by relevant departments or agencies.⁸

Aggregate budgetary assistance was fairly stable in 2015-16 after declining by almost a third since 2010-11

The estimated gross value of budgetary assistance to Australian industry was around \$8.3 billion in 2015-16, the same in nominal terms as in 2014-15 (figure 2.3). Since 2010-11 there has been a net fall in the real level of estimated assistance of nearly 20 per cent.

⁸ 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, 2010-11 to 2015-16**



Sources: Australian Government Budget and related papers (various years); departmental annual reports (various years); Australian Government (2017); Commission estimates.

Contributing to aggregate budgetary assistance from 2014-15 to 2015-16 are:

- an increase of just under \$100 million in assistance afforded by the refundable part of the R&D Tax Incentive — which is a tax offset scheme for certain eligible entities whose aggregated annual turnover is less than \$20 million
- an increase of \$250 million in assistance afforded by the newly introduced tax concession – Lower Company Tax Rate – accessible for companies with aggregated annual turnover of less than \$2 million
- an increase of around \$182 million in assistance afforded through the Film Industry Offsets program for certain Australian production expenditure incurred by a production company in making a film.

Offsetting these increases were decreases in budgetary assistance between 2014-15 to 2015-16, including:

- a fall of around \$275 million in assistance afforded by the Small Business Simplified Depreciation Rules scheme to enable small businesses to access concessional depreciation arrangements for business assets⁹
- a fall of around \$150 million in assistance afforded by the R&D Tax Incentive – non-refundable tax offset scheme

⁹ The Small Business Simplified Depreciation Rules scheme is an accelerated asset write-off scheme enabling small business entities with an aggregated annual turnover of less than \$2 million to access concessional depreciation arrangements for business assets.

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- a fall of around \$130 million in assistance afforded through the Australian Energy Renewable Agency.

The main source of change in budgetary assistance since 2010–11 was a \$1.3 billion decline from 2011–12 to 2012–13. The principal reductions related to the winding up of the Energy Security Fund (\$1 billion), Small Business and General Business Tax Break (\$470 million), Coal sector jobs package (\$219 million), Steel transformation plan (\$164 million), Farm management deposits scheme (\$80 million), and the Green Car Innovation Fund (\$78 million).

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. An initial benefiting industry has been identified for around 90 per cent of budgetary assistance.

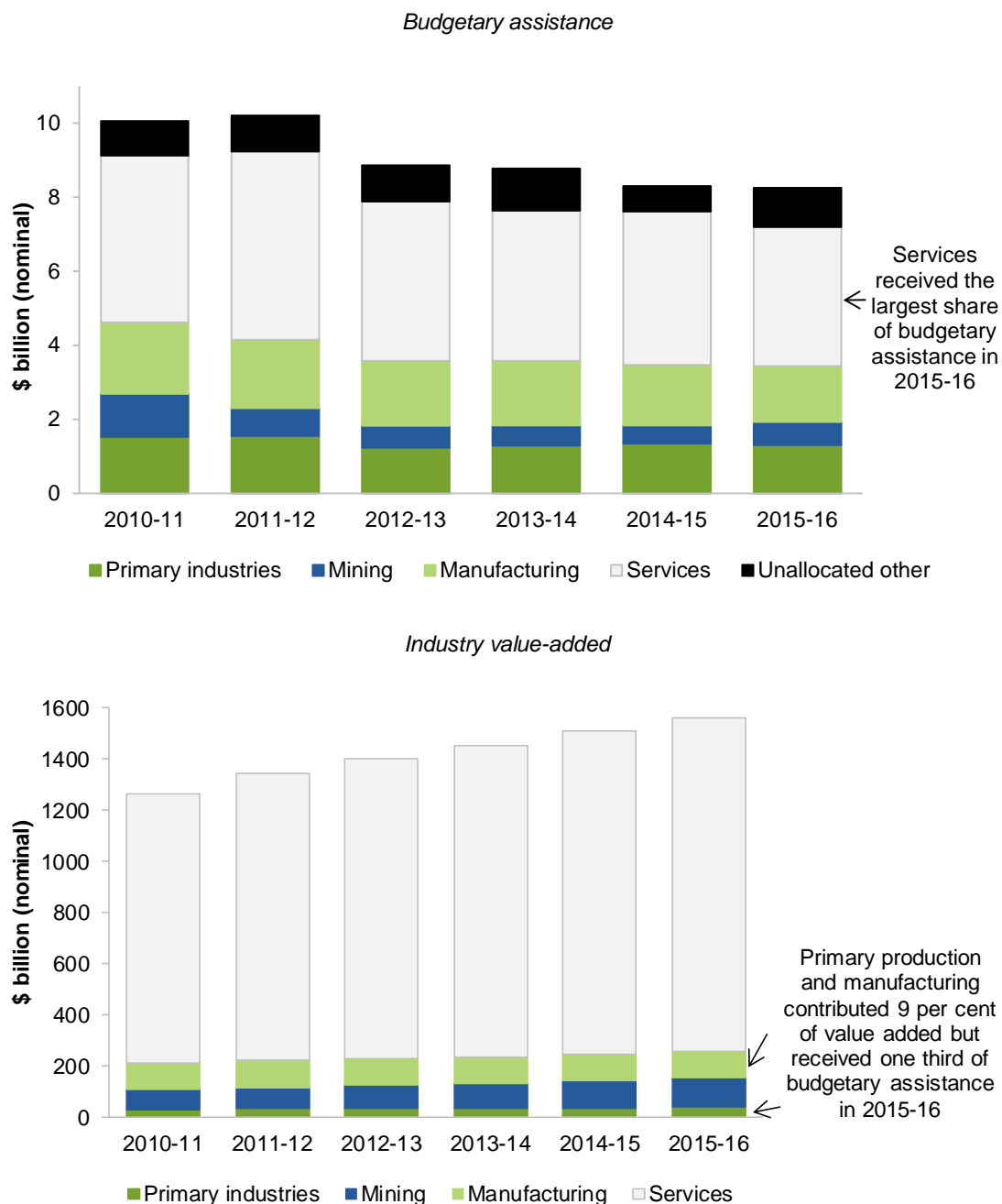
In 2015–16 most budgetary assistance was afforded through *outlays* for the primary production, manufacturing and services sectors while for mining the majority of budgetary assistance was provided through *tax concessions*.

In 2015–16, the services sector received around 46 per cent of estimated budgetary assistance (figure 2.4 top panel), much lower than the sector’s share of economy-wide value added (around 84 per cent) (figure 2.4 lower panel). In contrast, the manufacturing and primary production sectors, combined, received around 34 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 accounted for over a third of estimated budgetary assistance to industry in 2015–16 (table 2.4).

- Budgetary assistance was highest for the *Financial and insurance services* industry (\$1.17 billion) consisting mainly of the Concessional Rate of Withholding Tax scheme and Offshore Banking Unit Tax Concession scheme.
- *Property, professional and administrative services* was the next highest recipient (\$1.04 billion), including through the R&D Tax Incentive scheme and the Small Business Capital Gains Tax schemes.
- *Sheep, beef cattle and grain farming* accounted for \$615 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.

Figure 2.4 Budgetary assistance and value-added shares by industry sector, 2010-11 to 2015-16



Source: ABS (2016b), Commission estimates.

Table 2.4 Budgetary assistance by industry grouping, 2015-16
\$ million (nominal)

	<i>Outlays</i>	<i>Tax concessions</i>	<i>Total budgetary assistance</i>
Primary production	759.1	542.4	1301.5
Horticulture and fruit growing	79.3	52.3	131.6
Sheep, beef cattle and grain farming	257.6	357.4	615.1
Other crop growing	50.2	30.3	80.5
Dairy cattle farming	31.6	40.2	71.8
Other livestock farming	34.6	13.9	48.6
Aquaculture and fishing ^a	63.2	14.5	77.7
Forestry and logging	13.4	12.4	25.7
Primary production support services	5.2	18.0	23.2
Unallocated primary production ^b	224.1	3.4	227.5
Mining	294.2	329.8	624.0
Manufacturing	1069.4	445.9	1515.3
Food, beverages and tobacco	77.8	30.2	108.1
Textiles, leather, clothing and footwear	45.9	5.7	51.6
Wood and paper products	9.5	6.4	15.9
Printing and recorded media	8.8	6.8	15.7
Petroleum, coal, chemical and rubber products	190.4	22.9	213.3
Non-metallic mineral products	25.0	1.0	25.9
Metal and fabricated metal products	74.8	147.9	222.7
Motor vehicles and parts	258.5	31.5	290.0
Other transport equipment	26.0	2.5	28.5
Machinery and equipment manufacturing	173.9	22.6	196.5
Furniture and other manufacturing	19.7	0.6	20.2
Unallocated manufacturing ^b	159.0	167.8	326.9
Services	2177.0	1581.9	3758.9
Electricity, gas, water and waste services	127.1	17.8	144.9
Construction	45.2	-8.3	36.9
Wholesale trade	89.2	49.2	138.4
Retail trade	40.8	51.6	92.4
Accommodation and food services	9.1	46.8	55.9
Transport, postal and warehousing	65.3	3.3	68.6
Information, media and telecommunications	145.3	21.9	167.2
Financial and insurance services	394.5	772.7	1167.3
Property, professional and admin. services	858.9	179.7	1038.6
Public administration and safety	15.9	0.2	16.1
Education and training	20.5	2.0	22.5
Health care and social assistance	103.1	55.2	158.3
Arts and recreation services	96.2	380.8	477.0
Other services	21.9	8.8	30.7
Unallocated services ^b	144.1	0.0	144.1
Unallocated other^b	281.2	773.1	1054.3
Total	4580.9	3673.2	8254.1

– Nil. ^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.

Although *Motor vehicles and parts* received the sixth highest absolute level of support, accounting for \$290 million in budgetary assistance in 2015-16, it has the highest effective rate of assistance (absolute assistance relative to (unassisted) value added) of all industry groups because of the relatively high level of assistance relative to the scale of operations. The (announced) withdrawal of motor vehicle manufacturing in Australia will result in a reduction in the level of assistance in the coming years.

Budgetary assistance not assigned to an industry sector is reported in the *Unallocated other* category. That assistance accounted for around 13 per cent of total estimated budgetary assistance in 2015-16. The small business capital gains tax concession schemes (\$546 million), for which industry allocation data is currently not available through taxation statistics, accounts for over 50 per cent of the category. Other budgetary assistance not classified to industry included Austrade¹⁰, Concessional company taxation for small business, Australian Renewable Energy Agency (ARENA) grants, and the TCF Corporate Wear Program.¹¹

R&D remains the largest categories 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 that 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 several former investment attraction packages
- *Industry-specific* measures, including the Automotive Transformation Scheme, the Clothing and Household Textile Building Innovative Capability Program, 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 sector

¹⁰ 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.

¹¹ 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.

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- *Small business* programs, such as the small business capital gains tax concessions, the Small Business Simplified depreciation rules scheme and concessional company taxation for small business
 - *Regional* assistance, including the Tasmanian Freight Equalisation Scheme, Tasmanian Jobs and Growth Package and various structural adjustment programs with a regional focus
 - a residual ‘*Other*’ category, including the Textiles, Leather, Clothing and Footwear Corporate Wear Program, the Pooled Development Funds initiative, and the Enterprise Connect Innovation Centres Initiative.

The majority of budgetary assistance in 2015-16 was directed to:

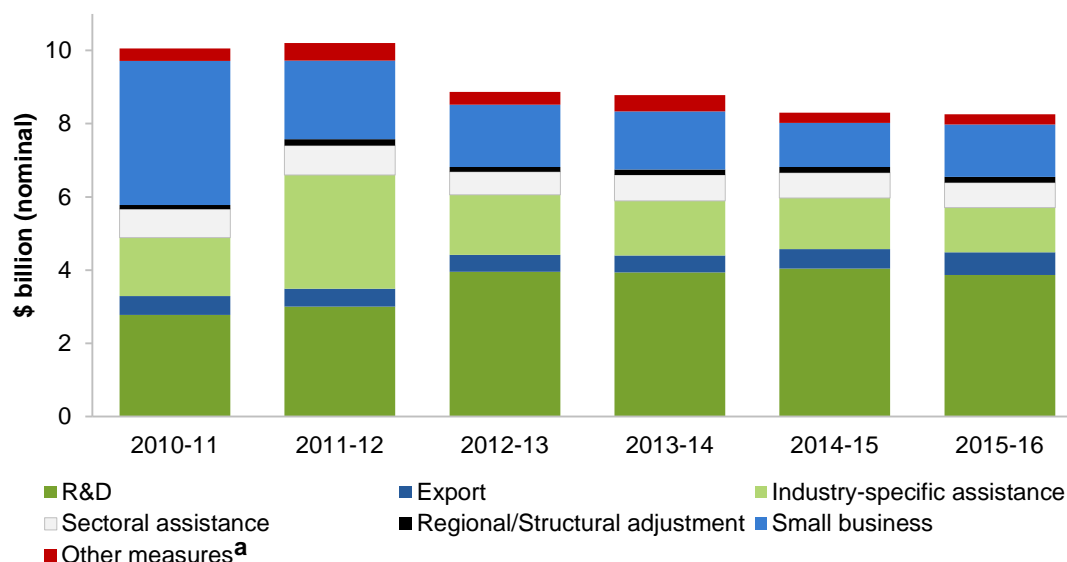
- R&D (\$3.9 billion or 47 per cent) — including \$2.8 billion via the R&D Tax Incentive, \$520 million for CSIRO research with most assistance going to the primary production sector (\$188 million) (of which around half of this allocated to the *Sheep, beef cattle and grain farming* industry) followed by the manufacturing sector (\$136 million), and \$103 million for the Cooperative Research Centres program where around half was directed towards services
- small business (\$1.4 billion or 17 per cent) — including \$1.6 billion for the Small Business Capital Gains Tax schemes, where over half of the concessions are claimed by the services sector with the *Financial and insurance services* industry being the single largest recipient of the schemes (\$267 million)
- specific industries (\$1.2 billion or 15 per cent) — including \$325 million for the Film industry offsets scheme (allocated to *Arts and recreation services*), \$223 million for the Automotive Transformation Scheme (allocated to *Motor vehicles and parts*), and \$215 million for the Offshore Banking Unit Tax Concession (allocated to *Financial and insurance services*) (figure 2.5).

Over the six-year period 2010-11 to 2015-16, changes in the shares of budgetary assistance to different activities are largely accounted for by:

- significant decreases in concessions under the Small Business and General Business Tax Break up to 2011-12
- an overall reduction in assistance from drought related programs over the period to 2012-13 following an easing in drought conditions, although in February 2014 the Government announced an expanded drought assistance package leading to an increase in drought related assistance from 2013-14¹²

¹² Australian Government funding under the Exceptional Circumstances program (both relief payments and interest rate subsidies) fell from a peak of \$779 million in 2008-09 to around \$1.6 million in 2012-13. In February 2014, the Australian Government announced a \$320 million drought assistance package including, among other things, \$280 million towards drought concessional loans and ‘more generous’ criteria for accessing income support through the Farm Household Allowance (PC 2015).

Figure 2.5 **Budgetary assistance by category, 2010-11 to 2015-16**



^a Includes investment measures.

Source: Commission estimates.

- a significant increase in transitional assistance in relation to the carbon pricing mechanism in 2011-12 and its subsequent winding down in 2012-13
- an expansion in funding for R&D activities over the period while funding for the other significant categories including industry-specific, sector-specific and small business measures have fallen
- an increase in concessions provided under the Small Business Depreciation Rules scheme in 2013-14, followed by a subsequent fall in concessions in 2014-15.

Some caution is required when comparing categories over time as changing shares do not necessarily reflect a conscious effort on the part of government to emphasis or increase one category relative to any other. While 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’), 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 \$201 million (2.4 per cent) of estimated budgetary assistance in 2015-16, down from \$618 million in 2014-15.

2.3 Combined assistance and effective rates of assistance

This section presents the results for combined tariff, budgetary and agricultural pricing 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.

Food, beverages and tobacco and Metal and fabricated products receive the most combined assistance

Table 2.5 summarises tariff and budgetary assistance at the industry level for 2015-16. The manufacturing division receives the highest level of net combined assistance because of tariff assistance on its outputs. Although services industries receive the most budgetary assistance (around \$3.8 billion in identifiable support), such assistance is very slightly outweighed by the estimated input tariff penalty (around \$3.8 billion). The primary production division received the majority of its support from budgetary assistance, although some tariff protection continues to be afforded to a range of horticultural, crop and forestry products. By value, the highest level of combined assistance is afforded to the manufacturing industries *Food, beverages and tobacco* and *Metal and fabricated products* industries mainly due to tariff assistance, while the highest tariff penalty on inputs is born by the *Construction* and *Property, professional and administration* industries. A time series of net combined assistance (table 2.5, right hand column) by industry grouping for the period 2010-11 to 2015-16 is presented in appendix A.

The effective rates of combined assistance has 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 3.8 per cent in 2015-16, unchanged from 2014-15 which was slightly down on previous years (table 2.6). The effective rate for the primary sector in 2014-15 was 2.8 per cent, down from 3.8 per cent in 2010-11 — largely reflecting the decline in drought assistance afforded through Exceptional Circumstances payments. The estimated effective rate of assistance from tariff and budgetary assistance for mining is negligible.

Table 2.5 Combined assistance by industry grouping, 2015-16^a
\$ million (nominal)

	Tariffs		Net tariff assistance	Budgetary		Net combined assistance
	Output	Input penalty		Outlays	Tax concess.	
Primary production	450.2	-173.4	276.8	759.1	542.4	1578.3
Horticulture and fruit growing	135.2	-9.3	125.9	79.3	52.3	257.5
Sheep, cattle and grain farming	272.7	-76.9	195.8	257.6	357.4	810.8
Other crop growing	1.0	-3.8	-2.9	50.2	30.3	77.6
Dairy cattle farming	—	-13.1	-13.1	31.6	40.2	58.7
Other livestock farming	—	-16.2	-16.2	34.6	13.9	32.3
Aquaculture and fishing	2.0	-8.4	-6.4	63.2	14.5	71.3
Forestry and logging	16.8	-1.9	14.9	13.4	12.4	40.7
Primary production services	22.6	-43.7	-21.1	5.2	18.0	2.0
Unallocated primary production	—	—	—	224.1	3.4	227.5
Mining	1.6	-306.6	-305.0	294.2	329.8	319.0
Manufacturing	6311.7	-1651.1	4660.6	1069.4	445.9	6175.9
Food, beverages and tobacco	1997.7	-690.0	1307.7	77.8	30.2	1415.8
Textiles, clothing and footwear	116.0	-30.5	85.5	45.9	5.7	137.1
Wood and paper products	691.7	-116.8	574.9	9.5	6.4	590.8
Printing and recorded media	102.9	-27.8	75.1	8.8	6.8	90.8
Petroleum, coal and chemicals	643.5	-138.2	505.4	190.4	22.9	718.7
Non-metallic mineral products	351.5	-59.1	292.3	25.0	1.0	318.3
Metal and fabricated products	1015.2	-166.1	849.1	74.8	147.9	1071.8
Motor vehicles and parts	556.2	-214.5	341.8	258.5	31.5	631.7
Other transport equipment	180.9	-49.7	131.2	26.0	2.5	159.7
Machinery and equipment	440.0	-109.5	330.5	173.9	22.6	526.9
Furniture and other products	216.2	-49.0	167.2	19.7	0.6	187.4
Unallocated manufacturing	—	—	—	159.0	167.8	326.9
Services	—	-3793.1	-3793.1	2177.0	1581.9	-34.2
Electricity, gas, water and waste	—	-67.2	-67.2	127.1	17.8	77.7
Construction	—	-1551.1	-1551.1	45.2	-8.3	-1514.2
Wholesale trade	—	-227.0	-227.0	89.2	49.2	-88.6
Retail trade	—	-142.4	-142.4	40.8	51.6	-50.0
Accommodation & food services	—	-294.3	-294.3	9.1	46.8	-238.4
Transport, postal & warehousing	—	-211.1	-211.1	65.3	3.3	-142.5
Information & communications	—	-70.2	-70.2	145.3	21.9	97.1
Financial & insurance services	—	-15.1	-15.1	394.5	772.7	1152.2
Property, professional & admin.	—	-377.2	-377.2	858.9	179.7	661.5
Public administration and safety	—	-140.4	-140.4	15.9	0.2	-124.2
Education and training	—	-49.8	-49.8	20.5	2.0	-27.3
Health care & social assistance	—	-216.9	-216.9	103.1	55.2	-58.7
Arts and recreation services	—	-76.7	-76.7	96.2	380.8	400.3
Other services	—	-353.7	-353.7	21.9	8.8	-323.0
Unallocated services	—	—	—	144.1	0.0	144.1
Unallocated other	—	—	—	281.2	773.1	1054.3
Total	6763.5	-5924.2	839.3	4580.9	3673.2	9093.4

— 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, 2010-11 to 2015-16^a**
per cent

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Primary production^b	3.8	3.7	3.0	3.0	2.9	2.8
Horticulture and fruit growing	2.3	2.1	2.2	2.6	2.5	2.6
Sheep, cattle and grain farming	5.2	4.2	3.4	4.0	3.6	3.4
Other crop growing	1.0	1.8	1.6	1.7	1.6	1.9
Dairy cattle farming	3.0	3.3	1.1	1.2	1.5	1.4
Other livestock farming	0.7	1.1	0.7	0.6	0.7	0.6
Aquaculture and fishing	4.4	3.5	2.6	2.9	2.9	2.8
Forestry and logging	3.2	4.3	3.3	2.4	2.3	2.2
Primary production services	0.9	0.4	1.3	0.1	0.0	0.0
Mining	0.7	0.4	0.2	0.2	0.1	0.2
Manufacturing^b	4.1	4.0	4.1	3.9	3.8	3.8
Food, beverages and tobacco	3.5	3.3	3.4	3.5	3.4	3.3
Textiles, clothing and footwear	7.5	5.4	5.4	5.4	4.7	4.0
Wood and paper products	5.1	5.0	5.1	5.0	5.1	5.0
Printing and recorded media	2.1	2.1	2.1	2.2	2.3	2.2
Petroleum, coal, & chemicals	3.6	3.3	3.3	2.8	2.8	2.5
Non-metallic mineral products	3.0	2.9	3.0	3.1	3.0	2.9
Metal and fabricated products	3.5	4.0	5.0	3.9	3.6	4.0
Motor vehicles and parts	11.9	12.1	13.0	11.0	10.3	9.5
Other transport equipment	3.3	3.1	3.1	3.5	4.0	3.4
Machinery and equipment	2.6	2.5	2.8	2.8	2.9	2.7
Furniture and other products	4.7	4.8	5.0	4.7	4.6	4.6

^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 2015-16 was 9.5 per cent.

In contrast, assistance for the *Textiles, leather, clothing and footwear* industry fell to 4.0 per cent in 2015-16 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 has now declined to 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.¹³ More recently, effective rates of assistance for these industries have fallen significantly, from 11.9 per cent for *Motor vehicles and parts* and 7.5 per cent for *Textiles, leather, clothing and footwear* in 2010-11, following the legislated tariff cuts in January 2010 and for *Textiles, leather, clothing and footwear* in 2015 and net reductions in budgetary assistance for both industries. With the announced rationalisation of the automotive industry, effective assistance in that industry is likely to fall further.

Rates have fallen for the Dairy cattle farming and Sheep, beef cattle and grain farming industries

The estimated effective rate of assistance for *Dairy cattle farming* fell from 2010-11 to 2015-16 — from 3 per cent to 1.4 per cent. This largely reflects a decline in Exceptional Circumstances drought support. Prior to the dairy industry's deregulation in July 2000, the effective rate of combined assistance was estimated to exceed 30 per cent.

Reflecting lower claims for Exceptional Circumstances drought support largely following the easing of drought conditions to 2012-13, the effective rate of assistance for the *Sheep, beef cattle and grain farming* group declined from 5.2 per cent in 2010-11 to 3.4 per cent in 2015-16. This decline in effective assistance has been moderated somewhat by increased support from the Farm Management Deposits Scheme (an additional \$153 million since 2010-11) and R&D support (an additional \$65 million).

Declines were also estimated over the period for some other agricultural industry groupings because of lower claims for drought support.

Rates have stabilised in forestry and logging

Effective rates of assistance to *Forestry and logging* have stabilised in more recent years at around 2.2 per cent. This reflects more stable levels of assistance provided through programs like the structural adjustment packages for the Tasmanian forestry industry, the small business capital gains tax concessions schemes, and net tariff assistance to forestry and logging.

This contrasts with effective rates of assistance to the industry prior to 2010-11 where assistance levels changed markedly from year to year. The effective rate of assistance for *Forestry and logging* was 6.9 per cent in 2007-08, negative 1.3 per cent in 2008-09 and then back to 4.7 per cent in 2009-10. This volatility resulted from changes in the direction of accelerated write-offs on forestry-managed investments from positive assistance in 2007-08 (the acceleration stage) to increased taxation in 2008-09 (the pay-back stage). The Forestry Managed Investment Scheme was terminated on 30 June 2008.

¹³ 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 was 140 per cent and 157 per cent respectively (PC 2000a).

Higher effective rates at finer levels of analysis

While present 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 2.4). Advantage conferred to a specific firm or activity in this way can be quite distortionary, both within an industry as well as at the economy-wide level.

Box 2.4 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.

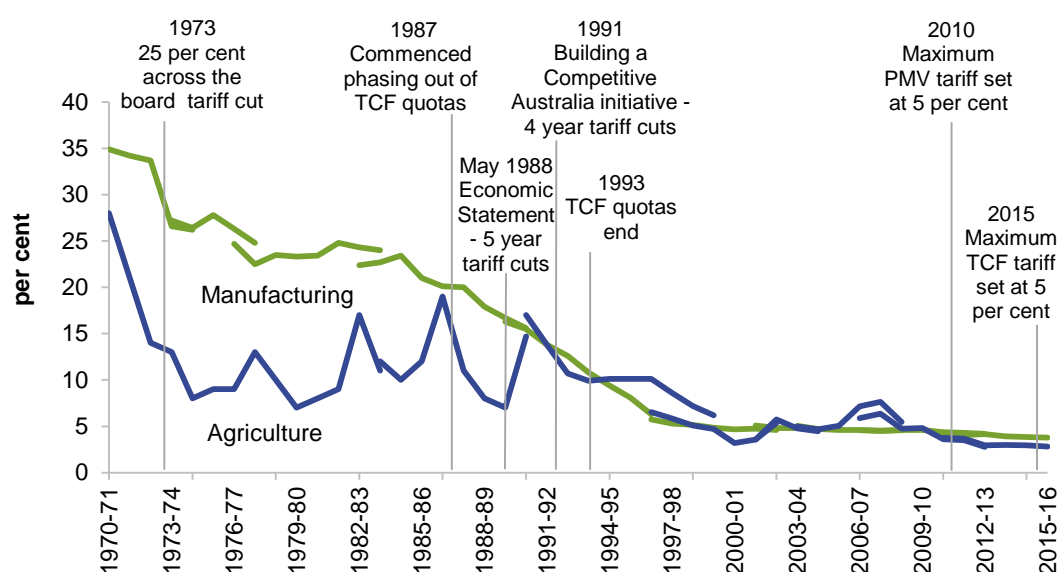
- Film industry offsets — government support provided by the producer tax offset (part of the Australian Screen Production Incentive) amounted to \$325 million in 2015-16. This assistance provided \$1 136 million for production budgets for the Australian film and television industry which amounted to around 29 per cent of production costs (SA 2017). (The comparable rate for 2013-14 and 2014-15 was 24 per cent and 16 per cent, respectively). The film industry also receives assistance from the state and territory film support programs, Screen Australia and the Export Finance and Insurance Corporation.
- Tasmanian Freight Equalisation Scheme (TFES) — around 50 per cent of the total amount claimed goes to 10 recipients (PC 2014b).
- 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 2015a).
- 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 2015-16.

Figure 2.6 Effective rates of assistance to manufacturing and agriculture,^a 1970-71 to 2015-16



^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 last 45 years

The estimates indicate a marked fall in measured assistance to the manufacturing sector over the last 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. Since 2000, the rate has been around 5 per cent, declining to 3.8 per cent in more recent years.

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.

Australia's tariff schedule, which lists a 5 per cent general tariff for about 50 per cent of products (at the HS 8 digit level), continues to provide assistance (border protection) to many manufacturing activities, and an associated cost impost on consumers, input use and government administration. The Commission has long considered that the 5 per cent general tariff rate should be eliminated. (Chapter 4, section 4.5 discusses this further). In practice, the protective effect and cost impost of the remaining tariffs depends upon the pattern of imports and the operation of certain tariff concessions. For instance, the industry assistance effects of tariff reduction preferences under Australia's preferential bilateral and regional trade agreements depends upon the degree to which tariff preferences flow through to reduced import prices or are 'pocketed' by the exporter/importer (box 2.5). Moreover, potential trade agreement tariff preferences may not be utilised because, to be eligible, the imports need to satisfy complex rules of origin (PC 2017b).

Box 2.5 Treatment of trade agreement tariff preferences in assistance estimates

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

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

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

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 to *eggs* also exceeded 250 per cent through much of the 1970s and early 1980s, while effective rates 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.

The rise in the (average) effective rate of assistance to agriculture in 2006-07 and 2007-08 reflects significant increases in Exceptional Circumstances drought relief payments and interest rate subsidies at the height of the drought through much of Australia. It also includes the Dairy Industry Structural Adjustment package.

3 Recent developments in industry assistance

Key points

- Industry assistance can take many forms. This diversity is illustrated by four recent developments that may well result in significant industry assistance in the future, although not all will be reflected in the TAR estimates.
- The Northern Australia Infrastructure Facility (NAIF) offers up to \$5 billion over five years in concessional finance to encourage and complement private sector investment in infrastructure that benefits Northern Australia. While mandatory criteria include the ability to repay or refinance the loan, the NAIF will provide industry assistance:
 - by offering lower interest rates, longer loan periods and different repayment arrangements to those required by the private sector, such as repayment holidays
 - as government takes on the contingent liability should the infrastructure not prove commercial.
- There is risk of political pressure to develop infrastructure that is unlikely to be able to meet its operational costs, let alone repay the loan. For example, the construction of dams that do not comply with the National Water Initiative could become a burden to local and state and territory governments over time. Attention to the governance of the NAIF is required to manage this and other risks.
- The Upper Spencer Gulf has attracted considerable industry assistance over the years to support the industries and towns through structural adjustment arising from reductions in tariffs, shifting global competitiveness, and most recently to loss of cheap electricity as ageing generation has closed down. Government support has fallen into three main types:
 - rescue, with the latest offers to Arrium by the State and Commonwealth governments adding to almost \$100 million. These actions have tended to simply delay required adjustment, raising the costs in the longer term.
 - adjustment assistance, with support for retraining, helping firms, and community services totalling over \$22 million in grants and loans in the current packages, but little coordination, or evidence that all the programs will be effective
 - development, with the State government committing \$7 million for projects aimed at community and business development on top of existing programs worth \$15 million.
- State and Commonwealth governments have responded to the recent electricity blackouts, and high electricity price with proposals for public investment in generation and storage. Such investments must pass a threshold market failure test, and have demonstrable net public benefit before allowed to proceed.
- Sugar marketing was reregulated in Queensland in 2015, in a major step backwards. While a recent dispute with the millers has been resolved, the state government should repeal this regulation. The charity status of the former single desk marketer, now privatised, confers unwarranted advantage and should be removed.
- Other recent announcements likely to be included in next year's estimates are the dairy support package (just under \$23 million, plus concessional loans of \$555 million), and the wine industry support package (\$50 million) and tourism and cellar door grant programme (\$10 million a year).

Industry assistance can take many forms, from anti-dumping duties to direct injections of cash into firms. As industry assistance distorts the allocation of resources, it should be justified by a public benefit case — to demonstrate the benefits to the community as a whole outweigh the costs imposed on the firms and industries that are not recipients of assistance, and the cost to taxpayers. This chapter describes four recent developments that may well provide significant industry assistance, namely:

- establishment of the \$5 billion Northern Australia Infrastructure Facility (NAIF)
- industry and regional assistance in response to Arrium (steel) entering administration, coming off the back of difficulties for other significant local employers in the Upper Spencer Gulf Region
- proposals for government investment in electricity generation and storage
- recent developments in the regulation of sugar marketing in Queensland, and conferring charity status on Queensland Sugar Ltd.

Not all of these developments will appear in the future estimates of industry assistance. For some, such as the concessional loans under the NAIF, this is because it is difficult to calculate the size of the subsidy provided or, more importantly, the value of the contingent liabilities assumed by government. For others, such as public investment in electricity generation, possible white elephants aside, industry assistance can subsequently be needed to keep infrastructure in operation. Special deals for some users of electricity have existed in the past leading to a long history of industry assistance that continues today.

There are other standout areas of recent industry assistance that are worthy of comment. This includes additional assistance to the wine and dairy industries, outside of the Agricultural Competitiveness White Paper (box 3.1).

Another notable development is the increase in measured *industry-specific* assistance for ‘film and screen’ activity, within the *Arts and Recreation Services* industry grouping, which rose by \$159.5 million in 2015-16 (Appendix A, table A.1). Australian Government assistance, via screen-related tax offsets, Screen Australia funding, and one-off payments to international film producers to make a movie in Australia¹⁴ totalled \$452.4 million. This assistance now exceeds the annual assistance to the motor vehicle industry in any of the last four years.

¹⁴ Most recently, for Aquaman (\$22.1 million) in 2018-19. Previously, Wolverine (\$12.8 million, 2011-12), Alien: Covenant and Thor: Ragnarok (\$47.3 million combined, 2016-18), and 20 000 Leagues Under the Sea: Captain Nemo (\$21.6 million, 2016-17), though Disney subsequently decided not to make Captain Nemo and the Australian Government agreed to transfer the funding to Pirates of the Caribbean: Dead Men tell No Tales.

Box 3.1 **New assistance for the dairy and wine industries**

Dairy Support Package.

On 25 May 2016 (during the Election caretaker period) the Liberal Party announced a dairy-specific support package to help dairy farmers affected by the Murray Goulburn and Fonterra decisions to reduce farm gate milk prices (Liberal Party 2016). The announcement included:

- new concessional loans specifically for dairy farm businesses (\$555 million)
- fast tracking the upgrade of the Macalister Irrigation District (\$20 million)
- establishment a commodity milk price index, to track global dairy demand and prices (\$2 million)
- an additional 9 rural financial counsellors in dairy regions (\$900 000)
- an additional 18 DHA staff to process new claims for income support (Farm Household Allowance)
- funding for Dairy Australia's 'Tactics for Tight Times' program (\$900 000)
- appointment of a Dairy Industry Liaison Officer
- two Department of Human Services Mobile Service Centres redirected to affected dairy regions.

State governments also announced support for affected farmers and farming communities, such as \$6 million by the Victorian government (Andrews 2016) and rural financial counselling support by the SA Government (PIRSA 2016) and Tasmanian Government (DPIPWE 2016).

Wine industry

In the 2016 Budget the Government announced a reduction in the Wine Equalisation Tax rebate cap in 2018 (Australian Government 2016a). To assist the industry the Government subsequently announced two measures, to be implemented by the Australian Grape and Wine Authority (AGWA) from 2016 through to 2019 (Joyce 2016).

- Export and Regional Wine Support Package (\$50 million over 4 years). The funds target regional wine producers, wine-related tourism and export-focused businesses. Stage 1 of the package is to develop a detailed and costed business plan detailing the activities and measures of success for the program for Ministerial approval. ACIL Allen has been retained as a consultant to develop the plan.
- Wine Tourism and Cellar Door Grant Programme (Consultation paper released March 2017). Wine producers who have met the eligibility criteria in the preceding financial year will be able to access an annual grant of up to \$100 000 for their eligible cellar door sales. The government wants to support producers who add value and contribute to communities by encouraging visitors to wine regions. The grant will be available in 2019-20, with the programme capped at \$10 million per year. The programme will be reviewed two years after implementation.

On the review front, the ANAO has examined the Rural R&D for Profit Program and farm finance concessional loans programs, focussing on the development of the policy decision and the early implementation of the programs. These reviews raised some concerns additional to those identified by the Commission in last year's *Review*. While program outcomes are a way off yet — the multi-year R&D projects are in-train and the first loans not due for repayment until 2018-19 — it is imperative that the information be collected to support a robust economic evaluation of the programs' design and operation.

3.1 Northern Australia Infrastructure Facility

The *Northern Australia Infrastructure Facility (NAIF) Act 2016* was passed by the Commonwealth Parliament on 3 May 2016. NAIF is a major long term initiative of the Australian Government's 2015 White Paper on Developing Northern Australia (Our North, Our Future) (Australian Government 2015). The NAIF offers up to \$5 billion over five years in concessional finance to encourage and complement private sector investment in infrastructure that benefits Northern Australia.¹⁵ Its administration is supported by the Export Finance and Insurance Corporation (EFIC).

The nature and recipients of NAIF industry assistance

The NAIF meets the criteria of industry assistance because it will provide concessional loans to be invested in eligible infrastructure projects as set out in the *NAIF Act 2016*. Concessions may be lower interest rates, longer loan periods and different repayment arrangements to those required by the private sector, such as repayment holidays. The level of assistance conferred by the concession is difficult to quantify, especially when several types of concession are combined. The largest component is usually the value of the interest rate discount, where the 'grant equivalent' depends mainly on the size of the loan and the difference between the market interest rate and the rate charged under the facility. The contingent liabilities incurred by the NAIF, which convert to real liabilities if the firms find themselves unable to repay or refinance their loans, are particularly difficult to quantify (Australian Government 2016b).

The justification for assistance to private projects and the selection of fortunate recipients are perennial threshold issues. For NAIF, projects must meet seven mandatory criteria, with some non-mandatory criteria (box 3.2). Projects may include developments in airports, communications, energy, ports, rail and water infrastructure.

¹⁵ It is not clear whether the \$5 billion has been credited to a 'special account' or will be credited in increments. The \$10 billion Clean Energy Finance Corporation was credited with \$2 billion in each of five years. As it takes time to identify and develop sound project proposals an incremental build-up of the facility resources may reduce the risk of poorer investment decisions being made in a rush to get the financing out the door.

Box 3.2 **Eligibility for NAIF**

There are seven mandatory criteria for NAIF finance and preference will be given to projects which meet one or both of the non-mandatory criteria.

Mandatory Eligibility Criteria:

1. The project involves the construction or enhancement of economic infrastructure
2. The project will be of public benefit
3. The project is unlikely to proceed, or only at a much later date, without NAIF financial assistance
4. The project is located in, or will have a significant benefit for, northern Australia
5. NAIF's loan is not the majority source of debt funding
6. The loan will be able to be repaid or refinanced
7. An Indigenous engagement strategy is prepared.

Non-Mandatory Eligibility Criteria:

1. The project is seeking finance from NAIF for an amount of at least \$50 million
2. There is an identified need for the project.

Other Considerations:

The Board must be satisfied that NAIF's return on the facilities it advances will cover at least the Commonwealth's cost of funding and NAIF's administrative costs.

Source: NAIF (2017)

Concessional loans are one way for governments to elicit the public good element of private sector infrastructure investment¹⁶, which may not be forthcoming if the private operator is not able to attract sufficient private finance. The public benefits can be spillovers — externalities where other firms benefit directly, for example because they can access associated infrastructure built by the firm, and flow-on effects, which arise, for example, with increased demand for support services in the local area. History suggests that there is systemic 'optimism bias' in assessments of the spillovers and flow-on effects, not least in how much employment is generated. For example, the Alice Springs to Darwin rail line was mooted to create 7000 jobs during construction (Landline 2000), but the peak number employed at any time during construction was 1500 (ABS 2005).

Apart from the need for judicious assessment of the public benefit of private infrastructure — a transparent and convincing business case — the justification for such concessional loans rests on the government's judgment that sufficient private finance is not forthcoming (at all,

¹⁶ Grants are another way, which have the advantage of being on the government's balance sheet, are transparent and quantifiable and therefore are weighed against other calls on government resources.

on the right terms, or quickly enough).¹⁷ That is, a market gap exists because the assessment of risk by private financiers means they require a rate of return well beyond market rates, at least for the development and construction phase of the project.¹⁸ The access to concessional finance mitigates this risk, as the government takes on the contingent liability.

The Commission's 2014 *Public Infrastructure* inquiry (PC 2014a) was circumspect about risk-based market gaps:

caution needs to be exercised when determining an appropriate role for government in the context of the unwillingness of the private sector to accept some risks....the unwillingness of the private sector to commit to higher risk projects may be a commercially and economically sound decision...

... allocation of some project risks from a private sector partner to the government may be warranted if the government is better able to avoid, manage or absorb those risks. However, this sets a substantially higher threshold for government involvement. (p. 216)

Preceding this 2014 Inquiry, the Commission's 2012 inquiry into *Australia's Export Credit Arrangements* (PC 2012) found that poor governance arrangements had allowed much of the concessional finance to be directed to multinationals, for trade activity that would have occurred regardless. The risk for the NAIF is more likely to be that some infrastructure projects will fail to cover their operational costs, let alone meet their loan servicing and repayment obligations.

The inherent assumption that lies behind concessional loan facilities such as the NAIF is that the risk of a firm being unable to service and repay the loan falls once the infrastructure is in operation. The finance aims to get the firm over the construction hurdle, after which the project will have a lower risk profile and be able to refinance the loan on (more favourable) commercial terms. This means that the infrastructure must generate sufficient revenue to meet all its operating costs and loan interest payments. Refinancing is desirable, in order to free up capital to support more investments under the NAIF, so overall the project must earn a rate of return reflective of market interest rates. If the NAIF is to be successful, it must ensure that the business case for all proposed investments is able to demonstrate an ability to cover their operational costs and the costs of servicing the loan at market rates in the future.

¹⁷ The Commission's 2014 inquiry on *Public Infrastructure* found that the finance community is only too willing to provide and finance (public) infrastructure where it has assessed the projects to be commercially viable (PC 2014a).

¹⁸ The reasons for a high risk assessment could include high costs of gaining information (which may be available to government), regulatory uncertainty, lack of track record of the firm, or lack of comparable investments to assist in the assessment of risk.

Governance and transparency of NAIF assistance

The lack of transparency to date and the promotion of certain projects by politicians (in the absence of credible supporting investment data) has raised concerns about the viability of future investments under the NAIF.

Governance arrangements are a major concern¹⁹

There is little in the public domain about the ‘workings’ of the NAIF other than the relatively general governance structure and investment mandate. Concerns about the capacity of the NAIF to conduct proper due diligence because of the current paucity around their governance and policies led to a call for the ANAO to audit the NAIFs independence and systems of analysis (Swann 2017). In response, the ANAO noted the concerns and stated that they will consider such an audit as part of planning the ANAO’s 2017-18 annual work program (ANAO 2017).

There is much to be learned from the long experience of EFIC providing concessional export finance. Some of these lessons cover what not to do. The Commission’s review of EFIC (PC 2012) found that it was failing to support small and medium size enterprises (SMEs) where market gaps in access to export financing were more likely (box 3.3). The Commission also found governance problems, such as insufficient internal and independent oversight of compliance with its mandate. The Commission was not satisfied that the EFIC Board was provided with sufficient information in board papers to evaluate whether finance facilities submitted for approval met the requirements set out in the Minister’s Statement of Expectations with regard to pricing, or to determine that EFIC was not competing with the private sector (PC 2012). EFIC have since made changes to improve its governance arrangements, which should inform the arrangements for the NAIF (box 3.3).

Project selection must be on merit and not succumb to political pressures

As at April 2017 around 100 applications to the NAIF are reported to have been made, and are under consideration (Vincent 2017). The NAIF website does not list the applications, as at 13 June no projects have yet been approved. However, three projects have received attention in the press, having been raised as possibilities by some politicians. These are:

- a rail line from the Gallilee Basin to Abbott Point
- one or more irrigation dam projects in various locations in Northern Australia
- ‘clean coal’ power generation in North Queensland.

¹⁹ Governance concerns in relation to so-called ‘co-investments’ (industry assistance) by government in private firms were discussed in Trade & Assistance Review 2013-14, (chapter 3) (PC 2015), and are summarised in the section on electricity market investment in this chapter.

Adani is reported to have made an application to the NAIF for a \$1 billion loan and a related entity (Aurizon) is seeking a \$1.25 billion loan to help finance the rail lines from the Galilee Basin to Abbott point. Adani has, however, stated that it does not need the loan in order to build the rail line (Vincent 2017), raising the question of if it can satisfy the additionality criteria for the NAIF. The proposal is supported by the Queensland Government, who want the development of coal mining in the Gallilee Basin to proceed.

Box 3.3 Past lessons from EFIC project assessment and governance

The Commission's 2012 review of the *Australia's Export Credit Arrangements* (PC 2012) (administered by EFIC) identified EFIC's support went to a relatively small number of large firms, often on a repeat basis. Further, EFIC's commercial account operations had yielded a low rate of return, with some facilities subsidised by taxpayers.

The Commission also found that there was no convincing evidence of systemic market failures for large firms in accessing export finance, nor for resource-related projects in Australia. Rather, information-related failures were likely to be limited to small and medium-sized enterprises that are new to exporting, or are attempting to access emerging markets.

Accordingly, the Commission recommended that EFIC's role should be limited to demonstrating to the private sector that providing export finance to newly exporting small and medium sized businesses can be commercially viable. To fulfil this demonstration role, EFIC should provide services on a commercial basis, including setting prices to cover the expected full economic costs of provision and being subject to competitive neutrality arrangements.

Amongst the Commission's other recommendations were the introduction of measures to enhance the governance and transparency of EFIC's operations, such as in the area of public reporting.

In response, in January 2013, the Australian Government announced that EFIC will apply a new market failure test to determine exporters' eligibility for EFIC services and will direct more resources to small and medium-sized enterprises looking to expand into Asian markets. In November 2014 the Minister wrote to EFIC outlining a new statement of expectations (SoE), that went some way to addressing the concerns raised by the Commission. This includes an emphasis on lending only where there is a market gap, focusing on small and medium sized enterprises, and greater transparency in its transactions. The SoE directed EFIC to cease support for onshore resource projects or associated infrastructure. It did, however, leave it open for EFIC to support large overseas resource projects (Robb 2014).

The development of coal mining in the Galilee Basin is controversial, but Adani has received the environmental approvals required for the mine to go ahead. That it should do so with industry assistance has led to Environmental Justice Australia (EJA) lodging a competitive neutrality complaint on behalf of the Institute for Energy Economics and Financial Analysis (EJA 2017). They argue that the project does not meet the criteria that 'The proposed Project is unlikely to proceed, or will only proceed at a much later date, or with a limited scope, without financial assistance'. Further, EJA raised concerns about the adequacy of the governance of the NAIF, including the lack of a risk appetite statement, and the absence of a debt neutrality charge, which EFIC is subject to, but NAIF is not. The proposal to provide

almost 20 per cent of the NAIF's resources to one project has also raised concerns (Swann 2017)

The very low likelihood of private sector finance for large scale irrigation dams in Northern Australia means that these projects would pass the market gap criteria. However, based on experience with large water catchment activities in northern Australia, there is a real question of whether any new dams would be sufficiently commercial to be able to repay a loan. Of the eleven large dams that have been built for irrigation in Northern Australia only three are still in operation. These surviving irrigation dams were built by government and continue to require operational subsidies. This explains the Queensland Government's reluctance to support the building of more dams. Currently the Ord 2 and the Burdekin dam have excess capacity, so building new dams is unlikely to deliver the boost to irrigated agriculture that proponents claim. Moreover, recent research by CSIRO casts doubt about the economic viability of expanding irrigation in Northern Australia.²⁰ The CSIRO analysis suggests that on-farm dams can offer a more viable economic prospect, and there may well be proposals of this nature made to the NAIF. However, to justify industry assistance, on-farm (private) dams must deliver on the criteria of providing a public benefit. Clause 15 of the NAIF Act indicates that the approvals required by a Project Proponent could include the implementation of water arrangements under the National Water Initiative. Requiring such compliance should reduce the probability that local communities and state and territory governments will be left with the bill for poor water infrastructure choices.

The third project that has been mentioned is a 'super-efficient' coal fired power station located in the Galilee basin. However, the commercial viability of coal generation has been questioned, particularly if a carbon price is introduced in the future. The Minister responsible for the NAIF has outlined perceived merit in such a project and that it could be supported by the NAIF (Canavan 2017). The link between coal power and smelting operations made by the Minister has parallels with past 'twinned' investments, such as aluminium smelting (now owned by Alcoa) and the Hazelwood and other brown coal fired electricity generators in the La Trobe Valley. These regional development strategies may be successful, but they can also result in long term dependency on industry assistance.

The risk of prospective industry assistance beyond NAIF

As the other vignettes in this chapter mention and the dams discussed above illustrate, there is a history of industry assistance for major infrastructure investment in regional areas resulting in ongoing public support. Governments have ended up providing industry

²⁰ CSIRO, under the North Queensland Irrigated Agriculture Strategy (2012-14), evaluated the feasibility, economic viability and sustainability of agricultural development in the Gilbert and Flinders catchments in North Queensland (CSIRO 2014). While they concluded that large instream dams in the Gilbert could support 20 to 30 thousand hectares of irrigation in 85 per cent of years, and on farm dams 10 to 20 thousand hectares in 70 to 80 per cent of years, they warned that this would have impacts on recreational and commercial fishing in the Gulf of Carpentaria, and other major environmental and social impacts downstream.

assistance to those firms that are established to make use of the infrastructure investment. For example, the success of Ord Stage One is questionable with a number of notable failures (Gosford 2014). These include the demise of the cotton industry once subsidies for fertilizer were removed in 1974, failed rice crops due to magpie geese in the 1980s, and later sugarcane which failed to produce enough to sustain a mill. In 2013, fungal blast disease destroyed the promise of new rice varieties. Given these experiences, stage 2 expansion and proposed Stage 3 have been described as ‘good money after bad’ (Gosford 2014).

The costs of building the infrastructure can also be underestimated. The Western Australian government audit of Ord Stage 2 reported that the expanded irrigation took 3 years longer than expected and cost \$334 million, which was \$114 million more than budgeted. The use is less than anticipated as of the planned 8 000 ha of land at Goomig proposed for a sugar development, only 1 600 ha, was under crop (mainly chia) as at June 2016 (OAG 2016). While the WA audit concluded that ‘the sustained social and economic benefits underpinning the decision to proceed with this \$529 million investment have not been realised,’ they also noted that ‘Nor is there a plan to track and assess them’ (OAG 2016). From the perspective of accountability for public funding, such plans are critical, and the findings from these types of evaluations will help inform future governments about what industry assistance may be worthwhile.

It is critical that the NAIF adopt best practice governance arrangements and is able to assess their investments on their merits, which should include generating sufficient revenue to cover both operating costs and servicing their loans. As the Arrium example in this chapter illustrates, because the firm (or industry) is often the major source of employment in the region, threats of closure may attract additional industry assistance. The failure of regional development investments to generate a diverse regional economy can also mean that actual closure sees a need for structural adjustment programs. There is a real danger of escalation in industry assistance associated with the NAIF as governments seek to avoid infrastructure investments being a ‘white elephant’.

3.2 Assistance to Arrium and adjustment in the Upper Spencer Gulf region

On 7 April 2016, Arrium Limited, an ASX listed international mining and materials company, whose operations across Australia and overseas include a vertically integrated steelworks operation in Whyalla (South Australia), went into voluntary administration.²¹ The Whyalla steelworks, and the associated iron ore mine about 60 km away, employ about 1600 staff and 1400 contractors.²² As at June 2017 the company sale process continues.

²¹ It was reported that Arrium had around \$4 billion of debts, including \$1 billion owed Australian big four banks and \$333 million in USA private placement debt (Evans 2017).

²² Australian employees are said to be around 6700: South Australia (1600); NSW (2800); Victoria (930); Queensland (900); Western Australia (350); Tasmania (60), Northern Territory (40) and ACT (30) (Norman 2016).

This section outlines the variety and extent of assistance provided to Arrium by the South Australian and Australian Government, both before and after entry into administration Assistance associated with Arrium, and with the closure of other businesses in the region, has also been given to affected workers, business suppliers and the community.

The Arrium case has taken place against a backdrop of recent similar problems in the region. Whyalla (population 23 000) is part of the Upper Spencer Gulf region, which comprises two other main cities, Port Pirie (17 000) and Port Augusta (14 000). Like Whyalla, these cities have also recently faced adjustment concerns because of changes in the fortunes of iconic local employers. And also like Whyalla, the SA government response has been to provide assistance. Closure of the 120 year old lead smelter in Port Pirie was imminent in 2014, but was ‘rescued’ by a \$291 million²³ finance guarantee by the SA government, which allowed the smelter to be re-engineered as a multi-metal recycling plant. In Port Augusta, Alinta Energy’s two brown coal fired power stations closed, one in 2012 and the second in May 2016, as did the associated Leigh Creek coal mine in November 2016. The SA Government responded with a \$1 million ‘jobs creation package’, and a \$7 million Upper Spencer Gulf and Outback assistance package.

Previous *Reviews* have reported on the multitude of Australian Government adjustment assistance and regional development packages that have been established in areas where a major employer was facing closure or closed (cf, PC 2015, appendix C, and PC 2013 chapter 4). These reports have posed questions as to whether the substantial investments, either in ‘rescuing’ existing companies, in helping workers adjust to the loss of jobs, or in boosting alternative economic activities in the region, have been effective in achieving these objectives. An underlying theme is that little evaluation has been undertaken, so the effectiveness of these measures, and whether governments are simply throwing good money after bad, is just not known.

A broader question, that is highly relevant to the Commission’s study on *Transitioning Regional Economies* (PC 2017a), is what effect, if any, industry assistance can have in developing resilient regions. Many of the regions that have attracted assistance have a long history of government providing infrastructure — such as electricity generation and distribution, road and rail links, water supply, and port facilities — initially to support the establishment of mining, metal smelting operations and other manufacturing, and subsequently further infrastructure to assist local industry. Infrastructure provision enabled the development of these regions, but for some regions it has left them vulnerable to changing market conditions .

The questions of whether the recently announced industry assistance to Arrium is likely to improve the resilience of Whyalla, and whether the broader assistance measures will improve the resilience of the Spencer Gulf region are beyond the scope of the TAR to answer. But it is important to document the level of support provided so that others can

²³ The state government financial guarantee allowed Nystar to secure \$291.25 million of external financing, for a \$563 million upgrade (SA Government 2017).

assess whether taxpayer money has been well spent. The support can be categorised by the implicit if not explicit objective to:

- rescue — retain a major employer by providing financial support through concessional loans or direct grants, which in the case of Arrium, included royalty concessions, indirect support through government procurement policies, and antidumping duties (below)
- adjust — assisting displaced workers with retraining and relocation, aiding affected local (input supply) businesses to diversify, supporting expansion of unrelated existing businesses (as a fillip to the local economy), and to manage the impacts of adjustment on the broader community such as through support for services such as mental health
- develop (dynamic) — attract new business (and lines of business) to the region, for example by providing infrastructure, relocation of government agencies, improving skills and education (over the longer term), and establishing local planning and strategy fora to ‘look forward’.

How each of these industry assistance strategies are currently being applied in the Spencer Gulf is outlined below.

Rescue attempt — the story of assistance to Arrium

Arrium (and previously BHP) has operated a fully integrated steelworks in Whyalla since the 1960s. Shipbuilding, also by BHP, had also been a major employer in the city from 1941 to 1978. The development of the steelworks, initially at the behest of the SA Government, was facilitated by Indenture Agreements (1937 and 1958), which set out the obligations of each party, such as infrastructure, as well as royalty terms. The production of steel and ships in Whyalla also benefited significantly from the Australian Government’s many years of (above average) tariff and subsidy assistance to the steel and shipbuilding industries (box 3.4).

Pre-administration assistance

Arrium was provided assistance for a number of years before administration. The South Australian Government is reported to have provided Arrium with royalty concessions on magnetite, estimated to exceed \$60 million, and waivers on the requirement to renew environmental approvals (Binstead 2015). The Australian Government provided assistance in the form of the imposition of antidumping import duties. By 2014 about 65 per cent of Arrium’s sales base was subject to antidumping investigations and Arrium announced to shareholders it was examining whether further applications were appropriate (Smedley 2014). In 2014-15, 86 per cent of all antidumping investigations were of steel products (PC 2016, p. 9). Australia’s antidumping system had been made more protective, through three packages of changes (2011, 2012 and 2014), driven in large part by the effect of steel imports (PC 2016, p. 22).

In October 2015, Arrium had announced it would reduce \$100 million in costs of operating the Whyalla plant, which was to involve a loss of 250 jobs (200 company employees and 50 contractors) over a 6-8 month period. The company promised to pay full entitlements and provide outplacement services and counselling to affected workers. This \$100 million savings announcement was on top of \$60 million of previously announced cost savings across Arrium's steel, mining, and mining consumables business (Binstead 2015).

Box 3.4 The facilitation of manufacturing in Whyalla

BHP invited in the 1930s to produce steel and ships

To aid regional development the SA Government asked BHP to construct and operate a blast furnace. The BHP Indenture Act was proclaimed in 1937 and an area of land was set aside for the construction of a blast furnace and harbour. Concern was expressed about the shortage of water at the site and negotiations with the SA Government resulted in the commitment for the construction of a pipeline from the River Murray. The Indenture Agreement provided for 'fair and reasonable' agreed water prices. The Whyalla Steelworks were opened in May 1941.

In 1939 the Royal Australian Navy asked BHP to build patrol ships. After the war BHP turned to commercial shipbuilding. Shipbuilding ceased in 1978. Employment in shipbuilding peaked in the early 1970s and was about 1800 at the time of the 1978 closure.

1958 steelworks expansion

In 1958 BHP announced the decision to build an integrated steelworks (coke oven, blast furnace, rolling mill) and the 1958 Indenture Agreement was signed. Full operation of the expanded facility commenced in the late 1960s. In anticipation of increased demand for water, a second pipeline from Morgan was constructed in the 1960s. Steelworks employment peaked at around 6000 in the mid 1980s. By 2011, this had fallen to 1600.

In the late 1960s preliminary land planning for Whyalla was made around a possible 100 000 population. The Whyalla population peaked in 1976 at 33,000 and in 2015 was around 23 000.

High effective rates of assistance to shipbuilding and steel making

Australian shipbuilding was long assisted by production subsidies and import tariffs. In 1969-70 the effective rate of assistance to shipbuilding (ASIC 3221) was 85 per cent, which was above the average for all transport equipment (57 per cent) and the average for manufacturing (35 per cent) (IAC 1974, table 3.4.1))

Australian steel-making was long assisted by import tariffs. In 1969-70 the effective rate of assistance to steel making (ASIC 291) was 35 per cent (ranging from zero to 52 per cent depending on the steel product). The average for basic metal manufacturing was 29 per cent. (IAC 1974, table 3.4.1)

In November 2015 the SA Government established a Steel Task Force to coordinate action across government 'to give Arrium's mining, smelting and manufacturing operations in and around Whyalla every chance to thrive'. It was also announced that all future State Government projects will be required to use steel which meets Australian Standards and certification, 'giving the local steel industry a competitive advantage against lower quality imports' (SA Department of State Development 2015 p. 1).

On 9 March 2016 the Australian Government announced the Australian Rail Track Corporation (ARTC) will bring forward by some years the planned upgrade of the Adelaide-Tarcoola line. Historically, Arrium has been the only supplier of rail tracks to ARTC. The rail supply contract is estimated to be about \$80 million. NSW used imported Spanish steel in its track upgrade, so there appears to be contestable supply (Koutsantonis 2016a).

Post-administration announcements of prospective assistance

There have been three offers of prospective financial assistance by government.

- On 9 June 2016, the South Australian Government announced a \$50 million grant available to a new owner of Arrium to upgrade infrastructure (Weatherill 2016). The SA Premier invited both the Australian Government and Labour Opposition to commit (during the current Federal Election) to add \$100 million assistance.²⁴ The Prime Minister's preliminary response on 9 June indicated the Government may provide support up to \$100 million through an *existing* financing scheme (the Export Finance and Insurance Corporation and the Clean Energy Finance Corporation), but it would be premature to commit pending independent advice (Ramsey 2016).²⁵
- On 16 June 2016, the Labour Opposition announced a prospective \$100 million grant and loan package, to be directed at cost reductions based around energy efficiency and productivity gains, and not to be used to cover Arriums' debts. The \$50 million grant would be an upfront contribution to a 'Steel Reserve' and the \$50 million financial loan/guarantee element would be provided by EFIC (although it is not clear that this would meet the EFIC criteria, which are focused on export credit and orientated towards SMEs where there is a market gap for finance).
- On 19 June 2016 the Prime Minister announced a Coalition Government would provide Arrium with a prospective \$49.2 million loan for new machinery that would allow the company to produce higher grade ore and in turn improve the company's profitability (Turnbull 2016). The Coalition said that this would add \$241 million to Arrium's cash flow over the next five years. The Government will take security over the assets.

Whether this combination of firm-specific assistance will guarantee a long term future for Arrium in the region is doubtful. The TAR has previously concluded that direct support to 'struggling' firms has demonstrated little long term success, and iconic manufacturers and employers eventually exit. The cost to the taxpayers of delaying exit can be considerable, as was demonstrated with the automotive industry. There is also a cost to workers in that it delays their skill adaptation.

²⁴ Arrium's administrator had previously flagged it needed more than \$100 million to upgrade facilities at the steelworks and mining operations (Norman 2016).

²⁵ Three weeks prior to the voluntary administration the administrator had requested assistance. The Australian Government appointed Mr Russell Caplan to independently assess the case (Ramsey 2016).

Adjustment assistance to workers and existing businesses in the Spencer Gulf

In August 2015, in response to Alinta announcing its intention to close the Port Augusta power stations and the Leigh Creek mine, the SA Government announced details of a \$1 million Jobs Creation Package and the creation of an Upper Spencer Gulf and Outback Task Force. The Package comprised:

- \$225 000 to assist the Upper Spencer Gulf and Outback supply chain workers with skills recognition, business start-up advice, and other career and employment services.
- \$258 000 for each of Port Augusta, Leigh Creek and Whyalla for Regional Job Creation Grants. Business could apply for funding, on a matching dollar-for-dollar basis, to help them expand their businesses and create jobs. The program would be based on the State Government's Business Transformation Voucher program.

The Task Force worked with Alinta Energy and the Port Augusta City Council to resolve issues arising from the closure of the power station and the remediation of the industrial site. Alinta employees were supported to transition to new employment and arrangements made for former Electricity Trust of South Australia (ETSA) employees who were eligible to seek a return to work within the South Australian public service (promised as part of the ETSA privatisation arrangements).

On 2 May 2016 the SA Government announced a \$10 million Whyalla Small Business Loan Scheme to support business having cash flow challenges as a result of the Arrium administration (Koutsantonis 2016b). This offered interest free loans of up to \$750 000 over a term of up to three years.

Whyalla community assistance included:

- Whyalla Response Office with two staff, as a first point of contact for local businesses and the community
- Whyalla Hospital Mental Health Funding (\$8.5 million);
- Foodbank Whyalla (\$0.3 million);
- Free financial and legal counselling for Arrium Trade Suppliers.

For its part, the Australian Government concentrated on intensive worker assistance along the line it has provided for other structural adjustment cases. In the case of Arrium it successively announced \$270 000 (December 2015) and \$1.1 million over five years (May 2016) (Cash 2016). The SA Government drew attention to the contrast between the Australian Government's broader \$43 million package in response to the Hazelwood power station closure in Victoria around the same time (Maher 2016).

Future development assistance

There is a fuzzy line between assistance targeted at helping workers and business to adjust to closures, and investments by government to promote regional development. But it is a useful distinction to make as the former aims to reduce the costs to those directly affected by closures, while the latter has a broader aim of growing economic activity in the region (relative to the counterfactual).

In November 2015, the State government announced a \$7 million Upper Spencer Gulf and Outback assistance package, comprising \$5 million (drawn from the next round of the Regional Development Fund) and \$2 million (drawn from the Jobs Accelerator Fund).²⁶

- The existing \$15 million a year Regional Development Fund provides funding for Major Projects from \$200 000 up to \$2 million and Community Infrastructure projects from \$200 000 up to \$1 million.
- The new \$2 million Upper Spencer Gulf and Outback Futures Program would provide grants for smaller projects from \$50 000 up to \$200 000 on a dollar for dollar basis.

Evaluation of the long term outcomes of government investments in regional development is needed as it does appear that while government expenditure on projects can create short term employment, it often does little to support transition and long term sustainable growth in regions. The Transitioning Regional Economies study concluded that strategies for successful adaptation and development are those that focus on supporting people in regional communities to adjust to changing economic circumstances (PC 2017a). Strategies work best when they are:

- identified and led by the local community, in partnership with all levels of government
- aligned with the region's relative strengths
- supported by targeted investment in developing the capability of the people in the local community to deal with transition, adaptation, and securing an economic future
- designed with clear objectives and measurable performance indicators and subject to rigorous evaluation.

While it is common to establish representative fora to develop strategies to address regional adjustment, a pitfall is having multiple working groups, duplicating effort, dividing opinion and supporting resources and not involving key stakeholders. It is not clear how effective and efficient the various fora have been in the Upper Spencer Gulf region. In recent times, the SA Government has established the: 'Upper Spencer Gulf and Outback Taskforce'; 'Arrium Whyalla Taskforce'; 'Port Pirie Transformation Taskforce'; 'Upper Spencer Gulf Economic Transition Forum'; and 'Port Augusta Power Stations Committee'. To these, the Federal Government added the 'Upper Spencer Gulf Regional Jobs and Investment Local Planning Committee' in 2016. None of these committees involve the local Councils (Spencer Gulf

²⁶ The choice between 'new money' and re-prioritising existing assistance is an important consideration. On the one hand, 'robbing' existing programs, may undermine the previous planning and prioritisation of the schemes. On the other hand, having to find money from within existing budgets and adjustment schemes exerts discipline on responses to 'crises'.

Cities 2017). Clearly greater coordination is needed if development plans are to be feasible and in the best interests of the broader community.

3.3 Government investment in electricity generation and storage

Australia's electricity sector is in considerable flux, driven by myriad changes in government policy, technology, consumer preferences, international energy markets and even the weather. Recent years have witnessed:

- numerous government initiatives to alter the emissions-intensity of the economy
- the closure of several coal fired power stations (and little investment in replacement 'base load' power sources)
- rising gas prices, as gas from New South Wales and Victoria has been diverted to Queensland to meet the LNG export contracts combined with moratoriums on exploration and investment, making the economics of using gas to generate electricity highly uncertain
- a significant increase in the share of electricity generated by renewables
- reductions in consumer demand for electricity from the grid
- significant increases in retail prices for electricity
- concerns about National Electricity Market (NEM) security and stability brought to head by the recent blackouts in South Australia (box 3.5).

Box 3.5 Recent supply disruptions in south-eastern Australia

A series of events in 2016 highlighted risks to electricity supply in south-eastern Australia:

- In the first half of 2016 after a record dry spring and an extended Basslink cable fault, Hydro Tasmania installed temporary diesel generation capacity to help safeguard Tasmania's electricity supply
- In July and August 2016, South Australia experienced high and volatile prices not experienced in the electricity market since 2009.
- On 28 September 2016, several tornadoes in different parts of South Australia triggered an unusual series of technical problems, including the loss of power from wind generators and disconnection from the National Electricity Market, which culminated in a statewide blackout.
- On 3 November 2016, the operator of the Hazelwood power station, which produced around 20 per cent of electricity in Victoria, announced its closure from 31 March 2017.

The policy uncertainty surrounding emission reduction policy, combined with uncertainty about the availability of gas, has seen private investors go 'on holiday'. As a result, the necessary investments to replace retiring generators and to smooth the intermittent nature of solar and wind electricity generation have not been made. The decision by the regulators to reduce the generosity of the pricing formula on transmission, for which the firms affected

have recently been awarded compensation, adds to the regulatory uncertainty (Winestock 2017). The upshot of the resulting rising prices and concerns about supply security has been frenetic activity by governments, often in the midst of crises. Several of the issues bedevilling the sector have been examined by the *Independent Review into Future Security into the National Energy Market* (NEM), chaired by Chief Scientist Alan Finkel. It's December 2016 Preliminary Report illustrates that the 'witches brew' of factors contributing to the current difficulties defies simplistic analysis of single causes. It also makes clear that although the NEM served Australia well for more than two decades, it needs to evolve more quickly if it is to keep pace with the changes affecting the sector (DEE 2016).

Several other reviews in aspects of the electricity sector are also in train. For example, ACCC investigations have been foreshadowed into competition issues in the electricity retailing, and the supply of and demand for wholesale gas in Australia. And electricity market regulators and other bodies are conducting studies into aspects of the sector (see Finkel Preliminary Report 2016, appendix C).

In the first half of 2017 governments have made major announcements regarding specific investments in electricity generation and storage assets.

- On 14 March, the South Australian Premier announced a package of measures estimated to cost \$550 million, including the commissioning of a new gas fired 'back up' power plant and assistance for large scale battery storage (box 3.6)
- On 16 March, the Prime Minister announced that the Australian Renewable Energy Agency (ARENA) will examine the feasibility of several projects to support large scale pumped hydroelectric energy storage²⁷ in the Snowy Hydro precinct (box 3.6).
- On 20 April, the Prime Minister announced that the ARENA will work with Hydro Tasmania on feasibility studies to assess several new pumped hydro energy storage schemes, as well as on expanding the capacity of two existing hydro power stations (box 3.5)
- The Minister for Resources and Northern Australia has also indicated that projects such as a coal-fired power station in the Galilee basin may be able to obtain federal support through the Northern Australia Infrastructure Facility (see above).

²⁷ 'Pumped Hydro' is: a system for 'recycling' the energy obtained through hydro-electric schemes so that it is available at times of peak demand. When demand for power is low and excess supplies are available, water is pumped from one reservoir to another sitting at a higher altitude. Then, when power is in critical demand, that water is released to run downhill again, passing through a generator to create electricity (Snowy Hydro 2017).

Box 3.6 **Recent energy generation and storage announcements**

South Australian power for South Australians

On 14 March, South Australian Premier announced a package of measures estimated to cost \$550 million, with final costings to be outlined in the 2017-18 State Budget (Weatherill 2017). In announcing the package, the Premier stated that 'the national energy market is failing South Australia and the nation' and that the plan would put South Australians first. The Government will allocate around \$360 million to build a 'back up' gas-fired electricity generator to provide up to 250 megawatts of power for emergency use. Also of significance from an industry assistance perspective, the plan includes:

- a \$150 million *Battery storage and renewable technology fund* (\$75 million in grants and \$75 million in loans) to support projects that make renewable energy available 24 hours a day.
- \$24 million for grant-supported projects to incentivise companies to extract more gas under the Plan for Accelerating Exploration (PACE).
- payments of royalties to landowners whose property contains a petroleum field brought into production.

The plan also includes a range of regulatory elements, for example:

- the South Australian Minister for Energy will be given new powers to direct the national market in the case of an electricity supply shortfall. This will include the ability to direct generators to operate and direct the AEMO to control flow on the interconnector
- South Australian retailers will be required to source a percentage (up to 36 per cent) of energy from local generators ('cleaner generators') rather than from Victorian coal-fired stations.

Large scale pumped hydroelectric energy storage

On 16 March 2017, the Prime Minister announced (Turnbull 2017a) that the Australian Renewable Energy Agency (ARENA) will examine the feasibility of several projects to support large scale pumped hydroelectric energy storage in the Snowy Hydro precinct. Termed 'Snowy Hydro 2.0', the projects to be examined include the building of new tunnels, with connections to existing storages and power stations. The Prime Minister indicated that these projects could add an additional 2000 megawatts to the grid (which is enough to power 500 000 homes). The projects reportedly could cost in the order of \$2 billion, and take up to six years to complete (Aston 2017)

On 20 April 2017, the Prime Minister announced (Turnbull 2017b) that the ARENA will work with Hydro Tasmania on feasibility studies to assess several new pumped hydro energy storage schemes. The Prime Minister indicated that the schemes could deliver up to 2500 MW of storage capacity for the national electricity market. Four large projects will be assessed with a capacity of around 500-700 MW each and an alternative of nine small scale sites totalling 500 MW. ARENA will also examine the potential for expansion of the Tarraleah and Gordon Power Stations.

The nature and extent of Government involvement or assistance for these projects, should they proceed, has not been finalised.

Whether these projects will proceed is uncertain, but there is a risk that they will lead to the wrong infrastructure in the wrong place and the electricity consumer will end up paying higher prices as a result. The more that market forces dictate what and where, the less likely that the investments will end up as white elephants. Given this need to work with industry, elements of industry assistance can arise. Assistance sometimes can take the form of 'co-investments',

where public money is provided to private firms often in return for commitments around investment, production or jobs. But some of the projects, such as elements of the South Australian Energy Plan, could entail significant direct government ‘investment’ in (and ownership of) electricity generation and storage assets.

While not necessarily ‘assistance’ to the recipient industry, government investment in electricity market assets can result in assets that do not have to earn a commercial rate of return. This can undermine competitive neutrality. More problematically, such entities have in the past provided energy at below market prices to some ‘base load’ customers (Turton 2002). This has resulted in long term legacy problems, as with the situation observed in Portland, where Alcoa has recently been provided with a \$200 million subsidy from the Victorian Government and a \$40 million concessional loan from the Australian Government (Leitch 2017). Given the closure of Hazelwood power station, which had been providing low cost power to Alcoa since the 1980s²⁸, keeping Alcoa operating has an additional cost in higher electricity prices.

Accordingly, it is important that any proposals be carefully evaluated and that consideration be given to alternatives that might address emerging problems in the electricity market in a more efficient and less costly manner. A risk, otherwise, is that future generations of taxpayers will be called on to foot the bill for precipitate responses to perceived crises now.

The Commission canvassed the governance requirements for government ‘co-investment’ in *Trade & Assistance Review 2013-14* (box 3.7). Many of the same governance requirements should apply where governments are considering expending public funds, whether in the form of investment or co-investment, in electricity assets. Before committing to investment in electricity generation and storage assets governments must clarify the regulatory environment, as making investments where there is considerable uncertainty about the future of the regulatory system is particularly fraught:

There may be a temptation to make the rules in a way that protects the public investment rather than rules that make the market operate efficiently. Any changes to the regulatory regime should be neutral in regard to the ownership structure of the infrastructure assets, which may well be difficult to achieve where investment is coupled with directive powers as envisaged in the South Australian proposal.

Given this risk, final investment decisions must be delayed until governments respond to the Finkel review (DEE 2017) with a commitment to a mechanism to meet Australia’s greenhouse emissions targets, and implement the regulatory changes required. Only at this time, can governments assess whether there is a material net public benefit from the proposed public investment in generation and storage.

²⁸ The low cost power agreement between Hazelwood and Alcoa expired in 2016. The low price relative to other industrial and household users was estimated to be worth around \$110 million a year in 2002 (Turton 2002).

Box 3.7 A governance framework for co-investment

Trade & Assistance Review 2013-14 noted that the stated rationales provided for budgetary assistance are wide ranging. They include addressing market failures, multiplier benefits, attracting investment capital, alleviating adverse market conditions or policy change, job creation, export expansion, regional economic development and adjustment, the delivery of environmental benefits, or simply assisting with capital and plant upgrades.

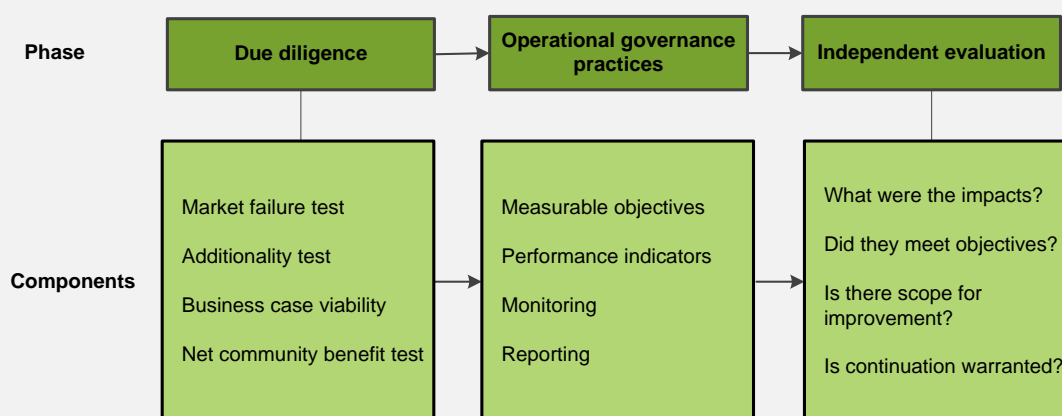
The Commission indicated that, from an economy-wide perspective, the basis for allocating public funding to assist firms should be a threshold market failure test accompanied by evidence that any support will lead to a net improvement in community-wide outcomes, including that the recipient business would not have undertaken the investment or activity in the absence of support and that there is a reasonable prospect of business viability post assistance.

It was suggested that where the decision to provide public support rests on the ongoing viability of the firm or project, the process for assessing such support is analogous to the financial due diligence conducted by private investors (including superannuation funds) before making commercial investment decisions.

The figure below outlines the core elements that would need to be met to ensure such governance practice across assistance measures.

- Careful due diligence preceding the commitment and ensuing commencement of public funding (or a new commitment to existing funding) should provide a minimum threshold level of governance practice and help achieve beneficial outcomes or, at the very least, lower the risk of costly diversion of public funds.
- Where proper analysis and evidence supports the threshold case for public funding, the next stage of good governance practice involves effective setting of objectives, performance management and reporting to track program outcomes against objectives.
- An independent evaluation phase would then examine whether policy objectives are being met, assess whether those objectives are being cost-effectively delivered and whether continuation of the program is warranted. The latter goes beyond an audit.

An appropriate assistance governance framework



Source: PC (2015).

If good governance processes are followed, assessments on the viability of public investment or co-investment should take into account whether, in the new regulatory environment, the private sector would be willing to invest (as regulatory uncertainty is a major disincentive to

investment). It should also treat any flow-on benefits that involve the investment by major new industries to be supported by the electricity generation with due caution.

3.4 Sugar reregulation: back to the future

Assistance to the agricultural industry fell substantially in the 1980s and 1990s as single desk marketing arrangements and production quotas were progressively removed. These reforms removed barriers to efficiency and innovation. For example, under the previous arrangements wheat growers received the same price for their wheat regardless of the protein level. Dairy farmers had no incentive to improve the volume of ‘market’ milk produced beyond the farm quota. Import controls meant that Australian consumers of sugar often paid higher prices than producers received for the products they exported. And the wool stockpile demonstrated that the argument that a single desk could extract higher prices for exports was a furphy.²⁹

This deregulation led to a number of benefits, such as lower prices and higher quality and diversity of products, and also benefited taxpayers. The deregulation was often accompanied by adjustment schemes put in place to help producers adjust to a competitive environment. For example, the dairy industry adjustment package cost the government \$1.78 billion, funded in part by a levy of 11 cent per a litre of milk that was only removed in 2009 (Harris 2005). The sugar industry also benefited from assistance provided to help the industry adjust to deregulation, with more than \$595 million of assistance provided by 2008 (Craigie 2014).

Yet, as described in the Commission’s recent report into *Australian Regulation of Agriculture* (PC 2016c), the Queensland sugar industry is going back to the future. It was reregulated, largely in response to a long running dispute between a group of canegrowers and cane sugar miller Wilmar Ltd.. In December 2015, the Queensland Parliament passed the Sugar Industry (Real Choice in Marketing) Amendment Act (the Real Choice Act), reregulating the marketing of Queensland’s sugar.³⁰ On 23 May 2017, the Queensland Government announced that the milling group (Wilmar) had come to a negotiated agreement with Queensland Sugar Limited (QSL) (the preferred marketer), indicating that they will repeal the most recent legislation. Moreover, QSL managed to obtain charity status — which gives it access to considerable payroll and fringe benefits tax concessions, and which therefore constitutes industry assistance. This saga is an illustration of the dependency psyche found in large parts of the Queensland sugar industry, and the challenges of moving an industry with a very long history of regulatory dependence (and associated industry assistance) into the market economy.

²⁹ While wool producers did extract a higher price by holding wool back from the world market, this was short lived as other countries expanded production and textile producers moved away from wool. The wool stockpile reached 4.7 million bales, cost \$240 million a year to maintain, and 10 years to be eliminated after the collapse of the wool price scheme on 1991 (Massey 2011).

³⁰ The legislation was opposed by the Queensland government, but passed with the support of the cross-bench.

The Real Choice Act provided growers with the say over where millers could market the sugar that they mill. This control is unusual in any other agricultural market, for example, the dairy farmer does not direct the processor in where they sell milk, cheese, or other products. Such direction could be part of a contractual agreement between the grower and the processor, but it should not be imposed by regulation as it takes the right to market their products away from the millers. In the absence of the Real Choice Act, millers would have been allowed to finally move away from the single-desk marketing arrangements (a 10-year transitional arrangements has been put in place around the time of deregulation in 2006; table 3.2).

The basis of the case made by a group of cane growers is that the price they receive for their cane is calculated by a formula established in 1915. This formula assigns two-thirds of the final profit to cane growers. The growers are concerned that millers will use transfer pricing (selling the sugar at a lower price to their own distributors) to reduce the return to cane growers. The Commission's assessment is that this is very unlikely as sugar is a globally traded commodity, international prices are known, and such transfer pricing would violate Australian tax law.

This reregulation of sugar marketing is not so much industry assistance, as it is a shift in the power dynamics between the millers, most of which are international companies, and the growers. It is questionable that millers have the monopoly power claimed by the growers; indeed growers and millers are co-dependent. As the Queensland Productivity Commission (QPC) recognised, this gives growers an opportunity to organise and bargain collectively with millers (QPC 2015). The QPC regulatory impact statement on the Real Choice Act found that there was no market failure, and no case for the legislation. Importantly the QPC also concluded that this legislation increased the risk for millers and was likely to 'make Queensland a less desirable investment destination, compared with other jurisdictions' (QPC, 2015, p.75).

Such reregulation of an industry may elevate sovereign risk. Where the investor is from a country that has a trade agreement with Australia that includes an investor state dispute settlement chapter, reregulation could trigger a claim. Such actions, which at best benefit the organisation that has held the single desk marketing power (which may or may not pass those benefits onto the growers), may act as a deterrent to foreign investment in agriculture more generally. Foreign investment is an important source of capital to fund refurbishment and modernisation of mills and other food processing capital that will increase productivity and the demand for the raw agricultural products. This makes reregulation a far greater concern than just the potential long term impacts on the sugar industry.

Reregulation of Queensland sugar was a backward step and the Queensland government should ensure that they do, as indicated in their media release announcing the settlement of the dispute with Wilmar (Byrne 2017), repeal the Real Choice Act.

But from an industry assistance perspective, a bigger issue is the cost to the taxpayer, and the anti-competitive nature, of the charity status granted to QSL.³¹ When it evolved from a legislated monopoly owned and controlled by CSR Ltd, the marketing authority QSL became a not-for-profit company limited by guarantee, rather than a mutual company owned by growers, as was the case with most other single desk operators. As such, growers cannot benefit directly from the profits made by QSL, and if it is closed or sold the capital must be put to the original purpose. Notionally, QSL's not-for-profit status means that it will offer services at a lower cost to users, but in general not-for-profit status simply allows an organisation to be less efficient than its for-profit competitors.

QSL was granted charity status in late 2015, backdated to 2012, allowing QSL to access fringe benefits tax and GST concessions from the Commonwealth government. The value of these concessions is not known, but could be substantial. QSL have also received payroll tax exemption from the Queensland government, which they report to be worth \$1 million a year. These concessions are industry assistance, which given that it is provided at a firm level also violate competitive neutrality. The Commission, in its 2016 report on *Australian Regulation of Agriculture*, recommended that agricultural trading companies should not be eligible for charity status.

³¹ There are two other agricultural organisations that have received charity status — Grain Growers Limited and BCH (WA). The NSW Chief Commissioner of State Revenue took legal action against Grain Growers Ltd in 2016 (NSW Government 2016). The matter was heard before Justice Black in the Equity Division of the NSW Supreme Court. Justice Black determined that Grain Growers Ltd could be regarded as a charity because an overwhelming part of what Grain Growers Ltd does could properly be regarded as 'good works'. Justice Black relied very heavily on an 1891 UK Case Commissioners for Special Purposes of Income Tax v Pemsel, which dealt with the purposes "of supporting missionary establishments among heathen nations of the Moravian church" (Commissioners for Special Purposes of Income Tax v. Pemsel [1891] A.C.531 – House of Lords).

Table 3.2 A quick history of sugar regulation, deregulation, and industry assistance

		<i>Assistance estimate</i>	
1902	Tariff assistance		
1915	Queensland Sugar Acquisition Act 1915, to acquire all raw sugar and sell it to the Commonwealth Regulation of Sugar Cane Prices Act 1915, to establish Local Sugar cane Prices Board in each area and an overarching Central Sugar Cane Prices Board to provide a fair distribution of raw sugar return between growers and millers Cane price formula introduced		
1923	Commonwealth Sugar Agreement, which gave the Queensland government control over all raw sugar produced, including in New South Wales, required them to provide sugar to manufacturers for export at world parity prices, in return for an embargo on sugar, golden syrup and treacle.		
1929	Peak Mill scheme introduced - cane quotas		
1979	Industry Assistance Commission (IAC) raised the question of the impact of the sugar arrangements on industry efficiency		
1983	IAC Review recommended the termination of the Sugar Agreement		
1985	Pool price support of \$230 a tonne	\$19 m	
1991-06	Impact of the cane on forgone production value estimated to cost the industry \$1.1 billion		CIE (1991), projection
1986-89	Joint Commonwealth and Queensland adjustment and support assistance	\$100 m	
1989	Sugar Agreement repealed and embargo on imports of sugar lifted NSW withdrew from voluntary pooling arrangements with Queensland The Sugar Board appointed CSR Ltd as the sole export marketing agent of Queensland sugar		
1989	Tariffs on imports of sugar \$115/tonne		
1990	Single desk selling was vested in the new Queensland Sugar Corporation		
1991	Tariff reduced to \$76 a tonne		
1992	Industry Commission Report recommended staged reduction of all production and marketing controls		
1993-00	Sugar Industry Program	\$25.9 m	Reported in TAR ^a
1997	Tariff removed		
1998-02	Sugar Industries Package	\$56.1 m	Reported in TAR ^a
1997-02	Sugar Industry Infrastructure Program	\$8.4 m	Reported in TAR ^a
1997-15	Sugar Research and Development	\$92.9 m	Reported in TAR ^a

(continued next page)

Table 3.2 (continued)

		<i>Assistance estimate</i>	
1999	Queensland Sugar Industry Act retained QSC as the marketer for Queensland sugar and single desk for sale of export and domestic sugar		
2004-2008	Sugar Industry Reform Program	\$418.5 m	Reported in TAR ^a
2005	MOU between the Queensland government and QSL to retain single desk marketing via QSL for a 10 year period	na	Assistance to QSL in retaining single desk
2006	Repeal of sections of the 1999 Act		
2010-15	Queensland Government payroll tax concession	\$5 m	Granted in 2015, back dated to 2010 reported by QSL to be \$1 m a year
2012	QSL granted charity status		Granted late 2015, backdated to 2012
December 2015	Sugar Industry (Real Choice in Marketing) Amendment Act		
23 May 2017	Queensland Government announcement that the Real Choice Act will be repealed		

^a Total of nominal expenditure

Sources: TAR database, Craigie 2014

4 Trade policy developments

Key points

- The best response to maintain and increase the wellbeing of Australians in the face of any widespread rise in protection would be to persist with lowering barriers to trade..
- The hiatus in tariff reductions since 1996 has been costly.
 - Tariffs raise the costs of intermediate inputs by around \$6 billion per year and inflate consumer prices
 - There are also administration, compliance and negotiating costs incurred by Customs in applying tariffs and concessions, costs to business in fulfilling tariff related requirements, and the resources expended by Department of Foreign Affairs and Trade on protracted negotiation on Australia's bilateral import preferences.
- The 10th WTO Ministerial Conference (Nairobi, December 2015) signalled that the unfinished 2001 multilateral Doha Round is effectively over — a 'single undertaking' with agreement by all parties on all items will not be achieved.
- The Doha disappointment does not mean multilateral approaches are doomed or should be put on the back-burner. On the contrary, there has been multilateral (and mega-regional) success.
 - Agreement to eliminate all agricultural export subsidies; entry into force of the Trade Facilitation Agreement; agreed tariff reductions under the Expanded Information Technology Agreement; progress with building on the 2012 APEC Environmental Goods Agreement; the 2014 Government Procurement Agreement; and progress on the Trade in Services Agreement.
- This success between like-minded countries should embolden further efforts. In the current climate of global trade angst there is an imperative to intensify efforts at multilateral and mega-regional reform.
- The benefit of cheaper imports through bilateral trade preferences have been found to be less than anticipated because:
 - They have in some cases simply replaced other tariff concession arrangements (and vice-versa); 'rules of origin' production transformation tests and compliance costs limit use, the tariff rent can be 'pocketed' by the importer/exporter, and existing trade with lower cost suppliers is diverted.
- In 2015-16, only one quarter of imports into Australia from PTA partners used the agreement concession.
 - The other three-quarters of imports from trade agreement partners entered Australia under three other tariff arrangements: zero-MFN tariffs (32 per cent); full-MFN tariff (29 per cent) and other tariff concessions (12 per cent), such as Developing Country preferences and Tariff Concessions Orders.
 - A similar comprehensive analysis of Australia's exports to trade agreement partners has not been made. Anecdotally, export volumes of certain products to certain countries have increased since trade agreements came into force.

4.1 Global trade protection uncertainty

The foremost trade policy issue concerning the global rules based trading system through 2016 and into 2017 has been the trade policy prescriptions floated in the United States of America (US) during the election campaign and with the election of President Trump. Considerable analytical effort has been devoted to predicting the economic impacts of these trade policy options (Noland et al 2016, McKibbin 2017; Kawasaki 2017). To date, the only actual decision of the US administration has been to withdraw the United States from the Trans-Pacific Partnership (TPP).

The Commission has recently released research that models the impact for Australia, as well as the rest of the world, of a number of scenarios based on some of the policy options that have been floated at various points in time (box 4.1). The analysis demonstrates that regardless of rising protection in other countries, Australia is best placed by not joining in with reciprocal measures. Moreover, Australia is better off if remaining tariffs and other barriers to trade are removed, and the more ‘like-minded’ countries that it can persuade to join it in this approach.

While many accept there are national gains from liberalised trade, a sizable part of the current global trade angst has been concerns about the distribution of the benefits of trade. In particular, the decline in manufacturing jobs in developed countries is considered by many to be linked to increased globalisation. While competition from lower wage countries has undoubtedly played a role, technology clearly accounts for a large part of the change. For example, manufacturing output as a share of GDP in the United States has remained constant, yet manufacturing employs only two-thirds of the number of workers it did 30 years ago (Krause and Sawhill 2017). Nevertheless, employment losses for trade-exposed industries can be concentrated in some locations, as is the case with metal smelting and automotive manufacturing in Australia. These industries also tend to be unionised and have good wages and conditions. The alternative employment opportunities in these locations may not only be more scarce, but also offer lower wages and poorer conditions. The Commission’s recent research paper makes two important points in this regard:

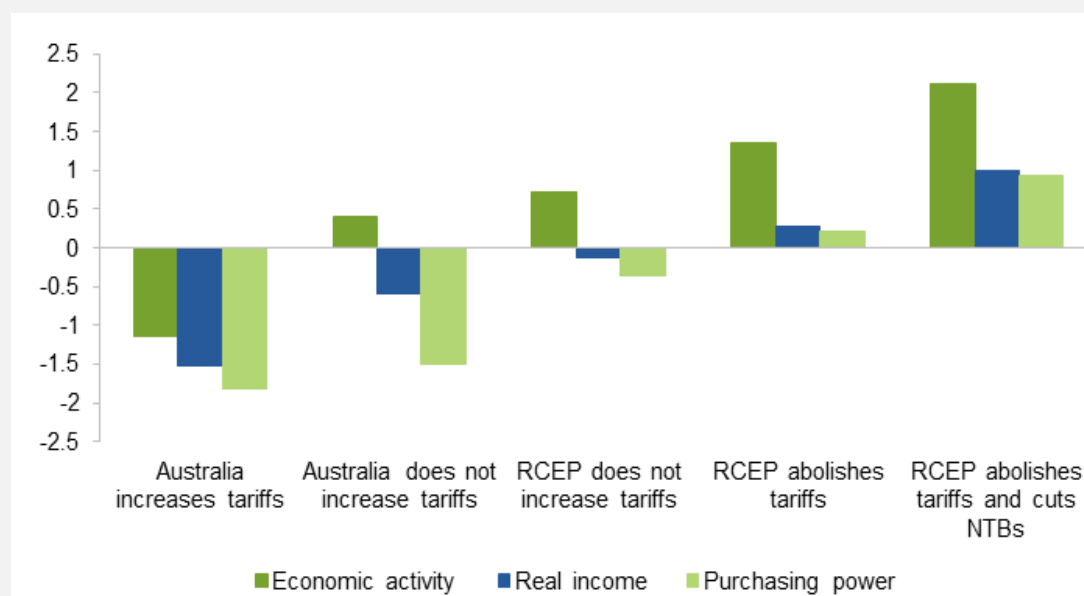
- Imposing protection will raise costs across the community and reduce jobs. Even if protection does allow some firms to survive and they do so by retaining workers and not by substituting technology, one person’s gain is another’s loss, and the losses outweigh the gains.
- Better adjustment policies are needed to assist workers displaced, not just by trade but by technology, especially where these workers are concentrated in areas that were dependent on a few most affected industries. The failure to evaluate the overall and long term impact of most assistance programs makes it difficult to design effective interventions. What is known is that programs targeted at assisting the workers through retaining, relocation and social support are more likely to make people’s lives better than funding firms to provide jobs in affected areas. The Commission’s forthcoming *Transitioning Regional Economies* study is examining these issues in more depth.

Box 4.1 Raising tariffs would harm Australia; benefits lie in liberalising

Across the developed world, the use of protectionist measures has been increasing, and there are clear signs that this trend could accelerate. To illustrate the possible impacts on Australia of significant international increases in protection, and of different Australian responses, the Commission has modelled a number of stylised scenarios (PC 2017b).

The results show that, once the dust had settled, Australia would be little affected by substantial increases in US tariffs on imports from China and Mexico, or by US adoption of border adjustments as part of a new corporate tax regime. On the other hand, economic growth and living standards in Australia would decline if there was a global increase in tariffs. For every \$1.00 increase in Australian tariff revenue, economic activity in Australia would fall by \$0.64. In total, GDP would be lower by over one per cent each year. In employment terms the costs would equate to a loss of close to 100 000 jobs.

Further trade liberalisation can benefit Australia, percentage increase^{a,b}



^a This chart compares five scenarios. In the first, all countries, Australia included, raise tariffs by 15 percentage points (ppts). In the second, Australia maintains existing tariff levels, while tariffs rise by 15 ppts overseas. In the third, RCEP countries maintain existing levels of protection, while all other countries raise tariffs by 15 ppts. In the fourth, RCEP countries remove all tariffs applied to all nations. The fifth scenario includes all circumstances from the fourth but RCEP countries also decrease non-tariff barriers and regulatory barriers to service trade. ^b Economic activity is defined as real GDP, real income is defined as real GNP and purchasing power is defined as gross domestic absorption adjusted for terms of trade effects.

Data source: Commission estimates generated using the PC Global model.

(continued next page)

Box 4.1 (continued)

The Commission also modelled three scenarios, in which Australia, in the face of 15 percentage point tariff increases elsewhere:

- maintained current levels of protection on its own
- co-operated with the other participants in the Regional Comprehensive Economic Partnership (RCEP) — China, Japan, South Korea, India, New Zealand and the ASEAN countries — to maintain policies that support international trade
- joined with RCEP in reducing tariffs, non-tariff barriers and barriers to services trade.

The results show that even in a world of much higher protection globally, Australia would be better off if it does not follow suit. Co-operating with a coalition of countries like RCEP in holding the line on freer markets would significantly amplify the positive economic effects for Australia of avoiding increases in protection. Further benefits would come with liberalisation of tariffs and other barriers to trade in RCEP countries. Living standards in Australia would be about 2.7 per cent higher than in a scenario in which all countries raised tariffs by 15 percentage points. And a household with the median weekly gross income of about \$1600 a week would be better off by about \$44 a week.

4.2 Multilateral agreements

The unfinished WTO Doha Round appears effectively over

The Doha Round of trade negotiations was officially launched at the World Trade Organization's (WTO's) Fourth Ministerial Conference in Doha, Qatar, in November 2001. It had an ambitious agenda covering over 20 areas of trade, including reform in the areas of agriculture and intellectual property. The Round is known semi-officially as the Doha Development Agenda, as a fundamental objective was to improve the trading prospects of developing countries.

The WTO's Tenth Ministerial Conference (MC10) was held in Nairobi, Kenya from 15–18 December 2015. As virtually every item of the negotiation had to be part of a whole and indivisible package and could not be agreed separately (known as a 'single undertaking' where 'Nothing is agreed until everything is agreed'), failure to achieve a consensus on continuing multilateral trade negotiations under the single undertaking framework of the Doha Round led the Australian Department of Foreign Affairs and Trade (DFAT 2017a) to conclude:

As such the Round is effectively over. Australia has argued that new approaches are necessary if we are to achieve meaningful outcomes on the outstanding Doha issues. (p. 1)

Notwithstanding the curtain call on the envisaged Doha Round, the 2015 Conference culminated in the adoption of six Ministerial Decisions on agriculture (below), cotton and issues related to least-developed countries (LDCs).

Towards elimination of all agricultural export subsidies

The WTO Agreement on Agriculture, which came into force on 1 January 1995, focused on three main pillars:

- Market Access — dealing with rules and commitments on the trade of goods, it looked to expand markets and reduce tariffs; and included special safeguards and tariff rate quotas.
- Export Competition — Government funded export subsidies and related measures.
- Domestic Support — payments or other support that Governments provide to producers.

A centrepiece of the 2015 Nairobi Package was a Ministerial Decision on Export Competition, which included a commitment to eliminate subsidies for farm exports. Under the decision, developed country members have committed to remove export subsidies immediately, except for a handful of agriculture products, and developing countries will do so by 2018. Developing members will keep the flexibility to cover marketing and transport costs for agriculture exports until the end of 2023, and the poorest and food-importing countries are allowed additional time to cut export subsidies.

Australia, as Chair of the Cairns Group of WTO Members, has long agitated for reform of distortions in global agricultural trade. While welcoming the Nairobi decision on removing agricultural *export* subsidies, Australia has drawn attention to the much larger distorting *domestic* support arrangements (including non-export subsidies) for agriculture, and signalled its intention to seek an outcome on domestic support at the 11th Ministerial Conference (MC11), which will take place 11-14 December 2017 in Buenos Aires, Argentina.

Trade distorting support practices disrupt global agricultural markets by encouraging excess production, depressing prices, and locking producers out of markets. Major subsidisers, like the US, EU, Japan, India and China, spend well over \$100 billion per year on trade distorting [domestic and export] subsidies. Substantial subsidies provided by governments in economically stronger countries discourage the efficient production of food and undermine global food security. Farmers in least-developed countries suffer the most, but all farmers are impacted and the global economy is weaker as a result (DFAT 2017b, p.1).

To support this reform agenda, the Australian Permanent Mission to the WTO in Geneva has developed an ‘Agricultural Trade Distorting Support Calculator’ which allows WTO Members to easily calculate the impact of various domestic support reform proposals (DFAT 2017b).

Entry into force of the Trade Facilitation Agreement

The WTO Agreement on Trade Facilitation (ATF), which entered into force on 22 February 2017, is the first major WTO multilateral agreement concluded since the establishment of the WTO in 1995.³²

Trade facilitation refers to the simplification and harmonisation of international trade procedures to assist the movement of goods. Customs, licensing and transit formalities involve complicated administrative processes and burdensome documentation requirements. The Agreement aims to reduce red tape and the burden of administrative costs associated with exporting and importing. It reduces and streamlines customs processes, and improves transparency about rules affecting international trade, making it easier for businesses to enter overseas markets. WTO Members committed to improving practices, including: publishing information on their customs procedures; establishing processes to provide advance rulings and appeal mechanisms; limiting fees and charges to the cost of providing customs services; and establishing procedures for authorities to use in clearing goods (DFAT 2017c).

During the ten years of negotiation on the ATF, Australia was involved in co-sponsoring and pushing for obligations to provide advance rulings and to prioritise the clearance of perishable goods (DFAT 2017c). This is expected to provide significant benefits to Australian exporters.

Australia does not need to introduce new legislation or procedures to implement the Agreement, but has designated a National Committee on Trade Facilitation (NCTF), as required under the Agreement. The NCTF, comprising Government agencies and a broad range of industry organisations, provides a forum for the discussion of issues affecting Australian industry stakeholders in the international trade environment.

Agreed tariff reductions under the Expanded Information Technology Agreement

On 16 December 2015, 81 WTO Members (including Australia) agreed to expand the coverage of the 1997 Information Technology Agreement (ITA) to a further 201 products. The Expanded ITA (ITA-2) is the first major tariff-cutting deal at the WTO since the original ITA. Members participating in the ITA-2 agreed to remove the majority of the tariffs on the 201 additional ITA products within three years, with reductions beginning in 2016-17. The tariff commitments given in the ITA-2 are made on a most-favoured nation (MFN) basis. This means participants must extend their commitments to all WTO Members, regardless of whether the other Member has also signed up to the ITA. The ITA-2 also provides for a work program to review non-tariff barriers (NTBs) which affect trade in IT products.

³² WTO Members concluded the Agreement on Trade Facilitation at the Ninth Ministerial Conference on 7 December 2013 in Bali. Australia formally accepted the ATF on 4 June 2015. But the agreement could not come into force until it was formally accepted by two-thirds of WTO members, which was achieved in early 2017.

The original ITA eliminated tariffs on products such as computers and peripheral equipment, electrical components such as semiconductors, computer software, telecommunications equipment and analytical instruments among other products. The expanded agreement covers products such as new-generation semi-conductors, GPS navigation systems, machine tools for manufacturing printed circuits, telecommunications satellites and touch screens. For the first time, the ITA-2 will also cover a range of consumer electronics, including headphones, loud speakers and amplifiers, as well as video game consoles and GPS devices. Medical devices such as Magnetic Resonance Imaging (MRI) machines, electro cardiograph (ECG) machines and bionic ear implants are also covered.

The WTO has estimated that annual trade in the 201 additional products to be covered is valued at over \$1.3 trillion per year³³, accounting for approximately 10 per cent of total global trade today. Australia imports around AUD\$19 billion worth of goods covered under the expanded agreement, and exports around AUD\$3.6 billion (DFAT 2017d).

Legislation to amend Australia's applied tariffs was passed in 2016. As many of the 201 goods are already subject to tariff reductions under Australia's preferential trade agreements (PTAs), there may be little additional benefit to Australia if most of the imports already come from PTA partners.

Building on the 2012 APEC Environmental Goods Agreement (EGA)

The Australian Government announced in January 2014 that Australia would join a number of other members of the WTO to negotiate an agreement to remove tariffs on a range of environmental goods. These products include solar panels, wind turbines, and technologies to improve energy efficiency, reduce air pollution, and improve waste and water management.

This will build on the list of 54 environmental goods the tariff reductions agreed to in 2012 by the leaders of Asia Pacific Economic Cooperation (APEC) organisation. Other WTO members currently participating in these negotiations are 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 global market for environmental goods was estimated to be worth US\$1 trillion when negotiations were launched in 2014, and is expected to expand to around US\$3 trillion by 2020 (DFAT 2017e). Australia's exports of environmental goods in 2014-15 were estimated at \$1.5 billion, and imports at \$8.7 billion (DFAT 2017e).³⁴

Australia chairs the negotiations. The eighteenth round of EGA negotiations (28 November to 1 December 2016) did not meet the stated aim of concluding the agreement at the EGA Ministers meeting (3-4 December 2016). However, progress was made and the EGA

³³ The WTO does not denote the currency (WTO 2017), while DFAT specifies AUD (DFAT 2017d).

³⁴ DFAT does not nominate the currency for the Australian trade.

Ministers reaffirmed the importance of the EGA and their commitment to work towards concluding the agreement as soon as possible in 2017 (DFAT 2017e).

Australia's accession bid on the Government Procurement Agreement

The Government Procurement Agreement (GPA) is a WTO plurilateral agreement which opens government procurement markets between its members. The Agreement's main principles are transparency and non-discrimination. It requires GPA members to provide other members' suppliers conditions 'no less favourable' than domestic suppliers. In addition, the GPA provides for domestic review procedures to enable aggrieved firms to seek a review of procurement decisions. The GPA has 18 members and other WTO members, most notably China, are engaged in accession negotiations. Australia has been negotiating its GPA accession since September 2015.

On 19 October 2016 the WTO Government Procurement Committee reviewed the progress made on the accession bid of Australia (WTO 2016). Committee Chairman John Newman summarised as follows:

Australia introduced its latest revised offer, which it said will provide GPA parties' suppliers AUD 100 billion of market access and contains improved market access in services, particularly on transport services. Some parties said Australia's offer was close to being agreeable; others said they had outstanding substantive concerns. "While there is still some distance to go, I am encouraged by the discussion", the Chairman said. (p.1)

Domestic consultation on the Trade in Services Agreement

The Trade in Services Agreement (TiSA) is a proposed services-only trade agreement jointly led by Australia, the European Union and the United States. There are currently 23 negotiating Parties. Negotiations commenced in 2012. However, despite the January 2016 agreed aim of concluding negotiations by the end of 2016 no further international progress has been reported. In 2016 the Australian Government conducted public (domestic) consultations on the proposed TiSA. However, no details of discussions are available (DFAT 2017f).

4.3 Mega-regional trade agreements

Uncertainty surrounding the Trans Pacific Partnership

The TPP is a regional trade agreement between the governments of Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam. Negotiations for the TPP commenced in 2008 and concluded on 5 October 2015. The legally-verified English-language version of the TPP text was released

on 26 January 2016, and formally signed by representatives of participating countries on 4 February 2016.

Countries were allowed 24 months to ratify the agreement. In January 2017, President Trump signed an executive order withdrawing the United States from the TPP.

Due to the structure of the entry into force provisions in the TPP, it is unlikely the TPP will enter into force without ratification by the United States. Nonetheless, the Australian Government has continued to express hope that the TPP will enter into force, and held discussions with TPP partners to this end on 21 May 2017 (DFAT 2017g).

Before completion of the USA election the Australian government had commenced the domestic processes for ratification of the TPP. This process triggered two substantial reports which document the key areas of concern raised by the TPP.

- The TPP was tabled in the Australian Parliament on 9 February 2016 and referred to the Joint Standing Committee on Treaties (JSCOT). Following the Australian federal election, the TPP was re-referred to JSCOT at the beginning of the 45th Parliament (August 2016). JSCOT tabled its report on the TPP on 30 November 2016. The majority report made six recommendations including that 'binding treaty action be taken' in relation to the TPP.³⁵
- Concurrent with the JSCOT process, on 15 September 2016, the Senate referred an inquiry into the TPP Agreement to the Foreign Affairs, Defence and Trade References Committee for inquiry and report by 7 February 2017 (after the USA election). The committee (unanimously) recommended that the Australian Government should defer undertaking binding treaty action until the future of the Trans-Pacific Partnership Agreement is clarified through further negotiations with Australia's major trading partners.³⁶

Notwithstanding the withdrawal of the USA, the TPP proved that mega-regional agreements could be completed.

Negotiations on 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. 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.

³⁵ A dissenting report was made by the Greens Party member.

³⁶ There were no dissenting reports, though the both the minority Government members and the Greens Party member made additional comments, directed at support or otherwise for the TPP.

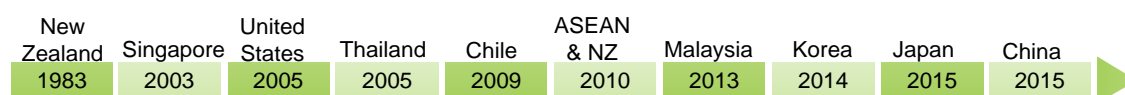
RCEP negotiations were initially launched in the margins of the East Asia Summit in Phnom Penh, Cambodia on 20 November 2012. At the 17th round of negotiations in March 2017, participating countries recognised the need for the negotiations to intensify, particularly in light of increasingly nationalistic and isolationist international trade approaches, and the withdrawal of the USA from the TPP.

As discussed in a recent report on Rules of Origin (RoO), cumulation rules in RCEP would provide an opportunity to reduce the trade restraining effect of RoO in the ‘noodle bowl’ of overlapping bilateral agreements (Crook and Gordon 2017).

4.4 Bilateral trade agreements

Australia is currently party to ten preferential trade agreements (figure 4.1). It has been negotiating agreements with India and Indonesia for several years, and has recently completed a joint scoping exercise with the EU towards launching formal negotiations with the EU (box 4.2). Negotiations with Hong Kong (16 May 2017) and Peru (24 May 2017) have also been announced. In the latter case, the process may be relatively quick because Australia and Peru have negotiated on the TPP (DFAT 2017h).

Figure 4.1 **Australia’s bilateral and regional trade agreements in force**



Diminishing returns from further bilateral trade preferences?

Australia’s existing bilateral agreements are with countries that account for a majority of Australia’s merchandise goods trade. Australia’s top four merchandise export destinations in 2015-16 (China, Japan, Korea and the USA) accounted for around 58 per cent of total exports. On the import side, the top four sources (China, the USA, Japan and Thailand) accounted for about 45 per cent.

Any further agreements will successively cover less and less existing goods trade. India is Australia’s 5th largest export destination (3.9 per cent). Germany is Australia’s 5th largest import source (4.9 per cent).

At some point it must be questioned whether the incremental benefits from further bilateral goods trade reform could even cover the negotiating costs. Negotiating bilateral agreements is time consuming and expensive, for instance the China–Australia Free Trade Agreement (ChAFTA) took 10 years and 21 formal Rounds. DFAT have been unable to provide costings of trade agreement negotiations (PC 2010). It is not clear how the time and cost is apportioned across the different chapters of the agreement, which can run to over 20 topics.

Negotiations on market access (tariffs and quotas) and the accompanying rules of origin are widely known to be extremely protracted.

Box 4.2 Recent bilateral trade agreement activity

Negotiations on the Australia–India Comprehensive Economic Cooperation Agreement

Negotiations on a Comprehensive Economic Cooperation Agreement between Australia and India were launched in May 2011. There have been nine rounds of negotiations, the most recent of which was held in September 2015 (DFAT 2017i).

Negotiations on the Indonesia–Australia Comprehensive Economic Partnership Agreement

Australian and Indonesian Trade Ministers reactivated negotiations in March 2016 after they were first launched by Leaders' in 2010. The sixth round of negotiations was hosted by Australia in Canberra from 20 to 24 February 2017. This was the fourth round of negotiations to be held since reactivation. The seventh round of negotiations was scheduled to take place in Indonesia in May 2017. DFAT (2017j) reported:

Negotiators are meeting approximately every three months and working groups have been established to progress work in a number of areas including: trade in goods, rules of origin, customs procedures and trade facilitation, technical barriers to trade, sanitary and phytosanitary measures, services, investment, telecommunications services, e-commerce, financial services, competition policy, institutional and framework provisions and economic cooperation.

A number of outcomes from IA-CEPA have been brought forward to demonstrate the benefits of closer economic cooperation between Australia and Indonesia. Early outcomes that have already been progressed include the Indonesia-Australia Business Partnership Group, the Red Meat and Cattle Partnership, and cooperation on Financial Services and in the Creative Industries (fashion and jewellery).

Preparations for Australia–EU negotiations

The Australian Prime Minister together with the President of the European Council and the President of the European Commission agreed in a joint statement on 15 November 2015 to start the process towards a trade agreement. Australian and EU officials recently completed a joint scoping exercise, and are working toward a launch of formal negotiations. As part of this process, DFAT received over 40 submissions from interested stakeholders (DFAT 2017k).

To what extent are Australia's bilateral trade preferences being used?

Imports into Australia

In 2015-16, an estimated 67 per cent of imports into Australia came from countries with which Australia has a reciprocal preference agreement (table 4.1).

However, only 26 per cent (of this 67 per cent) derived a benefit from the trade agreement (column 5). The remainder of imports from trade agreement partners entered Australia under three other tariff arrangements:

- 32 per cent (of the 67 per cent) derive no benefit from the trade agreement because the goods already face a zero-MFN tariff (column 3).
- 12 per cent came in under tariff concessions separate from a PTA, (such as Developing Country preferences, Tariff Concessions Orders, TRADEX and the Enhanced Project By-Law Scheme)
- 29 per cent of imports paid the full MFN rate even though a preference was available under the agreement (table 4.1, column 6). One reason why firms fail to use the preference would be that the imports did not qualify due to the stringency of the RoO (see below). A second reason would be because the partner country exporter or Australian importer decided that the preference on offer was not worth the cost of compliance. A third explanation is that the exporter or importer was not aware of the preference.

Table 4.1 Imports into Australia, 2015-16

By type of tariff entry

	<i>Total imports</i>	<i>MFN zero</i>	<i>Other concession</i>	<i>Claimed the tariff concession under a trade agreement ^a</i>	<i>MFN >zero</i>
	<i>per cent of value</i>	<i>per cent of value</i>	<i>per cent of value</i>	<i>per cent of value</i>	<i>per cent of value</i>
From trade agreement partners	67	32	12	26	29 ^b
From Rest of the World	33	45	6	Not applicable	49
	100				

^a Some concessions still involve some tariff duty, where the preference rate has yet to be reduced to zero.

^b This is biased up because it includes some trade that was not eligible under the agreements. However, the bias should be small because PTAs are required to cover 'substantially all trade' to be WTO compliant.

Source: Crook and Gordon (2017, table 3).

The pattern of liberalised trade and preference usage differs widely among Australia's agreements (figure 4.2). At the country level, imports from New Zealand had the highest proportion of duty free or concessional entry (98 per cent), while China had the lowest (55 per cent).

The *relative* contribution of zero MFN tariffs, other concessions and trade preferences to overall liberalised trade varies across agreements. Chile enjoys most (74 per cent) of its liberalised trade with Australia in the form of zero-MFN tariffs (figure 4.3). Singapore enjoys most (74 per cent) of its liberalised trade in the form of non-agreement preferences. Thailand enjoys most (78 per cent) of its liberalised trade in the form of agreement preferences. Overall, more imports (44 per cent) from trade agreement partners came into Australia in 2015-16 via zero MFN and non-agreement preferences than the PTA

preferences (26 per cent). Pomfret et. al. (2009) studied Australian import patterns before and after trade agreements over 2000—2009 and found little evidence of expanded use of concessions (either trade agreement preferences or other concessions) relative to zero-MFN imports.

Exports from Australia

A similar comprehensive analysis of Australia's exports to trade agreement partners has not been made. Anecdotally, export volumes of certain products to certain countries have increased since trade agreements came into force.

Rules of origin act against trade preferences

RoO are transformation tests (such as requiring a local value added threshold be met) to earn tariff and quota preferences under preferential trade agreements (PTAs). They are a non-tariff barrier. The more stringent the transformation test, the greater protection afforded and the higher import prices will be for consumers. A recent paper (Crook and Gordon 2017) concluded:

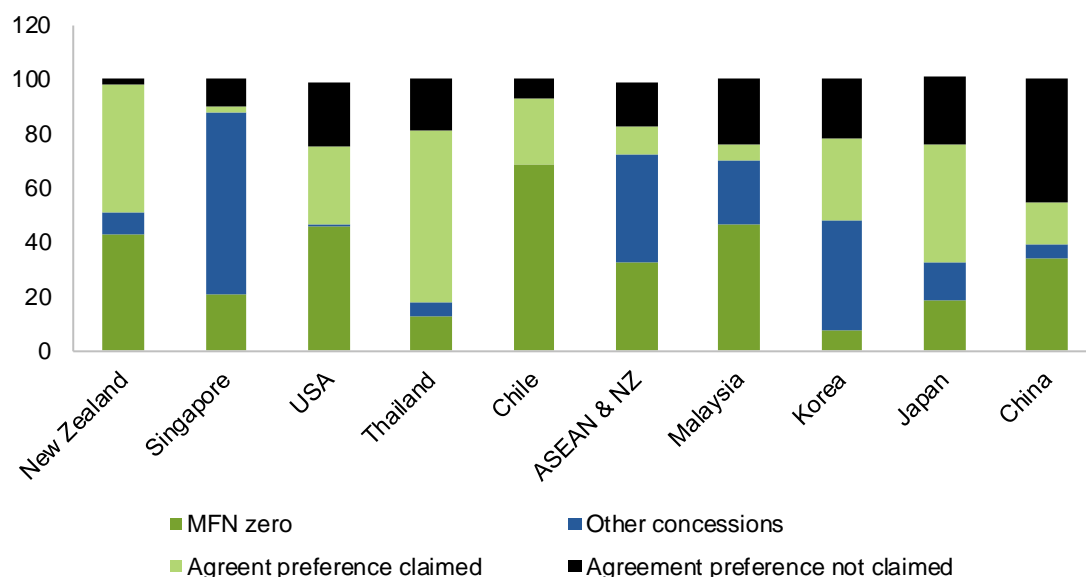
Rules of Origin (RoO) have become a pernicious barrier to trade for Australian business. Their inherent protectionism is little known - well disguised in their daunting yet mind numbingly dull complexity.

RoO are insidious as they afford an impression of trade concessions, but instead their complexity and restrictiveness substantively erode the purported positive trade impacts of the PTA. (p. 3)

One study estimated that RoO (across 149 countries) reduced the trade creation effects of PTAs by around two thirds (Anson et al. 2005). Another study found that the RoO for several ASEAN country agreements reduced the average preference available by about one-quarter (Cadot and Ing 2014). There is also evidence that the application of RoO by Customs is a growing 'at the border' barrier in some Asian countries, through the 'proof of origin' requirements.

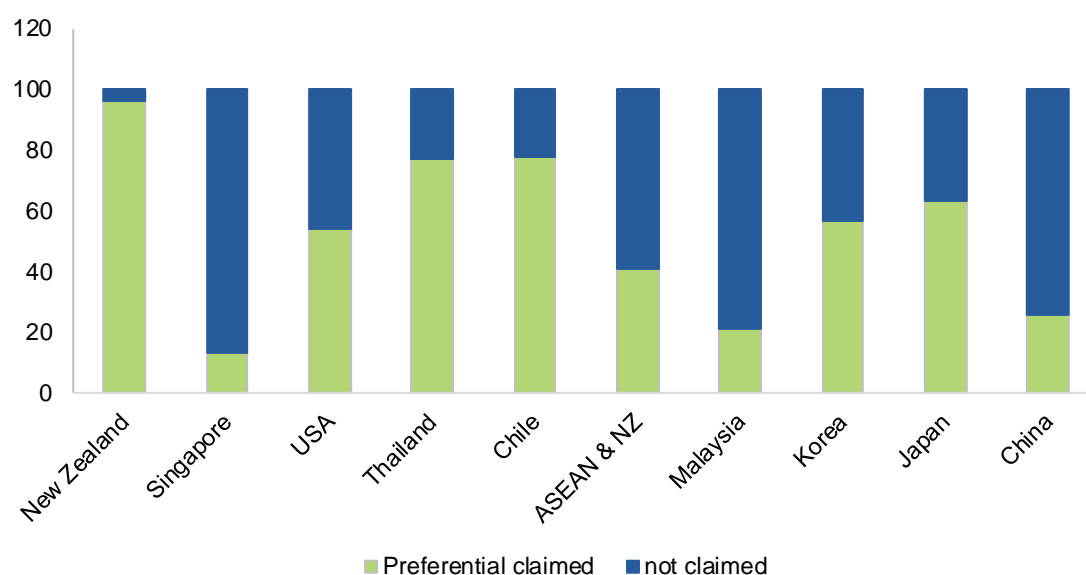
Australia can rid itself of the RoO problems for importers by unilaterally removing remaining MFN tariffs (section 4.5). Reforming the RoO faced by Australian exporters requires negotiated agreement with PTA partners.

Figure 4.2 Imports into Australia, 2015-16
By type of tariff entry and trade agreement, per cent



Source: Crook and Gordon (2017, figure 2).

Figure 4.3 Share of eligible imports where preference was claimed, 2015-16, per cent



Source: Crook and Gordon (2017)

Bilateral trade preferences may not flow through to cheaper imports — potential pocketing of the rent

Exporters can take the benefits from trade agreement preferences in several ways. The exporter will ‘pass on’ the tariff preference as a lower price if it wants to expand volume, including breaking into the market if they are currently not exporting to the partner. Alternatively, the exporter may ‘pocket’ the tariff rent (particularly if it is already supplying the market), in which case local consumers do not gain.

Studies of pass through of tariff reductions indicate that pass through is lower the weaker is competition in the retail–wholesale distribution chain (Iapadre and Pace 2016; Cole and Eckel 2014; De Loecker et al. 2012).³⁷ Consistent with the competition theme, it may be expected that pass through is lower under bilateral tariff reductions compared with unilateral and multilateral tariff cuts. Hayakawa and Ito (2015) find supporting evidence based on import data for 46 countries (including Australia) over the period 2007 to 2011. They estimated that exporters ‘retained’ about 73 per cent of tariff reductions under bilateral (and regional) trade agreements compared with 28 per cent under MFN tariff reductions.

4.5 The case for removing the remaining tariffs

Recent Commission research illustrates that Australia’s best option in response to global trade uncertainty is to remain open and pursue further trade liberalisation, ideally in the company of like-minded countries to amplify the benefits (PC 2017b).

Three reasons espoused for retaining remaining general rate tariffs are: to maintain protection for manufacturing (employment); raise revenue; and provide negotiating coin in trade negotiations. All three are weak arguments. Moreover, with the proliferation of preferential trade agreements (PTAs) any perceived benefit along these lines has diminished over the last decade. While the price distortions from tariffs are much lower than in the past they still impose a ‘tax’ penalty on some firms, and the administration and compliance costs of the ‘tariff system’ have likely increased with the enforcement of the PTAs. Since the halt in 1996 of general reductions³⁸ in tariffs, Australia had endured 20 years of unnecessary economic distortion, administration and compliance costs.

In part this reflects long discredited views that exports are good and imports are bad.

³⁷ Also illustrating the central role of competition, there is evidence that pass through of tariff reductions is lower among higher productivity exporting firms because they increase quality and the tariff-exclusive price, for products with high scope for quality differentiation (Ludema and Yu 2016).

³⁸ Reductions in tariffs on passenger motor vehicles and textiles, clothing and footwear continued after 1996, starting from levels much higher than the ‘general rates’. All such tariffs finally reached 5 per cent in 2015.

The tax effect of tariffs on intermediate inputs is estimated to be about \$6 billion per year (chapter 2), which flows through into higher consumer prices. The induced distortions in producer and consumer decisions detract from Australia's resource allocation efficiency.³⁹

While it is common to focus on the economic tax effect, a somewhat neglected, and unquantified, aspect of the cost of the remaining tariffs is the administration, compliance and trade negotiation costs.

An extensive tariff administration architecture is required to enforce both the tariff system and PTAs. At the border, Customs (and the importer) needs to address tariff classification, valuation for duty, and origin, which are not straightforward and prone to uncertainty and dispute. In each of 2014 and 2015-16 Customs dealt with over 3000 formal requests for advice on tariff classification, valuation and rules of origin, completing less than 40 per cent to client service standards (DIBP 2016b). Another complication is that Goods and Services Tax (GST) applies to the landed duty paid value of nearly all imports, whereas Australian tariffs typically apply to the free-on-board value, and thus importing involves the collection of two taxes on different bases.

In addition to PTAs, Australia operates several tariff concession schemes, each with its own eligibility rules and compliance processes. This includes the Tariff Concession Scheme (TCS), estimated to have saved importers about \$1.8 billion in 2013-14 (ANAO 2015b), Duty Drawback of \$161.3 million in 2015-16, TRADEX pre-duty claims of \$48.4 million in 2015-16 (DIBP 2017 pers. comm.), and Developing Country concessions estimated to be worth \$124 million in 2013-15 (DFAT 2016).⁴⁰

The concession schemes have been reviewed numerous times over the last 30 years.⁴¹ Most recently, an audit of the TCS has been completed (ANAO 2015b) and Australia's system of Developing Country tariff preferences is currently under review (DFAT 2016) (box 4.3). Both reviews reveal a complex and costly administrative system, and difficulties and costs for those seeking to claim a tariff concession. The Commission has previously estimated that the government administration and business compliance cost of the TCS was at least \$6 million per year (PC 2000a). Neither of the two recent reviews focus on the balance between the trade liberalisation benefits of the concessions and the administration and compliance costs of the schemes. The TCS review reveals a focus by Customs on tightly screening the use of tariff concession orders (TCOs) in order to minimise revenue forgone, as well as not undermining the existing import protection for local producers.

³⁹ The protective intent of maintaining 5 per cent has lost practicality as the pattern of manufacturing and sources of competition are much different now to when the tariff freeze began in 1996.

⁴⁰ Concessions under the Enhanced Project By-Law Scheme (EPBS) were about \$230 million in 2011 (PC 2012). The EPBS was closed to new claims in 2016. The value of concessions is not known for qualifying imports of goods for government, scientific, educational or cultural purposes.

⁴¹ For instance, the TCS was reviewed by the IAC (1982), IC (1991) and the PC (2000a), each time finding scope for improvement in the operation and efficiency of the system. There was also a joint review by the Department of Industry, Science and Technology and the Australian Customs Service (DIST and ACS 1995).

Historically, Customs has assessed the risk ...within the context of the loss of revenue payable to the Commonwealth (revenue risk). ... Since 2011–12, Customs has evolved its understanding of revenue risk, renaming it ‘economic risk’ or ‘economic risk including revenue’. Economic risk is now identified as: ‘the likelihood of trade unfairly distorting the environment in which Australian firms compete.’ (ANAO 2015b, p. 91)

Box 4.3 Recent reviews of tariff concession arrangements

ANAO performance audit of the Administration of the Tariff Concession System

The audit report was published in February 2015. It examined the governance of the system, assessment of concession applications, and processes for ongoing management, review and eventual revocation of concessions.

The audit concluded that the administrative arrangements were generally sound for the assessment and management of concessions, though there was scope for improvement relating to documentation and engaging with local manufacturers.

The Tariff Concession Orders (TCOs) application process takes up to 178 days. As at October 2014 there were over 15 000 current TCOs, and Customs received about 940 TCO applications every year, with around 80 per cent of applications resulting in a TCO being made. TCOs were estimated to have saved importers about \$1.8 billion in 2013-14 (ANAO 2015b).

In 2012, the Australian Government provided Customs with \$13.5 million to review the validity of existing TCOs. This resulted in the revocation of more than 300 TCOs, mostly for those not used in the previous two years (pp. 84–5). Customs claimed its compliance review ‘saved’ the Government \$14.3 million in notional duty (\$3.7 million, plus \$10.6 million). This is difficult to rationalise if most of the revocations were for non-use of TCOs.

Customs also has a strong focus on identifying local manufacturers of goods subject to a TCO or application. ANAO recommended further raising awareness among local manufacturers. The audit did not address potential improvements in the efficiency and effectiveness of the system for users of TCOs.

DFAT Review of Australia’s System of Tariff Preferences (ASTP) for least developed countries (LDCs) and developing countries (DCs).

The review commenced in May 2016. It is assessing: the range and type of preference categories; eligibility requirements and process for amendments; rules of origin; and documentation requirements. The review is not reconsidering Australia’s policy position of providing duty-free and quota-free market access to least developed countries, or preferential access to developing countries.

The ASTP covers 145 countries and 31 places, and includes some countries Australia has signed PTAs with. China is the largest user of the ASTP system. There are five preference categories, with duplication of countries and different rules of origin. The benefit of ASTP preferences declined as Australia unilaterally reduced MFN tariffs.

As tariffs were reduced during the early 1990s the protective benefit to manufacturing and the revenue to government declined, yet many of the administrative, compliance and review costs of tariffs and concessions are ‘fixed’ (independent of the level of the tariff) and did not abate. The change in the benefit–cost calculus of maintaining a system of tariff concessions has not been addressed.

If government is unwilling to adopt the unilateral reduction option in the near-future, then a stocktake (quantification) of the administration costs associated with maintaining existing MFN tariffs is warranted. If tariffs are retained it is important that the tariff concession framework be liberal, and cost effective, which has not always been the case, according to past reviews.⁴²

This section briefly covers:

- the halt in general tariff reductions in 1996 and new imposts
- the profile of remaining tariffs and duty revenue
- calls for reciprocity instead of unilateral tariff reductions and the scope to reduce MFN tariffs in the face of existing bilateral agreements.

The 1996 halt and new imposts

Previous momentum

From 1988 to 1996 general rate tariffs (except for passenger motor vehicles (PMV) and for textiles, clothing and footwear (TCF)) were phased down to a maximum of 5 per cent in two programs (table 4.2). The first program from 1 July 1988 to 1 July 1992, announced in the May 1988 Economic Statement (Keating 1988) reduced tariffs to either a maximum of 15 or 10, depending upon the starting level. The second program from 1 July 1993 to 1 July 1996, announced in the March 1991 Statement: Building a Competitive Australia (Hawke, Keating and Button 1991) further reduced general rate tariffs to a maximum of 5 per cent. (The 1988 statement also abolished the 2 per cent revenue duty, which had been imposed in 1979 on many previously tariff-free items).⁴³

⁴² Along similar lines, Hudson (2016) stated that ‘recent AAT [Administrative Appeals Tribunal] decisions and changes to practice by government agencies have made it more difficult to secure, maintain and use such TCOs’. Hudson outlined difficulties in the making of, grant, retention, and revocation of TCOs to the Customs Brokers and Forwarders Council of Australia (CBFCA 2015).

⁴³ A ‘Primage Duty’ was variously in force between 1930 and 1980, adding 3 to 10 per cent to duties on most items. It was progressively removed and then finally abolished after an IAC report of 1978 (*Removal of Primage Duty*, Report No.187). However, with the 1979 ‘Mini-Budget’ the government imposed a 2 per cent tariff on most imports previously admitted Freefree. This was removed in the May 1988 Statement.

Table 4.2 General rate tariff reductions, 1989–1996

Date	<i>General rates (except PMV and TCF) ^b</i>	
	<i>Tariffs above 15 per cent</i>	<i>Tariffs between 10 and 15 per cent</i>
	Ad valorem tariff rate (%)	Ad valorem tariff rate (%)
May 1988 announcement ^a		
From		
1 July 1988	The Statement did not provide a common phasing schedule as there were many different starting rates.	
1 July 1989		
1 July 1990	There was a <i>minimum</i> one percentage point reduction per year.	
1 July 1991		
1 July 1992	15	10
March 1991 announcement		
1 July 1993	12	9
1 July 1994	10	8
1 July 1995	8	7
1 July 1996	5	5

^a The 1988 Statement also included abolition of the 2 per cent revenue duty, which had been imposed in 1979 on many items previously admitted Free. ^b PMV — passenger motor vehicles, TCF — textiles, clothing and footwear.

Source(s): Keating (1988); Hawke, Keating and Button (1991)

A change of direction in 1996

The momentum of reductions in tariffs stalled with the change of Government in May 1996. The new government declined to make further reductions in general rates. Moreover, in July 1996 a 3 per cent revenue duty (tax) was imposed on imports of business inputs and capital goods for which there was no domestic production⁴⁴. The scope of the TCS was also tightened, by abolishing the ‘market test’ provision (where a tariff concession was given where it was not likely to have a significant adverse effect on the market for the substitute Australian-produced good).⁴⁵ In line with changes to the TCS, the duty rate applying to

⁴⁴ The revenue duty was removed on 11 May 2005, and at the time was imposing a cost on users and consumers of around \$300 million (PC 2005).

⁴⁵ The number of new tariff concessions granted had increased considerably, from 1366 in 1990–91 to 4521 in 1994–95, but fell to 2888 in 1995–96 (IC 1996), and to around 1000 in the three years 1996–97 to 1998–99 (PC 2000a). As at October 2014, there were over 15 000 current TCOs. Customs receives about 940 TCO applications every year, with around 80 per cent of applications resulting in a TCO being made (ANAO 2015b).

several concessional By-laws⁴⁶ was increased to 3 per cent and several administrative changes were also made to restrict the availability of By-law concessions. In 1997 a decision was also made to freeze tariff reductions for PMV and TCF from 2000 to 2005.

A missed opportunity in 2000

In July 1999 the Commission was asked to report on the scope for post-2000 reduction in tariffs of 5 per cent or less, other than those included in the TCF and PMV plans, including consideration of the appropriateness of the Tariff Concession Scheme and Project By-law arrangements. The inquiry was to fulfil Australia's APEC commitment to review its general tariffs in 2000 or earlier. In its report (July 2000) the Commission recommended the abolition of the general tariff rates under reference (and the 3 per cent duty on business inputs under the concessional scheme), sooner rather than later, preferably on 1 July 2001 and no later than 1 January 2003. The Commission also considered that, if the general tariff arrangements were to continue, there would be merit in expanding the Project and Policy By-law schemes. The Commission also concluded that the interaction of the tariffs and a complex set of concessional duty arrangements caused significant monitoring and compliance costs for business and made recommendations to reduce the administration and compliance costs of the schemes.

In response, in December 2000, the Government announced that it would retain the general tariff rate at 5 per cent and also retain the 3 per cent duty on business inputs under the Tariff Concession Scheme. In announcing its decision, the Government stated that it:

...accepts the Productivity Commission's view that there are benefits to be obtained from the removal of the general tariff, but that such benefits would be relatively small.

...We consider there would be benefit in holding these current arrangements for the present and moving to withdraw them at a time consistent with trade and fiscal objectives (Costello and Minchin 2000).

The government did however announce changes (in May 2001) to the Policy and Project By-Laws Scheme (PBLs) to broaden eligibility and reduce compliance costs (PC 2002).

The revenue from the remaining tariffs is declining

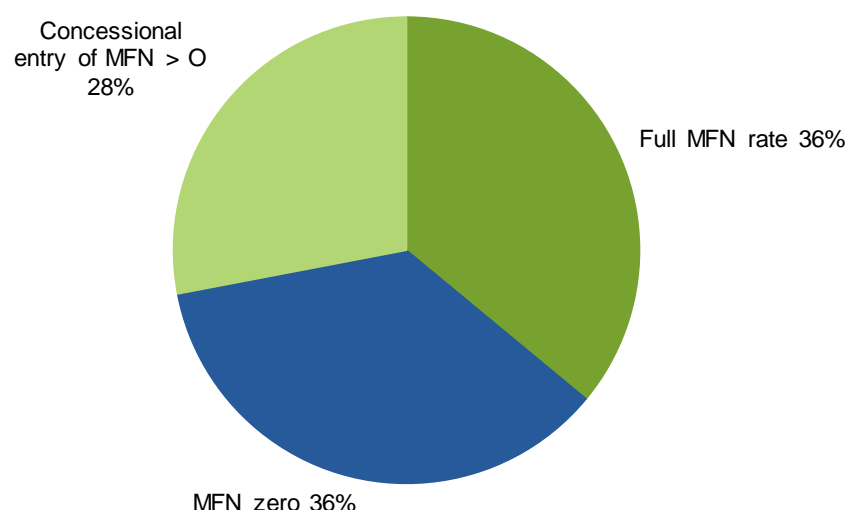
As at 1 January 2017, Australia continues to 'retain' non-zero MFN tariffs on about 50 per cent of imports, measured by tariff lines at the HS 8 digit level. That is, about 2500 tariffs remain 'on the books'. Nearly all of Australia's remaining MFN tariffs are 5 per cent. There are some 4 per cent items and some specific-rate tariffs (such as dollars per kilogram or litre, for certain cheeses and fruit juice).

⁴⁶ Policy and Project By-Laws were another form of concessional entry, intended to meet industry policy objectives when other tariff concessions were not available. For example, By-laws allowed for concessional entry of inputs used in food processing, motor vehicle production, and textiles, clothing and footwear.

In practice, about 64 per cent of Australia's imports (by value) in 2015-16 were goods that are listed on the tariff schedule as having a positive MFN tariff.⁴⁷ Of this,

- about 36 per cent of imports paid the full MFN rate, including some that were goods covered by a trade agreement but did not claim the concession (or could not satisfy the origin rules (figure 4.4)
- about 28 per cent claimed a tariff concession under various schemes, mainly Tariff Concession Orders and bilateral trade agreements.

Figure 4.1 Imports into Australia by type of tariff, 2015-16

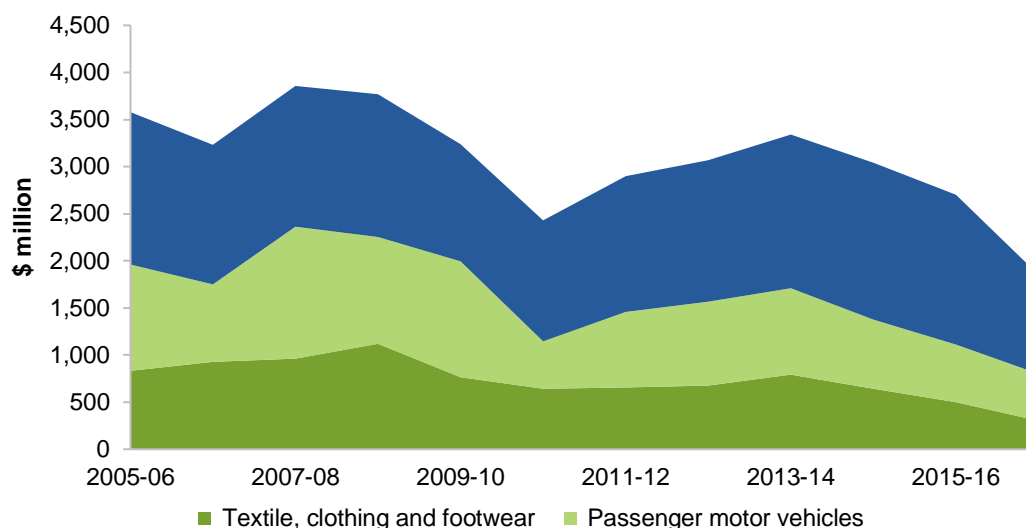


Data source: Commission estimates:

Gross tariff revenue in 2015-16 was \$2.43 billion, comprising \$498 million for TCF imports, \$614 million for PMV imports (excluding luxury car tax of around \$500 million) and \$1370 million for other products (Australian Government 2016). Refunds and drawbacks were \$436 million, giving a net customs duty estimate of around \$2 billion. This is estimated to decline to \$1.43 billion for 2016-17. Import duty revenue has declined an average of around 3 per cent per year over the last decade (figure 4.5). Import duties have declined significantly as a proportion of budget revenue. In 1986-87, before the two rounds of general reductions, tariffs contributed almost 4 per cent of Commonwealth revenue, but this had fallen to less than 2 per cent by 1996-97 (PC 2000a, figure 2.2) and 0.6 per cent in 2015-16.

⁴⁷ This is derived from table 4.3, as $\{1 - [(0.67 \times 0.32) + (0.33 \times 0.45)]\} = 0.6371$

Figure 4.2 **Gross tariff revenue, 2005-06 to 2016-17^a**



^a Annual refunds and drawbacks ranged from \$212m to \$436m from 2005-06 to 2014-15, with no discernible pattern. The estimate for 2016-17 is \$420m.

Data source: Final Budget Outcome (various years), Part 2: Australian Government Financial Statements, Note 3, Taxation revenue by type). Actual (2005-06 to 2011-12). MYEFO estimate 2012-13 to 2016-17.*

There does not appear to be a coherent pattern in which goods face zero tariffs and goods which are still subject to a positive general rate. The tariff schedule is riddled with ‘puzzling’ differences between somewhat like goods, for instance kids toys, such as tricycles, dolls and puzzles attract a 5 per cent tariff, but musical toys are free (box 4.4). This is not a new phenomenon, the IAC noted similar inconsistencies between ‘like’ products of duty-free and duty-payable under the 2 per cent revenue duty regime (IAC 1987). For example, tea was free but coffee was dutiable.

Retaining negotiating coin and reciprocity

At the time of the 1996 tariff ‘pause’, some argued the remaining tariffs should be retained for bargaining coin in future (multilateral) trade negotiations (before the focus on bilateral agreements). The same arguments resurfaced as the government shifted focus to bilateral and regional agreements in the mid-2000s. Now, after signing 10 such agreements some may argue that Australia cannot unilaterally reduce general rate tariffs because it will ‘upset’ the agreement partners.

Box 4.4 **Examples of tariff differences between ‘like’ goods**

The tariff schedule contains many examples of different tariff rates between somewhat like goods, including

- mineral water is tariff free, but mineral water with sugar has a 5 per cent import tax.
- Roquefort cheese escapes the tariff, but cheddar cheese is charged \$1.22 per kilogram.
- potato starch attracts a 5 per cent tariff, but not wheat and corn starch.
- rubber tyres for cars face a 5 per cent tariff, but not for motorcycles.
- imported fuel wood in the form of logs, billets, twigs and faggots is tariff free, but chips and particles face a 5 per cent import tax.
- there is a tariff on calendars but not catalogues.
- there is a 5 per cent tariff on golf clubs, but not tennis racquets.
- fishing rods face a 5 per cent tariff, while the hooks are tariff free.
- kids toys, such as tricycles, dolls and puzzles attract a 5 per cent tariff, but musical toys are free.

At least Customs does not have to sort the sheep from the goats.

Leyonhjelm (2015) also observed many examples, including a 5 per cent tariff on margarine, a 4 per cent tariff on dairy spreads, but no tariff on butter.

Source: Productivity Commission examination of the Tariff Schedule

In 1997 the Commission (and others) expressed doubts about the degree of leverage Australia had in multilateral settings given its small market and low tariffs (IC 1997). It also pointed to the opportunity cost (loss of benefits) from not undertaking further unilateral reductions, and that Australia had previously been given credit in multilateral negotiations for unilateral reductions.⁴⁸

The Commission again substantively addressed the negotiating coin argument in the 2000 inquiry into general reductions in tariffs and in the 2010 report on bilateral and regional trade agreements, concluding that retaining ‘coin’ for use in international negotiations:

... would delay and potentially forego the relatively much larger and more readily achieved gains available from domestic reform [of tariffs] in favour of smaller and uncertain benefits (PC 2010, p. XXVI).

No impediments to unilateral MFN reductions under bilateral agreements

In the Commission’s 2000 inquiry into general reductions in tariffs, DFAT submitted that unilateral reductions in general rates would not cause problems (adverse relations) with Australia’s bilateral agreements at the time with New Zealand (CER), Forum Island

⁴⁸ In 1977, Australia unilaterally reduced tariffs on about 900 items, in the wake of a 17.5 per cent devaluation of the dollar in November 1976. These reductions formed part of the concessions in the multilateral trade negotiations (IC 1998).

Countries (SPARTECA) and Papua New Guinea (PACTRA II) (PC 2000a). DFAT noted some minor consequences under the trade agreement with Canada (CANATA), where either partner is free to remove a preference but it is open to the other to withdraw a substantially equivalent concession. However, it was not made clear whether this applied to Australia removing a bilateral concession (such as carving out a product) or unilateral reduction in general tariffs.⁴⁹

Australia's recent bilateral agreements recognise the possibility that MFN rates may fall below negotiated bilateral concessions. For example, the PTA with China (ChAFTA) makes this explicit:

If, as a result of the elimination or reduction of its customs duty applied on a particular good on a most-favoured-nation basis, the most-favoured-nation applied rate becomes lower than the rate of customs duty to be applied in accordance with Article 2.4.1 (Elimination of Customs Duties) of Chapter 2 (Trade in Goods) on the originating good which is classified under the same tariff line as that particular good, each Party shall apply the lower rate with respect to that originating good (clause 5, Annex 1, Chapter 2)

This situation has already arisen in practice. ChAFTA provided for reductions in Australia's tariff on certain TCF items from 10 per cent to 8 per cent from 20 December 2015, and 6 per cent from 1 January 2016. Separately, Australia unilaterally reduced the tariffs on TCF products to 5 per cent from 1 January 2015.

In similar vein, each time Australia signed another bilateral agreement it potentially 'chipped' away at the concessions already granted in other agreements.

Despite all the evidence, mercantilist views still persist

The unilateral approach to trade liberalisation contrasts with the 'conditional reciprocity' approach. The contrasting views reflect fundamental differences in the assessment of the economic benefits and costs of tariff reductions. These have been nicely summarised by Salmond (table 4.3).

The difference lies in the perspective on benefits, with economists seeing the gains to trade for all parties, while the mercantilists look at trade as a zero sum game. This view, most recently demonstrated by President Trump's views on US trade, persists despite the considerable evidence to the contrary as the reductions in protection across the world led to a period of unprecedented economic growth (PC 2017b). The Commission's trade research paper discusses the need for better communication of the case for open trade and public misconceptions about trade.

⁴⁹ On the multilateral front, DFAT expressed the view that early reductions in Australia's applied tariffs [general rates] could *strengthen* Australia's negotiating positions rather than weaken it (PC 2000a). The Commission explained how this may work – Australia could be 'lavish' in agreeing to, and hard in pushing others, on bound rates reductions, because it won't bite for Australia, as our applied rates will be much lower than current bound rates. DFAT also agreed it gives Australia moral leadership in multilateral forums.

Table 4.3 Two perspectives on trade policy

<i>Trade liberalisers</i>			<i>Conditional reciprocists ^a</i>		
	Partner liberalises	Partner does not liberalise		Partner liberalises	Partner does not liberalise
Australia liberalises	Best	2 nd best	Australia liberalises	2 nd best	Worst
Australia does not liberalise	3 rd best	Worst	Australia does not liberalise	Best	3 rd best

^a Salmond uses the term 'political scientists'.

Source: Salmond (2003)

Australia can lead the way back toward trade liberalisation

While many might agree that the case for unilateral liberalisation, as set out above, is strong, some will argue that now, because of slow economic growth, is not a good time. Australia's 1988 trade liberalisation took place in a boom time, but the second round of general tariff reductions announced in 1991, commenced when Australia was officially in a recession and there was high unemployment. There is an important lesson in this, as the 1991 announcement of the 1992-1996 tariff reduction program was accompanied by strong statements by both the Prime Minister and Treasurer in favour of trade liberalisation (box 4.5).

In June 1996 the Commission concluded in its microeconomic reform stocktake that it was 'time to finish the job of dismantling remaining tariff and non-tariff barriers' (PC 1996, p. 121). It recommended that phased reductions in general tariffs should continue beyond July 1996, with tariffs for most goods being phased out by July 1998. This recommendation remains as relevant today as when it was made some 20 years ago.

Box 4.5 **Government support for 1992-96 tariff reductions**

Prime Minister Hawke stated:

Mr Speaker, the most powerful spur to greater competitiveness is further tariff reduction.

Tariffs have been one of the abiding features of the Australian economy since Federation. Tariffs protected Australian industry by making foreign goods more expensive here; and the supposed virtues of this protection became deeply embedded in the psyche of the nation.

But what in fact was the result?

Inefficient industries that could not compete overseas; and

Higher prices for consumers and higher costs for our efficient primary producers. Worse still, tariffs are a regressive burden — the poorest Australians are hurt more than the richest (Hawke, Keating and Button, p.1.5).

Treasurer Keating was equally damning of the tariff:

The package of measures announced today ends forever Australia's sorry association with the tariff as a device for industrial development.

By turning its back on tariffs, Australia will be further propelled in its quest for international trade and efficiency, a search begun with the opening up of the economy in 1983 when we floated the dollar and abolished exchange controls.

As in all nations before it, the pursuit of trade and competition has instilled in Australia a thirst for greater efficiency at home and a larger dominion abroad.(Hawke, Keating and Button, p.2.1)

Source: Hawke, Keating and Button (1991).

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 2010-11 to 2015-16.

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 2015-16 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 new 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 (<http://www.pc.gov.au/research/recurring/trade-assistance>).

The tables for 2015-16 include the corrected estimates from 2012-13 for the R&D Tax Incentive (and all totals that include these numbers), and this data rather than estimates published in previous *Reviews* should be used. The Commission apologises for the mistake, which has led to the systematic underestimation of the budgetary assistance provided by the R&D Tax Incentive in the *Reviews* since 2013-14.

Table A.1 Net tariff assistance by industry grouping, 2010-11 to 2015-16^a
\$ million (nominal)

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary production	212.4	228.8	269.2	212.6	248.4	276.8
Horticulture and fruit growing	96.3	93.2	123.0	101.1	115.4	125.9
Sheep, beef cattle and grain farming	143.0	161.3	173.2	155.3	178.3	195.8
Other crop growing	-3.1	-3.7	-4.0	-4.0	-3.5	-2.9
Dairy cattle farming	-9.4	-7.0	-11.5	-12.9	-13.3	-13.1
Other livestock farming	-14.5	-15.4	-13.7	-13.7	-15.2	-16.2
Aquaculture and fishing	-4.6	-4.9	-6.3	-5.9	-6.2	-6.4
Forestry and logging	15.2	16.3	14.9	12.9	14.0	14.9
Primary production support services	-10.6	-11.1	-6.3	-20.2	-21.0	-21.1
Unallocated primary production ^b	–	–	–	–	–	–
Mining	-220.4	-237.0	-259.1	-284.2	-296.7	-305.0
Manufacturing	4996.0	5048.5	5012.3	4671.3	4690.8	4660.6
Food, beverages and tobacco	1244.8	1279.9	1293.1	1314.5	1307.1	1307.7
Textiles, leather, clothing and footwear	115.3	111.0	109.2	111.3	100.3	85.5
Wood and paper products	573.6	526.8	521.8	542.3	562.2	574.9
Printing and recorded media	89.7	80.7	79.4	76.7	74.6	75.1
Petroleum, coal, chemical and rubber	730.7	746.3	636.0	506.8	502.7	505.4
Non-metallic mineral products	277.7	264.0	250.2	257.3	285.0	292.3
Metal and fabricated metal products	880.5	903.3	1126.0	890.1	882.1	849.1
Motor vehicles and parts	435.6	456.5	293.6	343.6	344.5	341.8
Other transport equipment	160.5	168.3	205.1	131.1	131.8	131.2
Machinery & equipment manufacturing	314.8	330.4	337.8	331.4	332.7	330.5
Furniture and other manufacturing	172.7	181.2	160.1	166.3	167.6	167.2
Unallocated manufacturing ^b	–	–	–	–	–	–
Services	-3186.5	-3458.0	-3590.5	-3712.8	-3750.5	-3793.1
Electricity, gas, water & waste services	-57.8	-65.5	-74.1	-73.3	-70.4	-67.2
Construction	-1220.9	-1345.5	-1412.3	-1479.7	-1513.2	-1551.1
Wholesale trade	-219.8	-231.6	-236.8	-236.2	-227.5	-227.0
Retail trade	-129.0	-138.4	-141.3	-141.9	-139.9	-142.4
Accommodation & food services	-250.0	-267.1	-275.6	-280.1	-293.3	-294.3
Transport, postal & warehousing	-171.2	-187.6	-196.7	-197.3	-200.9	-211.1
Information & telecommunications	-70.6	-71.9	-72.2	-73.3	-72.9	-70.2
Financial and insurance services	-12.0	-12.3	-13.0	-13.8	-14.5	-15.1
Property, professional & admin.	-315.5	-341.2	-358.9	-365.3	-374.5	-377.2
Public administration and safety	-127.9	-136.3	-140.5	-145.2	-140.8	-140.4
Education and training	-40.0	-43.5	-45.7	-47.9	-48.6	-49.8
Health care and social assistance	-200.2	-210.0	-220.8	-232.0	-228.5	-216.9
Arts and recreation services	-65.2	-68.5	-68.7	-72.9	-74.3	-76.7
Other services	-306.4	-338.7	-334.1	-353.8	-351.1	-353.7
Unallocated services ^b	–	–	–	–	–	–
Unallocated other^b	–	–	–	–	–	–
Total	1801.5	1582.2	1431.9	886.9	892.0	839.3

– 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, 2010-11 to 2015-16

\$ million (nominal)

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary production	1527.9	1553.1	1236.3	1284.5	1346.1	1301.5
Horticulture and fruit growing	160.9	136.3	126.4	129.9	121.2	131.6
Sheep, beef cattle and grain farming	760.6	662.8	532.1	603.8	600.6	615.1
Other crop growing	46.8	94.1	94.0	100.0	80.8	80.5
Dairy cattle farming	96.6	78.0	51.1	60.5	73.4	71.8
Other livestock farming	43.9	66.2	43.8	39.0	48.6	48.6
Aquaculture and fishing	77.8	67.2	65.6	69.9	75.6	77.7
Forestry and logging	46.1	72.3	46.9	26.4	26.2	25.7
Primary production support services	33.0	21.9	25.6	26.9	23.4	23.2
Unallocated primary production ^a	262.2	354.3	250.6	228.1	296.4	227.5
Mining	1156.5	745.6	587.7	550.4	491.9	624.0
Manufacturing	1933.6	1851.5	1759.8	1747.3	1634.6	1515.3
Food, beverages and tobacco	192.6	108.5	162.4	200.6	167.6	108.1
Textiles, leather, clothing and footwear	134.8	61.0	60.1	62.5	58.5	51.6
Wood and paper products	36.3	17.3	32.5	22.5	23.6	15.9
Printing and recorded media	17.9	16.3	16.8	17.9	24.1	15.7
Petroleum, coal, chemical and rubber	353.0	279.2	323.0	326.7	320.1	213.3
Non-metallic mineral products	27.5	16.7	30.6	41.9	35.2	25.9
Metal and fabricated metal products	140.5	288.7	205.7	210.8	110.3	222.7
Motor vehicles and parts	573.2	625.4	454.1	395.0	346.3	290.0
Other transport equipment	29.3	22.0	26.2	32.9	60.1	28.5
Machinery & equipment manufacturing	166.2	154.0	209.2	211.2	229.3	196.5
Furniture and other manufacturing	25.5	32.3	36.1	27.4	21.8	20.2
Unallocated manufacturing ^a	236.8	230.0	203.2	197.9	237.6	326.9
Services	4510.4	5083.0	4297.7	4059.0	4141.4	3758.9
Electricity, gas, water & waste services	460.2	1106.1	130.4	152.5	222.4	144.9
Construction	208.9	210.6	173.1	160.9	115.7	36.9
Wholesale trade	439.1	285.6	250.8	213.6	184.0	138.4
Retail trade	197.7	136.2	124.7	120.7	127.6	92.4
Accommodation & food services	71.1	67.7	68.0	77.2	77.5	55.9
Transport, postal & warehousing	266.4	245.7	176.7	114.0	107.4	68.6
Information & telecommunications	263.2	293.6	381.2	194.6	201.6	167.2
Financial and insurance services	901.3	1036.4	1026.0	1101.2	1217.9	1167.3
Property, professional & admin.	936.9	859.1	1092.7	1038.0	1151.7	1038.6
Public administration and safety	21.3	15.9	16.6	12.9	21.5	16.1
Education and training	30.2	32.7	32.4	28.0	28.0	22.5
Health care and social assistance	179.2	184.4	180.4	191.0	185.0	158.3
Arts and recreation services	301.3	362.0	407.7	445.7	326.1	477.0
Other services	64.1	68.0	66.4	51.8	36.0	30.7
Unallocated services ^a	169.3	179.0	170.8	156.8	138.9	144.1
Unallocated other^a	929.1	972.5	984.7	1137.8	686.5	1054.3
Total	10057.5	10205.7	8866.2	8779.0	8300.4	8254.1

– 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,
2010-11 to 2015-16^a**
\$ million (nominal)

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary production	1740.3	1781.8	1505.5	1497.1	1594.4	1578.3
Horticulture and fruit growing	257.2	229.5	249.4	231.1	236.6	257.5
Sheep, beef cattle and grain farming	903.6	824.1	705.4	759.1	778.8	810.8
Other crop growing	43.7	90.4	90.0	95.9	77.3	77.6
Dairy cattle farming	87.2	71.0	39.6	47.6	60.1	58.7
Other livestock farming	29.5	50.8	30.0	25.3	33.3	32.3
Aquaculture and fishing	73.3	62.3	59.3	64.0	69.3	71.3
Forestry and logging	61.3	88.6	61.8	39.2	40.2	40.7
Primary production support services	22.4	10.8	19.3	6.8	2.4	2.0
Unallocated primary production ^b	262.2	354.3	250.6	228.1	296.4	227.5
Mining	936.1	508.6	328.7	266.1	195.2	319.0
Manufacturing	6929.6	6900.0	6772.1	6418.6	6325.4	6175.9
Food, beverages and tobacco	1437.4	1388.4	1455.4	1515.1	1474.7	1415.8
Textiles, leather, clothing and footwear	250.1	172.0	169.2	173.8	158.8	137.1
Wood and paper products	609.8	544.1	554.4	564.8	585.8	590.8
Printing and recorded media	107.7	97.1	96.2	94.6	98.7	90.8
Petroleum, coal, chemical and rubber	1083.6	1025.4	959.0	833.5	822.8	718.7
Non-metallic mineral products	305.2	280.7	280.9	299.2	320.2	318.3
Metal and fabricated metal products	1021.0	1192.0	1331.7	1100.9	992.5	1071.8
Motor vehicles and parts	1008.8	1082.0	747.7	738.6	690.8	631.7
Other transport equipment	189.9	190.3	231.3	164.0	192.0	159.7
Machinery & equipment manufacturing	481.0	484.4	547.0	542.6	562.0	526.9
Furniture and other manufacturing	198.3	213.6	196.2	193.7	189.5	187.4
Unallocated manufacturing ^b	236.8	230.0	203.2	197.9	237.6	326.9
Services	1323.8	1625.0	707.2	346.3	390.9	-34.2
Electricity, gas, water & waste services	402.4	1040.7	56.3	79.2	152.0	77.7
Construction	-1011.9	-1135.0	-1239.2	-1318.8	-1397.5	-1514.2
Wholesale trade	219.3	54.0	14.0	-22.5	-43.5	-88.6
Retail trade	68.7	-2.2	-16.6	-21.2	-12.3	-50.0
Accommodation & food services	-178.8	-199.3	-207.6	-202.9	-215.8	-238.4
Transport, postal & warehousing	95.2	58.1	-20.0	-83.3	-93.6	-142.5
Information & telecommunications	192.6	221.7	308.9	121.3	128.8	97.1
Financial and insurance services	889.3	1024.0	1013.0	1087.4	1203.5	1152.2
Property, professional & admin.	621.4	517.9	733.8	672.7	777.2	661.5
Public administration and safety	-106.6	-120.5	-123.9	-132.3	-119.3	-124.2
Education and training	-9.8	-10.8	-13.3	-19.9	-20.6	-27.3
Health care and social assistance	-21.0	-25.6	-40.3	-41.0	-43.5	-58.7
Arts and recreation services	236.1	293.5	338.9	372.8	251.8	400.3
Other services	-242.2	-270.7	-267.6	-302.1	-315.1	-323.0
Unallocated services ^b	169.3	179.0	170.8	156.8	138.9	144.1
Unallocated other^b	929.1	972.5	984.7	1137.8	686.5	1054.3
Total	11858.9	11787.9	10298.2	9665.9	9192.4	9093.4

– 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,
2010-11 to 2015-16^a**
\$ million (nominal)

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary production	337.2	361.3	402.1	364.4	413.6	450.2
Horticulture and fruit growing	107.3	103.7	133.7	109.8	124.5	135.2
Sheep, beef cattle and grain farming	199.8	225.4	242.0	217.0	248.7	272.7
Other crop growing	1.0	1.2	1.3	1.3	1.1	1.0
Dairy cattle farming	—	—	—	—	—	—
Other livestock farming	—	—	—	—	—	—
Aquaculture and fishing	1.5	1.6	2.0	1.7	1.9	2.0
Forestry and logging	17.1	18.4	16.8	14.5	15.8	16.8
Primary production support services	10.5	11.0	6.2	20.0	21.7	22.6
Unallocated primary production ^b	—	—	—	—	—	—
Mining	1.1	1.2	1.3	1.4	1.5	1.6
Manufacturing	6745.3	6831.8	6686.4	6359.3	6364.8	6311.7
Food, beverages and tobacco	1904.7	1958.4	1975.6	2014.6	2000.0	1997.7
Textiles, leather, clothing and footwear	150.9	145.3	142.8	145.6	133.2	116.0
Wood and paper products	691.4	635.0	629.7	653.4	676.9	691.7
Printing and recorded media	124.3	111.8	109.9	106.2	102.7	102.9
Petroleum, coal, chemical and rubber	887.2	906.3	776.9	648.9	641.9	643.5
Non-metallic mineral products	335.0	318.4	301.9	310.4	343.3	351.5
Metal and fabricated metal products	1067.2	1094.7	1320.7	1073.2	1059.1	1015.2
Motor vehicles and parts	712.1	746.4	480.0	561.7	562.0	556.2
Other transport equipment	223.7	234.5	285.7	182.7	182.7	180.9
Machinery & equipment manufacturing	422.1	443.0	452.9	444.3	444.5	440.0
Furniture and other manufacturing	226.8	237.9	210.1	218.3	218.4	216.2
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	7083.6	7194.2	7089.7	6725.0	6779.9	6763.5

— 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, 2010-11 to 2015-16^a
\$ million (nominal)

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary production	-124.8	-132.5	-132.9	-151.8	-165.3	-173.4
Horticulture and fruit growing	-11.0	-10.5	-10.7	-8.7	-9.2	-9.3
Sheep, beef cattle and grain farming	-56.8	-64.1	-68.8	-61.7	-70.4	-76.9
Other crop growing	-4.1	-4.8	-5.3	-5.3	-4.6	-3.8
Dairy cattle farming	-9.4	-7.0	-11.5	-12.9	-13.3	-13.1
Other livestock farming	-14.5	-15.4	-13.7	-13.7	-15.2	-16.2
Aquaculture and fishing	-6.1	-6.5	-8.3	-7.7	-8.1	-8.4
Forestry and logging	-1.9	-2.1	-1.9	-1.6	-1.8	-1.9
Primary production support services	-21.1	-22.2	-12.5	-40.2	-42.7	-43.7
Unallocated primary production ^b	–	–	–	–	–	–
Mining	-221.5	-238.1	-260.3	-285.6	-298.1	-306.6
Manufacturing	-1749.3	-1783.3	-1674.1	-1688.0	-1674.0	-1651.1
Food, beverages and tobacco	-659.9	-678.5	-682.5	-700.1	-692.9	-690.0
Textiles, leather, clothing and footwear	-35.5	-34.2	-33.6	-34.3	-32.9	-30.5
Wood and paper products	-117.8	-108.2	-107.9	-111.1	-114.7	-116.8
Printing and recorded media	-34.5	-31.1	-30.6	-29.5	-28.1	-27.8
Petroleum, coal, chemical and rubber	-156.6	-160.1	-140.9	-142.2	-139.2	-138.2
Non-metallic mineral products	-57.3	-54.5	-51.6	-53.1	-58.2	-59.1
Metal and fabricated metal products	-186.7	-191.5	-194.7	-183.1	-177.0	-166.1
Motor vehicles and parts	-276.5	-289.8	-186.4	-218.1	-217.4	-214.5
Other transport equipment	-63.2	-66.2	-80.7	-51.6	-50.9	-49.7
Machinery & equipment manufacturing	-107.3	-112.6	-115.1	-112.9	-111.8	-109.5
Furniture and other manufacturing	-54.0	-56.7	-50.1	-52.0	-50.8	-49.0
Unallocated manufacturing ^b	–	–	–	–	–	–
Services	-3186.5	-3458.0	-3590.5	-3712.8	-3750.5	-3793.1
Electricity, gas, water & waste services	-57.8	-65.5	-74.1	-73.3	-70.4	-67.2
Construction	-1220.9	-1345.5	-1412.3	-1479.7	-1513.2	-1551.1
Wholesale trade	-219.8	-231.6	-236.8	-236.2	-227.5	-227.0
Retail trade	-129.0	-138.4	-141.3	-141.9	-139.9	-142.4
Accommodation & food services	-250.0	-267.1	-275.6	-280.1	-293.3	-294.3
Transport, postal & warehousing	-171.2	-187.6	-196.7	-197.3	-200.9	-211.1
Information & telecommunications	-70.6	-71.9	-72.2	-73.3	-72.9	-70.2
Financial and insurance services	-12.0	-12.3	-13.0	-13.8	-14.5	-15.1
Property, professional & admin.	-315.5	-341.2	-358.9	-365.3	-374.5	-377.2
Public administration and safety	-127.9	-136.3	-140.5	-145.2	-140.8	-140.4
Education and training	-40.0	-43.5	-45.7	-47.9	-48.6	-49.8
Health care and social assistance	-200.2	-210.0	-220.8	-232.0	-228.5	-216.9
Arts and recreation services	-65.2	-68.5	-68.7	-72.9	-74.3	-76.7
Other services	-306.4	-338.7	-334.1	-353.8	-351.1	-353.7
Unallocated services ^b	–	–	–	–	–	–
Unallocated other^b	–	–	–	–	–	–
Total	-5282.1	-5612.0	-5657.8	-5838.1	-5888.0	-5924.2

– 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, 2010-11 to 2015-16
\$ million (nominal)

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary production	1044.4	946.6	743.0	782.0	837.9	759.1
Horticulture and fruit growing	118.3	85.9	76.3	78.3	68.7	79.3
Sheep, beef cattle and grain farming	447.5	253.1	220.6	289.1	280.3	257.6
Other crop growing	25.7	48.8	45.1	53.1	52.5	50.2
Dairy cattle farming	67.4	41.4	29.4	35.8	35.0	31.6
Other livestock farming	23.5	41.2	29.1	24.3	32.1	34.6
Aquaculture and fishing	64.6	53.8	54.3	55.0	58.6	63.2
Forestry and logging	34.2	64.1	36.7	14.9	12.8	13.4
Primary production support services	2.3	5.7	5.6	6.0	4.4	5.2
Unallocated primary production ^a	261.0	352.5	245.8	225.5	293.4	224.1
Mining	186.3	398.1	268.2	316.1	319.5	294.2
Manufacturing	947.4	1376.1	1175.5	1193.4	1193.1	1069.4
Food, beverages and tobacco	51.4	27.4	51.7	94.9	84.1	77.8
Textiles, leather, clothing and footwear	122.6	50.4	49.7	53.8	51.2	45.9
Wood and paper products	10.5	5.6	19.3	12.7	13.7	9.5
Printing and recorded media	3.4	6.1	8.0	9.0	8.8	8.8
Petroleum, coal, chemical and rubber	234.2	220.1	256.5	276.2	268.5	190.4
Non-metallic mineral products	6.2	7.3	20.1	30.5	26.3	25.0
Metal and fabricated metal products	50.6	205.4	61.0	58.4	67.4	74.8
Motor vehicles and parts	192.9	580.4	416.2	362.1	315.3	258.5
Other transport equipment	16.4	13.4	19.1	17.5	23.4	26.0
Machinery & equipment manufacturing	86.1	71.0	115.8	125.3	168.1	173.9
Furniture and other manufacturing	17.8	25.9	28.6	23.1	19.8	19.7
Unallocated manufacturing ^a	155.2	163.0	129.4	129.8	146.4	159.0
Services	1174.8	2247.6	1836.4	1826.8	2173.5	2177.0
Electricity, gas, water & waste services	71.6	1072.2	99.6	132.5	203.4	127.1
Construction	15.0	18.3	40.1	41.3	52.4	45.2
Wholesale trade	35.0	38.6	70.6	64.9	85.6	89.2
Retail trade	52.9	32.2	33.4	27.4	37.8	40.8
Accommodation & food services	5.4	4.6	6.5	5.9	8.5	9.1
Transport, postal & warehousing	52.1	57.9	49.0	52.7	62.0	65.3
Information & telecommunications	96.9	88.0	134.5	137.6	154.2	145.3
Financial and insurance services	120.4	137.2	279.6	274.3	366.2	394.5
Property, professional & admin.	302.8	328.6	654.4	628.7	804.7	858.9
Public administration and safety	13.9	10.6	9.8	7.9	15.0	15.9
Education and training	19.2	18.6	20.0	18.2	20.3	20.5
Health care and social assistance	95.8	113.5	117.0	128.0	102.3	103.1
Arts and recreation services	112.0	128.8	123.6	126.5	102.1	96.2
Other services	12.3	19.4	27.4	24.1	20.0	21.9
Unallocated services ^a	169.3	179.0	170.8	156.8	138.9	144.1
Unallocated other^a	303.8	337.1	297.4	436.0	415.6	281.2
Total	3656.6	5305.5	4320.4	4554.2	4939.5	4580.9

– 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,
2010-11 to 2015-16**
\$ million (nominal)

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary production	483.5	606.5	493.3	502.5	508.2	542.4
Horticulture and fruit growing	42.6	50.4	50.1	51.6	52.5	52.3
Sheep, beef cattle and grain farming	313.1	409.7	311.5	314.7	320.3	357.4
Other crop growing	21.1	45.2	48.9	46.9	28.3	30.3
Dairy cattle farming	29.2	36.6	21.8	24.6	38.4	40.2
Other livestock farming	20.5	25.0	14.7	14.7	16.4	13.9
Aquaculture and fishing	13.2	13.4	11.3	14.9	17.0	14.5
Forestry and logging	11.9	8.2	10.2	11.5	13.3	12.4
Primary production support services	30.7	16.2	20.0	20.9	18.9	18.0
Unallocated primary production ^a	1.2	1.8	4.8	2.7	3.0	3.4
Mining	970.2	347.5	319.6	234.3	172.4	329.8
Manufacturing	986.2	475.4	584.3	554.0	441.5	445.9
Food, beverages and tobacco	141.1	81.1	110.6	105.7	83.5	30.2
Textiles, leather, clothing and footwear	12.2	10.5	10.3	8.7	7.3	5.7
Wood and paper products	25.8	11.7	13.2	9.8	9.9	6.4
Printing and recorded media	14.5	10.3	8.8	8.9	15.3	6.8
Petroleum, coal, chemical and rubber	118.8	59.0	66.5	50.6	51.6	22.9
Non-metallic mineral products	21.3	9.4	10.6	11.5	8.9	1.0
Metal and fabricated metal products	89.9	83.4	144.6	152.4	42.9	147.9
Motor vehicles and parts	380.3	45.0	37.9	32.9	31.0	31.5
Other transport equipment	12.9	8.6	7.1	15.5	36.7	2.5
Machinery & equipment manufacturing	80.1	83.0	93.3	85.8	61.2	22.6
Furniture and other manufacturing	7.7	6.5	7.5	4.3	2.0	0.6
Unallocated manufacturing ^a	81.6	67.0	73.8	68.0	91.2	167.8
Services	3335.6	2835.4	2461.3	2232.2	1967.9	1581.9
Electricity, gas, water & waste services	388.6	33.9	30.8	20.0	19.0	17.8
Construction	193.9	192.3	133.0	119.5	63.3	-8.3
Wholesale trade	404.1	246.9	180.3	148.7	98.4	49.2
Retail trade	144.8	104.1	91.3	93.2	89.8	51.6
Accommodation & food services	65.7	63.2	61.4	71.3	68.9	46.8
Transport, postal & warehousing	214.2	187.8	127.7	61.3	45.3	3.3
Information & telecommunications	166.3	205.5	246.6	57.0	47.5	21.9
Financial and insurance services	780.9	899.1	746.4	826.9	851.8	772.7
Property, professional & admin.	634.1	530.5	438.3	409.3	347.0	179.7
Public administration and safety	7.4	5.2	6.8	5.0	6.5	0.2
Education and training	11.0	14.1	12.4	9.8	7.7	2.0
Health care and social assistance	83.4	70.9	63.5	63.1	82.8	55.2
Arts and recreation services	189.4	233.2	284.1	319.2	224.1	380.8
Other services	51.8	48.6	39.0	27.7	16.0	8.8
Unallocated services ^a	—	—	—	—	—	—
Unallocated other^a	625.3	635.4	687.3	701.9	270.8	773.1
Total	6400.9	4900.2	4545.8	4224.8	3360.9	3673.2

— 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, 2010-11 to 2015-16^a**
per cent

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary Production^b	0.5	0.5	0.6	0.5	0.5	0.6
Horticulture and fruit growing	0.7	0.7	0.9	0.9	1.0	1.1
Sheep, beef cattle and grain farming	0.7	0.7	0.7	0.7	0.7	0.7
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	0.2	0.2	0.2	0.2	0.2
Forestry and logging	0.7	0.7	0.7	0.7	0.7	0.8
Primary production support services	0.2	0.2	0.2	0.2	0.2	0.2
Mining	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing^b	2.1	2.0	2.1	2.0	2.0	2.0
Food, beverages and tobacco	2.2	2.2	2.2	2.2	2.2	2.2
Textiles, leather, clothing and footwear	2.9	2.9	2.9	2.9	2.5	2.2
Wood and paper products	3.7	3.7	3.7	3.7	3.7	3.7
Printing and recorded media	1.8	1.8	1.8	1.8	1.8	1.8
Petroleum, coal, chemical and rubber	1.4	1.4	1.2	1.1	1.1	1.0
Non-Metallic mineral products	2.0	2.0	2.0	2.0	2.0	2.0
Metal and fabricated metal products	1.4	1.4	2.2	1.5	1.5	1.5
Motor vehicles and parts	5.3	3.8	3.8	3.8	3.8	3.8
Other transport equipment	2.2	2.2	2.2	2.2	2.2	2.2
Machinery and equipment manufacturing	1.6	1.6	1.6	1.6	1.6	1.6
Furniture and other manufacturing	3.1	3.1	3.2	3.1	3.2	3.1

– 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, 2010-11 to 2015-16^a**
per cent

<i>Industry grouping</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>
Primary Production^b	0.5	0.5	0.5	0.6	0.6	0.5
Horticulture and fruit growing	0.3	0.3	0.3	0.3	0.3	0.3
Sheep, beef cattle and grain farming	0.6	0.6	0.6	0.6	0.6	0.6
Other crop growing	0.3	0.3	0.3	0.3	0.3	0.3
Dairy cattle farming	0.5	0.5	0.6	0.6	0.6	0.5
Other livestock farming	0.8	0.8	0.8	0.8	0.8	0.8
Aquaculture and fishing	0.8	0.8	0.8	0.8	0.7	0.7
Forestry and logging	0.2	0.2	0.2	0.2	0.2	0.2
Primary production support services	0.8	0.8	0.8	0.8	0.8	0.8
Mining	0.7	0.7	0.7	0.7	0.6	0.6
Manufacturing^b	0.9	0.9	0.9	0.9	0.9	0.9
Food, beverages and tobacco	1.5	1.5	1.5	1.5	1.5	1.5
Textile, leather, clothing and footwear	1.5	1.5	1.5	1.5	1.3	1.2
Wood and paper products	1.8	1.8	1.8	1.8	1.8	1.8
Printing and recorded media	1.8	1.8	1.8	1.8	1.8	1.7
Petroleum, coal, chemical and rubber	0.3	0.3	0.3	0.3	0.3	0.3
Non-Metallic mineral products	0.9	0.9	0.9	0.9	0.9	0.8
Metal and fabricated metal products	0.4	0.4	0.6	0.4	0.4	0.4
Motor vehicle and parts	2.4	2.4	2.3	2.3	2.3	2.3
Other transport equipment	1.5	1.5	1.5	1.5	1.4	1.4
Machinery and equipment manufacturing	1.2	1.2	1.2	1.2	1.2	1.2
Furniture and other manufacturing	1.7	1.7	1.7	1.7	1.6	1.6

– 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, 2010-11 to 2015-16^a

\$ million (nominal)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Horticulture and fruit growing						
<i>Industry-specific measures</i>						
Australian Wine Industry Support	–	–	0.5	0.5	–	–
Premium Fresh Tasmania - assistance	–	–	0.5	–	–	–
Wine Australia Corporation	2.7	2.8	2.7	2.9	–	–
Tax deductions for grape vines	-7.0	-7.0	-6.0	-6.0	-6.0	-5.0
Tax Deduction for horticultural plantations	6.0	6.0	6.0	–	–	–
<i>Sector-specific measures</i>						
Carbon Farming Futures	–	0.3	0.2	5.2	4.1	1.7
Drought Assistance Package - concessional loans	–	–	–	–	<0.1	<0.1
Exceptional Circumstances - interest rate subsidies	26.0	8.7	–	–	–	–
Exceptional Circumstances - relief payments	17.6	0.8	–	–	–	–
Farm Finance - concessional loans	–	–	–	0.7	0.1	0.1
Farm Help	–	<0.1	–	–	–	–
Interim Income Support	<0.1	<0.1	–	–	–	–
Rural Financial Counselling Service	2.1	2.3	2.1	2.3	2.2	1.9
Farm Management Deposits Scheme	4.2	20.4	18.2	17.8	19.9	26.1
Income tax averaging provisions	10.7	12.8	15.3	19.1	18.4	18.4
Tax deduction for conserving or conveying water	1.9	5.0	5.2	4.2	0.1	-0.3
<i>Rural R&D measures</i>						
Grape and Wine R&D	12.3	10.3	9.7	11.9	12.1	12.1
Horticulture Australia Limited R&D	40.5	42.0	41.4	41.9	29.2	41.7
Rural Industries R&D Corporation	2.3	3.4	2.2	2.3	1.6	1.2
<i>General export measures</i>						
Export Market Development Grants Scheme	1.3	1.0	1.0	0.8	1.0	1.0
<i>General R&D measures</i>						
Commercialisation Australia	0.2	0.3	<0.1	–	0.8	<0.1
COMET Program	<0.1	–	–	–	–	–
Clean Business Australia - Climate Ready Program	<0.1	–	–	–	–	–
CSIRO	8.7	9.7	7.3	2.5	7.2	7.8
R&D Tax Incentive - refundable tax offset	–	–	7.4	7.2	9.6	10.1
R&D tax offsets - Refundable	3.0	3.4	–	–	–	–
Premium R&D tax concession	0.1	–	–	–	–	–
R&D tax concession	1.5	3.3	1.5	0.5	0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	1.3	4.3	6.6	2.3

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	–	–	0.8	0.8
Enterprise Connect Innovation Centres	–	0.1	<0.1	<0.1	<0.1	–
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	<0.1
North West and Northern Tasmania Innovation and Investment Fund	1.5	–	–	–	–	–
South East South Australia Innovation and Investment Fund	–	0.5	0.9	–	–	–
Tasmanian Innovation and Investment Fund	–	0.4	0.3	0.1	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.7
Small business capital gains tax rollover deferral	0.7	0.5	0.6	0.6	1.1	1.1
The Small Business and General Business Tax Break	15.3	1.1	0.4	<0.1	–	–
Small Business - Simplified depreciation rules	1.7	0.1	-0.7	2.7	-1.9	-4.9
Small business capital gains tax 15-year asset exemption	0.6	2.2	2.2	2.6	4.8	5.5
Small business capital gains tax retirement exemption	2.6	2.2	2.2	2.4	3.7	3.8
Small business capital gains tax 50 per cent reduction	3.6	3.2	3.4	3.3	5.8	5.3
25 per cent entrepreneurs' tax offset	0.5	0.5	0.5	–	–	–
<i>Total</i>	<i>160.8</i>	<i>136.3</i>	<i>126.4</i>	<i>129.9</i>	<i>121.2</i>	<i>131.5</i>
Sheep, beef cattle and grain farming						
<i>Industry-specific measures</i>						
Beef Australia 2015	–	–	–	2.5	–	–
Northern Australia Beef Industry Strategy	–	0.5	–	–	–	–
Indigenous Pastoral Project	–	–	–	–	–	–
<i>Sector-specific measures</i>						
Carbon Farming Futures	–	13.4	10.3	40.6	30.3	12.2
Carbon Farming Initiative	–	–	–	0.2	–	–
Drought Assistance Package - concessional loans	–	–	–	2.0	1.3	0.6
Exceptional Circumstances - interest rate subsidies	182.8	15.8	–	–	–	–
Exceptional Circumstances - relief payments	93.4	4.1	–	–	–	–
Farm Finance - concessional loans	–	–	–	7.2	1.0	1.0
Interim Income Support	0.2	<0.1	–	–	–	–
Rural Financial Counselling Service	6.6	6.7	7.8	11.3	11.0	11.1
Farm Management Deposits Scheme	19.5	168.3	103.7	100.4	120.2	173.0
Income tax averaging provisions	109.5	93.4	86.7	108.3	104.4	104.4
Tax deduction for conserving or conveying water	11.2	33.7	40.0	32.5	2.4	-1.0

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Rural R&D measures</i>						
Wool R&D	11.3	12.5	13.3	13.0	12.5	13.4
Grains R&D Corporation	53.4	55.9	62.8	68.6	68.0	70.2
Harvesting Productivity Initiative	0.1	—	—	—	—	—
Meat and Livestock Australia R&D	35.6	37.1	38.3	46.7	46.5	44.0
Rural Industries R&D Corporation	0.8	1.0	2.6	3.8	4.0	3.2
<i>General export measures</i>						
Export Market Development Grants Scheme	0.6	0.4	0.4	0.5	0.8	0.5
<i>General R&D measures</i>						
Cooperative Research Centres	9.8	6.1	3.7	0.2	3.3	4.8
CSIRO	48.9	81.9	70.7	81.4	90.7	85.0
R&D Tax Incentive - refundable tax offset	—	—	7.5	7.2	9.6	10.2
R&D tax offsets - Refundable	3.0	3.4	—	—	—	—
R&D tax concession	2.8	2.4	1.1	0.4	0.1	—
R&D Tax Incentive - non-refundable tax offset	—	—	6.4	1.7	0.8	0.3
<i>Other measures</i>						
Enterprise Connect Innovation Centres	<0.1	<0.1	<0.1	0.1	<0.1	—
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	<0.1	0.3
Live Animal Exports Business Assistance	—	13.3	2.3	3.1	0.3	—
Temporary Assistance for Tasmanian Exporters	—	0.1	—	—	—	—
Tasmanian Freight Equalisation Scheme	0.8	0.8	0.9	0.9	0.9	1.1
Small business capital gains tax rollover deferral	9.6	7.8	9.2	9.2	16.2	16.3
The Small Business and General Business Tax Break	112.5	57.7	20.0	2.4	—	—
Small Business - Simplified depreciation rules	6.7	0.5	-2.8	11.1	-8.4	-21.7
Small business capital gains tax 15-year asset exemption	3.6	13.3	13.8	15.8	29.8	33.5
Small business capital gains tax retirement exemption	14.8	12.2	12.5	13.5	20.8	21.5
Small business capital gains tax 50 per cent reduction	21.1	18.8	19.8	19.5	34.0	31.1
25 per cent entrepreneurs' tax offset	1.6	1.6	1.3	—	—	—
Total	760.6	662.7	532.1	603.8	600.5	615.1
Other crop growing						
<i>Industry-specific measures</i>						
Tobacco Grower Adjustment Assistance	0.1	—	—	—	—	—
<i>Sector-specific measures</i>						
Carbon Farming Futures	—	3.0	2.3	3.7	3.0	1.2
Drought Assistance Package - concessional loans	—	—	—	—	0.2	0.1
Exceptional Circumstances – interest rate subsidies	—	2.1	—	—	—	—

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Sector-specific measures (continued)</i>						
Exceptional Circumstances - relief payments	–	<0.1	–	–	–	–
Farm Finance - concessional loans	–	–	–	1.0	0.2	0.2
Interim Income Support	–	<0.1	–	–	–	–
Rural Financial Counselling Service	0.8	0.9	0.6	0.8	0.8	0.7
Farm Management Deposits Scheme	1.9	11.9	9.0	10.1	11.8	17.7
Income tax averaging provisions	4.2	5.7	6.3	7.9	6.8	6.8
Tax deduction for conserving or conveying water	3.5	22.1	28.9	23.4	2.1	-0.5
<i>Rural R&D measures</i>						
Cotton R&D Corporation	5.7	9.5	11.8	11.2	7.3	6.1
Rural Industries R&D Corporation	0.9	0.8	0.7	0.6	0.6	0.6
Sugar R&D Corporation	5.9	5.4	4.3	6.7	6.1	6.6
<i>General export measures</i>						
Export Market Development Grants Scheme	0.4	0.5	0.6	0.6	0.8	0.8
<i>General R&D measures</i>						
Commercialisation Australia	–	–	0.1	0.1	–	–
COMET Program	<0.1	–	–	–	–	–
Cooperative Research Centres	3.5	3.0	–	–	–	–
Clean Business Australia - Climate Ready Program	0.3	<0.1	–	–	–	–
CSIRO	7.7	23.0	23.2	27.0	31.6	31.9
R&D Tax Incentive - refundable tax offset	–	–	1.4	1.4	1.8	1.9
R&D tax offsets - Refundable	0.6	0.6	–	–	–	–
R&D tax concession	1.1	0.7	0.3	0.1	<0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	–	<0.1	0.6	0.5
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	–	–	0.2	0.2
Small business capital gains tax rollover deferral	0.6	0.5	0.5	0.5	0.9	1.0
The Small Business and General Business Tax Break	5.5	0.7	0.3	<0.1	–	–
Small Business - Simplified depreciation rules	0.5	<0.1	-0.2	0.9	-0.7	-1.7
Small business capital gains tax 15-year asset exemption	0.2	0.6	0.6	0.7	1.3	1.4
Small business capital gains tax retirement exemption	0.9	0.7	0.7	0.8	1.2	1.2
Small business capital gains tax 50 per cent reduction	2.6	2.3	2.4	2.4	4.1	3.8
25 per cent entrepreneurs' tax offset	0.1	0.1	0.1	–	–	–
Total	46.8	94.0	94.0	99.9	80.8	80.5

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Dairy cattle farming						
<i>Sector-specific measures</i>						
Carbon Farming Futures	–	2.5	1.9	6.5	4.3	1.7
Drought Assistance Package - concessional loans	–	–	–	–	<0.1	<0.1
Exceptional Circumstances - interest rate subsidies	23.3	2.9	–	–	–	–
Exceptional Circumstances - relief payments	17.9	0.8	–	–	–	–
Farm Finance - concessional loans	–	–	–	0.7	0.2	0.2
Interim Income Support	<0.1	<0.1	–	–	–	–
Rural Financial Counselling Service	1.2	1.0	1.6	1.6	1.4	1.2
Farm Management Deposits Scheme	2.1	15.4	9.5	9.9	10.7	14.3
Income tax averaging provisions	10.2	10.1	6.1	7.7	21.8	21.8
Tax deduction for conserving or conveying water	2.0	6.6	2.2	1.8	0.1	-0.1
<i>Rural R&D measures</i>						
Dairy Australia R&D	18.8	18.6	19.3	20.4	21.0	22.7
<i>General export measures</i>						
Export Market Development Grants Scheme	–	–	–	0.1	0.1	0.1
TRADEX	0.3	0.3	0.4	0.4	0.4	0.4
<i>General R&D measures</i>						
Cooperative Research Centres	4.8	4.8	4.8	4.8	4.0	1.6
CSIRO	1.5	10.7	1.8	1.7	4.1	4.1
R&D tax offsets - Refundable	<0.1	<0.1	–	–	–	–
<i>Other measures</i>						
Small business capital gains tax rollover deferral	0.5	0.4	0.5	0.5	0.8	0.8
The Small Business and General Business Tax Break	9.6	0.4	0.1	<0.1	–	–
Small Business - Simplified depreciation rules	0.8	0.1	-0.3	1.2	-0.9	-2.3
Small business capital gains tax retirement exemption	1.2	0.9	1.0	1.0	1.6	1.7
Small business capital gains tax 50 per cent reduction	2.4	2.1	2.2	2.2	3.8	3.5
25 per cent entrepreneurs' tax offset	0.2	0.2	0.1	–	–	–
Total	96.6	78.0	51.1	60.5	73.4	71.8

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Other livestock farming						
<i>Sector-specific measures</i>						
Carbon Farming Futures	–	6.6	5.0	1.1	0.7	0.3
Drought Assistance Package - concessional loans	–	–	–	–	<0.1	<0.1
Exceptional Circumstances - interest rate subsidies	1.5	0.4	–	–	–	–
Exceptional Circumstances - relief payments	1.5	0.1	–	–	–	–
Farm Finance - concessional loans	–	–	–	0.1	<0.1	<0.1
Interim Income Support	<0.1	<0.1	–	–	–	–
Rural Financial Counselling Service	0.3	0.3	0.7	0.8	0.5	0.5
Farm Management Deposits Scheme	1.1	12.3	4.8	4.2	4.4	5.5
Income tax averaging provisions	4.5	4.9	4.2	5.3	7.0	7.0
Tax deduction for conserving or conveying water	0.7	1.1	1.0	0.8	0.1	-0.1
<i>Rural R&D measures</i>						
Egg Research and Development	1.6	1.9	1.8	1.9	1.5	1.7
Pig Research and Development	4.3	4.6	4.5	4.8	4.9	5.3
Rural Industries R&D Corporation	3.9	4.4	4.8	3.8	3.1	3.2
<i>General export measures</i>						
Export Market Development Grants Scheme	0.6	0.2	0.6	0.4	0.3	0.3
<i>General R&D measures</i>						
Cooperative Research Centres	8.2	6.8	7.2	7.0	6.6	6.6
CSIRO	1.0	15.3	3.1	3.0	12.4	14.6
R&D Tax Incentive - refundable tax offset	–	–	1.5	1.4	1.9	2.0
R&D tax offsets - Refundable	0.6	0.7	–	–	–	–
R&D tax concession	0.6	4.1	1.8	0.6	0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	0.7	0.9	2.3	0.2
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	–	–	0.1	0.2
Enterprise Connect Innovation Centres	–	–	<0.1	–	–	–
Small business capital gains tax rollover deferral	0.2	0.2	0.2	0.2	0.4	0.4
The Small Business and General Business Tax Break	10.6	0.6	0.2	<0.1	–	–
Small Business - Simplified depreciation rules	0.6	<0.1	-0.3	1.0	-0.7	-1.8
Small business capital gains tax retirement exemption	0.9	0.7	0.7	0.8	1.2	1.3
Small business capital gains tax 50 per cent reduction	1.1	1.0	1.0	1.0	1.7	1.6
25 per cent entrepreneurs' tax offset	0.2	0.2	0.3	–	–	–
Total	43.9	66.2	43.8	39.0	48.5	48.5

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Aquaculture and fishing						
<i>Industry-specific measures</i>						
Fisheries Structural Adjustment Package	1.8	—	—	—	—	—
<i>Sector-specific measures</i>						
Exceptional Circumstances - interest rate subsidies	13.3	<0.1	—	—	—	—
Exceptional Circumstances - relief payments	0.1	<0.1	—	—	—	—
Interim Income Support	<0.1	<0.1	—	—	—	—
Rural Financial Counselling Service	0.1	0.1	0.1	0.1	0.1	0.1
Income tax averaging provisions	5.8	6.6	7.0	8.7	13.8	13.8
Tax deduction for conserving or conveying water	0.1	0.6	0.3	0.3	<0.1	<0.1
<i>Rural R&D measures</i>						
Fisheries R&D Corporation	16.5	16.6	17.2	17.9	18.7	20.0
Fisheries Resources Research Fund	1.6	0.1	2.1	2.0	0.3	0.4
<i>General export measures</i>						
Export Market Development Grants Scheme	0.6	0.4	0.4	0.3	0.3	0.2
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General R&D measures</i>						
Commercialisation Australia	0.1	1.1	1.7	2.1	0.7	<0.1
Commercial Ready Program	0.2	<0.1	—	—	—	—
Cooperative Research Centres	5.4	5.4	5.1	4.8	—	—
Clean Business Australia - Climate Ready Program	0.1	—	—	—	—	—
CSIRO	17.1	21.0	13.9	15.0	22.3	24.4
R&D Tax Incentive - refundable tax offset	—	—	9.1	8.8	11.6	12.3
R&D tax offsets - Refundable	3.6	4.1	—	—	—	—
Premium R&D tax concession	0.3	1.5	0.4	0.2	—	—
R&D tax concession	2.5	2.8	1.3	0.4	0.1	—
R&D Tax Incentive - non-refundable tax offset	—	—	0.7	3.5	1.6	0.2
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	0.3	0.3
Enterprise Connect Innovation Centres	—	<0.1	<0.1	<0.1	<0.1	—
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	<0.1	0.4
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	0.1
Industry Cooperative Innovation Program	0.1	—	—	—	—	—
North West and Northern Tasmania Innovation and Investment Fund	0.4	—	—	—	—	—
South Australia Innovation and Investment Fund and Labour Assistance Package	<0.1	—	—	—	—	—
South East South Australia Innovation and Investment Fund	—	0.1	—	—	—	—

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
Temporary Assistance for Tasmanian Exporters	–	0.5	–	–	–	–
Tasmanian Freight Equalisation Scheme	3.7	3.5	4.1	3.8	4.1	4.8
Tasmanian Innovation and Investment Fund	–	0.8	0.7	0.2	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.3
Small business capital gains tax rollover deferral	0.2	0.2	0.2	0.2	0.3	0.3
The Small Business and General Business Tax Break	2.2	–	–	–	–	–
Small Business - Simplified depreciation rules	0.5	<0.1	-0.2	0.8	-0.6	-1.4
Small business capital gains tax retirement exemption	0.2	0.1	0.1	0.2	0.2	0.3
Small business capital gains tax 50 per cent reduction	0.9	0.8	0.8	0.8	1.4	1.3
25 per cent entrepreneurs' tax offset	0.7	0.7	0.7	–	–	–
<i>Total</i>	<i>77.8</i>	<i>67.1</i>	<i>65.6</i>	<i>69.9</i>	<i>75.5</i>	<i>77.7</i>
Forestry and logging						
<i>Industry-specific measures</i>						
Tasmanian Contractors Assistance Program	16.9	–	–	–	–	–
Tasmanian Forests Agreement - Implementation Package	–	–	20.3	–	–	–
Tasmanian Forest Industry Adjustment Package	–	42.4	0.3	–	–	–
<i>Sector-specific measures</i>						
Carbon Farming Futures	–	1.1	0.8	–	–	–
Carbon Farming Initiative	–	–	–	<0.1	–	–
Exceptional Circumstances - interest rate subsidies	–	<0.1	–	–	–	–
Farm Finance - concessional loans	–	–	–	<0.1	–	–
Rural Financial Counselling Service	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Income tax averaging provisions	2.7	1.9	3.2	4.0	3.8	3.8
Tax deduction for conserving or conveying water	0.1	0.2	0.3	0.3	<0.1	<0.1
<i>Rural R&D measures</i>						
Forest and Wood Products R&D	2.6	2.4	1.8	2.2	2.0	2.3
<i>General export measures</i>						
Export Market Development Grants Scheme	0.1	0.1	–	0.2	0.2	0.2
<i>General R&D measures</i>						
Cooperative Research Centres	3.8	3.2	–	–	–	–
CSIRO	6.8	10.5	8.5	7.8	5.4	4.8
R&D Tax Incentive - refundable tax offset	–	–	0.8	0.8	1.0	1.1
R&D tax offsets - Refundable	0.3	0.4	–	–	–	–

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General R&D measures (continued)</i>						
R&D tax concession	0.2	0.3	0.1	<0.1	<0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	0.7	0.5	–	–
<i>Other measures</i>						
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	<0.1
Temporary Assistance for Tasmanian Exporters	–	0.5	–	–	–	–
Tasmanian Freight Equalisation Scheme	3.7	3.5	4.2	3.9	4.2	4.9
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.1
Small business capital gains tax rollover deferral	1.1	0.9	1.1	1.1	1.9	1.9
The Small Business and General Business Tax Break	1.4	–	–	–	–	–
Small Business - Simplified depreciation rules	0.6	<0.1	-0.2	0.8	-0.5	-1.1
Small business capital gains tax retirement exemption	2.1	1.8	1.8	2.0	3.0	3.1
Small business capital gains tax 50 per cent reduction	3.2	2.8	3.0	2.9	5.1	4.7
25 per cent entrepreneurs' tax offset	0.3	0.3	0.2	–	–	–
Total	46.0	72.3	46.9	26.2	26.2	25.7
Primary production support services						
<i>Sector-specific measures</i>						
Carbon Farming Futures	–	–	–	2.5	–	–
Carbon Farming Initiative	0.3	2.0	1.8	–	–	–
Exceptional Circumstances - interest rate subsidies	–	1.8	–	–	–	–
Exceptional Circumstances - relief payments	–	0.3	–	–	–	–
Interim Income Support	–	<0.1	–	–	–	–
Income tax averaging provisions	7.3	9.6	11.2	14.0	14.0	14.0
Tax deduction for conserving or conveying water	0.3	0.7	2.2	1.8	0.1	<0.1
<i>General export measures</i>						
Export Market Development Grants Scheme	0.4	0.3	0.4	0.6	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	<0.1	0.1	0.4	0.3	<0.1	0.1
COMET Program	0.1	<0.1	–	–	–	–
Commercial Ready Program	<0.1	–	–	–	–	–
Clean Business Australia – Climate Ready Program	0.3	<0.1	–	–	–	–
R&D Tax Incentive - refundable tax offset	–	–	2.7	2.6	3.5	3.7
R&D tax offsets - Refundable	1.1	1.2	–	–	–	–
R&D tax concession	1.7	1.9	0.9	0.3	0.1	–

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Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General R&D measures (continued)</i>						
R&D Tax Incentive - non-refundable tax offset	–	–	1.5	0.4	0.6	1.7
<i>Other measures</i>						
Enterprise Connect Innovation Centres	<0.1	<0.1	–	<0.1	<0.1	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	<0.1	0.3
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	0.1
Illawarra Region Innovation and Investment Fund	–	–	0.3	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.2
Small business capital gains tax rollover deferral	1.0	0.8	1.0	1.0	1.7	1.7
The Small Business and General Business Tax Break	16.2	–	–	–	–	–
Small Business - Simplified depreciation rules	0.8	0.1	-0.3	1.3	-1.0	-2.7
Small business capital gains tax retirement exemption	0.5	0.4	0.5	0.5	0.8	0.8
Small business capital gains tax 50 per cent reduction	1.7	1.5	1.6	1.6	2.7	2.5
25 per cent entrepreneurs' tax offset	1.2	1.2	1.5	–	–	–
<i>Total</i>	32.9	21.9	25.6	26.9	23.2	23.2
Unallocated primary production						
<i>Industry-specific measures</i>						
Australian Animal Health Laboratory	7.3	7.4	7.5	7.7	7.8	7.9
Exotic Disease Preparedness Program	0.6	0.6	0.6	–	–	–
Other Exotic Disease Preparedness Program	–	–	–	–	0.6	0.6
<i>Sector-specific measures</i>						
Climate Change Adjustment Program	8.7	16.2	0.6	–	–	–
Caring for our country - Landcare	34.0	36.8	35.1	17.2	11.9	5.9
Drought assistance - Murray Darling Basin grants to irrigators	–	–	0.1	–	0.1	–
Drought assistance - professional advice	7.1	1.9	<0.1	–	–	–
Drought assistance - re-establishment assistance	23.9	16.4	2.2	–	–	–
Drought Assistance Package - concessional loans	–	–	–	–	<0.1	<0.1
Exceptional Circumstances - interest rate subsidies	–	<0.1	–	–	–	–
Exceptional Circumstances - relief payments	14.6	0.3	1.6	<0.1	–	–
Environmental Stewardship Program	13.3	13.2	11.0	14.0	11.3	10.3
Farm Co-operatives and Collaboration Pilot - Stronger Farmers, Stronger Economy	–	–	–	–	–	0.7
Farm Finance - concessional loans	–	–	–	–	<0.1	<0.1

(continued next page)

Table A.10 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Sector-specific measures (continued)</i>						
Improved Access to Agricultural and Veterinary Chemicals - A Competitive Agricultural Sector	—	—	—	—	0.3	1.7
Interim Income Support	<0.1	<0.1	—	—	—	—
Managing Farm Risk Program - Stronger Farmers, Stronger Economy	—	—	—	—	—	<0.1
Promoting Australian Produce Program	3.8	—	—	—	—	—
Rural Financial Counselling Service	1.7	1.9	0.6	0.5	0.8	0.6
Support for Small Exporters - A Competitive Agricultural Sector	—	—	—	—	1.3	2.3
Sustainable Rural Water Use and Infrastructure Program	59.2	191.8	140.5	143.7	192.3	121.6
Farm Management Deposits Scheme	1.2	1.8	4.8	2.7	3.0	3.4
<i>Rural R&D measures</i>						
Boosting Farm Profits Through Rural R&D - A Competitive Agricultural Sector	—	—	—	—	19.3	29.3
Climate Change Adaption Partnerships Program	10.8	8.5	—	—	—	—
Climate Change and Productivity Research Program	15.0	6.2	—	—	—	—
National Weeds and Productivity Research Program	4.0	4.0	—	—	—	—
Rural Industries R&D Corporation	5.2	5.4	4.4	4.2	3.5	3.7
<i>General R&D measures</i>						
Cooperative Research Centres	10.8	9.5	9.3	6.9	8.8	4.6
CSIRO	26.9	17.1	15.5	15.2	18.9	15.8
<i>Other measures</i>						
Indigenous Carbon Farming Fund	—	—	0.9	1.5	0.4	0.4
Temporary Assistance for Tasmanian Exporters	—	2.0	—	—	—	—
Tasmanian Freight Equalisation Scheme	14.1	13.3	15.9	14.6	16.0	18.6
<i>Total</i>	<i>262.1</i>	<i>354.3</i>	<i>250.6</i>	<i>228.1</i>	<i>296.4</i>	<i>227.5</i>
Total outlays	1044.4	946.6	743.0	782.0	837.9	759.1
Total tax concessions	483.5	606.5	493.3	502.5	508.2	542.4
Total budgetary assistance	1527.9	1553.1	1236.3	1284.5	1346.1	1301.5

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

Source: Commission estimates.

Table A.11 Australian Government budgetary assistance to mining, 2010-11 to 2015-16^a
\$ million (nominal)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Industry-specific measures</i>						
Coal Mining Abatement Support Package	–	–	1.0	24.0	14.0	–
Coal Sector Jobs Package	–	218.8	–	–	–	–
National Low Emissions Coal Initiative	47.6	25.6	22.4	43.8	31.6	4.4
<i>Sector-specific measures</i>						
Industry Growth Centres	–	–	–	–	0.6	4.3
Capital expenditure deduction for mining	7.0	2.0	2.0	2.0	2.0	2.0
<i>General export measures</i>						
Export Market Development Grants Scheme	1.4	1.8	1.2	2.0	2.4	1.8
TRADEX	0.3	0.3	0.3	0.3	0.3	0.4
<i>General R&D measures</i>						
Commercialisation Australia	0.1	0.9	1.9	2.5	0.8	–
COMET Program	<0.1	<0.1	–	–	–	–
Cooperative Research Centres	10.6	11.3	10.7	11.3	8.8	8.6
Clean Business Australia - Climate Ready Program	0.9	0.3	–	–	–	–
CSIRO	65.2	71.2	80.7	87.3	68.2	71.7
R&D Tax Incentive - refundable tax offset	–	–	149.7	144.8	192.6	202.8
R&D tax offsets - Refundable	60.0	67.7	–	–	–	–
Premium R&D tax concession	111.7	88.8	24.2	10.1	–	–
R&D tax concession	222.6	252.5	112.7	38.3	6.8	–
R&D Tax Incentive - non-refundable tax offset	–	–	176.5	179.1	162.1	327.9

(continued next page).

Table A.11 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Others measures</i>						
Enterprise Connect Innovation Centres	0.2	0.1	0.2	0.2	0.1	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	<0.1	0.2
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	0.1	0.3
North West and Northern Tasmania Innovation and Investment Fund	<0.1	–	–	–	–	–
South East South Australia Innovation and Investment Fund	–	–	0.1	–	–	–
Temporary Assistance for Tasmanian Exporters	–	<0.1	–	–	–	–
Tasmanian Freight Equalisation Scheme	0.2	0.2	0.2	0.2	0.2	0.3
Small business capital gains tax rollover deferral	–	–	–	–	0.6	0.1
The Small Business and General Business Tax Break	625.8	0.1	<0.1	<0.1	–	–
Small Business - Simplified depreciation rules	0.5	<0.1	-0.2	0.8	-0.6	-1.5
Small business capital gains tax 15-year asset exemption	–	–	–	–	0.3	0.1
Small business capital gains tax retirement exemption	0.8	0.9	0.9	1.0	0.2	0.1
Small business capital gains tax 50 per cent reduction	1.3	2.6	2.8	2.7	0.7	0.9
25 per cent entrepreneurs' tax offset	0.2	0.2	0.3	–	–	–
Total	1156.4	745.5	587.7	550.4	491.9	624.0
Total outlays	186.3	398.1	268.2	316.1	319.5	294.2
Total tax concessions	970.2	347.5	319.6	234.3	172.4	329.8
Total budgetary assistance	1156.5	745.6	587.7	550.4	491.9	624.0

– 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.12 Australian Government budgetary assistance to manufacturing, 2010-11 to 2015-16^a

\$ million (nominal)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Food, beverages and tobacco						
<i>Industry-specific measures</i>						
Australian Wine Industry Support	–	–	0.5	0.5	–	–
Bindaree Beef assistance	–	–	–	–	0.4	11.1
Clean Technology Investment - Food and Foundries Program	–	1.2	20.8	61.1	35.7	17.1
Regional Food Producers' Innovation and Productivity Program	5.1	0.4	–	–	–	–
Assistance for upgrade of Simplot Processing Plant (Tasmania)	2.0	1.0	–	–	–	–
Wine Australia Corporation	2.7	2.8	2.7	2.9	–	–
Brandy preferential excise rate	4.0	4.0	4.0	4.0	5.0	5.0
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	–	–	–	0.2	–	–
Industry Growth Centres	–	–	–	–	0.6	4.3
Manufacturing Transition Grants Programme	–	–	–	–	0.2	1.5
Next Generation Manufacturing Investment Programme	–	–	–	–	–	0.6
Victorian Innovation and Investment Fund - Ford Assistance	–	–	–	–	2.0	1.8
<i>General export measures</i>						
Export Market Development Grants Scheme	11.4	8.1	6.6	4.9	7.6	6.3
TRADEX	0.5	0.5	0.5	0.5	0.5	0.6
<i>General R&D measures</i>						
Commercialisation Australia	0.8	0.4	1.4	3.0	2.3	0.1
COMET Program	0.1	–	–	–	–	–
Commercial Ready Program	0.1	–	–	–	–	–
Clean Business Australia - Climate Ready Program	0.3	0.3	–	–	–	–
CSIRO	19.6	5.1	3.1	2.6	11.7	10.9
Manufacturing Technology Innovation Centre	–	–	–	4.0	1.7	–
R&D Tax Incentive - refundable tax offset	–	–	15.2	14.7	19.6	20.6
R&D tax offsets - Refundable	6.1	6.9	–	–	–	–
Premium R&D tax concession	17.3	15.6	4.2	1.8	–	–
R&D tax concession	41.0	40.8	18.2	6.2	1.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	70.2	81.6	68.1	17.5

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	1.5	1.5
Enterprise Connect Innovation Centres	0.9	0.8	0.6	0.7	0.7	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	<0.1	0.4
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.2	0.8
Geelong Innovation and Investment Fund	0.2	—	—	—	—	—
Illawarra Region Innovation and Investment Fund	—	—	0.2	—	—	—
North West and Northern Tasmania Innovation and Investment Fund	1.9	—	—	—	—	—
South East South Australia Innovation and Investment Fund	—	—	<0.1	—	—	—
Tasmanian Innovation and Investment Fund	—	0.5	0.5	0.3	—	—
Tasmanian Jobs and Investment Fund	—	—	—	—	—	0.8
Small business capital gains tax rollover deferral	1.4	1.3	1.5	1.5	2.8	2.4
The Small Business and General Business Tax Break	69.8	10.9	3.8	0.5	—	—
Small Business - Simplified depreciation rules	0.7	0.1	-0.3	1.2	-1.0	-2.5
Small business capital gains tax retirement exemption	2.2	3.3	3.4	3.7	3.4	3.3
Small business capital gains tax 50 per cent reduction	4.1	4.6	4.8	4.8	3.5	4.0
25 per cent entrepreneurs' tax offset	0.2	0.2	0.3	—	—	—
Total	192.6	108.5	162.3	200.6	167.6	108.0
Textile, leather, clothing and footwear						
<i>Industry-specific measures</i>						
Clothing and Household Textile Building Innovative Capability Program	—	22.6	22.3	22.0	21.8	21.2
TCF Strategic Capability Program	5.2	8.7	7.2	7.2	2.6	—
TCF Structural Adjustment Scheme	2.3	6.2	1.3	1.3	1.0	—
TCF Small Business Program	2.1	2.0	1.8	2.5	2.3	—
TCF Strategic Investment Program Scheme - Post 2005	99.2	—	—	—	—	—
TCF Product Diversification Scheme	4.2	—	—	—	—	—
<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
<i>General export measures</i>						
Export Market Development Grants Scheme	5.3	4.6	6.4	5.6	7.6	7.2
TRADEX	3.5	3.7	3.9	3.9	4.2	4.3

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General R&D measures</i>						
Commercialisation Australia	–	0.1	0.1	0.1	–	–
COMET Program	<0.1	–	–	–	–	–
Commercial Ready Program	0.2	–	–	–	–	–
CSIRO	5.4	3.1	4.1	3.9	7.2	8.7
Manufacturing Technology Innovation Centre	–	–	–	1.2	–	–
R&D Tax Incentive - refundable tax offset	–	–	5.8	5.6	7.4	7.8
R&D tax offsets - Refundable	2.3	2.6	–	–	–	–
Premium R&D tax concession	0.4	0.9	0.3	0.1	–	–
R&D tax concession	1.0	2.4	1.1	0.4	0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	2.8	2.2	2.2	1.4
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	–	–	0.1	0.1
Enterprise Connect Innovation Centres	0.4	0.4	0.4	0.2	0.2	<0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	0.1
Geelong Innovation and Investment Fund	0.2	–	–	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	<0.1	–	–	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	<0.1
Small business capital gains tax rollover deferral	0.1	0.1	0.1	0.1	0.3	0.2
The Small Business and General Business Tax Break	0.6	1.2	0.4	0.1	–	–
Small Business - Simplified depreciation rules	0.5	<0.1	-0.2	0.7	-0.5	-1.3
Small business capital gains tax retirement exemption	0.4	0.6	0.6	0.7	0.6	0.6
Small business capital gains tax 50 per cent reduction	0.5	0.6	0.6	0.6	0.4	0.5
25 per cent entrepreneurs' tax offset	0.9	0.9	0.7	–	–	–
Total	134.7	60.9	60.1	62.5	58.5	51.5
Wood and paper products						
<i>Industry-specific measures</i>						
Australia's Forest Industry - Preparing for the Future	3.5	–	–	–	–	–
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
Victorian Innovation and Investment Fund – Ford Assistance	–	–	–	–	0.8	0.8

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Rural R&D measures</i>						
Forest and Wood Products R&D	1.8	1.5	0.9	0.7	1.3	1.5
<i>General export measures</i>						
Export Market Development Grants Scheme	0.7	0.4	0.3	0.3	0.2	0.2
TRADEX	0.3	0.4	0.4	0.4	0.4	0.4
<i>General R&D measures</i>						
COMET Program	<0.1	—	—	—	—	—
CSIRO	2.4	0.9	0.7	0.7	0.7	0.8
R&D Tax Incentive - refundable tax offset	—	—	3.9	3.7	5.0	5.2
R&D tax offsets - Refundable	1.5	1.7	—	—	—	—
Premium R&D tax concession	—	0.1	<0.1	<0.1	—	—
R&D tax concession	7.9	7.4	3.3	1.1	0.2	—
R&D Tax Incentive - non-refundable tax offset	—	—	5.0	3.9	6.6	3.9
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	0.1	0.1
Enterprise Connect Innovation Centres	0.5	0.4	0.4	0.4	0.4	0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.1	0.2
South East South Australia Innovation and Investment Fund	—	0.3	0.6	—	—	—
Tasmanian Innovation and Investment Fund	—	0.4	0.3	0.1	—	—
Tasmanian Jobs and Investment Fund	—	—	—	—	—	0.2
The Small Business and General Business Tax Break	14.1	—	—	—	—	—
Small Business - Simplified depreciation rules	0.4	<0.1	-0.2	0.6	-0.5	-1.2
Small business capital gains tax retirement exemption	1.1	1.6	1.7	1.8	1.7	1.6
Small business capital gains tax 50 per cent reduction	1.7	1.9	2.0	1.9	1.4	1.6
25 per cent entrepreneurs' tax offset	0.3	0.3	1.1	—	—	—
Total	36.3	17.3	32.5	22.5	23.6	15.9
Printing and recorded media						
<i>Industry-specific measures</i>						
TCF Small Business Program	<0.1	—	—	—	—	—
<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	0.2	0.2	0.1	0.2	0.6	0.7
TRADEX	0.1	0.1	0.1	0.1	0.2	0.2

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General R&D measures</i>						
COMET Program	<0.1	—	—	—	—	—
Commercial Ready Program	<0.1	—	—	—	—	—
CSIRO	0.7	—	—	—	—	—
R&D Tax Incentive - refundable tax offset	—	—	5.8	5.6	7.5	7.9
R&D tax offsets - Refundable	2.3	2.6	—	—	—	—
Premium R&D tax concession	—	1.1	0.3	0.1	—	—
R&D tax concession	0.9	2.1	0.9	0.3	0.1	—
R&D Tax Incentive - non-refundable tax offset	—	—	1.0	1.7	10.7	2.7
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.2	0.2	0.2	0.2	0.2	<0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.1	0.2
Illawarra Region Innovation and Investment Fund	—	2.9	—	—	—	—
Tasmanian Innovation and Investment Fund	—	0.1	<0.1	<0.1	—	—
The Small Business and General Business Tax Break	8.4	1.1	0.4	<0.1	—	—
Small Business - Simplified depreciation rules	0.4	<0.1	-0.2	0.6	-0.5	-1.2
Small business capital gains tax retirement exemption	1.5	2.2	2.3	2.5	2.3	2.2
Small business capital gains tax 50 per cent reduction	3.0	3.3	3.5	3.4	2.5	2.9
25 per cent entrepreneurs' tax offset	0.2	0.2	0.4	—	—	—
<i>Total</i>	<i>17.9</i>	<i>16.3</i>	<i>16.8</i>	<i>17.9</i>	<i>24.1</i>	<i>15.6</i>
Petroleum, coal, chemical and rubber products						
<i>Industry-specific measures</i>						
Australian Tropical Medicine Commercialisation Grants	—	—	—	—	—	7.0
CSL - Commonwealth assistance	9.3	10.6	8.0	2.1	—	—
Clean Technology Investment - Food and Foundries Program	—	—	—	<0.1	—	—
Ethanol production subsidy	124.7	115.3	108.9	102.5	103.5	—
Product Stewardship for Oil Program	35.0	36.0	33.4	40.0	49.0	63.0
Small scale mammalian cell production facility	1.0	4.0	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
Next Generation Manufacturing Investment Programme	—	—	—	—	—	3.4
Victorian Innovation and Investment Fund - Ford Assistance	—	—	—	—	0.1	0.1

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General export measures</i>						
Export Market Development Grants Scheme	7.0	5.3	6.2	5.4	6.5	5.4
TRADEX	1.3	1.4	1.4	1.4	1.5	1.6
<i>General R&D measures</i>						
Commercialisation Australia	2.5	2.5	3.5	2.3	2.5	0.2
COMET Program	0.3	<0.1	—	—	—	—
Commercial Ready Program	0.5	0.1	—	—	—	—
Cooperative Research Centres	8.0	7.0	2.6	10.0	4.1	3.7
Clean Business Australia - Climate Ready Program	0.8	0.2	—	—	—	—
CSIRO	18.9	16.6	33.2	44.6	33.5	34.0
Clean Technology Innovation Program	—	—	—	1.4	0.9	—
Innovation Investment Fund	0.9	1.2	1.4	1.6	1.6	3.2
Manufacturing Technology Innovation Centre	—	—	—	2.4	—	—
National Stem Cell Centre	4.5	—	—	—	—	—
R&D Tax Incentive - refundable tax offset	—	—	45.8	44.3	58.9	62.0
R&D tax offsets - Refundable	18.3	20.7	—	—	—	—
Premium R&D tax concession	11.3	14.2	3.9	1.6	—	—
R&D tax concession	38.6	40.6	18.1	6.2	1.1	—
R&D Tax Incentive - non-refundable tax offset	—	—	41.2	39.8	48.6	21.4
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	0.3	0.3
Enterprise Connect Innovation Centres	0.9	0.6	0.8	0.5	0.5	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	0.2	1.7
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.1	0.4
Geelong Innovation and Investment Fund	0.2	—	—	—	—	—
Illawarra Region Innovation and Investment Fund	—	—	0.8	—	—	—
South Australia Innovation and Investment Fund and Labour Assistance Package	1.4	—	—	—	—	—
Tasmanian Innovation and Investment Fund	—	<0.1	<0.1	—	—	—
Tasmanian Jobs and Investment Fund	—	—	—	—	—	0.1
The Small Business and General Business Tax Break	66.2	1.7	0.6	0.1	—	—
Small Business - Simplified depreciation rules	0.3	<0.1	-0.1	0.5	-0.4	-1.0
Small business capital gains tax 50 per cent reduction	0.9	1.0	1.0	1.0	0.7	0.9
25 per cent entrepreneurs' tax offset	0.1	0.1	0.4	—	—	—
<i>Total</i>	<i>353.0</i>	<i>279.1</i>	<i>323.0</i>	<i>326.7</i>	<i>320.1</i>	<i>213.3</i>

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
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
Next Generation Manufacturing Investment Programme	–	–	–	–	–	0.6
Victorian Innovation and Investment Fund - Ford Assistance	–	–	–	–	0.4	0.4
<i>General export measures</i>						
Export Market Development Grants Scheme	0.4	0.4	0.3	0.6	0.6	0.9
TRADEX	0.1	0.1	0.2	0.2	0.2	0.2
<i>General R&D measures</i>						
Commercialisation Australia	0.1	0.3	0.6	0.3	1.7	0.1
COMET Program	<0.1	–	–	–	–	–
Clean Business Australia - Climate Ready Program	<0.1	–	–	–	–	–
CSIRO	0.4	1.5	1.9	1.8	2.4	2.9
Clean Technology Innovation Program	–	–	0.1	–	–	–
R&D Tax Incentive - refundable tax offset	–	–	11.1	10.8	14.3	15.1
R&D tax offsets - Refundable	4.5	5.0	–	–	–	–
Premium R&D tax concession	2.0	0.2	<0.1	<0.1	–	–
R&D tax concession	8.7	6.6	2.9	1.0	0.2	–
R&D Tax Incentive - non-refundable tax offset	–	–	6.0	9.5	8.5	1.1
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.1	0.1	0.1	0.2	0.1	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	<0.1	<0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	0.2
Geelong Innovation and Investment Fund	0.7	–	–	–	–	–
Illawarra Region Innovation and Investment Fund	–	–	0.1	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	<0.1	–	–	–	–	–
South East South Australia Innovation and Investment Fund	–	–	0.2	–	–	–
Tasmanian Innovation and Investment Fund	–	<0.1	–	<0.1	–	–
The Small Business and General Business Tax Break	9.6	1.9	0.7	0.1	–	–
Small Business - Simplified depreciation rules	0.2	<0.1	-0.1	0.3	-0.2	-0.6
Small business capital gains tax 50 per cent reduction	0.3	0.4	0.4	0.4	0.3	0.3
25 per cent entrepreneurs' tax offset	0.2	0.2	0.4	–	–	–
Total	27.4	16.6	30.6	41.9	35.2	25.9

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Metal and fabricated metal products						
<i>Industry-specific measures</i>						
Clean Technology Investment - Food and Foundries Program	–	–	0.9	1.0	0.7	–
Steel Transformation Plan	–	164.0	–	–	–	–
<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
Next Generation Manufacturing Investment Programme	–	–	–	–	–	2.7
Victorian Innovation and Investment Fund - Ford Assistance	–	–	–	–	0.5	0.5
<i>General export measures</i>						
Export Market Development Grants Scheme	2.6	2.2	2.2	2.6	2.6	2.7
TRADEX	1.1	1.1	1.2	1.2	1.3	1.3
<i>General R&D measures</i>						
Commercialisation Australia	<0.1	1.1	2.4	1.6	0.8	0.1
COMET Program	0.1	–	–	–	–	–
Commercial Ready Program	0.4	–	–	–	–	–
Cooperative Research Centres	7.8	5.5	–	–	–	–
Clean Business Australia - Climate Ready Program	0.1	–	–	–	–	–
CSIRO	29.2	22.5	31.9	31.9	36.4	37.6
Clean Technology Innovation Program	–	–	0.1	0.2	0.1	–
Innovation Investment Fund	0.2	0.2	0.3	0.3	0.3	0.6
R&D Tax Incentive - refundable tax offset	–	–	17.7	17.1	22.8	24.0
R&D tax offsets - Refundable	7.1	8.0	–	–	–	–
Premium R&D tax concession	6.7	24.8	6.8	2.8	–	–
R&D tax concession	40.8	50.4	22.5	7.6	1.3	–
R&D Tax Incentive - non-refundable tax offset	–	–	109.5	136.4	39.0	147.2
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	–	–	<0.1	<0.1
Enterprise Connect Innovation Centres	1.3	0.9	1.0	1.1	0.8	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	0.1	0.5
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	0.2	0.7
Geelong Innovation and Investment Fund	<0.1	–	–	–	–	–
Illawarra Region Innovation and Investment Fund	–	–	0.1	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	1.3	–	–	–	–	–
South Australia Innovation and Investment Fund and Labour Assistance Package	0.5	–	–	–	–	–

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
South East South Australia Innovation and Investment Fund	–	0.1	0.5	–	–	–
Tasmanian Innovation and Investment Fund	–	0.8	0.7	0.1	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.5
Small business capital gains tax rollover deferral	0.2	0.2	0.3	0.3	0.5	0.4
The Small Business and General Business Tax Break	37.3	3.5	1.2	0.1	–	–
Small Business - Simplified depreciation rules	1.0	0.1	-0.4	1.6	-1.2	-3.1
Small business capital gains tax retirement exemption	0.6	1.0	1.0	1.1	1.0	1.0
Small business capital gains tax 50 per cent reduction	1.1	1.2	1.3	1.3	0.9	1.1
25 per cent entrepreneurs' tax offset	1.0	1.0	1.4	–	–	–
Total	140.5	288.7	205.7	210.8	110.3	222.7
Motor vehicles and parts						
<i>Industry-specific measures</i>						
Automotive Transformation Scheme	93.3	381.0	334.4	332.8	269.4	222.7
Automotive Industry Structural Adjustment Program	17.0	16.8	–	–	–	–
Automotive Market Access Program	0.5	0.5	–	–	–	–
Automotive New Markets Initiative	–	–	2.9	6.3	3.8	0.3
Automotive Supply Chain Development Program	5.8	5.4	4.4	–	–	–
Automotive Diversification Programme	–	–	–	–	2.2	8.8
Ford Australia Assistance	–	34.0	–	–	–	–
Green Car Innovation Fund	63.0	125.5	47.4	6.0	0.1	–
Toyota Major Facelift Vehicle and Supplier Grant	–	–	–	–	15.5	2.1
Automotive competitiveness and investment scheme - Stage 2	282.7	–	–	–	–	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	–	–	0.8	1.8	0.4	–
Manufacturing Transition Grants Programme	–	–	–	–	0.1	1.1
Next Generation Manufacturing Investment Programme	–	–	–	–	–	1.2
Victorian Innovation and Investment Fund - Ford Assistance	–	–	–	–	1.4	1.2
<i>General export measures</i>						
Export Market Development Grants Scheme	1.3	0.9	1.0	0.9	0.9	0.7
TRADEX	22.9	24.4	25.6	25.4	27.1	28.3
<i>General R&D measures</i>						
Commercialisation Australia	0.5	1.2	0.8	0.1	<0.1	–
COMET Program	0.1	<0.1	–	–	–	–

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General R&D measures (continued)</i>						
Cooperative Research Centres	5.5	5.0	10.7	1.1	6.1	4.4
Clean Business Australia - Climate Ready Program	0.2	0.2	—	—	—	—
CSIRO	0.6	4.4	2.2	1.8	—	—
R&D Tax Incentive - refundable tax offset	—	—	11.7	11.3	15.0	15.8
R&D tax offsets - Refundable	4.7	5.3	—	—	—	—
Premium R&D tax concession	4.0	3.7	1.0	0.4	—	—
R&D tax concession	13.6	15.5	6.9	2.3	0.4	—
R&D Tax Incentive - non-refundable tax offset	—	—	2.9	3.0	2.6	2.5
<i>Other measures</i>						
Enterprise Connect Innovation Centres	—	0.2	0.1	0.1	0.1	<0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	0.1
South Australia Innovation and Investment Fund and Labour Assistance Package	0.5	—	—	—	—	—
The Small Business and General Business Tax Break	55.5	—	—	—	—	—
Small Business - Simplified depreciation rules	0.2	<0.1	-0.1	0.3	-0.2	-0.5
Small business capital gains tax 50 per cent reduction	1.2	1.4	1.4	1.4	1.0	1.2
25 per cent entrepreneurs' tax offset	0.1	0.1	0.1	—	—	—
Total	573.2	625.4	454.1	395.0	346.2	290.0
Other transport equipment						
<i>Sector-specific measures</i>						
Victorian Innovation and Investment Fund - Ford Assistance	—	—	—	—	1.3	1.2
<i>General export measures</i>						
Export Market Development Grants Scheme	1.5	1.1	1.0	0.5	1.0	0.8
TRADEX	0.1	0.1	0.1	0.1	0.1	0.1
<i>General R&D measures</i>						
Commercialisation Australia	—	0.6	0.5	0.3	0.3	0.1
COMET Program	0.1	—	—	—	—	—
Cooperative Research Centres	5.2	5.1	6.0	5.3	5.3	6.7
Clean Business Australia - Climate Ready Program	0.2	—	—	—	—	—
CSIRO	5.8	3.1	3.5	3.5	4.6	4.6
R&D Tax Incentive - refundable tax offset	—	—	7.9	7.6	10.2	10.7
R&D tax offsets - Refundable	3.2	3.6	—	—	—	—
Premium R&D tax concession	0.7	1.2	0.3	0.1	—	—
R&D tax concession	7.2	5.2	2.3	0.8	0.1	—
R&D Tax Incentive - non-refundable tax offset	—	—	3.0	13.3	36.2	2.4

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	0.6	0.6
Enterprise Connect Innovation Centres	0.4	<0.1	0.1	0.1	0.1	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	0.1	1.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	0.2
Industry Cooperative Innovation Program	0.1	—	—	—	—	—
North West and Northern Tasmania Innovation and Investment Fund	<0.1	—	—	—	—	—
Tasmanian Jobs and Investment Fund	—	—	—	—	—	<0.1
The Small Business and General Business Tax Break	3.7	0.9	0.3	<0.1	—	—
Small Business - Simplified depreciation rules	0.2	<0.1	-0.1	0.3	-0.3	-0.6
Small business capital gains tax 50 per cent reduction	0.6	0.7	0.7	0.7	0.5	0.6
25 per cent entrepreneurs' tax offset	0.4	0.4	0.4	—	—	—
<i>Total</i>	29.3	22.0	26.2	32.9	60.1	28.4
Machinery and equipment manufacturing						
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	—	—	1.3	1.9	1.6	0.2
Exceptional Circumstances - interest rate subsidies	<0.1	—	—	—	—	—
Manufacturing Transition Grants Programme	—	—	—	—	0.5	4.0
Next Generation Manufacturing Investment Programme	—	—	—	—	—	1.8
Victorian Innovation and Investment Fund - Ford Assistance	—	—	—	—	1.5	1.4
<i>General export measures</i>						
Export Market Development Grants Scheme	11.6	9.7	8.1	8.9	11.7	10.0
TRADEX	2.8	3.0	3.1	3.1	3.3	3.5
<i>General R&D measures</i>						
Commercialisation Australia	4.1	11.4	12.6	12.4	6.2	0.9
COMET Program	0.8	0.1	—	—	—	—
Commercial Ready Program	0.7	<0.1	—	—	—	—
Cooperative Research Centres	2.5	2.0	—	—	3.3	6.2
Clean Business Australia - Climate Ready Program	7.3	2.9	—	—	—	—
CSIRO	21.1	3.7	5.0	6.9	25.5	23.6
Clean Technology Innovation Program	—	—	0.8	10.3	4.3	1.1
R&D Tax Incentive - refundable tax offset	—	—	86.9	84.0	111.7	117.6
R&D tax offsets - Refundable	34.8	39.3	—	—	—	—
Premium R&D tax concession	19.2	19.1	5.2	2.2	—	—
R&D tax concessions	47.1	54.5	24.3	8.3	1.5	—

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General R&D measures (continued)</i>						
R&D Tax Incentive - non-refundable tax offset	—	—	57.6	69.9	56.3	20.0
<i>Other measures</i>						
Enterprise Connect Innovation Centres	1.1	1.1	0.9	0.9	0.7	0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	0.7	6.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.3	0.9
Geelong Innovation and Investment Fund	0.1	—	—	—	—	—
Illawarra Region Innovation and Investment Fund	—	0.7	0.1	—	—	—
North West and Northern Tasmania Innovation and Investment Fund	0.6	—	—	—	—	—
South Australia Innovation and Investment Fund and Labour Assistance Package	1.5	—	—	—	—	—
Tasmanian Innovation and Investment Fund	—	0.1	<0.1	<0.1	—	—
The Small Business and General Business Tax Break	9.0	4.9	1.7	0.2	—	—
Small Business - Simplified depreciation rules	0.6	<0.1	-0.2	1.0	-0.7	-2.0
Small business capital gains tax 50 per cent reduction	1.0	1.2	1.2	1.2	0.9	1.0
25 per cent entrepreneurs' tax offset	0.3	0.3	0.4	—	—	—
Total	166.2	153.9	209.2	211.1	229.3	196.5
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
Next Generation Manufacturing Investment Programme	—	—	—	—	—	0.3
Victorian Innovation and Investment Fund - Ford Assistance	—	—	—	—	0.5	0.5
<i>General export measures</i>						
Export Market Development Grants Scheme	5.7	6.0	6.1	4.5	6.0	4.6
TRADEX	1.1	1.2	1.2	1.2	1.3	1.4
<i>General R&D measures</i>						
Commercialisation Australia	0.3	2.1	3.0	2.2	0.9	—
COMET Program	0.3	<0.1	—	—	—	—
Commercial Ready Program	<0.1	—	—	—	—	—
Cooperative Research Centres	6.8	6.8	6.8	2.1	—	—
CSIRO	—	6.7	4.5	4.4	1.9	1.5
Manufacturing Technology Innovation Centre	—	—	—	1.2	—	—
R&D Tax Incentive – refundable tax offset	—	—	7.5	7.3	9.7	10.2

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General R&D measures (continued)</i>						
R&D tax offsets - Refundable	3.0	3.4	–	–	–	–
Premium R&D tax concession	1.3	0.4	0.1	0.1	–	–
R&D tax concession	2.3	2.3	1.0	0.3	0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	3.1	0.9	0.5	<0.1
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.3	0.3	0.2	0.2	0.3	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	0.1	1.2
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	0.1	0.3
Illawarra Region Innovation and Investment Fund	–	0.3	0.2	–	–	–
North West and Northern Tasmania Innovation and Investment Fund	1.5	–	–	–	–	–
Tasmanian Innovation and Investment Fund	–	0.2	0.1	<0.1	–	–
The Small Business and General Business Tax Break	1.0	1.0	0.3	<0.1	–	–
Total	25.5	32.3	36.1	27.3	21.8	20.2
Unallocated manufacturing						
<i>Industry-specific measures</i>						
Industry Skilling Program Enhancement	2.9	1.2	0.2	0.2	0.2	–
New Aircraft Combat Capability	–	3.3	2.0	2.0	0.9	2.8
Priority Industry Capability Innovation Program	–	13.3	10.4	–	–	–
Skilling Australian Defence Industry	9.0	14.6	16.9	12.2	6.6	5.5
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	–	<0.1	–	–	–	–
Industry Growth Centres	–	–	–	–	2.1	15.0
Clean Business Australia - Re-tooling for Climate Change	7.6	4.2	–	–	–	–
<i>General export measures</i>						
Duty Drawback	74.5	62.5	69.1	62.7	86.4	161.3
<i>General R&D measures</i>						
Cooperative Research Centres	–	–	–	–	3.2	5.6
CSIRO	23.0	12.8	12.3	12.0	10.8	11.7
Defence Materials Technology Centre	4.3	5.4	6.8	6.8	4.5	6.5
Energy Innovation Fund	30.0	32.7	–	–	–	–
Manufacturing Technology Innovation Centre	–	–	2.8	1.2	2.6	–

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Table A.12 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Enterprise Connect Innovation Centres	9.2	0.1	<0.1	–	–	–
Illawarra Region Innovation and Investment Fund	–	–	–	–	–	0.8
Melbourne's North Innovation and Investment Fund	–	–	–	18.8	6.2	–
Temporary Assistance for Tasmanian Exporters	–	9.9	–	–	–	–
Tasmanian Freight Equalisation Scheme	69.2	65.5	78.0	71.4	78.5	91.1
Tasmanian Jobs and Growth Package	–	–	–	5.1	30.9	19.4
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.5
Small business capital gains tax 15-year asset exemption	7.1	4.5	4.6	5.3	4.8	6.5
<i>Total</i>	<i>236.8</i>	<i>230.0</i>	<i>203.2</i>	<i>197.9</i>	<i>237.6</i>	<i>326.9</i>
Total outlays	947.4	1376.1	1175.5	1193.4	1193.1	1069.4
Total tax concessions	986.2	475.4	584.3	554.0	441.5	445.9
Total budgetary assistance	1933.6	1851.5	1759.8	1747.3	1634.6	1515.3

– 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.13 Australian Government budgetary assistance to services, 2010-11 to 2015-16^a
\$ million (nominal)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Electricity, gas, water and waste services						
<i>Industry-specific measures</i>						
Carbon Capture and Storage Flagships Program	7.1	6.8	13.8	27.1	61.1	44.1
Diamond Energy Assistance	—	—	—	0.3	0.3	—
Energy Brix Australia Corporation	—	—	9.1	36.0	61.4	—
Energy Security Fund - transitional assistance	—	1000.0	—	—	—	—
Solar Flagships Programs	17.3	3.8	—	—	—	—
<i>General export measures</i>						
Export Market Development Grants Scheme	0.5	0.3	0.3	0.4	0.4	0.7
TRADEX	0.1	0.1	0.1	0.1	0.1	0.1
<i>General investment measures</i>						
Infrastructure bonds scheme	0.3	0.3	—	—	—	—
<i>General R&D measures</i>						
Commercialisation Australia	0.3	0.9	0.4	2.3	0.9	0.3
COMET Program	0.3	—	—	—	—	—
Commercial Ready Program	0.1	—	—	—	—	—
Clean Business Australia - Climate Ready Program	0.3	<0.1	—	—	—	—
CSIRO	35.7	48.6	52.0	39.7	50.4	47.8
Clean Technology Innovation Program	—	—	0.2	4.3	0.3	0.3
Innovation Investment Fund	2.2	2.8	3.3	3.9	3.8	7.7
R&D Tax Incentive - refundable tax offset	—	—	19.1	18.5	24.6	25.9
R&D tax offsets - Refundable	7.7	8.6	—	—	—	—
Premium R&D tax concession	9.0	13.5	3.7	1.5	—	—
R&D tax concession	17.7	19.3	8.6	2.9	0.5	—
R&D Tax Incentive - non-refundable tax offset	—	—	17.7	14.4	15.1	13.3
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.2	0.3	0.2	0.1	0.2	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	<0.1	0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	0.2
Industry Cooperative Innovation Program	<0.1	—	—	—	—	—
Illawarra Region Innovation and Investment Fund	—	0.2	1.2	—	—	—
South East South Australia Innovation and Investment Fund	—	—	0.1	—	—	—
Small business capital gains tax rollover deferral	—	—	—	—	0.8	1.8

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
The Small Business and General Business Tax Break	358.3	—	—	—	—	—
Small Business - Simplified depreciation rules	0.3	<0.1	-0.1	0.6	-0.4	-1.2
Small business capital gains tax 15-year asset exemption	—	—	—	—	0.2	0.6
Small business capital gains tax retirement exemption	—	—	—	—	0.8	0.8
Small business capital gains tax 50 per cent reduction	2.7	0.5	0.5	0.5	1.8	2.3
25 per cent entrepreneurs' tax offset	0.2	0.2	0.4	—	—	—
Total	460.2	1106.1	130.4	152.5	222.3	144.9
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	0.6	0.9	0.3	0.9	1.5	1.1
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
COMET Program	<0.1	—	—	—	—	—
Commercial Ready Program	<0.1	0.5	—	—	—	—
Cooperative Research Centres	—	—	2.0	2.8	8.6	1.7
Clean Business Australia - Climate Ready Program	—	<0.1	—	—	—	—
CSIRO	1.4	2.8	2.6	3.0	—	—
Clean Technology Innovation Program	—	—	—	0.1	<0.1	—
R&D Tax Incentive - refundable tax offset	—	—	30.3	29.3	39.0	41.1
R&D tax offsets - Refundable	12.1	13.7	—	—	—	—
Premium R&D tax concession	10.8	15.0	4.1	1.7	—	—
R&D tax concession	20.0	41.2	18.4	6.2	1.1	—
R&D Tax Incentive – non-refundable tax offset	—	—	20.5	46.7	54.8	25.5
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	0.1	0.1
Enterprise Connect Innovation Centres	0.3	0.5	0.5	0.5	0.7	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	<0.1	0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.2	0.9
North West and Northern Tasmania Innovation and Investment Fund	0.6	—	—	—	—	—

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
South Australia Innovation and Investment Fund and Labour Assistance Package	<0.1	–	–	–	–	–
South East South Australia Innovation and Investment Fund	–	–	<0.1	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.1
Small business capital gains tax rollover deferral	2.1	1.2	1.5	1.5	6.0	4.3
The Small Business and General Business Tax Break	66.8	58.2	20.2	2.4	–	–
Small Business - Simplified depreciation rules	21.4	1.6	-9.0	35.0	-27.0	-72.6
Small business capital gains tax 15-year asset exemption	2.1	2.9	3.0	3.4	2.8	6.8
Small business capital gains tax retirement exemption	8.7	6.2	6.4	6.9	9.5	10.9
Small business capital gains tax 50 per cent reduction	11.2	15.1	16.0	15.7	16.0	16.8
25 per cent entrepreneurs' tax offset	50.8	50.8	52.0	–	–	–
<i>Total</i>	<i>208.8</i>	<i>210.5</i>	<i>173.0</i>	<i>160.8</i>	<i>115.7</i>	<i>36.8</i>
Wholesale trade						
<i>Industry-specific measures</i>						
TCF Small Business Program	<0.1	<0.1	<0.1	–	–	–
<i>Sector-specific measures</i>						
Exceptional Circumstances - interest rate subsidies	<0.1	–	–	–	–	–
Victorian Innovation and Investment Fund - Ford Assistance	–	–	–	–	0.2	0.2
<i>General export measures</i>						
Export Market Development Grants Scheme	11.1	10.3	10.6	8.6	10.9	10.8
TRADEX	1.7	1.8	1.9	1.9	2.0	2.1
<i>General R&D measures</i>						
Commercialisation Australia	0.2	1.8	0.8	0.5	0.1	–
COMET Program	0.1	–	–	–	–	–
Clean Business Australia - Climate Ready Program	0.1	0.1	–	–	–	–
R&D Tax Incentive - refundable tax offset	–	–	57.4	55.5	73.8	77.7
R&D tax offsets - Refundable	23.0	25.9	–	–	–	–
Premium R&D tax concession	55.0	31.5	8.6	3.6	–	–
R&D tax concession	99.3	91.7	41.0	13.9	2.5	–
R&D Tax Incentive – non-refundable tax offset	–	–	71.2	93.2	68.4	29.1
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	–	–	–	–	0.2	0.2
Enterprise Connect Innovation Centres	0.3	0.3	0.3	0.3	0.3	<0.1

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	0.1	0.3
North West and Northern Tasmania Innovation and Investment Fund	<0.1	–	–	–	–	–
South Australia Innovation and Investment Fund and Labour Assistance Package	0.1	–	–	–	–	–
South East South Australia Innovation and Investment Fund	–	0.1	1.5	–	–	–
Small business capital gains tax rollover deferral	8.0	–	–	–	4.8	2.7
The Small Business and General Business Tax Break	211.2	96.9	33.7	4.0	–	–
Small Business - Simplified depreciation rules	4.1	0.3	-1.7	6.7	-5.1	-13.5
Small business capital gains tax 15-year asset exemption	2.3	3.2	3.3	3.8	3.1	4.9
Small business capital gains tax retirement exemption	4.9	7.6	7.8	8.4	9.3	10.1
Small business capital gains tax 50 per cent reduction	16.4	12.8	13.5	13.3	13.6	13.9
25 per cent entrepreneurs' tax offset	1.2	1.2	1.1	–	–	–
Total	439.0	285.5	250.8	213.6	184.0	138.4
Retail trade						
<i>Industry-specific measures</i>						
LPG Vehicle Scheme	40.9	18.8	5.2	–	–	–
TCF Small Business Program	<0.1	–	<0.1	–	–	–
<i>Sector-specific measures</i>						
Exceptional Circumstances - interest rate subsidies	0.1	–	–	–	–	–
Victorian Innovation and Investment Fund - Ford Assistance	–	–	–	–	0.7	0.6
<i>General export measures</i>						
Export Market Development Grants Scheme	1.2	1.2	1.0	1.6	2.6	3.4
TRADEX	2.2	2.3	2.4	2.4	2.6	2.7
<i>General R&D measures</i>						
Commercialisation Australia	<0.1	0.1	0.6	0.2	0.6	0.4
COMET Program	<0.1	–	–	–	–	–
R&D Tax Incentive - refundable tax offset	–	–	26.3	25.4	33.8	35.6
R&D tax offsets - Refundable	10.5	11.9	–	–	–	–
Premium R&D tax concession	1.6	3.4	0.9	0.4	–	–
R&D tax concession	11.1	14.0	6.2	2.1	0.4	–
R&D Tax Incentive - non-refundable tax offset	–	–	15.2	15.9	17.9	1.8

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.1	0.2	0.1	0.2	0.1	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	0.1	0.6
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	0.1
North West and Northern Tasmania Innovation and Investment Fund	<0.1	—	—	—	—	—
South East South Australia Innovation and Investment Fund	—	—	0.2	—	—	—
Tasmanian Jobs and Investment Fund	—	—	—	—	—	0.1
Small business capital gains tax rollover deferral	5.9	5.6	6.6	6.6	14.7	10.7
The Small Business and General Business Tax Break	64.7	26.6	9.2	1.1	—	—
Small Business - Simplified depreciation rules	8.0	0.6	-3.3	12.7	-9.5	-24.4
Small business capital gains tax 15-year asset exemption	1.6	2.2	2.3	2.6	10.8	9.0
Small business capital gains tax retirement exemption	19.0	17.0	17.5	18.8	19.0	17.3
Small business capital gains tax 50 per cent reduction	28.1	29.6	31.2	30.7	33.9	34.5
25 per cent entrepreneurs' tax offset	2.8	2.8	3.1	—	—	—
<i>Total</i>	<i>197.6</i>	<i>136.2</i>	<i>124.6</i>	<i>120.7</i>	<i>127.6</i>	<i>92.4</i>
Accommodation and food services						
<i>General export measures</i>						
Export Market Development Grants Scheme	4.3	3.2	3.3	2.8	4.3	4.1
<i>General R&D measures</i>						
Commercialisation Australia	—	0.1	<0.1	—	—	—
COMET Program	<0.1	—	—	—	—	—
R&D Tax Incentive - refundable tax offset	—	—	2.9	2.8	3.7	3.9
R&D tax offsets - Refundable	1.2	1.3	—	—	—	—
R&D tax concession	0.5	0.8	0.3	0.1	<0.1	—
R&D Tax Incentive - non-refundable tax offset	—	—	0.4	1.6	1.4	<0.1
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	0.2	0.2
Enterprise Connect Innovation Centres	<0.1	<0.1	0.3	0.3	0.2	<0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	0.1
Tasmanian Jobs and Investment Fund	—	—	—	—	—	0.8
Small business capital gains tax rollover deferral	2.8	10.3	12.1	12.1	13.0	9.2
The Small Business and General Business Tax Break	20.7	4.6	1.6	0.2	—	—

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
Small Business - Simplified depreciation rules	4.9	0.4	-2.1	8.4	-6.6	-17.9
Small business capital gains tax 15-year asset exemption	0.6	0.8	0.9	1.0	9.6	8.8
Small business capital gains tax retirement exemption	11.7	13.0	13.4	14.4	17.3	14.7
Small business capital gains tax 50 per cent reduction	23.5	32.3	34.1	33.5	34.2	32.0
25 per cent entrepreneurs' tax offset	1.0	1.0	0.8	—	—	—
Total	71.1	67.7	67.9	77.2	77.4	55.8
Transport, postal and warehousing						
<i>Industry-specific measures</i>						
Payment scheme for Airservices Australia's en route charges	4.0	4.2	1.0	1.0	1.3	1.3
Bass Strait Passenger Vehicle Equalisation	36.5	34.6	34.5	37.5	40.9	44.1
<i>Sector-specific measures</i>						
Exceptional Circumstances - interest rate subsidies	0.4	0.3	—	—	—	—
Exceptional Circumstances - relief payments	0.9	<0.1	—	—	—	—
Interim Income Support	<0.1	<0.1	—	—	—	—
<i>General export measures</i>						
Export Market Development Grants Scheme	5.6	2.7	2.6	2.1	3.0	2.3
TRADEX	0.3	0.3	0.3	0.3	0.3	0.3
<i>General investment measures</i>						
Infrastructure bonds scheme	0.2	0.2	—	—	—	—
<i>General R&D measures</i>						
Commercialisation Australia	<0.1	0.7	0.6	<0.1	<0.1	—
COMET Program	<0.1	<0.1	—	—	—	—
CSIRO	1.2	5.3	1.4	3.5	4.8	4.7
R&D Tax Incentive - refundable tax offset	—	—	8.6	8.3	11.0	11.6
R&D tax offsets - Refundable	3.4	3.9	—	—	—	—
Premium R&D tax concession	13.2	14.0	3.8	1.6	—	—
R&D tax concession	15.2	22.8	10.2	3.5	0.6	—
R&D Tax Incentive - non-refundable tax offset	—	—	48.0	25.6	32.2	7.7
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	0.3	0.4
Enterprise Connect Innovation Centres	0.1	0.1	0.1	0.3	0.5	0.1
Entrepreneurs Infrastructure Programme – Business Management Skills	—	—	—	—	0.2	0.6

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
Illawarra Region Innovation and Investment Fund	–	–	<0.1	–	–	–
Temporary Assistance for Tasmanian Exporters	–	5.9	–	–	–	–
Tasmanian Innovation and Investment Fund	–	0.2	0.2	<0.1	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.3
Small business capital gains tax rollover deferral	–	–	–	–	3.2	2.5
The Small Business and General Business Tax Break	155.2	126.4	43.9	5.3	–	–
Small Business - Simplified depreciation rules	8.1	0.6	-3.4	13.3	-10.2	-27.4
Small business capital gains tax 15-year asset exemption	1.4	1.9	1.9	2.2	3.3	5.8
Small business capital gains tax retirement exemption	2.1	1.3	1.4	1.5	6.5	5.3
Small business capital gains tax 50 per cent reduction	6.2	7.9	8.3	8.1	9.5	9.0
25 per cent entrepreneurs' tax offset	12.3	12.3	13.3	–	–	–
Total	266.3	245.6	176.7	113.9	107.4	68.6
Information, media and telecommunications						
<i>Industry-specific measures</i>						
Community Broadcasting Program	–	<0.1	14.9	18.2	29.1	16.7
Vodafone Hutchison Australia - Tasmania Call Centre Expansion	–	–	4.0	–	–	–
Rebate for broadcasting licence fees	45.0	130.0	155.0	–	–	–
Regional Equalisation Plan	1.3	1.1	1.0	4.7	4.6	1.0
<i>General export measures</i>						
Export Market Development Grants Scheme	19.4	19.2	18.2	17.0	17.3	18.5
<i>General R&D measures</i>						
Commercialisation Australia	2.6	8.1	9.3	11.1	8.2	1.0
COMET Program	0.6	<0.1	–	–	–	–
Cooperative Research Centres	4.4	4.4	4.4	4.4	–	–
Clean Business Australia - Climate Ready Program	0.1	–	–	–	–	–
CSIRO	26.7	12.1	17.0	21.9	23.1	24.9
Clean Technology Innovation Program	–	–	0.8	1.1	0.1	–
ICT centre of excellence	25.9	25.0	23.8	22.5	21.4	21.0
Innovation Investment Fund	0.1	0.1	0.1	0.2	0.1	0.3
R&D Tax Incentive - refundable tax offset	–	–	41.9	40.5	53.8	56.7
R&D tax offsets - Refundable	16.8	18.9	–	–	–	–
Premium R&D tax concession	5.3	28.9	7.9	3.3	–	–
R&D tax concession	33.9	39.2	17.5	5.9	1.0	–
R&D Tax Incentive - non-refundable tax offset	–	–	60.1	39.6	40.2	18.1

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.1	0.1	0.1	0.1	0.2	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	0.6	5.8
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.1	0.4
Industry Cooperative Innovation Program	0.3	—	—	—	—	—
Illawarra Region Innovation and Investment Fund	—	—	0.1	—	—	—
North West and Northern Tasmania Innovation and Investment Fund	<0.1	—	—	—	—	—
Tasmanian Economic Diversification Projects - OfficeMax	—	—	—	0.6	—	—
Small business capital gains tax rollover deferral	—	—	—	—	0.4	1.3
The Small Business and General Business Tax Break	75.0	3.5	1.2	0.1	—	—
Small Business - Simplified depreciation rules	1.1	0.1	-0.5	1.9	-1.5	-4.1
Small business capital gains tax 15-year asset exemption	—	—	—	—	0.1	0.9
Small business capital gains tax retirement exemption	—	—	—	—	0.8	1.0
Small business capital gains tax 50 per cent reduction	3.3	1.4	1.5	1.4	1.9	3.7
25 per cent entrepreneurs' tax offset	1.4	1.4	3.0	—	—	—
Total	263.2	293.6	381.2	194.6	201.6	167.2
Financial and insurance services						
<i>Industry-specific measures</i>						
High Costs Claims Scheme	24.5	20.3	33.4	30.1	47.2	49.9
Offshore banking unit tax concession	180.0	140.0	185.0	200.0	250.0	215.0
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	0.6	0.2	0.8	1.1	1.2	1.0
TRADEX	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<i>General R&D measures</i>						
Commercialisation Australia	—	0.9	1.1	1.2	0.5	0.1
COMET Program	0.1	—	—	—	—	—
CSIRO	0.7	2.2	—	2.3	1.8	1.8
Innovation Investment Fund	5.3	6.9	8.1	9.5	9.2	18.8
R&D Tax Incentive - refundable tax offset	—	—	236.1	230.2	306.2	322.4
R&D tax offsets - Refundable	89.2	106.7	—	—	—	—
Premium R&D tax concession	69.6	71.7	19.6	8.2	—	—
R&D tax concession	158.7	182.5	81.5	27.9	4.9	—
R&D Tax Incentive - non-refundable tax offset	—	—	174.3	192.0	164.1	139.5

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Enterprise Connect Innovation Centres	<0.1	–	<0.1	–	<0.1	–
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	<0.1	0.4
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	<0.1
Concessional rate of withholding tax	155.0	195.0	140.0	285.0	210.0	180.0
Pooled development funds	5.0	40.0	0.5	–	–	–
Small business capital gains tax rollover deferral	13.3	11.2	13.1	13.1	30.1	19.1
The Small Business and General Business Tax Break	115.2	182.6	63.4	7.6	–	–
Small Business - Simplified depreciation rules	10.3	0.8	-4.5	18.2	-14.5	-39.9
Small business capital gains tax 15-year asset exemption	4.1	5.6	5.8	6.7	34.5	72.7
Small business capital gains tax retirement exemption	21.0	27.7	28.4	30.7	70.7	79.2
Small business capital gains tax 50 per cent reduction	31.5	25.1	26.5	26.0	90.5	95.7
25 per cent entrepreneurs' tax offset	5.5	5.5	1.2	–	–	–
Total	901.2	1036.3	1025.9	1101.2	1217.8	1167.2
Property, professional and administrative services						
<i>Industry-specific measures</i>						
TCF Small Business Program	0.3	0.3	0.6	0.3	0.3	–
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	–	–	0.2	–	–	–
Exceptional Circumstances - interest rate subsidies	<0.1	–	–	–	–	–
Manufacturing Transition Grants Programme	–	–	–	–	0.2	1.3
Next Generation Manufacturing Investment Programme	–	–	–	–	–	1.8
Victorian Innovation and Investment Fund - Ford Assistance	–	–	–	–	0.2	0.2
<i>General export measures</i>						
Export Market Development Grants Scheme	26.8	27.1	25.7	22.5	26.9	25.1
TRADEX	0.2	0.2	0.2	0.2	0.2	0.3
<i>General R&D measures</i>						
Commercialisation Australia	10.0	13.6	18.7	16.3	5.9	1.2
COMET Program	1.4	<0.1	–	–	–	–
Commercial Ready Program	3.2	0.1	–	–	–	–
Cooperative Research Centres	11.5	11.9	12.4	7.9	7.8	11.5
Clean Business Australia - Climate Ready Program	3.1	0.6	–	–	–	–
CSIRO	2.2	2.1	1.8	1.9	–	–
Clean Technology Innovation Program	–	–	0.3	2.2	0.4	–
Innovation Investment Fund	2.3	3.0	3.6	4.1	4.0	8.2

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General R&D measures (continued)</i>						
Manufacturing Technology Innovation Centre	—	—	—	2.0	—	—
National Enabling Technologies Strategy	0.2	0.3	0.5	—	—	—
R&D Tax Incentive - refundable tax offset	—	—	587.4	568.0	755.5	795.5
R&D tax offsets - Refundable	235.3	265.5	—	—	—	—
Premium R&D tax concession	82.7	84.9	23.2	9.6	—	—
R&D tax concession	153.1	196.0	87.5	29.7	5.2	—
R&D Tax Incentive - non-refundable tax offset	—	—	131.6	165.1	123.8	57.0
<i>Other measures</i>						
Australian Government Innovation and Investment Fund - Tasmania	—	—	—	—	0.1	0.1
Enterprise Connect Innovation Centres	2.6	3.7	2.4	3.3	1.7	0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	1.4	12.2
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.5	1.8
Industry Cooperative Innovation Program	<0.1	—	—	—	—	—
Illawarra Region Innovation and Investment Fund	—	0.3	0.8	—	—	—
South Australia Innovation and Investment Fund and Labour Assistance Package	1.5	—	—	—	—	—
Small business Online Program	2.4	—	—	—	—	—
South East South Australia Innovation and Investment Fund	—	—	0.1	—	—	—
Tasmanian Innovation and Investment Fund	—	0.1	—	<0.1	—	—
Small business capital gains tax rollover deferral	3.7	16.5	19.5	19.5	38.1	35.4
The Small Business and General Business Tax Break	218.6	78.1	27.1	3.3	—	—
Small Business - Simplified depreciation rules	34.7	2.7	-14.8	58.4	-45.3	-120.9
Small business capital gains tax 15-year asset exemption	9.2	12.6	13.1	15.0	37.2	31.5
Small business capital gains tax retirement exemption	33.5	38.0	39.0	42.1	76.5	69.8
Small business capital gains tax 50 per cent reduction	61.0	64.1	67.6	66.4	111.3	106.7
25 per cent entrepreneurs' tax offset	37.4	37.4	44.4	—	—	—
Total	936.9	859.1	1092.7	1038.0	1151.7	1038.6
Public administration and safety						
<i>Sector-specific measures</i>						
Next Generation Manufacturing Investment Programme	—	—	—	—	—	0.5

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>General export measures</i>						
Export Market Development Grants Scheme	0.2	0.1	0.2	0.1	0.2	0.1
TRADEX	0.1	0.1	0.1	0.1	0.1	0.1
<i>General R&D measures</i>						
Commercialisation Australia	0.2	0.1	0.3	0.1	0.2	0.1
COMET Program	0.1	–	–	–	–	–
CSIRO	11.6	7.7	5.1	3.7	9.3	9.5
R&D Tax Incentive - refundable tax offset	–	–	4.1	4.0	5.3	5.6
R&D tax offsets - Refundable	1.7	1.9	–	–	–	–
Premium R&D tax concession	0.5	1.1	0.3	0.1	–	–
R&D tax concession	3.0	1.5	0.7	0.2	<0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	3.0	2.0	5.4	–
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.2	0.8	<0.1	<0.1	–	–
Small business capital gains tax rollover deferral	–	–	–	–	0.2	0.1
The Small Business and General Business Tax Break	1.8	0.1	<0.1	<0.1	–	–
Small Business - Simplified depreciation rules	0.5	<0.1	-0.2	0.7	-0.6	-1.5
Small business capital gains tax 15-year asset exemption	–	–	–	–	<0.1	0.2
Small business capital gains tax retirement exemption	–	–	–	–	0.4	0.5
Small business capital gains tax 50 per cent reduction	0.8	1.7	1.8	1.8	0.8	0.8
25 per cent entrepreneurs' tax offset	0.8	0.8	1.1	–	–	–
Total	21.3	15.8	16.6	12.9	21.5	16.1
Education and training						
<i>General export measures</i>						
Export Market Development Grants Scheme	11.1	9.2	7.6	7.0	8.0	7.4
<i>General R&D measures</i>						
Commercialisation Australia	0.5	0.8	1.2	0.2	0.5	<0.1
COMET Program	<0.1	0.1	–	–	–	–
Commercial Ready Program	0.2	0.1	–	–	–	–
CSIRO	0.7	2.2	3.1	3.1	1.5	1.2
R&D Tax Incentive - refundable tax offset	–	–	7.9	7.7	10.2	10.7
R&D tax offsets - Refundable	3.2	3.6	–	–	–	–
Premium R&D tax concession	0.2	0.2	0.1	<0.1	–	–
R&D tax concession	0.7	1.5	0.7	0.2	<0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	0.5	2.0	0.2	0.2

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Enterprise Connect Innovation Centres	1.1	2.6	0.1	0.1	0.1	0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	0.1	0.7
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	<0.1
Small business Online Program	2.3	—	—	—	—	—
South East South Australia Innovation and Investment Fund	—	—	0.1	—	—	—
Temporary Assistance for Tasmanian Exporters	—	<0.1	—	—	—	—
Tasmanian Freight Equalisation Scheme	0.1	0.1	0.1	0.1	0.1	0.1
Tasmanian Jobs and Investment Fund	—	—	—	—	—	0.1
Small business capital gains tax rollover deferral	—	—	—	—	2.2	1.6
The Small Business and General Business Tax Break	1.1	2.5	0.9	0.1	—	—
Small Business - Simplified depreciation rules	1.6	0.1	-0.7	2.7	-2.1	-5.7
Small business capital gains tax 15-year asset exemption	0.1	0.2	0.2	0.2	1.1	0.5
Small business capital gains tax retirement exemption	—	—	—	—	2.4	1.7
Small business capital gains tax 50 per cent reduction	2.1	4.4	4.6	4.5	3.9	3.9
25 per cent entrepreneurs' tax offset	5.3	5.3	6.2	—	—	—
Total	30.2	32.7	32.4	28.0	28.0	22.5
Health care and social assistance						
<i>Industry-specific measures</i>						
Premium Support Scheme	13.1	11.4	9.3	9.3	7.8	8.0
<i>General export measures</i>						
Export Market Development Grants Scheme	1.7	1.6	1.2	2.2	2.2	1.6
TRADEX	0.2	0.2	0.2	0.2	0.2	0.2
<i>General R&D measures</i>						
Commercialisation Australia	0.6	1.4	1.5	3.2	2.9	0.8
COMET Program	0.2	<0.1	—	—	—	—
Cooperative Research Centres	29.6	38.9	35.4	43.8	38.0	37.4
CSIRO	44.6	53.1	53.4	55.4	33.4	32.5
Innovation Investment Fund	1.2	1.6	1.9	2.2	2.2	4.4
R&D Tax Incentive - refundable tax offset	—	—	12.1	11.7	15.6	16.4
R&D tax offsets - Refundable	4.9	5.5	—	—	—	—
Premium R&D tax concession	1.4	1.0	0.3	0.1	—	—
R&D tax concession	4.0	4.2	1.9	0.6	0.1	—
R&D Tax Incentive - non-refundable tax offset	—	—	4.8	5.6	6.9	0.3

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Enterprise Connect Innovation Centres	–	<0.1	0.1	<0.1	<0.1	<0.1
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	0.2	2.0
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	<0.1	<0.1
Illawarra Region Innovation and Investment Fund	–	–	2.0	–	–	–
Small business capital gains tax rollover deferral	0.9	0.8	1.0	1.0	14.3	6.4
The Small Business and General Business Tax Break	31.7	13.9	4.8	0.6	–	–
Small Business - Simplified depreciation rules	6.4	0.5	-2.8	11.6	-9.3	-25.4
Small business capital gains tax 15-year asset exemption	1.9	2.7	2.8	3.2	7.8	8.7
Small business capital gains tax retirement exemption	11.0	18.2	18.7	20.1	24.5	22.9
Small business capital gains tax 50 per cent reduction	15.7	19.3	20.4	20.0	38.3	42.1
25 per cent entrepreneurs' tax offset	10.2	10.2	11.6	–	–	–
<i>Total</i>	<i>179.2</i>	<i>184.4</i>	<i>180.4</i>	<i>191.0</i>	<i>185.0</i>	<i>158.2</i>
Arts and recreation services						
<i>Industry-specific measures</i>						
Funding for major films - Wolverine	–	12.8	–	–	–	–
Indigenous Broadcasting Program	14.7	15.0	15.4	16.0	–	–
Screen Australia	89.4	91.8	98.1	101.1	89.9	84.4
Tax incentives for film investment	-18.0	-17.0	-14.0	-11.0	-9.0	-7.0
Exemption of film tax offset payments	36.0	32.0	55.0	61.0	69.0	50.0
Film industry offsets	152.0	204.0	226.0	252.0	143.0	325.0
<i>General export measures</i>						
Export Market Development Grants Scheme	4.9	4.6	4.1	5.1	7.1	6.5
<i>General R&D measures</i>						
Commercialisation Australia	–	–	0.1	0.1	–	–
COMET Program	0.1	–	–	–	–	–
CSIRO	1.6	1.2	1.1	1.3	1.3	1.3
R&D Tax Incentive - refundable tax offset	–	–	2.6	2.5	3.4	3.6
R&D tax offsets - Refundable	1.1	1.2	–	–	–	–
Premium R&D tax concession	0.6	0.4	0.1	<0.1	–	–
R&D tax concession	1.6	2.6	1.2	0.4	0.1	–
R&D Tax Incentive - non-refundable tax offset	–	–	3.2	9.1	14.0	3.5

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures</i>						
Enterprise Connect Innovation Centres	0.1	0.1	0.1	0.2	0.1	<0.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	0.1	0.2
Illawarra Region Innovation and Investment Fund	—	1.9	1.8	—	—	—
Temporary Assistance for Tasmanian Exporters	—	<0.1	—	—	—	—
Tasmanian Freight Equalisation Scheme	0.2	0.1	0.2	0.2	0.2	0.2
Small business capital gains tax rollover deferral	—	—	—	—	1.2	1.3
The Small Business and General Business Tax Break	7.4	0.5	0.2	<0.1	—	—
Small Business - Simplified depreciation rules	1.7	0.1	-0.7	2.8	-2.1	-5.6
Small business capital gains tax 15-year asset exemption	—	—	—	—	2.4	5.3
Small business capital gains tax retirement exemption	—	—	—	—	1.6	2.0
Small business capital gains tax 50 per cent reduction	2.1	4.7	4.9	4.9	3.8	6.3
25 per cent entrepreneurs' tax offset	5.9	5.9	8.2	—	—	—
<i>Total</i>	<i>301.3</i>	<i>362.0</i>	<i>407.7</i>	<i>445.6</i>	<i>326.1</i>	<i>477.0</i>
Other services						
<i>General export measures</i>						
Export Market Development Grants Scheme	2.2	1.4	1.6	2.3	3.2	3.6
<i>General R&D measures</i>						
COMET Program	<0.1	—	—	—	—	—
CSIRO	<0.1	—	—	—	—	—
R&D Tax Incentive - refundable tax offset	—	—	12.8	12.4	16.5	17.4
R&D tax offsets - Refundable	5.1	5.8	—	—	—	—
Premium R&D tax concession	1.6	2.7	0.7	0.3	—	—
R&D tax concession	5.4	7.1	3.2	1.1	0.2	—
R&D Tax Incentive - non-refundable tax offset	—	—	6.0	4.1	0.9	0.7
<i>Other measures</i>						
Enterprise Connect Innovation Centres	1.6	12.1	12.7	9.3	0.1	—
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	—	—	—	—	0.1	0.8
Entrepreneurs' Infrastructure Programme - Business Management Skills	—	—	—	—	<0.1	0.1
Industry Cooperative Innovation Program	0.9	—	—	—	—	—
North West and Northern Tasmania Innovation and Investment Fund	<0.1	—	—	—	—	—
Small business Online Program	2.4	—	—	—	—	—

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Table A.13 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
South East South Australia Innovation and Investment Fund	–	<0.1	0.3	–	–	–
Tasmanian Innovation and Investment Fund	–	0.1	<0.1	–	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.1
Small business capital gains tax rollover deferral	–	–	–	–	3.2	3.1
The Small Business and General Business Tax Break	16.0	16.6	5.7	0.7	–	–
Small Business - Simplified depreciation rules	5.6	0.4	-2.4	9.3	-7.2	-19.2
Small business capital gains tax 15-year asset exemption	1.1	1.4	1.5	1.7	2.4	5.1
Small business capital gains tax retirement exemption	4.0	1.8	1.8	2.0	5.5	7.3
Small business capital gains tax 50 per cent reduction	7.9	8.3	8.8	8.6	10.9	11.7
25 per cent entrepreneurs' tax offset	10.3	10.3	13.6	–	–	–
<i>Total</i>	<i>64.1</i>	<i>68.0</i>	<i>66.4</i>	<i>51.8</i>	<i>35.9</i>	<i>30.7</i>
Unallocated services						
<i>General export measures</i>						
Tourism Australia	136.1	136.8	129.7	130.4	138.9	144.0
<i>General R&D measures</i>						
CSIRO	2.6	1.3	1.2	1.3	–	–
<i>Other measures</i>						
Enterprise Connect Innovation Centres	<0.1	–	–	–	–	–
Clean Business Australia - Green Building Fund	24.0	31.9	24.7	6.0	–	–
Tasmanian Forest Tourism Initiative	3.3	–	–	–	–	–
Tourism Industry Regional Development	–	–	7.0	9.9	–	–
Tasmanian Jobs and Investment Fund	–	–	–	–	–	0.1
TQUAL Grants	3.3	9.0	8.3	9.3	–	–
<i>Total</i>	<i>169.2</i>	<i>179.0</i>	<i>170.8</i>	<i>156.8</i>	<i>138.9</i>	<i>144.1</i>
Total outlays	1174.8	2247.6	1836.4	1826.8	2173.5	2177.0
Total tax concessions	3335.6	2835.4	2461.3	2232.2	1967.9	1581.9
Total budgetary assistance	4510.4	5083.0	4297.7	4059.0	4141.4	3758.9

– 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, 2010-11 to 2015-16^{a,b}**
\$ million (nominal)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Industry-specific measures</i>						
Asian Business Engagement Plan	—	—	—	1.8	1.4	0.6
Australian Space Science Program	11.2	12.2	12.7	—	—	—
Clean Technology Investment - Food and Foundries Program	—	—	—	—	0.4	—
National Urban Water and Desalination Plan	46.0	88.9	64.2	18.7	23.2	1.0
National Energy Efficiency Initiative - Smart Grid, Smart City	33.7	51.0	9.1	—	—	—
TCF Small Business Program	—	0.2	<0.1	—	—	—
<i>Sector-specific measures</i>						
Clean Technology Investment - General Program	—	—	—	—	1.1	—
Farm Help	—	<0.1	—	—	—	—
<i>General export measures</i>						
Austrade	118.8	115.1	101.5	112.1	115.7	136.5
Clean Energy Trade and Investment Strategy	5.0	4.9	—	—	—	—
<i>General investment measures</i>						
Regional headquarters program	0.5	0.5	0.5	—	—	—
<i>General R&D measures</i>						
Australian Renewable Energy Agency	14.4	23.8	59.6	261.9	244.4	114.6
Commercialisation Australia	—	—	—	0.2	—	—
Clean Technology Innovation Program	—	—	—	—	0.9	—
Innovation Investment Follow-on Fund	17.2	1.0	2.2	0.1	0.1	—
Manufacturing Technology Innovation Centre	—	—	0.8	—	—	—
National Enabling Technologies Strategy	0.4	0.6	0.3	—	—	—
R&D tax offsets - Refundable	<0.1	<0.1	—	—	—	—
Premium R&D tax concession	3.3	—	—	—	—	—
R&D tax concession	13.6	—	—	—	—	—
R&D Tax Incentive - non-refundable tax offset	—	—	23.5	0.5	0.8	—
R&D tax offset payments - exemption	-200.0	-235.0	-200.0	-135.0	-85.0	-50.0
<i>Other measures</i>						
Asialink Business	—	—	—	—	—	3.4
Asia Marketing Fund	—	—	8.5	12.5	13.5	14.0
Asia Pacific Partnership on Clean Development and Climate	11.0	2.3	0.2	—	—	—
Digital Enterprise Program	—	4.0	1.9	5.2	0.3	—
Enterprise Connect Innovation Centres	3.9	—	—	—	6.7	0.1
Energy Efficiency Information Grants	—	7.3	20.8	9.5	—	—

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Table A.14 (continued)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<i>Other measures (continued)</i>						
Entrepreneurs' Infrastructure Programme - Accelerating Commercialisation	–	–	–	–	0.1	1.1
Entrepreneurs' Infrastructure Programme - Business Management Skills	–	–	–	–	0.3	1.2
Insulation Industry Assistance Package	22.9	–	–	–	–	–
Illawarra Region Innovation and Investment Fund	–	–	0.1	–	–	–
Procurement strategy	3.5	6.4	–	–	–	–
Regional Partnerships Program	0.2	–	–	–	–	–
Small Business Advisory Services Program	9.0	12.1	8.0	7.1	–	–
Temporary Assistance for Tasmanian Exporters	–	0.9	–	–	–	–
Tasmanian Freight Equalisation Scheme	6.6	6.3	7.5	6.8	7.5	8.7
Concessional taxation for small business - Lower company tax rate	–	–	–	–	–	250.0
Small business capital gains tax rollover deferral	127.5	111.4	131.1	131.1	50.4	123.8
The Small Business and General Business Tax Break	2.0	21.8	7.6	0.9	–	–
Small Business - Simplified depreciation rules	3.5	0.3	-1.2	4.3	-2.4	-6.0
Small business capital gains tax 15-year asset exemption	59.1	76.2	79.1	90.8	33.7	77.2
Small business capital gains tax retirement exemption	204.3	210.6	216.3	233.4	93.1	134.0
Small business capital gains tax 50 per cent reduction	284.5	270.7	285.5	280.5	147.2	211.1
25 per cent entrepreneurs' tax offset	35.6	35.6	28.6	–	–	–
Taxation assistance for victims of Australian natural disasters	6.0	58.0	31.0	10.0	3.0	3.0
TCF corporate wear program	85.4	85.4	85.4	85.4	30.0	30.0
Total outlays	303.8	337.1	297.4	436.0	415.6	281.2
Total tax concessions	625.3	635.4	687.3	701.9	270.8	773.1
Total budgetary assistance	929.1	972.5	984.7	1137.8	686.5	1054.3

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

Source: Commission estimates.

B Recent developments in industry assistance

Chapter 3 examined four recent developments that have significant implications for industry assistance. This appendix summarises other developments since around May 2016, some of which may feed into the estimates for 2016-17.

The developments are drawn largely from Ministerial announcements and supporting information on departmental websites. New announcements are not necessarily finalised designs or costings.

As noted in earlier chapters assessing what constitutes industry assistance, and estimating the amount of assistance, is not always straightforward. To guide the reader as to how the developments fit into an industry assistance framework the following tables include a brief classification based on the characteristics of the measures .

The Commission classifies budgetary assistance into two broad categories — budgetary outlays and tax concessions (figure B.1). Budgetary outlays are further classified into direct financial (as are tax concessions) and indirect support, which is where funding goes to firms that are providing services to the firms receiving assistance. These services range from activities such as delivering financial advice to R&D to infrastructure, if solely for the use of an industry.

There is a third category of support that falls outside of the budgetary categorisation. This is preferential access arrangements that confer advantage to the firms that receive them. This includes advantage given by access to a resource base or quota allocation where the price is not set by a competitive process, and by government purchasing preferences. These sources of assistance have not tended to be included in the measured assistance as the extent of assistance can be difficult to estimate. This category is included in the recent developments even though the programs are unlikely to be included in the measured estimates as they are implemented.

The Commission also classifies budgetary assistance into eight categories based on a mix of who is supported and the type of support the assistance provides. These categories are:

- R&D, which takes in R&D subsidies and grants and tax concessions
- Export, which covers grants and services assistance provided to exporting firms, for example to support market access and trade financing

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- Industry-specific assistance, which is available to a ‘single’ industry, such as automotive manufacturing
 - Sectoral assistance, which is available to businesses in a ‘sector’, such as agriculture.
 - Regional/structural assistance, which are grant programs to support activities in areas that have been affected by major firm closures, or are economically depressed
 - Small business, which are budgetary and tax concessions that are limited to small businesses
 - Investment measures, including development allowances and investment attraction packages
 - Other measures, which picks up those areas not covered by the other categories and includes, for example the Tasmanian Freight Equalisation Scheme, and some programs supporting commercialisation of new technologies.

These categories can overlap, for example rural R&D could also be treated as industry or sector specific. In these cases the assistance is assigned in the order given above to avoid double counting.

The tabulation also includes an additional characteristic of assistance, which is how the assistance recipient is selected. Some assistance is allocated by a competitive selection process, some assistance is demand driven (capped and uncapped), and some assistance is decided on a discretionary basis. Assistance that is competitively allocated should, in principle, achieve the objective of the assistance at a lower cost. (While this assistance may be cost-effective, whether this assistance is efficient will depend upon the selection criteria in the competitive process, particularly whether the activity is targeted at overcoming a ‘market failure’). In comparison, assistance that is selective, where the recipient firm is chosen without any competition, is less likely to deliver value for the budgetary support provided. That such support is still provided means that firms have incentives to lobby governments, which diverts their resources away from activities that might reduce their need for assistance to survive.

Figure B.1 Characteristics of budgetary assistance

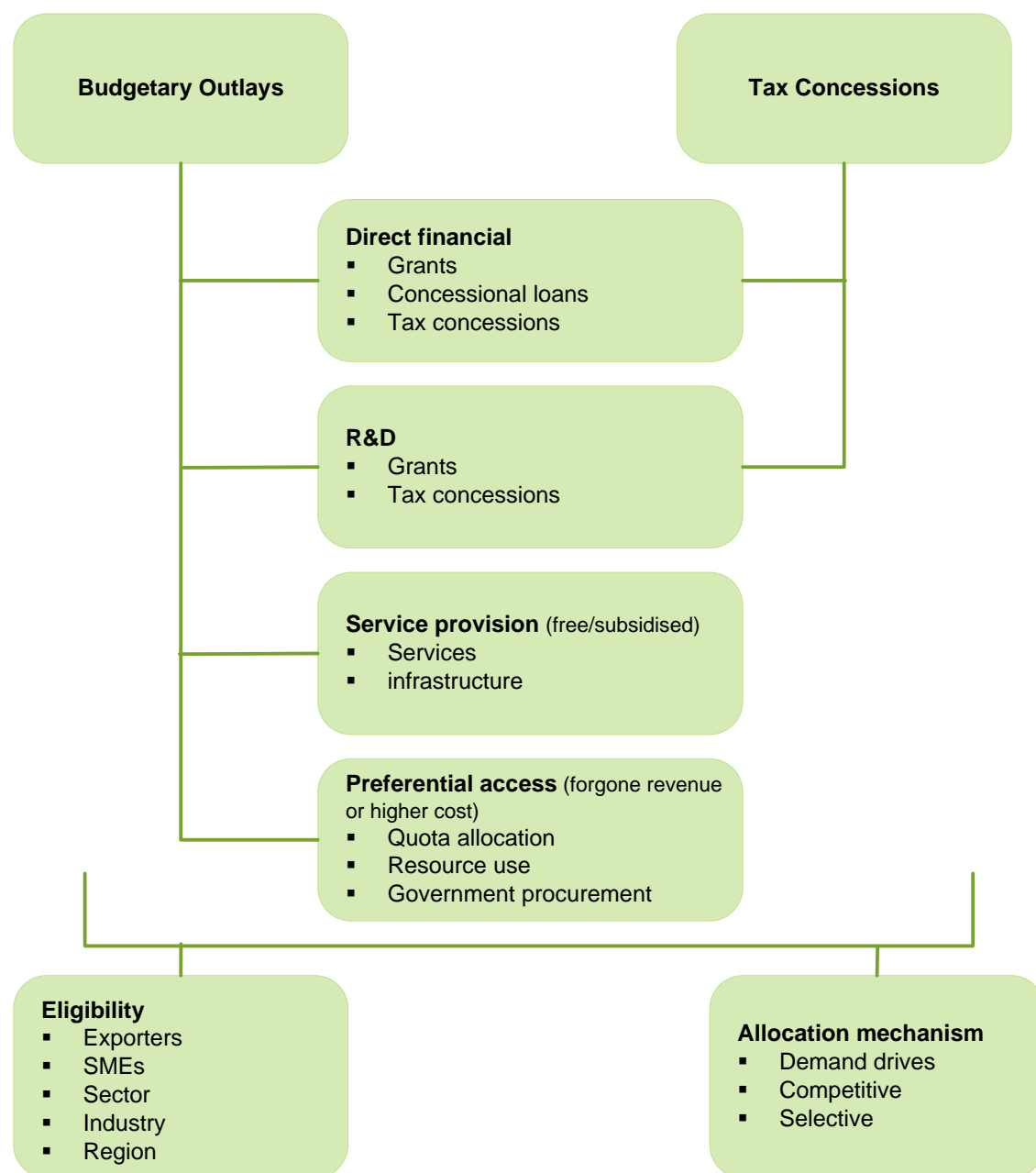


Table B.1 Agriculture and Water portfolio

Selected recent developments

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Likely to be included in assistance estimates			
Changes to the Farm Management Deposits (FMD) Scheme take effect from 1 July 2016	Not given	Deposit limit doubled from \$400 000 to \$800 000; earlier access re-established for farmers affected by drought; removal of previous restriction on FMDs being used as a loan offset. Annual concessional tax benefit estimated by Treasury in Tax Expenditure Statement.	Direct financial – tax concession Sector specific – primary production Demand driven
First pilot of the new Commonwealth On-Farm Further Irrigation Efficiency (COFFIE) programme in South Australia	\$35 million for pilots \$1.575 billion for programme to run until 2024	The program will be in addition to other Australian Government programs funding on-farm irrigation infrastructure improvements. It is expected that the COFFIE program will be broader than current on-farm programs, including: smaller projects will be accepted — projects will need to make a minimum of 10ML of water savings; all minimum water efficiency savings are to be transferred to the Commonwealth; project funding will be limited to 1.75 times the prevailing average market price of the water access entitlements to be recovered.	Direct financial – grant Sector specific – primary production Demand driven
Australian Trade and Market Access Cooperation (ATMAC) programme	\$3.1m over four years, 2015-16 to 2018-19 Additional \$1.9m for Departmental projects	Grants are available for projects aimed at promoting cooperation in accessing international markets. Applicants must seek project funding of at least \$55 000. Funding priorities apply.	Direct financial – grant Sector specific – primary production Competitive selection

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Table B.1 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Applications opened in February 2017 for Round 2 of the Package Assisting Small Exporters (PASE)	\$2 million	<p>The PASE consists of three components:</p> <ul style="list-style-type: none"> • a rebate for eligible small exporters to assist with export registration charges • a review of export fees and charges • funding for projects that will help improve market access for small exporters. <p>\$15m over four years was committed in the 2013 Election. 41 projects supported in Round One, covering industries such as table grapes, dairy, avocado, kangaroo meat and cherries.</p>	<p>Direct financial – grant</p> <p>Sector specific – primary production</p> <p>Competitive selection</p>
Rebate for professional advice on insurance for farms under the Managing Farm Risk Programme	Not given	Rebates for 50 per cent of the advice cost up to a maximum claim of \$2500.	<p>Direct financial – grant</p> <p>Sector specific – primary production</p> <p>Demand driven</p>
Export and Regional Wine Support Package	\$50 million over four years	To promote Australian wine in overseas markets and encourage domestic and international tourists to visit Australia's premium wine regions.	<p>Indirect – marketing plan</p> <p>Industry specific – wine</p> <p>Discretionary</p>
Wine Tourism and Cellar Door Grants	\$10 million annual	Encouraging visitors to wine regions. Grants up to \$100 000 to eligible producers for their cellar door sales, starting in 2018-19.	<p>Direct financial – grant</p> <p>Industry specific – wine</p> <p>Demand driven (capped funding may result in pro-rata reduction in grant if over-subscribed)</p>

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Table B.1 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Not included in assistance estimates			
Initial response to prawn disease outbreak	\$1.74 million	Up to \$400 000 support to cover costs to farmers as a consequence of Queensland Government response to white spot disease infection of five properties in south-east Queensland. \$1.3 million provided to the Queensland Government to respond to disease outbreak, including to decontaminate affected areas, surveillance, and biosecurity plans. (Queensland Government costs expected to be significantly higher and may be shared by Australian Government)	Cost re-imbursement for Government action.
ACCC Agricultural Unit	\$11.4 million over four years	The Agricultural Competitiveness White Paper announced the ACCC would increase engagement with the agricultural sector, including a new dedicated Commissioner. The ACCC commenced an inquiry in November 2016, examining competition between dairy processors, contracting practices, market transparency and retail pricing of dairy products.	May indirectly benefit agricultural activities.
New Country of Origin labelling laws passed 9 February 2017	Nil - regulation	Clarifies correct use of 'made in' and 'packed in' labelling claims. Abolished the requirement to recalculate shares of imported and local product (such as when prices and exchange rates change) previously required to support origin claims. Complements country of origin food labelling information standard introduced 1 July 2016.	Indirect – possible increased demand for 'Australian' product Indirect financial – possible cost reduction in changing labelling information
Improved access to the Farm Household Allowance (FHA)	Not applicable	Two mandatory waiting periods will be removed to speed up the payment to farmers in need. The definition of farm and non-farm assets has been changed which will act to increase eligibility for FHA.	The FHA is a social security measure, intended to help recipients meet basic household needs. The support is for individuals, decoupled from the farming business.
New Horticulture Code of Conduct took effect on 1 April 2017	Nil - regulation	The Code is intended to provide clarity around transactions between growers and wholesalers of fruit and vegetables and is enforced by the ACCC.	Indirect benefit – may influence the returns of growers and facilitate dispute resolution. Selective to Horticulture.

Table B.2 Industry, Innovation and Science portfolio
Selected recent developments

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Likely to be included in assistance estimates			
Tax Incentive for Early Stage Investors	Not given	Provides tax concessions from 1 July 2016 to eligible early stage investors that invest in qualifying innovation companies. The concessions include a 20 per cent non-refundable tax offset (capped at \$200 000) and a 10 year exemption for investors from capital gains tax.	Direct financial — tax concession Sector specific — all (primarily manufacturing and services) Demand driven
New Arrangements for Venture Capital Limited Partnerships	Not given	Changes income tax and venture capital legislation to improve access to capital and make investing in venture capital more user-friendly and internationally competitive. The changes made include: <ul style="list-style-type: none"> • providing non-refundable carry-forward tax offsets for limited partners in early stage venture capital limited partnerships (ESVCLP) • providing for a capital gains tax exemption for fixed and unit trust beneficiaries of partners in ESVCLPs • excluding small entities from eligible venture capital investment auditor requirements • increasing the maximum fund size for ESVCLPs to \$200 million • removing the requirement that an ESVCLP divest an investment in an entity once the value of the entity's assets exceeds \$250 million • enabling foreign venture capital funds to hold more than 30 per cent of the committed capital of an ESVCLP and extend their access to capital gains tax and other income tax concessions in relation to eligible venture capital investments. 	Direct financial — tax concession Sector specific — potentially all (primarily manufacturing and services) Demand driven

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Table B.2 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Development of the Darwin Innovation Hub	\$500 000	Grant to Paspalis Enterprises under the Incubator Support initiative to fund the development the Northern Territory's first innovation hub to support start-ups.	Indirect — service provision (working space and programs) Sector specific — small business Discretionary (National Innovation and Science Agenda measure)
Contract for the replacement of steel rails on the Adelaide to Tarcoola railway line	'Tens of millions of dollars'	Contract between the Australian Rail Track Corporation and the administrators of Arrium, KordaMentha, to purchase approximately 73 000 tonnes of steel from the Whyalla steelworks to upgrade the 1200 kilometres of rails between Adelaide and Tarcoola to improve rail freight transport.	Direct financial — procurement Firm specific — metal and fabricated metal products Discretionary
CSIRO Innovation Fund	\$100 million over 10 years (plus \$100 million from the private sector)	Funds the commercialisation of early stage innovations from CSIRO, universities and other publicly-funded research bodies.	Direct financial — grant Sector specific — all Discretionary
Establishment of a Cyber Security Growth Centre	\$31.9 million over four years	Aims to improve cyber security opportunities for Australian business to grow their operations and reach new markets with their innovations.	Direct financial — grant Industry specific — information, media and telecommunications Discretionary
Establishment of a Biomedical Translation Fund	\$250 million (plus \$250 million from the private sector)	Seeks to take Australian biomedical discoveries out of the laboratory and to the patient.	Direct financial — grant Industry specific — petroleum, coal, chemical and rubber products Competitive selection
Grant to the Alcoa Portland Aluminium Smelter	\$30 million	Provides financial assistance for capital improvements, maintenance and repairs to restore operations following damage to the smelter's production lines after a transmission fault cut power in December 2016. The assistance is conditional on operations at the smelter continuing until at least 30 June 2021 and maintaining production to at least 90 per cent of pre-outage levels.	Direct financial — grant Firm specific — metal and fabricated metal products Discretionary

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Table B.2 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Establishment of the Cooperative Research Centre for Developing Northern Australia	\$75 million over 10 years	Bring industry and research organisations together to tackle barriers to private investment in northern Australia, with an initial focus on agriculture, food and tropical health. The CRC will also fund short-term research projects that enhance the competitiveness of Northern Australia.	Indirect — research and development Industry specific — all primary production; food, beverages and tobacco Discretionary (The White Paper on Developing Northern Australia measure)
Establishment of the Cooperative Research Centre for High Performance Soils	\$39.5 million over 10 years (with \$136.8 million cash and in-kind participant contributions)	Bring industry and research organisations together to help farmers bridge the gap between soil science and farm management giving them the tools and knowledge to make decisions on complex soil management issues and help them optimise productivity, yield and profitability and ensure long-term sustainability of their farming businesses.	Indirect — research and development Industry specific — all primary production (except aquaculture and fishing) Merit selection (18 th Round)
Establishment of the Cooperative Research Centre for Honey Bee Products	\$7 million over five years (with \$19.2 million cash and in-kind participant contributions)	Bring industry and research organisations together to link floral hive sites to product quality control processes to: <ul style="list-style-type: none"> • underpin the healthy product image for national and international markets • to create valuable proprietary knowledge and systems • to provide training platforms for industry improvement. 	Indirect — research and development Industry specific — other primary production (honey) Competitive selection (18 th Round)
Establishment of the Food Agility Cooperative Research Centre	\$50 million over 10 years (with almost \$162 million in cash and in-kind participant contributions)	Bring industry and research organisations together to help Australia's food industry grow its comparative advantage through digital transformation and develop ways of applying the agile culture and processes of the digital economy along the whole value chain for fresh and processed food.	Indirect financial — research and development Industry specific — all primary production (except forestry and logging; food, beverages and tobacco) Competitive selection (18 th Round)

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Table B.2 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Establishment of the iMove Cooperative Research Centre	\$55 million over 10 years matched (with \$178.8 million in cash and in-kind participant contributions)	Exploit digital and evolving vehicle technologies to enable traffic to flow more smoothly, creating more efficient intermodal connections and offer real time choice to travellers and freight operators. The outcomes are reduced congestion, fuel use and emissions, and improved national productivity and competitiveness.	Indirect financial — research and development Industry specific — transport, postal and warehousing Competitive selection (18 th Round)
Grants under the Global Innovation Linkages programme (Round One)	\$8.69 million	Grants to nine Australian businesses and research organisations over the next four years to collaborate with global partners on strategically-focused, leading-edge research and development projects.	Direct financial — grant Industry specific — advanced manufacturing; food and agribusiness; medical technology and pharmaceuticals; mining equipment technology and services; oil, gas and energy resources Competitive selection
Global Connections Fund — Priming grants (Round Two)	\$280 000	Grants of \$7000 to 17 small-to-medium enterprises and 23 researchers to meet with their international partners and develop their collaborative idea. The grants seek to build industry-researcher engagement, enable the exchange of ideas, and access world-class expertise, infrastructure and the global market.	Direct financial — grant Industry specific — advanced manufacturing; food and agribusiness; medical technology and pharmaceuticals; mining equipment technology and services; oil, gas and energy resources Competitive selection
Global Connections Fund — Bridging grants (Round Two)	\$662 608	Grants between \$35 000 and \$50 000 to 14 projects to support international small-to-medium enterprise-Researcher partnerships grow beyond an initial level of engagement such as might be developed during a Priming Grant funded process, into a strong collaboration which leads to the translation of research knowledge and intellectual property into market ready products or services.	Direct financial — grant Industry specific — advanced manufacturing; food and agribusiness; medical technology and pharmaceuticals; mining equipment technology and services; oil, gas and energy resources Competitive selection

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Table B.2 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Business Research and Innovation Initiative (BRII) grants	\$9.5 million (2016-17)	<p>Assist small-to-medium enterprises to:</p> <ul style="list-style-type: none"> • develop innovative products and services with commercial potential • receive a commercial income • grow with a global mindset. <p>Allows government agencies to work with small-to-medium enterprises to develop, and then have the option to purchase innovative solutions.</p>	<p>Direct financial — grant</p> <p>Sector specific — manufacturing; services</p> <p>Competitive selection</p>
Establishment of an Advanced Manufacturing Fund	\$100 million over four years (from 2017-18)	<p>Seeks to promote innovation in Australia's manufacturing sector to create jobs, grow business, improve productivity and be globally competitive. The fund consists of:</p> <ul style="list-style-type: none"> • the Advance Manufacturing Fund (\$47.5 million) • an Advanced Manufacturing Growth Centre (\$4 million) • Cooperative Research Centre funding (\$20 million over two years) • the establishment of two innovation labs (\$10 million) • investing in engineering student research (\$5 million) • tariff reductions on imported vehicle prototypes and components used in vehicle design and engineering services that operate in a global network (\$13.5 million). 	<p>Direct financial — grant</p> <p>Indirect financial — tariff reductions</p> <p>Indirect assistance — research and development</p> <p>Sector specific — manufacturing</p> <p>Competitive selection</p>

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Table B.2 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Manufacturing Transition Programme grants (Round One)	\$46.3 million (\$201.6 million private sector)	Provides 18 manufacturing businesses with grant funding to be more competitive and viable. It supports capital investment projects that help businesses: move or expand into higher value and/or niche manufacturing activities; build skills in higher value and knowledge intensive activities in new or growing markets. Grant funding is for up to 25% of eligible project costs. The minimum grant amount is \$1 million and the maximum grant amount is \$10 million. The maximum grant period is 2 years. A further 6 month extension may be approved.	Direct financial — grant Industry specific — manufacturing Competitive selection
Gas Acceleration Program	\$26 million (2017-18)	Provides grants of up to \$6 million for each new onshore gas project with substantial prospects of producing gas into the eastern gas market within three years to accelerate the development of known significant gas resources.	Direct financial — grant Industry specific — gas Competitive selection
Regional Jobs and Investment Packages	\$200 million over four years (from 1 September 2016 to 30 June 2020)	Funding to drive economic growth and create jobs in ten pilot regions by investing in projects that will diversify regional economies, stimulate long-term growth, deliver sustainable employment and enable applicants to enter new markets and sectors. Funding is available across three streams: local infrastructure; business innovation; and skills and training.	Direct financial — grant (business innovation stream) Industry specific — determined by recipients of business innovation funding Competitive selection

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Table B.2 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Not included in industry assistance			
National Resources Development Strategy — exploring for the future	\$100.5 million over four years	Funds pre-competitive geographical modelling of mineral, petroleum and groundwater resources in targeted areas across northern Australia and South Australia. This program of data acquisition and analysis will allow Australia to identify new greenfield exploration sites for future development.	Pre-competitive information provision
Funding of a strategic partnership with the European Southern Observatory	\$26.1 million (2017-18)	Funds a strategic partnership to maintain Australia's world renowned optical astronomical research and instrumentation capabilities.	Ostensibly funding basic scientific research
Sale of a permit allowing offshore gas exploration off the Western Australian coast for six years	Revenue to government of \$3 million	Confers the legal right to explore for oil and gas in release area W16-7 of the Northern Carnarvon Basin.	Permit issued through competitive auction and no payments by government involved
Co-investment in Quantum Computing	\$25 million over five years (with matching funding from other private and public sector funding parties)	Funds the development of a silicon quantum integrated circuit — the first step in building a functional quantum computer.	Research infrastructure development
Establishment of the Northern Australia Infrastructure Facility	\$43.8 million over five years	Administrative Funds to establish the Northern Australia Infrastructure Facility (NAIF) as a corporate Commonwealth entity. The NAIF will deliver up to \$5.0 billion in financing over five years (from 2016-17) to support economic infrastructure in northern Australia.	Establishment of an Australian Government agency.

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Table B.2 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
International Energy Agency's Oil Stockholding Requirements	\$23.8 million over four years	Supports Australia working to meet the International Energy Agency's (IEA) oil stockholding requirements. The funding includes: <ul style="list-style-type: none"> • a Collective Action Response Mechanism • the establishment of an Energy Security Office in the Department of Industry, Innovation and Science • the establishment of a counsellor position to represent Australia's interests at the IEA in Paris. 	Administrative costs in meeting Australia's international obligations
National Radioactive Waste Management Project — community benefits package	\$7.5 million over three years	Provides a benefits package to the shortlisted communities selected for consideration under the National Radioactive Waste Management Project.	Community acceptance and facilitation assistance

Table B.3 Foreign Affairs and Trade portfolio

Selected recent developments

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Likely to be included in Industry estimates			
Landing Pads in Innovation Hot Spots (4 th and 5 th locations)	\$2.4 million over two years	Brings forward the opening of the Singapore and Berlin Landing Pads for supporting emerging Australian companies in global innovation hotspots from 2018-19 to 2016-17.. The first three locations were Silicon Valley, Tel Aviv and Shanghai.	Indirect — trade facilitation services Industry neutral — all startups Demand driven
Second round of Free Trade Agreement Training Provider Grant recipients	\$2.145 million over two years	Grants to 12 recipients to fund training programs designed to help Australian businesses boost their export capabilities.	Indirect — information and training services Industry neutral — all exporters Demand driven
Not included in Industry estimates			
Small Business Export Loan	Not stated	Loans provided by the Australian Export Finance and Insurance Corporation to help 12 small and medium enterprises that have been established for at least two years with annual revenue of between \$250 000 and \$5 million to access up to \$250 000 to support an export contract.	Any difference between market rate of interest and a (lower) EFIC loan rate would constitute industry assistance, but is not easily estimated.
Re-opening Australia's Australian Trade and Investment Commission Office in Tehran, Iran	\$5.3 million over four years	Re-opens an Austrade office in Tehran (Iran) that will support Australian business to capitalise on export and investment opportunities in agriculture, resources, healthcare, education and water management.	The cost of this measure will be offset by redirecting funding from other areas in the Austrade network. Austrade assistance to industry already included in assistance estimates.

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Table B.3 (continued)

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Opening of Austrade office in Boston, Massachusetts	Not stated	The Boston office will focus on developing two-way trade and investment, particularly in technology-driven sectors such as medical technology. It will strengthen linkages and collaboration with region's world-class research and development facilities, many of which host leading Australians.	Austrade assistance to industry already included in assistance estimates.
Development of a new Business Events portal	Not stated	Website offers planners and decision makers direct access to Tourism Australia business events representatives and business events products and destinations to allow users to easily make contact with sources of inspiration and information on holding a business event in Australia.	Makes existing arrangements easier Would be included as part of Tourism Australia

Table B.4 Environment portfolio
Selected recent developments

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Likely to be included in assistance estimates			
High efficiency fertiliser trials	\$7.1 million (jointly funded by the Australian and Queensland Governments)	Funding to Queensland Canegrowers to support on-farm trials of high efficiency fertilisers across all cane growing regions that flow to the Great Barrier Reef. This new generation of fertilisers have the potential to increase farmer profit margins through improving yields, whilst reducing fertiliser run-off and thereby improving water quality.	Direct financial — grant Industry specific — sugar growing Discretionary
Not included in assistance estimates			
Clean Energy Finance Corporation	<p>New commitments in 2015-16 (\$837 million).</p> <p>Actual loans and advances in 2015-16 (\$208.015 million)</p> <p>Principal loan repayments in 2015-16 (\$133.68 million)</p>	<p>The CEFC provides, primarily, debt and equity finance.</p> <p>There were 15 new investments in 2015-16. Loans and advances outstanding at 30 June 2016 were \$402 million (to 79 obligors)</p>	<p>Any difference between the market rate of finance and concessional finance provided by the Corporation constitutes assistance.</p> <p>The CEFC is required to record in its financial accounts its judgment of the concessional loan 'charge'. (\$6.876 million in 2015-16). An interpretation of this charge is that the realisable (market) value of the \$208 million of loans written in 2015-16 was \$201 million due to the discounted interest rate/terms (hence the \$7 million charge).</p>

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Table B.4 Environment portfolio
Selected recent developments

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Commencement Clean Energy Innovation Fund (1 July 2016)	\$1.0 billion over 10 years (from CEFC)	The fund provides debt and equity financing to assist emerging clean energy technologies make the leap from demonstration to commercial deployment for projects and businesses that use technologies that have passed beyond the research and development stages but are not yet established or of sufficient maturity, size or otherwise commercially ready to attract sufficient private sector capital. Funding redirected from existing Clean Energy Finance Corporation (CEFC) funding. The fund is jointly managed by CFEC and the Australian Renewable Energy Agency.	Assistance component may be difficult to ascertain — any difference between market rate of finance and concessional finance provided by the Fund
Fourth Emissions Reduction Fund auction	\$368 million	Contracts for 34.4 million tonnes abatement at \$10.69 average price per tonne. 47 contractors, 49 projects	Payments (significantly) overstate the net financial benefit to contractors because abatement costs are incurred to earn the credits.
Fifth Emissions Reduction Fund auction	\$133 million	Contracts for 11.25 million tonnes abatement at \$11.82 average price per tonne. 31 contractors, 38 projects	
Exemption from the costs associated with the Renewable Energy Target (RET) for Emissions-Intensive Trade-Exposed (EITE) activities	\$590 million (2016)	The exemption confers an advantage on qualifying businesses (38) relative to those domestic businesses that are less trade exposed. Aluminium smelting accounts for around 62 per cent of the exempt emissions.	Direct financial — exemption from liability

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Table B.4 Environment portfolio
Selected recent developments

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Yellow crazy ant control efforts	\$7.5 million over three years	Funding to control the spread and to promote the eradication of yellow crazy ants in Far North Queensland that pose a serious threat to the environment and native species, the agricultural sector, community safety and way of life. This funding covers: detection, baiting and monitoring with a view to eradicate yellow crazy ant infestations. This funding builds on almost \$4 million of existing Federal Government support to tackle yellow crazy ants.	Primarily addresses environmental considerations notwithstanding some benefit to agricultural production in affected areas

Table B.5 Other portfolio
Selected recent developments

<i>Measure</i>	<i>Government indicative costing</i>	<i>Nature and recipient</i>	<i>Assistance considerations</i>
Likely to be included in assistance estimates			
Funding to secure the filming of the movie <i>Aquaman</i> in Australia (Communication portfolio)	\$22 million	Government announcement of a 'location tax offset' to secure Australia as the filming location for the Warner Bros. feature film <i>Aquaman</i> .	Direct financial — grant Firm specific — arts and recreation services Discretionary
Not included in assistance estimates			
Youth Employment Package — encouraging entrepreneurship and self-employment (Education portfolio)	An additional \$88.6 million over four years	Expansion of the New Enterprise Incentive Scheme (NEIS) and to support self-employment opportunities for young people.	May include an assistance component but ostensibly employment related

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