the shepherd review

Statement of National Challenges

Why Australians are struggling to get ahead

27 March 2017

MENZIES
RESEARCH CENTRE

The Shepherd Review
Statement of National Challenges: Why Australians are struggling to get ahead

An Independent Review commissioned by the Menzies Research Centre

Nick Cater, MRC Executive Director
Andrew Bragg, MRC Director of Policy and Research

A.T. Kearney has assisted the secretariat of the Menzies Research Centre in assembling much of the fact base and analysis for the report. We are grateful for their assistance.

Published by
The Menzies Research Centre Limited

R G Menzies House
Cnr Blackall and Macquarie Streets
BARTON ACT 2600
PO Box 6091
KINGSTON ACT 2604

Phone: 02 6273 5608

Email: info@menziesrc.org

Portal: www.menziesrc.org

Designed by Vanessa Schimizzi

The Menzies Research Centre is a company limited by guarantee.

The Menzies Research Centre is supported by a grant from the Commonwealth Department of Finance.

ACN 067 379 684

ISBN 978-0-9806383-8-7

MENZIES
RESEARCH CENTRE

From the desk of Tony Shepherd AO

For generations the great promise celebrated in our national anthem – wealth in exchange for toil – has given us an enviable lifestyle.

Yet Australians are beginning to doubt that promise. They are prepared to work as hard as ever to secure a better life for themselves and their families, yet many feel it has become harder to get ahead. They have become distrustful of government and nervous about the future.

This review of the nation's economic challenges shows that Australians are right to be anxious. The steady improvement in living standards Australians have come to expect is far from guaranteed; rapid changes in technology and highly mobile investment capital are disrupting established business models; wages remain static and basics, like energy and housing, are no longer cheap.

The burden of national debt makes us increasingly vulnerable to external shocks. Yet the mounting cost of the services we expect from our governments – welfare, health and education – makes the task of repaying that debt harder every year.

If we fail to meet the not inconsiderable challenges we now face, the outlook for Australians is gloomy. Job opportunities will shrink, wages won't rise and each next generation will have fewer chances in life than the previous one.

Business and individuals will be asked to pay higher taxes and higher energy bills which will drive up the price of almost everything we consume.

Fortunately there is an alternative. We can rise above these challenges by creating an environment in which businesses thrive and we can insist that government stops wasting our money, by providing services efficiently and effectively.

The rewards will follow: jobs, higher real wages, affordable energy and, above all, the opportunity for Australians to pursue their dreams.

Australia remains in control of its destiny, but we cannot postpone the hard decisions indefinitely. The choices we make today will shape our future.

Tony Shepherd AO

Chairman, The Shepherd Review

March 2017

The Review Panel

Tony Shepherd AO

Hon Warwick Smith AM

Ben Heap

Josephine Sukkar

Dr Peta Seaton

Peter Strong

Geoffrey Winters

Andrew Bragg
Head of Secretariat

Contents

Overview

This statement of national challenges is the first stage of the Shepherd Review commissioned by the Menzies Research Centre. Its task is to identify the obstacles in the path of national progress and to outline a range of scenarios as the nation approaches the third decade of the 21st century.

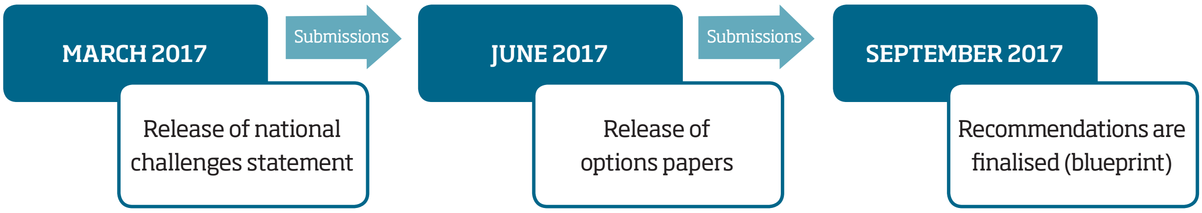
Before looking for solutions, we must first articulate the problem to be solved. Policy makers who overlook this imperative, struggle to win a popular mandate to translate policy into action. A clear definition of the challenge encourages clarity of thinking in policy design and helps build a consensus for change.

It is clear that in an age of market disruption and increasing competition between nations for economic opportunities, Australia cannot stand still.

Australia has benefited from an extended period of strong economic growth and wealth generation. This has contributed to the country's high levels of prosperity, equality and standard of living. While we remain in control of our destiny, Australia must capitalise on new wealth generating opportunities and avoid complacency. Failure to do so will reduce Australia's performance over the medium to long term and reduce options for economic growth and prosperity into the future.

The Review Panel, led by MRC Director Tony Shepherd AO and supported by Secretariat Head Andrew Bragg is working with small, medium and large business and the wider community to develop a credible, fact based process.

This process provides multiple opportunities for community discussion and debate on the nature of the problems and the potential solutions. The next stage in this process will be the release of options papers and the final stage will be a blueprint for change to be published in the third quarter of 2017.



An outline of each proposed options paper is flagged under each national challenge to ensure that the review remains outcomes-focussed.

The Review Panel now calls for submissions in response to the Statement of National Challenges. Submissions will inform the drafting of the options papers which are due in June 2017. We seek submissions with a view to building consensus and agreement on the pivotal challenges. Submissions close on 12 May 2017.

Challenges (Mar 2017)	Options Paper (Jun 2017)	Recommendations (Sep 2017)
Confidence in a Growing Economy	Balancing the Budget	Tax and Spending Sustainability
Effective and Accountable Government	Better and Effective Services	Roles of Commonwealth, State and Local Government; Payments, Grants and Programs; Efficiency and Efficacy
Competitive Economy and Open Markets	Boosting Australian Competitiveness and Economic Growth	Regulation, Industrial Relations, Trade, Taxation, Infrastructure, Training and Education
Infrastructure and Energy Underpin our Future	Securing and Building our Platform	Energy and Infrastructure - Economic and Social
Imagination and Adaption	Ready Today to Exploit Tomorrow	Innovation, Adaptability Adroitness, Flexibility

Principles and Framework

Core principle

The fundamental principle applying to this review is:

A strong economy is the basis of a just and fair society.

> *"We have greatly aided social justice. We have not just kept the right and allowed victory to go to the strong. We have encouraged free enterprise, have recognised the making of a people as one of the dynamic inducements to the taking of capital risks in the development of the nation. But we have insisted upon the performance of social and industrial obligations; we have shown that industrial progress is not to be based upon the poverty or despair of those who cannot compete."*
>
> Robert Menzies, The Liberal Creed, 6 April 1964

Framework

Many Australians believe they are not getting ahead because our system of government is broken.[1] Despite the nation's 25 year run of unbroken economic growth, we have significant problems which impact all of us in different ways.

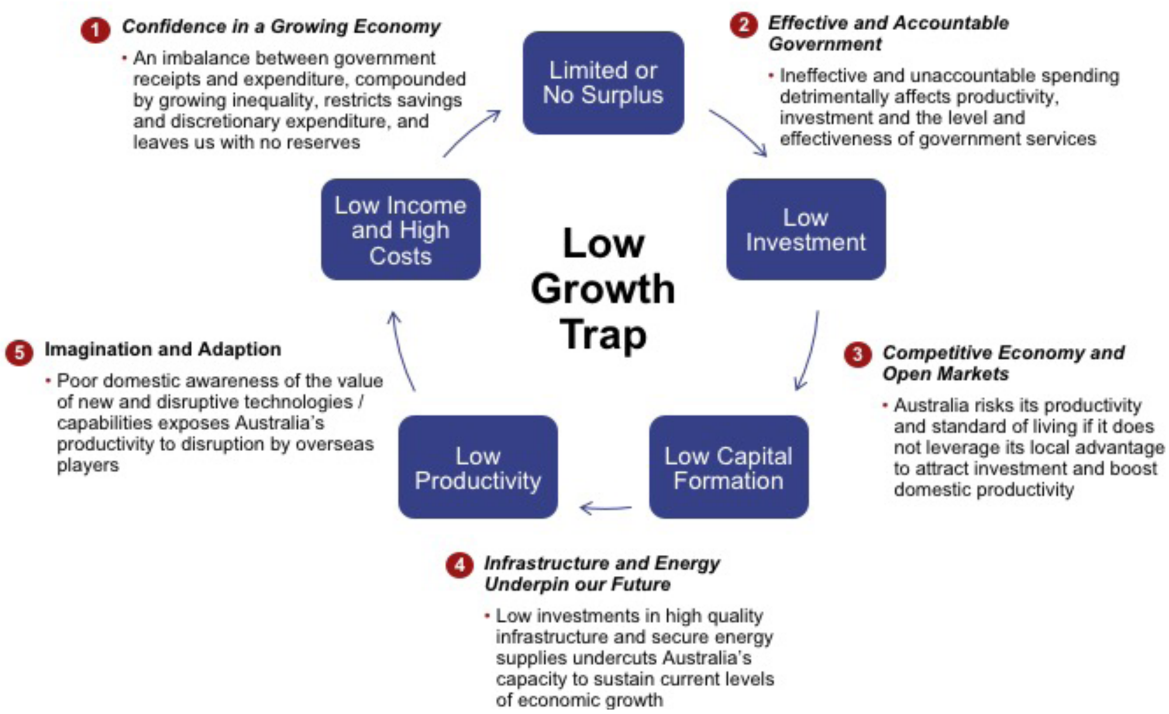
For Australia to continue to fulfil its promise of prosperity, growth and social justice, five major economic challenges must be addressed:

1. Australians expect more opportunities to work, study and retire with *security and confidence in a growing economy with a sustainable budget*; the budget must be brought into surplus and the mounting national debt repaid. Australians expect the freedom to prosper unencumbered by inherited public debt which has been built up to fund current entitlements.
2. Australia requires *effective, accountable and efficient* governments at all three levels for all functions and services. Further, governments have a duty to create an environment in which enterprise can flourish. Australians have the right to feel secure and empowered, but not entitled. People and businesses who can look after themselves should do so.
3. Australia is a trading nation that requires a *competitive economy, open markets* and free trade to prosper. Open economies grow faster than closed economies, and trade is an essential component of sustainable economic growth.
4. *Infrastructure and energy underpin our future:* Australia depends on continued investment in nation building infrastructure and affordable and secure energy to remain productive and competitive.
5. Australia must be *imaginative and adaptive* in dealing with a changing global economic landscape across existing industries and new industries. Innovation drives incremental improvement in the standard of living of all Australians and more importantly creates more opportunities. As a high cost, low productivity country this is essential for our future prosperity. This is the traditional gift that the current generation can pass on to future generations.

---

[1] Australian Electoral Survey

How Australia manages these challenges going forward is important as they will have a direct bearing on the future state of the country and, more importantly, its people. The diagram below illustrates how these national challenges interlink with each other and the five key drivers of national growth.



① *Confidence in a Growing Economy*

- An imbalance between government receipts and expenditure, compounded by growing inequality, restricts savings and discretionary expenditure, and leaves us with no reserves

② *Effective and Accountable Government*

- Ineffective and unaccountable spending detrimentally affects productivity, investment and the level and effectiveness of government services

③ *Competitive Economy and Open Markets*

- Australia risks its productivity and standard of living if it does not leverage its local advantage to attract investment and boost domestic productivity

④ *Infrastructure and Energy Underpin our Future*

- Low investments in high quality infrastructure and secure energy supplies undercuts Australia's capacity to sustain current levels of economic growth

⑤ Imagination and Adaption

- Poor domestic awareness of the value of new and disruptive technologies / capabilities exposes Australia's productivity to disruption by overseas players

Case Study: Sweden

While differences exist, the story of Sweden's economic success as a nation with low levels of national debt, low and stable inflation and a healthy banking system is a telling example. In the early 1990s, Sweden was hit by a deep financial crisis. Two banks were nationalised, unemployment rose rapidly and government spending and debt was out of control.

As a result, successive Swedish governments took tough measures over the following decade to institutionalise sustainable fiscal policy, proactively encourage global competiveness, and approach trade and innovation openly. When tested again over a decade later in the 2007-2008 global financial crisis, its resilience and prosperity in the face of recessionary pressure earmarked it as a model economy for the rest of Europe. Today, Sweden maintains a strong social welfare safety net with a competitive business tax system. Sweden's company tax rate is 22%.

1. Confidence in a growing economy

Australians expect more opportunities to work, study and retire with ***security and confidence in a growing economy with a sustainable budget***. The budget must be brought into surplus and the national debt repaid. Australians expect the freedom to prosper unencumbered by inherited public debt which has been built up to fund current entitlements.

Australia suffers from a structural deficit.

We are borrowing to meet the demands of growing recurrent expenditure while the tax base shrinks because of the ageing population. Few other nations bear such a heavy reliance on personal income and company taxes as Australia does in 2017. Fundamentally, there is an imbalance between the expected level of government revenue and payments. The position is unlikely to improve over the longer term as the effects of an ageing population, poor productivity and a decline in our terms of trade continue to bite.

The current level of government spending is simply unaffordable. The stimulatory government spending in reaction to the 2008-09 Global Financial Crisis was made at a time of record Terms of Trade. When the terms returned to normal and revenue fell, expenditure continued to grow.

Gross debt subject to the Treasurer's Direction[2] is steadily increasing. As at the 2016-17 MYEFO, the face value of Commonwealth Government Securities (CGS) subject to the Treasurer's Direction is projected to be $496 billion at the end of 2016-17. The total face value of CGS on issue is projected to rise to around $648 billion by 2026-27.

Net debt has increased from $153 billion (10 per cent of GDP) at 30 June 2013 to an estimated $317.2 billion (18.1 per cent) in 2016-17 at the 2016-17 MYEFO. Net debt is projected to peak at 19.0 per cent of GDP in 2018-19, before declining over the medium term to 9.9 per cent of GDP ($284.7 billion) in 2026-27 if the assumptions on which this forecast is based are achieved which follow.

Australia is entering its eighth consecutive year of deficit. Additionally, in a recent report prepared by KPMG, forecasted government revenue is projected to fall short of forecasted payments by 0.5% - 2.2% of GDP over the medium term (Figure 1.1).

If Australia's structural deficit continues to grow, it will compound the nation's fiscal deterioration and ultimately limit the government's options with respect to its discretionary spending. Australians most in need will suffer most. The KPMG projections which follow are less optimistic than the Treasury estimates canvassed below. This is primarily due to a lack of optimism that spending will reduce and draws upon the recent history of budget forecasting which overstates expected revenue collection.

---

[2] The Treasurer's Direction was introduced as an amendment to the Commonwealth Inscribed Stock Act 1911 on 10 December 2013.

Figure 1.1: Projected Commonwealth Government Receipts and Payments[3]

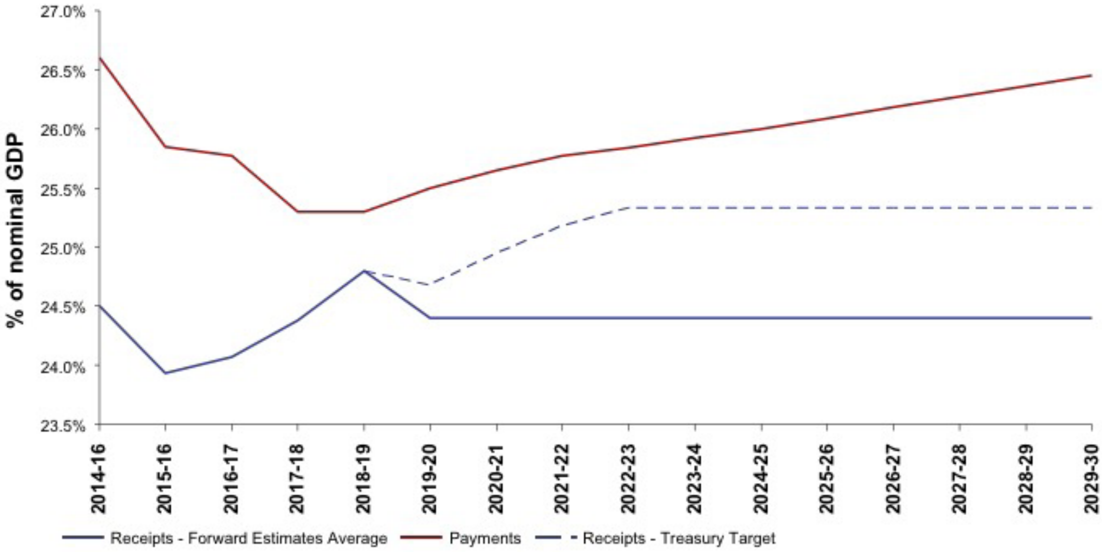
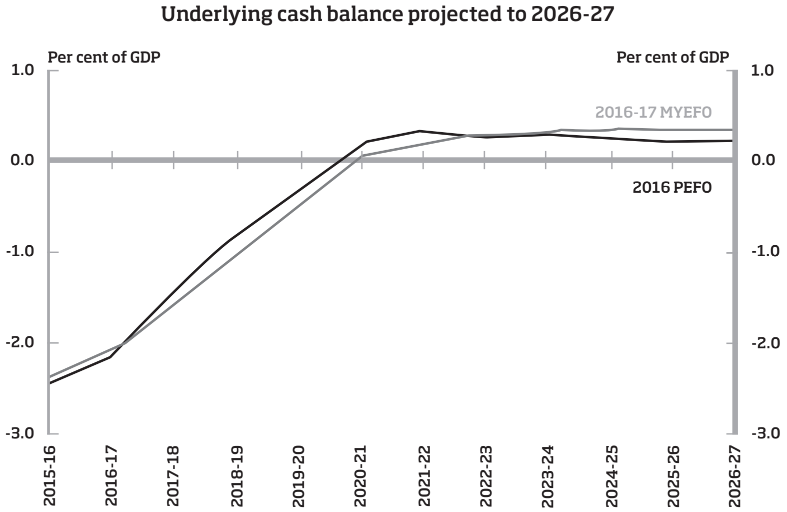


Figure 1.2 below from the 2016 MYEFO shows budget balance is due to occur in the next few years based on somewhat heroic Treasury assumptions. This outlook assumes Australia maintains a world-beating 25 year stretch of economic growth, the Senate passes measures to support fiscal consolidation and a continuing generally positive economic outlook.

Figure 1.2 below from 2016 MYEFO shows the budget balance is due to occur in the next few years based on Treasury figures.



Note: A tax-to-GDP cap of 23.9 per cent is applied to the 2016-17 MYEFO projections from 2022-23. This tax cap applied to the 2016 PEFO projections from 2021-22. Net Future Fund earnings are included in projections of the underlying cash balance from 2020-21 when drawdowns from the Future Fund commence.
Source: Treasury projections.

---

[3] KPMG, *Solving the Structural Deficit*, April 2016

The table below shows the assumptions built into the Treasury estimates in detail and compares the estimates with 2013-14.

Assumptions	2013-14 MYEFO (per cent per annum)	2016-17 MYEFO (per cent per annum)
Real Gross Domestic Product		
Budget year	2½	2
FE1 (a)	2½	2¾
FE2 and FE3 (b)	3	3
Medium term (c)	Around 3	2¾ (from 2022-23)
Inflation		
Budget year		1¾
FE1 (a)		2
FE2 and FE3 (b)		n/p
Medium term (c)	Around 2½	2½
Nominal Gross Domestic Product		
Budget year	3½	5¾
FE1	3½	3¾
FE2 and FE3	4¾	n/p
Medium term (c)	5½	n/p
Unemployment rate		
Budget year	6	5½
FE1	6¼	5½
FE2 and FE3	Around 6	n/p
Medium term (c)	Around 6	Converge to 5
Participation rate		
Budget year		64½
FE1	65	64½
FE2 and FE3	Assumed to fall as population ages	n/p
Medium term (c)		n/p
Productivity	1.6	n/p
Wages growth		
Budget year	2¾	2¼
FE1	2¾	2½
FE2 and FE3	4	n/p
Medium term (c)	4	n/p
Terms of trade growth		
Budget year	Declining until 2019-20, then remaining constant at the 2006-07 level	14
FE1		-3¾
FE2 and FE3		n/p
Medium term (c)		Constant at the 2005 level

Two key challenges underpin Australia's growing structural deficit, namely:

1. Recurrent and unsustainable government spending (magnified by an ageing population); and
2. A narrow, volatile and overly concentrated tax base.

Recurrent spending

At the 2013-14 MYEFO, Commonwealth payments were $409 billion, approximately 25.9 per cent of GDP in 2013-14. Payments as a proportion of GDP have remained high following the Global Financial Crisis, being 25.6 per cent of GDP at the 2013-14 and 2014-15 Final Budget Outcomes, and rising marginally to 25.7 per cent of GDP at the 2015-16 Final Budget Outcome.

As at the 2016-17 MYEFO, payments are projected by Treasury to decline and remain steady at 25.2 per cent of GDP over the forward estimates, improving the underlying cash balance.[4]

However, this is based on the assumption the Senate will aid fiscal consolidation by passing a number of savings measures and that Australia will maintain our world-beating run of 25 consecutive years of economic growth.

Commonwealth net debt is approaching $317.2 billion in June 2017. While concerning, debt of itself can be both 'productive' and 'unproductive'. For example, 'productive' debt used efficiently to build long-term wealth for the country (investment in economic infrastructure), has clear benefits for national productivity, employment and potential growth.

Conversely, 'unproductive' debt used inefficiently to fund recurrent spending (e.g. pension payments, welfare payments and healthcare costs), should be avoided since it does not generate revenue, and requires compounding amounts of debt to sustain it with no means of paying it back.

Today, 'unproductive' debt is a significant and growing part of Australia's debt profile as a result of legislated payments and commitments to unfunded programs in disability, health and education. Inefficient, ineffective and unaccountable government spending (to be discussed in more detail under **Challenge 2** of this Statement) also add to the problem.

Major assumptions by Treasury put growth between 2.5 and 3 per cent, inflation no higher than 2.25 per cent and the Terms of Trade are either negative or steady at the 2006/7 level.

Ageing population

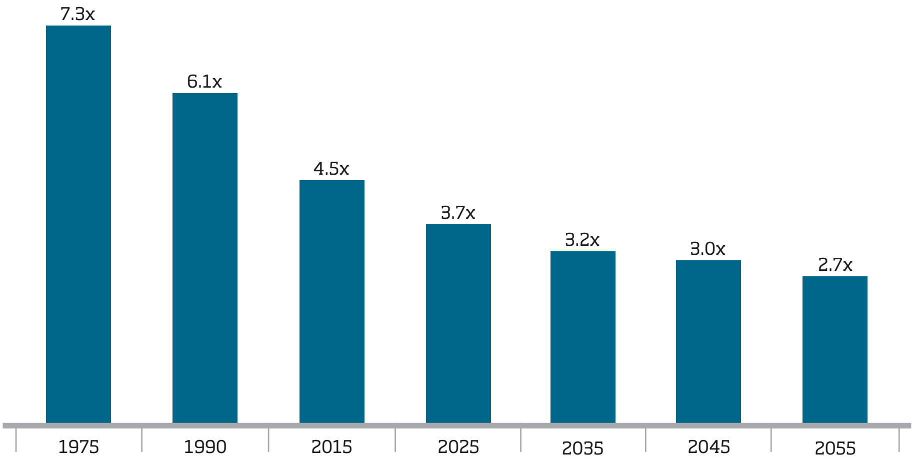
Australia has an ageing population. This results in both a potential decrease in government revenues (as the number of working age people decreases, taxable income and GST decreases), and an increase in welfare and other payments. As workers retire, the number of beneficiaries of pension and welfare payments increases exacerbated by the increasing demands for healthcare and aged care.

Figure 1.3 forecasts the ratio of working age persons to statutory pensionable age persons, otherwise known as the 'Dependency Ratio'. A decrease in the Dependency Ratio indicates a situation in which an increasing number of pension and health payment beneficiaries are supported by a reduced number of economically active potential contributors.

---

[4] Treasury of Australia, *Budget Forecasts*, 2016

Figure 1.3: Dependency Ratio[5] (Number of people aged from 15 to 64 relative to the number of people aged 65 and over)



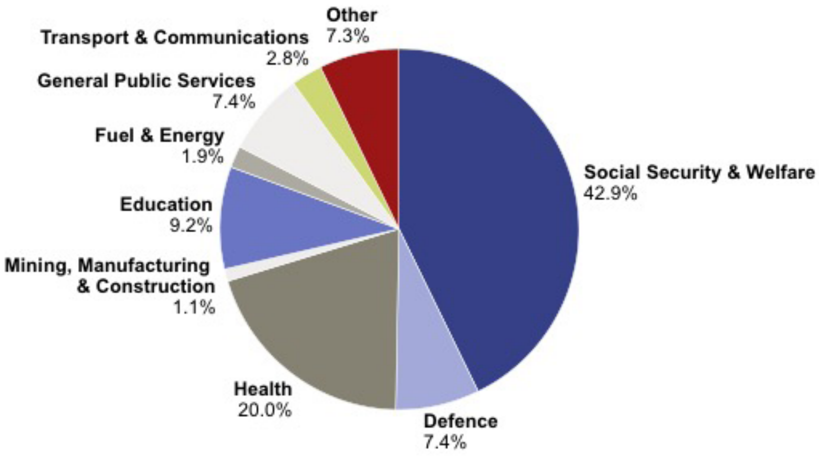
As the dependency ratio decreases over time, heavier demands are placed on government spending and the working population to maintain the flow of benefits to older groups. For example, 2.7 people working in 2055 would have to contribute as much as, if not more than, 4.5 people today to support the health and welfare demands of an ageing population at today's levels. That assumes we maintain our current level of skilled immigration. If we cut skilled immigration, the demographic profile will only worsen and it will be harder to return to budget balance.

Alarmingly, significant spending on non-revenue generating payments (such as social security, welfare, defence and health) is forecast to grow faster than GDP (Figures 1.3 and 1.4). Meanwhile, forward looking productive investments such as transport and communications are growing at a rate lower than GDP.

Failure to proactively manage government expenditure risks eroding the pool of available funds both now and into the future for value generating investments by locking it into non-revenue generating recurrent spending.

The following figure shows the bulk of expenditure falls into welfare and health cost buckets.

Figure 1.4: Estimates of 2016 Australian Government general government expenses by function[6]



---

[5] Treasury of Australia, *Intergenerational Report,* 2015

[6] Treasury of Australia*, Budget Forecasts*, 2016

Figure 1.5: Estimates of Australian Government General Government Expenses by Function[7]

	2016-17 ($m)	2017-18 ($m)	2018-19 ($m)	2019-20 ($m)	Growth Rate	Growth Assessment
Social Security and Welfare	155,792	162,723	178,356	184,941	5.9%	High
Defence	26,816	28,030	29,436	31,488	5.5%	High
Health	72,842	73,724	76,340	78,792	2.7%	Med
Fuel and Energy	6,874	7,040	7,224	7,591	3.4%	Med
Mining, Manufacturing and Construction	4,052	4,048	4,238	4,500	3.6%	Med
Education	33,339	33,087	33,699	34,973	1.6%	Low
General Public Services	26,991	20,683	21,009	22,080	(6.5%)	Low
Transport and Communications	10,296	10,716	7,588	8,238	(14.9%)	Low
Other Economic Affairs	9,866	8,496	8,324	8,238	(5.8%)	Low
Housing and Community	5,131	5,142	4,541	4,226	(6.3%)	Low
Public Order and Safety	5,117	4,762	4,695	4,629	(3.3%)	Low
Recreation and Culture	3,532	3,448	3,351	3,295	(2.3%)	Low
Agriculture, Fisheries, and Forestry	2,914	2,960	2,765	2,371	(6.6%)	Low
Total	**363,562**	**364,859**	**381,566**	**393,459**	**2.7%**	

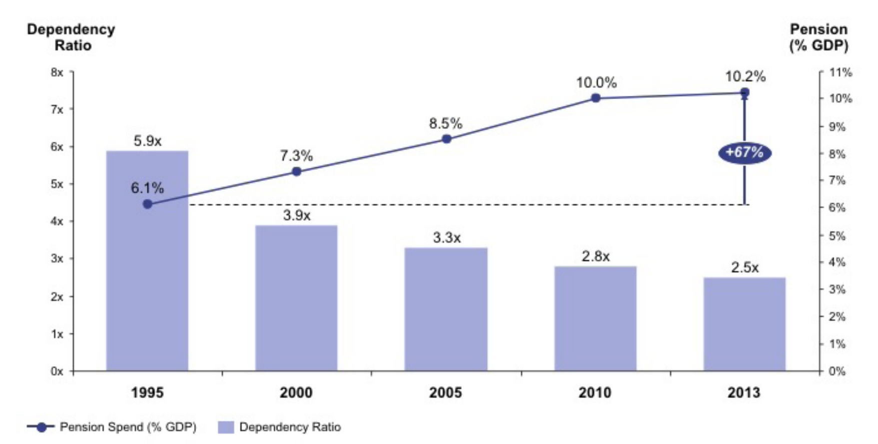
---

[7] Treasury of Australia, *Budget Forecasts*, 2016

Case Study: Japan's ageing population

Japan provides a warning of how a country's finances can be crippled by pension spending as a proportion of GDP increasing as the dependency ratio falls. Between 1995 and 2013, Japan's dependency ratio fell from 5.9x to 2.5x - a similar level to that of Australia's 1990 to 2055 projected dependency ratio. Further, it shows that the budget will need to be re-adjusted if Japan's significant increase in pension spend is any indication of Australia's future spend.

Dependency Ratio and Pension Spend of Japan



The 2015 Intergenerational Report showed even after 50 years of compulsory superannuation there is no significant reduction in the number of Australians drawing on a publicly funded pension. In 2050, some 80 per cent of Australians beyond retirement age will be entitled to the Aged Pension in full or in part. It represents almost no change to today's call on the public pension system which costs Australia $44 billion in 2015-16.

External shocks, budget balance and the triple A rating

Australia's fiscal position makes it susceptible to external shocks. Its triple A credit rating, reflecting a historical reputation for fiscal prudence, is far from guaranteed in the future. The Secretary of the Treasury told the Sydney Institute last year the rating depended on a credible fiscal consolidation and a smooth transition to a more diverse economy.

> *We should not be complacent about this. I know from personal experience during the financial crisis how important a strong credit rating is to investor confidence. If we are to permanently reduce net debt, we are going to need to achieve sustained 'structural' budget improvements.*
>
> *It can be difficult to separate accurately which elements of the budget should be considered structural and which cyclical; the many measures that attempt to do so all have their limitations. Treasury assesses the long-term position of the budget by estimating the so called "structural budget balance".*
>
> *But in essence, the "structural budget balance" is an estimate of what the budget position would be in the absence of cyclical or temporary factors. For example, cyclically high unemployment raises government expenditure via higher unemployment benefits and lowers government revenue via lower labour income tax receipts.*
>
> *With the exception of unemployment benefits, government expenditure is assumed to be structural. Treasury's estimates of the structural budget deficit have successively worsened over the past several years, in line with downgrades to the underlying cash balance.*

> *There are no hard and fast rules on fiscal repair – and there are many factors to consider. There were determined efforts to cut spending in the 1980s and also in the late 1990s.*
>
> *These were characterised by: limiting new spending and/or fully offsetting net new policy with savings from the same portfolios; better targeting of transfer payments; and changes to payments to the states.*
>
> *Going forward, the more we can do to limit net new policy spending, the better. This includes reprioritisation of spending within portfolios. For the longer-term, we need to look for substantial structural savings across the board - including transfer payments.*[8]

The message is clear: balancing the budget is essential to retaining Australia's triple A rating. Its loss would reverberate throughout the economy, notably through Australia's banking system, which would hurt consumers and businesses alike.

As former Treasury Secretary and National Australia Bank Chairman Ken Henry AC said in the context of the triple A rating:

> *Australia – and especially South Australia – has much to offer: world-class health and education; deep agricultural expertise and premium food and wine; and centres of innovation capable of developing the technologies of the future. I stress, though, that these opportunities will not be harnessed unless they are supported by a coherent narrative of economic reform. And that includes a strong bipartisan commitment to a credible medium-term fiscal strategy.*[9]

A credible medium-term fiscal strategy must focus on how Australians are taxed as much as how their taxes are spent.

A narrow and concentrated tax base

Australia's fiscal challenge is compounded by its reliance on a narrow, concentrated and volatile tax base that is subject to fluctuations in mobile capital which, in turn, depends on the growth in the world economy.

Tax receipts are estimated to be $378.8 billion in 2016-17.

Tax receipts are projected to reach 23.9 per cent of GDP in 2022-23, beyond which Treasury's medium-term model assumes that they remain constant as a share of GDP.[10] The model assumes Australia maintains its world-beating run of economic growth. Yet with tax revenue "capped" at this level, projected surpluses are less than 0.5% of GDP over the medium term, too small to make meaningful inroad into the debt.

Tax revenue in Australia is drawn from over 100 different taxes by three levels of Government but 90% is raised from just three taxes: GST, personal and company tax. 73% of the Federal budget's revenue is collected from company and individual income tax alone (Figure 1.6). Magnifying this bias is the fact that a small number of corporates (<0.1%) and individuals (9%) contribute the majority of the revenue in their respective segments (59% and 47% respectively).[11] [12] [13]

---

[8] John Fraser, Secretary to the Treasury – address to the Sydney Institute January 2016

[9] Ken Henry AC comments at National Australia Bank AGM 2016

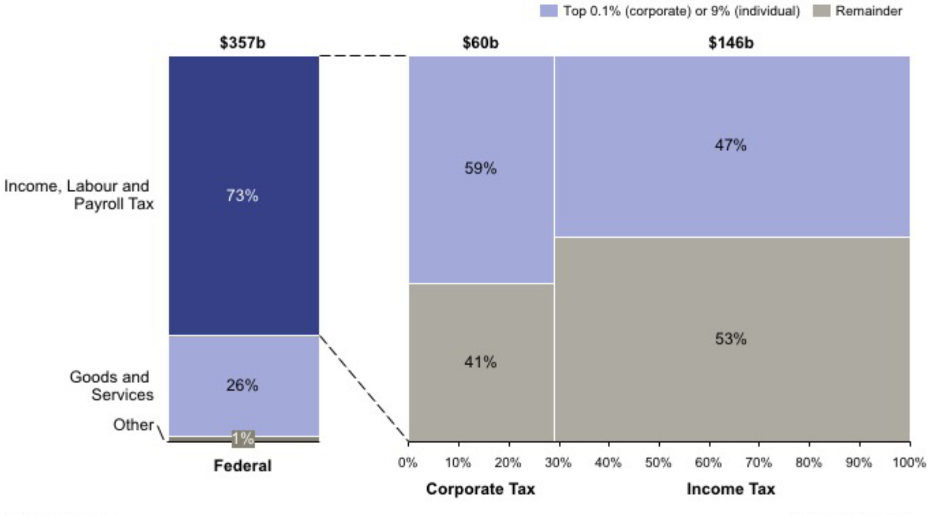
[10] Treasury of Australia, *Budget Forecasts*, 2016

[11] Australian Taxation Office, *Corporate Tax Statistics*, 2011-12

[12] Australian Taxation Office, *Income Tax Statistics*, 2012-13

[13] Australian Taxation Office, *Income Tax Statistics*, 2012-13

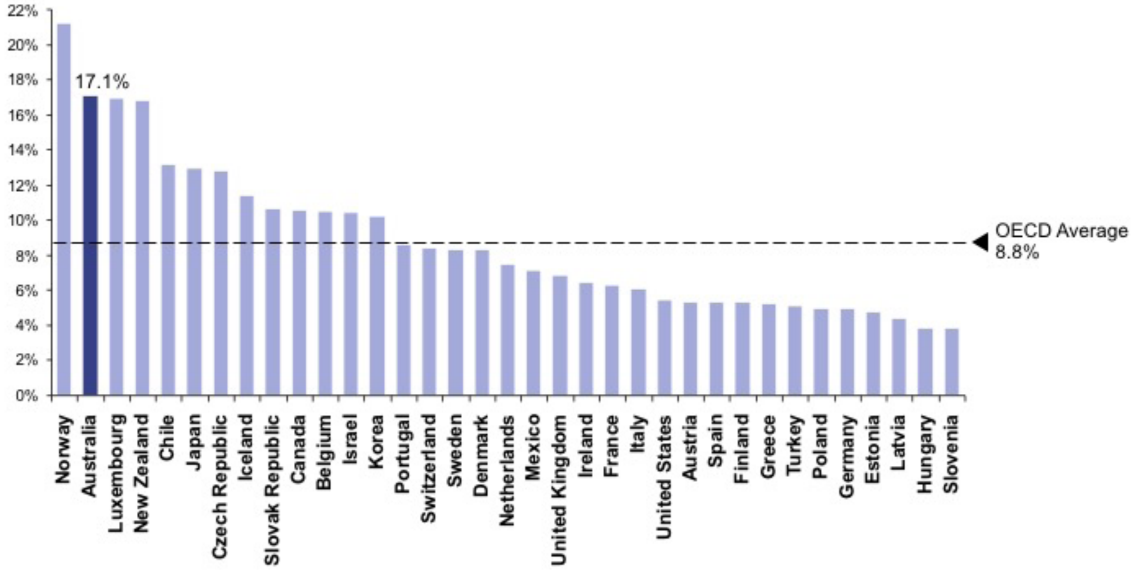
Figure 1.7: Australian Federal Government Tax Composition



Australia relies more heavily on corporate and income tax than almost any other OECD nation. Company tax accounts for 17.1% of revenue, compared to the OECD average of 8.8%. [14] [15]

Australia relies less on more efficient and less volatile taxes such as consumption taxes (Figure 1.8 and Figure 1.9). The 2016-17 MYEFO illustrates the volatility of the company tax base with a $6 billion write down of company tax revenue over the forecasted estimate.

Figure 1.8: Corporate Tax (% of Tax Revenue)

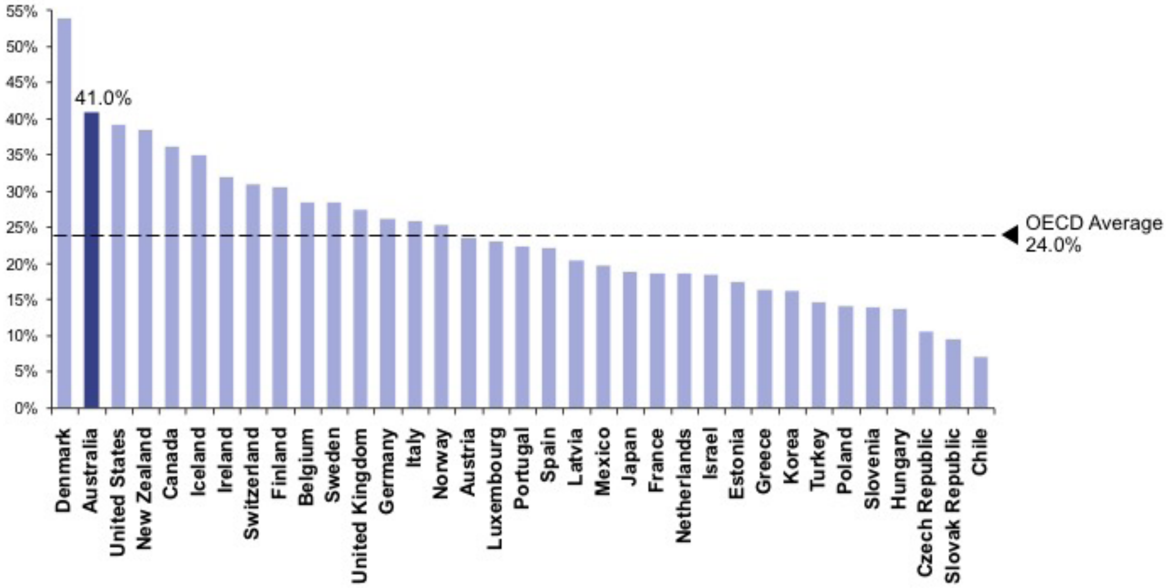


---

[14] OECD, *Revenue Statistics*, 2016

[15] Revenue excludes social security taxes, as Australia has a private sector managed superannuation scheme.

Figure 1.9: Personal Income Tax (% of Tax Revenue)



The concentration of taxes (personal and company taxes) adds considerably to the risk to the Commonwealth. Reducing Australia's tax revenue volatility by broadening its base is a key challenge in managing Australia's structural deficit.

Options paper two "Balancing the budget" will include an examination of the sustainability of the budget (both the revenue and expenditure sides of the Commonwealth and State budgets).

This paper will be released in conjunction with options paper three "Better services" which will look at the allocations of responsibilities within the Federation, and improving service delivery through effectiveness and efficiency in government.

2. Effective and accountable government

Australia requires **effective, accountable and efficient** government for all its functions and services. Australians have the right to feel empowered and secure, but not entitled.

Effective and efficient government spending is a prerequisite to boosting productivity and improving public sector performance, which in turn is critical to our growth as an economy.

Regrettably, the effectiveness of government programs and grants is seldom reliably assessed. They tend to be measured by inputs rather than outcomes and too little attention is paid to inefficient and duplicated spending between the Commonwealth and the States. Australia ranks a lowly 53rd in the World Economic Forum Competitiveness Index measure of efficient public spending (Figure 2.1). This is particularly relevant in a time when governments around the world are being asked to "do more, do it better, and do it with the same amount of taxes".[16]

Figure 2.1: Wastefulness of Government Spending[17]

"In your country how efficiently does the government spend public revenue?"
[1 = extremely inefficient; 7 = extremely efficient in providing goods and services]

Rank	Economy	Value
1	Qatar	6.0
3	Singapore	5.9
5	New Zealand	5.1
14	Hong Kong SAR	4.5
20	Germany	4.2
22	Japan	4.1
23	Canada	4.1
34	United Kingdom	3.8
53	Australia	3.5
75	United States	3.1

Two challenges emerge from the World Economic Forum's analysis:

1. Correcting the heavy vertical fiscal imbalance; and
2. Reforming a complex and largely unsustainable system of government support.

---

[16] McKinsey, *Global Trends Affecting the Public Sector*, June 2007

[17] World Economic Forum, *Global Competitiveness Index*, 2016

A heavy vertical fiscal imbalance

Public financing in Australia is marked by a high degree of vertical fiscal imbalance, the disparity between the revenue generation ability of individual jurisdictions and their spending obligations. Of principal concern is the mismatch between state and territory spending responsibilities and their limited appetite to use their revenue generation capacity, and the Commonwealth's capacity to raise more revenue than it requires for its own expenditure. The States' current fiscal outlook is better than the Commonwealth. However, in the longer term, the States bear rising health and education costs which are unsustainable.

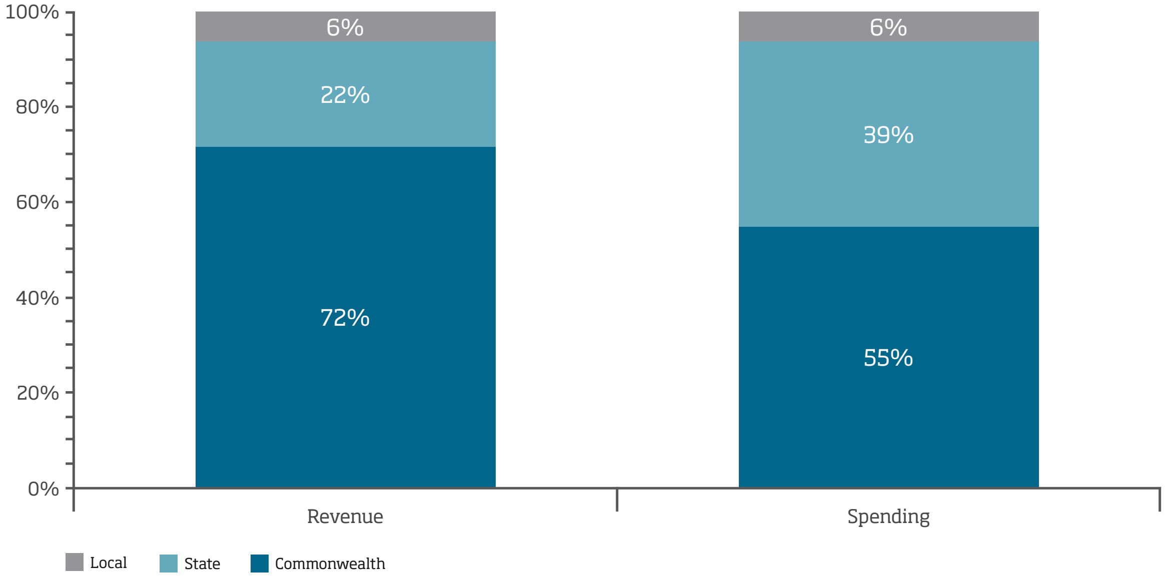
Inefficiency indelibly marks the Australian tax system: the States rely heavily on inefficient stamp duties and counter-growth payroll tax while the Commonwealth taxes individuals and companies at an internationally uncompetitive level that supresses economic activity. All jurisdictions rely on tax systems which confuse accountability and damage the national economy.

The vertical fiscal imbalance often makes it difficult to hold a single government to account for the provision of core services such as health, welfare and education.

In 2015/16 the States spent $225b[18] and received $107b from the Commonwealth through GST and grant payments.[19]

In 2014-15, the Federal Government accounted for 80% of own-source revenue raised by all levels of government, but was responsible for only 68% of government own-purpose spending. By comparison, State Governments accounted for 17% of own source revenue and 27% of own purpose spending (see Figure 2.2).

Figure 2.2: Own source revenue and spending, by level of government[20]



The extent of vertical fiscal imbalance and resulting transfers is generally higher in Australia than in other federations. Figure 2.3 compares the states shares of total government revenue and spending across a number of federations. The absolute gap between state share of total revenue and total spending is highest in Australia, while the relative gap is only surpassed in Belgium and Austria amongst the countries profiled.

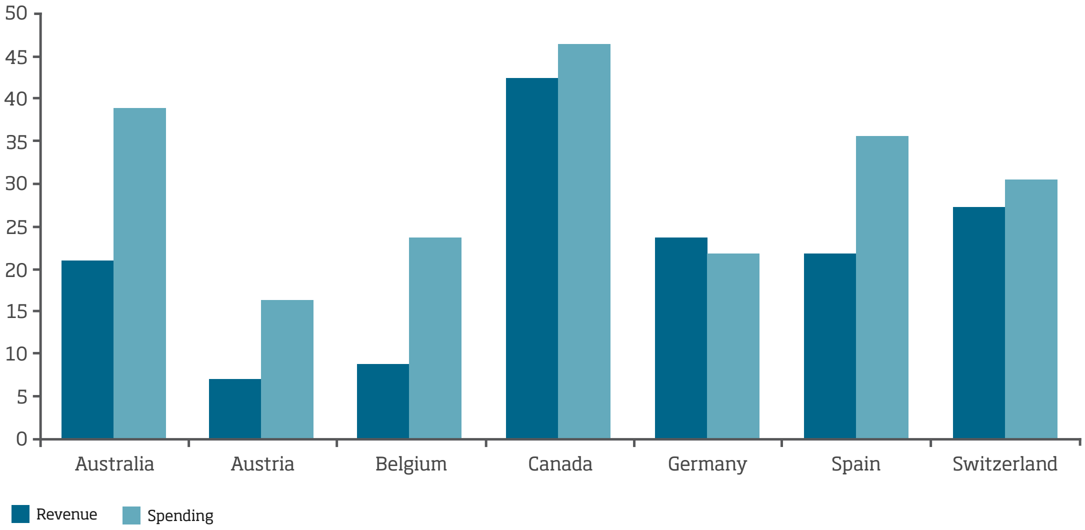
---

[18] State Budgets

[19] The Treasury, *MYEFO 2015-2016*

[20] NSW Treasury and Australian Bureau of Statistics, 5512.0: *Government Financial Statistics*, 2014-15

Figure 2.3: State Government own resource/own-purpose spending, as a share of total government revenue/spending[21]



Such a significant gap leads to shared responsibilities in the funding and delivery of services by the Commonwealth in functions that are better left to the States, leading to duplication and inefficiency.

The 2014 National Commission of Audit (NCOA) and the 2015 Federation White Paper proposed a number of options to reduce the funding gap. Yet apart from research by the Samuel Griffith Society, the Centre for Independent Studies and the Department of Prime Minister and Cabinet, there has been minimal public discussion on the lack of accountability within the federation in recent years. Sadly Australian business has not identified it as an important issue.

Complex and potentially unsustainable system of government support

Government support as it relates to Australia's transfer system must also reflect a commitment to values of fairness and support for those who need it most. It must be efficient, sustainable and transparent. Presently, cash transfer payments are the most significant component of Australia's social support system in terms of expenditure. For example, social security and welfare payments accounted for over $152 billion[22] in 2016 – more than a third of total federal spending and by far the largest and fastest growing component.

Given the nature of Australia's ageing population and its shrinking tax base (already discussed under **Challenge 1**) changes are needed to make Australia's transfer system more sustainable. In particular, imminent challenges faced by the transfer system include the:

1. Falling rate of workforce participation;
2. Complexity surrounding income support and incentives to work; and
3. The ever growing rise in eligibility for entitlement.

---

[21] International Monetary Fund, *Government Finance Statistics Yearbook*, 2008

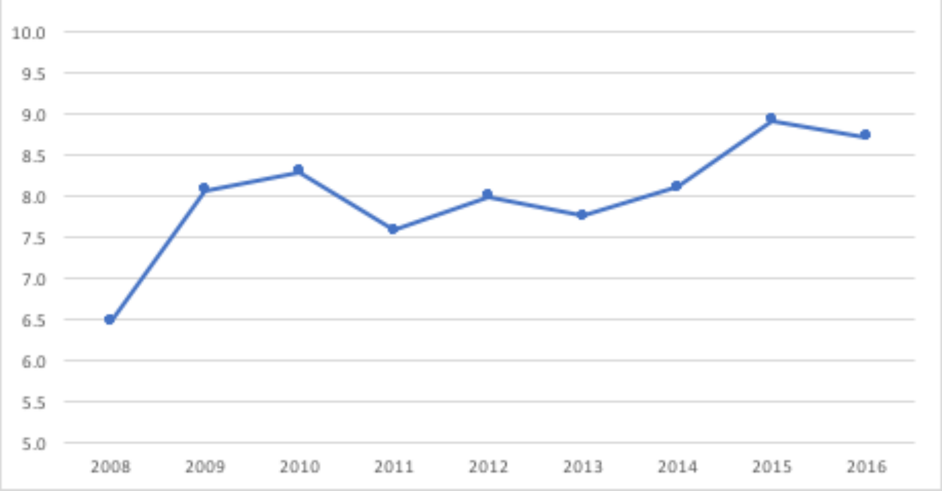
[22] Australian Budget, Statement 5: *Expenses and Net Capital Investment*, 2016-17

Improving workforce participation

Balance must be restored between the work incentive and the provision of benefits to encourage those who are able to support themselves, in full or in part, to do so. Australia's labour force participation rate is high compared to other G20 countries at 77%, but there is still room for improvement when compared with other well developed OECD countries (Figure 2.4), particularly given our relatively small workforce and ageing population.

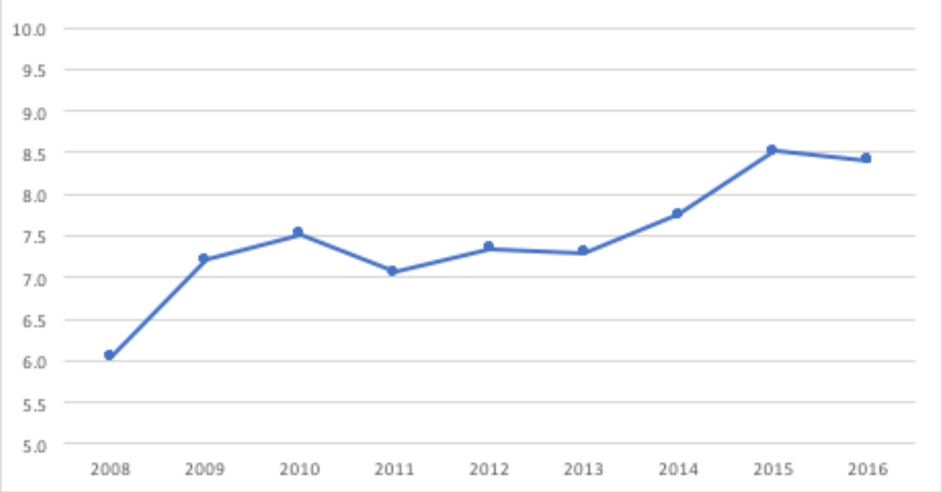
During the Post-GFC period both the proportion of employed workers that are underemployed and the proportion of people in the labour force that are underemployed have risen significantly from 6% to 6.5% to between 8% and 9%. This follows a long-term historical trend since the 1970s where both rates remained below 3%.[23]

Figure 2.4: Underemployment Ratio (%) 2008-2016



0.00%

Figure 2.5: Underemployment Rate (%) 2008-2016



The share of part-time employees as a proportion of total employees is extremely uneven across individual sectors, with government related sectors such as health and education having around a 50/50 split between the two categories in contrast to full-time dominated sectors such as Mining and Utilities.[24]

---

[23] Australian Bureau of Statistics, 6202.0 *Labour Force Australia*, 2016

[24] Australian Bureau of Statistics, 6333.0 *Characteristics of Employment, Australia, August 2014*

Figure 2.6: Share of Full-Time/Part-Time Employees by Industry 2014

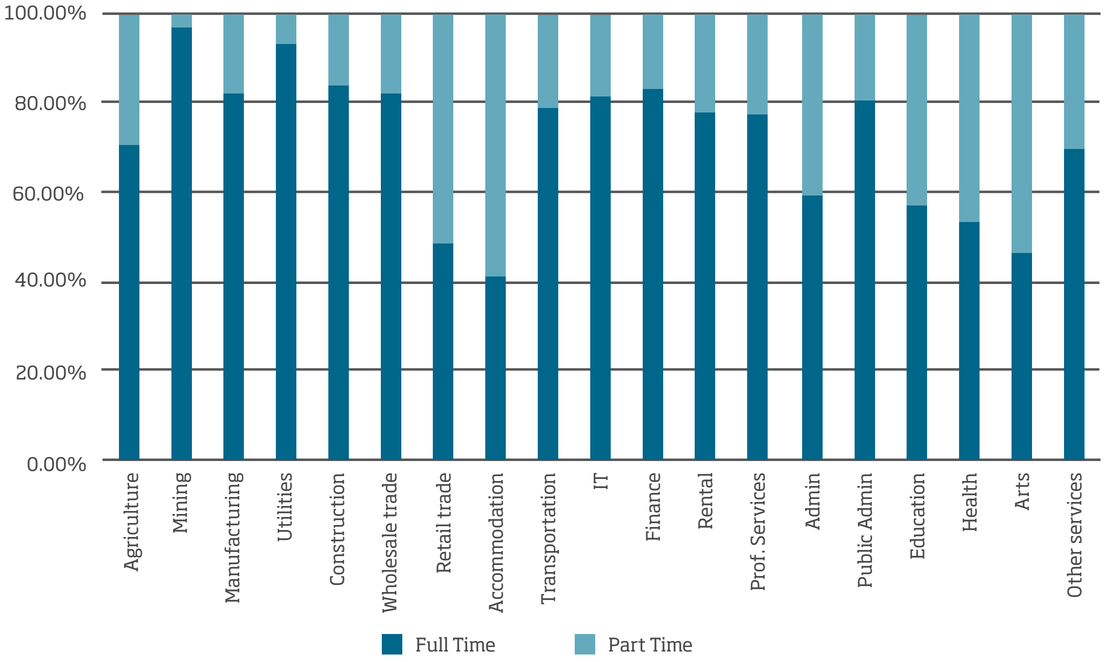
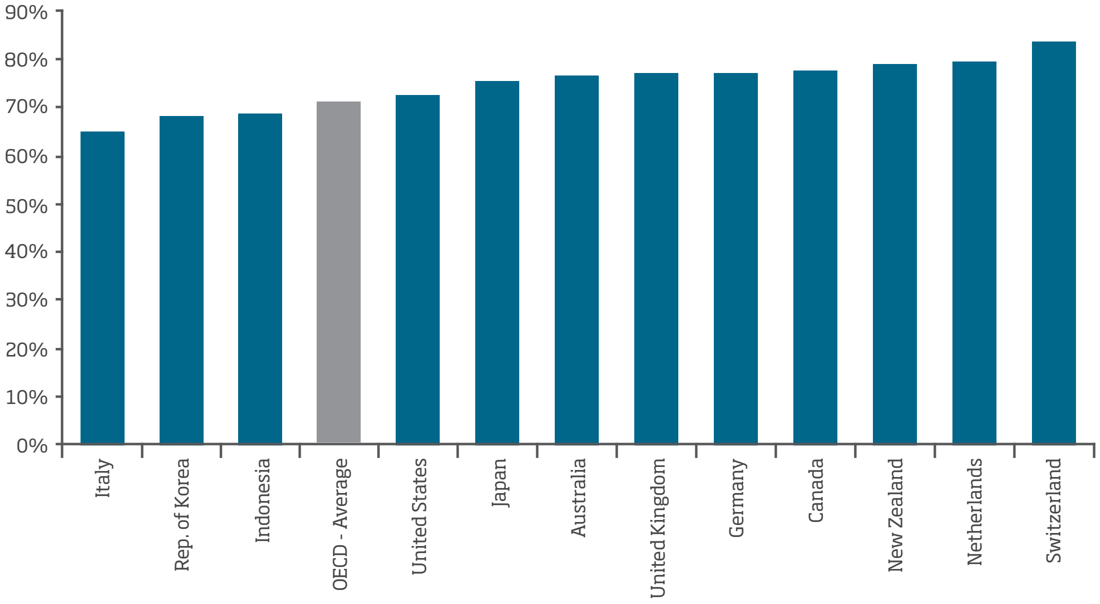


Figure 2.7: Labour force participation rate, 15-64 year-olds, % in same group[25]



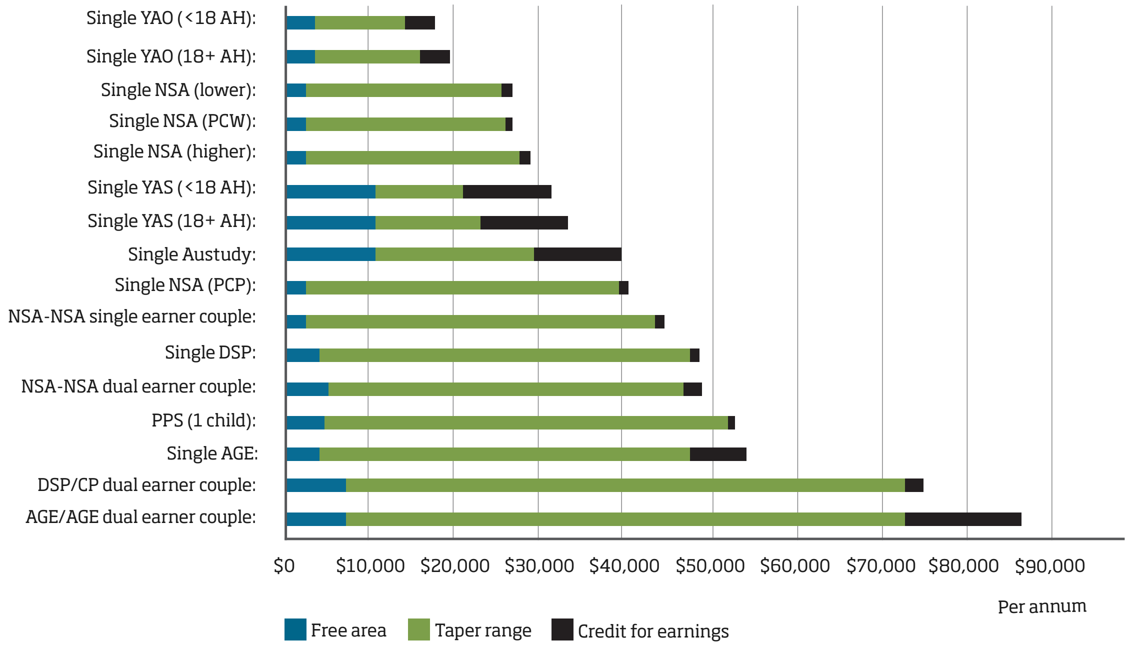
Income support complexity

The system of welfare payments and income testing arrangements must be made less complex. Australia has one of the most targeted income support systems in the OECD and, as stated by the McClure Report, the level of government support for different income support categories can vary widely (Figure 2.8).

---

[25] OECD, *Labour Force Participation Rate*, 2015

Figure 2.8: Different Income Tests for Different Payments[26]



A complex system serves the interests of neither beneficiary nor taxpayer. It makes it hard for potential claimants to understand and access support and is difficult to administer effectively and efficiently.

Complex income testing arrangements confuse recipients about the rewards for working. Taper rates vary widely between different income support categories leading to anomalies in the effective marginal tax rate (EMTR) - the combined effect of income test withdrawals and tax obligations.

The complexity of the system (and the fact that welfare payments are made tax-free) can lead to unintended situations where an individual is actually better off receiving an income through welfare than through full-time employment.[27]

A simpler, clearer cash transfer system with a smaller number of basic payments and limited additional allowance would reduce the disincentives to self-reliance. The McClure Report's conclusions should be heeded:

> *The design of a new simpler system should take account of payment and tax interactions, to ensure sufficient incentives to work and provide certainty for individuals about the financial outcomes of work.*[28]

Options paper two "Better Services" will investigate the need to improve service delivery through effectiveness and efficiency in government.

---

[26] Department of Social Services, *McClure Report: A New System for Better Employment and Social Outcomes*, 2015

[27] The Australian, 'Parental welfare pays more than work', October 2016

[28] *A New System for Better Employment and Social Outcomes*, Report of the Reference Group on Welfare Reform to the Minister for Social Services, February 2015

3. Competitive economy and open markets

Australia is a trading nation that requires a ***competitive economy, open markets*** and free trade to prosper. Open economies grow faster than closed economies, and trade is an essential component of sustainable economic growth.

Australia faces the challenge of maintaining its status as a resilient and internationally competitive economy. This is critical since a competitive economy fosters innovation, productivity and growth, which in turn create opportunities, reduce poverty and create wealth.

The World Economic Forum's Global Competitiveness Index ranked Australia's global competiveness as a disappointing 21st overall (down five spots from 16th position five years prior) (Figure 3.1).[29]

Figure 3.1: Global Competitiveness Index Key Factors Rankings[30]

Pillar of Competitiveness	2016 Rank	2011 Rank	Change in Rank
1: Institutions	19	14	5 ↓
2: Infrastructure	16	22	6 ↑
3: Macroeconomic Environment	28	17	11 ↓
4: Health and Primary Education	9	13	4 ↑
5: Higher Education and Training	8	14	6 ↑
6: Goods Market Efficiency	27	18	9 ↓
7: Labour Market Efficiency	36	11	25 ↓
8: Financial Market Development	7	3	4 ↓
9: Technology Readiness	21	23	2 ↑
10: Market Size	22	18	4 ↓
11: Business Sophistication	27	29	2 ↑
12: Innovation	23	21	2 ↓
Global Competitiveness Index Overall	21	16	5 ↓

Australia's tax and industrial relations systems are the principal drivers of the collapse in our position over the past five years.

The overarching challenges facing Australia relate to our ability to:

1. Attract and retain foreign investment;
2. Maintain free and open international trade; and
3. Encourage business innovation and investment (to be discussed in more detail under **Challenge 5** of this Statement).

---

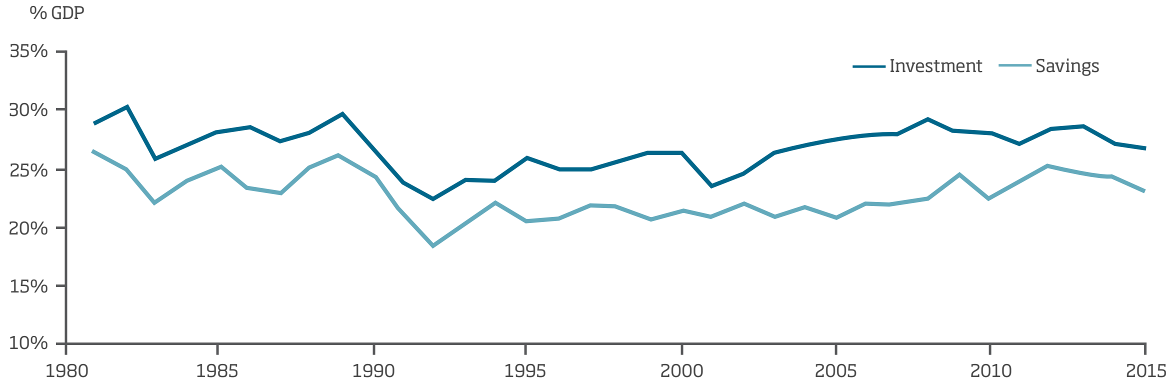
[29] World Economic Forum, *Global Competitiveness Index,* 2015-16

[30] World Economic Forum, *Global Competitiveness Index,* 2015-16

Attracting and retaining foreign investment

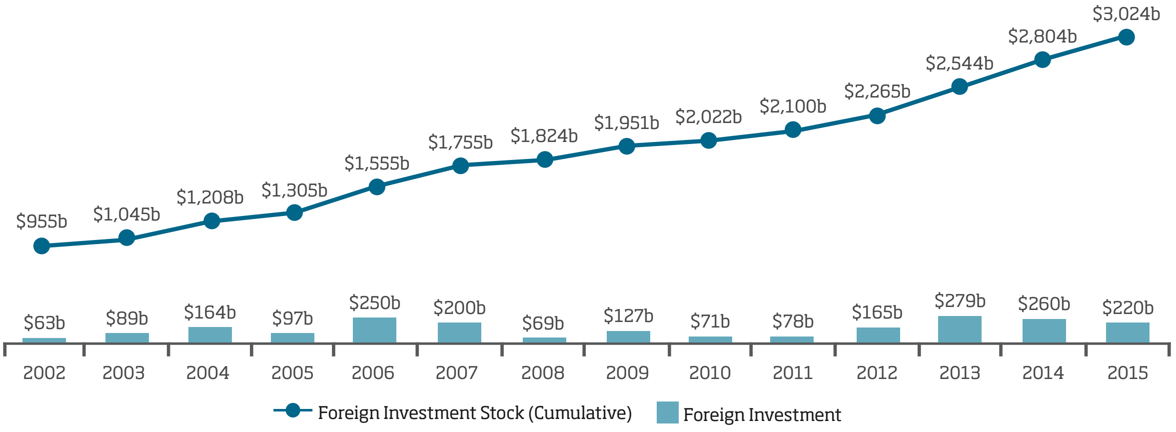
Australia is falling behind other countries in productively engaging its people, tools and resources to attract and retain foreign investment. We are a reasonably well educated and happy country with stable and democratic government and a sound legal system but we cannot afford to be complacent. Foreign investment is essential to reducing the shortfall between the demand for national investments and national savings (Figure 3.2). There is a significant risk of a national funding shortage if foreign investments continue to decline or if there is another global freeze in capital movement as experienced during the 2008-09 international financial crisis.

Figure 3.2: Australia's National Investment and Savings Gap[31]



Over the past 20 years, foreign investment into the Australian economy has accounted for over $3 trillion in investment (Figure 3.3), and at the end of 2015 the stock of direct foreign investment in Australia was valued at $735.5 billion.[32] Furthermore, industries that have traditionally underpinned Australia's growth have been the major recipients of this significant capital flow, with resources (40.1%) and manufacturing (11.7%) accounting for the largest shares of the stock (Figure 3.4).

Figure 3.3: Foreign Investment in Australia[33]



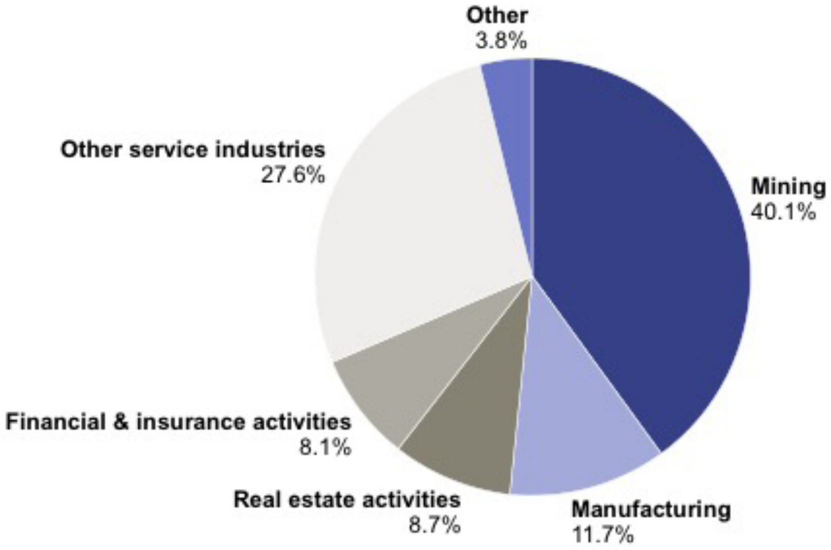
---

[31] Treasury of Australia, *Foreign Investment into Australia*, 2016

[32] Department of Foreign Affairs and Trade, *International Investment Australia 2015*, 2016

[33] Australian Bureau of Statistics, 5352.0: *International Investment Position*, 2015

Figure 3.4: Foreign Direct Investment in Australia by Industry - stocks[34]



By the same rationale, the potential impact of increasing foreign investment is also significant. In a study commissioned by the Business Council of Australia by Deloitte Access Economics, it was found that a 10% increase in foreign investment could increase real GDP and wages by more than 1% by the year 2020.[35]

> *"Year after year, for more than two centuries now, capital from the rest of the world has helped build our country. If we had to rely on our own resources, we would not be enjoying the prosperity that we do today. Our asset base and our productive capacity would be lower, and so too would be our standard of living"*
>
> - Phillip Lowe, RBA Governor

Foreign investment is - and has been for over 200 years - critical in supporting Australia's economic growth. It is concerning then that foreign investment in Australia actually decreased by more than 20% in the two years from 2013 to 2015 (Figure 3.3).

The residual optimism surrounding Australia's business environment is largely due to the relative performance of the economy during the Global Financial Crisis. However, as global mobility of capital continues to increase, competition for foreign investment is becoming more intense.

There are three significant challenges in attracting foreign investment:

1. A relatively high corporate tax rate and complex tax system;
2. An inflexible labour market; and
3. A slow, rigid and costly regulatory system across three levels of government.

---

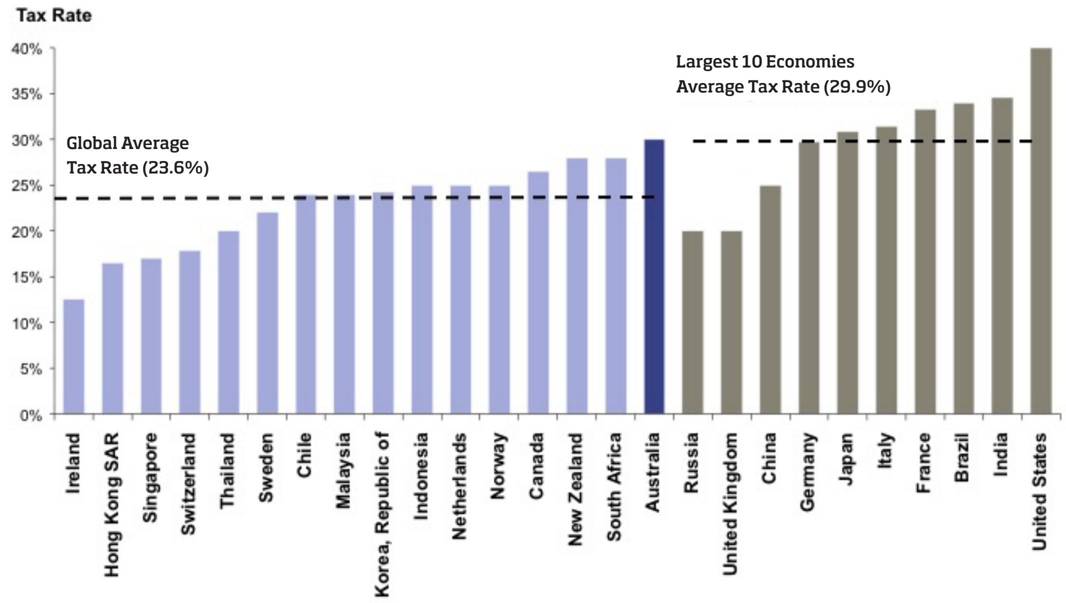
[34] Department of Foreign Affairs and Trade, *International Investment Australia 2015*, 2016

[35] Business Council of Australia, *Higher Foreign Investment a Key to Maintaining our Edge*, 16 April 2010

A high corporate tax rate

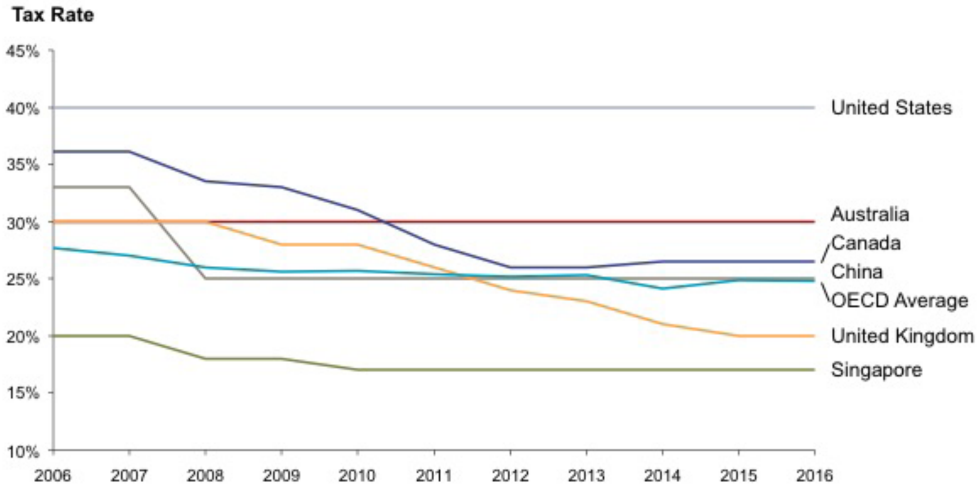
Australia's high corporate taxation rate is a significant drag on the nation's desirability as a destination for foreign investment. At 30%, Australia's corporate tax rate is higher than most OECD countries it competes with, and almost 7% above the OECD average (Figure 3.5).

Figure 3.5: Corporate Tax Rates with Selected Trading Partners[36]



Simultaneously, Australia's high tax rate is compounded by other countries (e.g. United Kingdom, China, Canada, and Singapore) proactively reducing their corporate tax rates to attract investment (Figure 3.6). Indeed, while the World Bank's "Ease of Doing Business Index" ranked Australia at 13th overall, the nation ranked very poorly in terms of "paying taxes" (42nd).[37]

Figure 3.6: Trend in Corporate Tax Rates in Selected Economies[38]



---

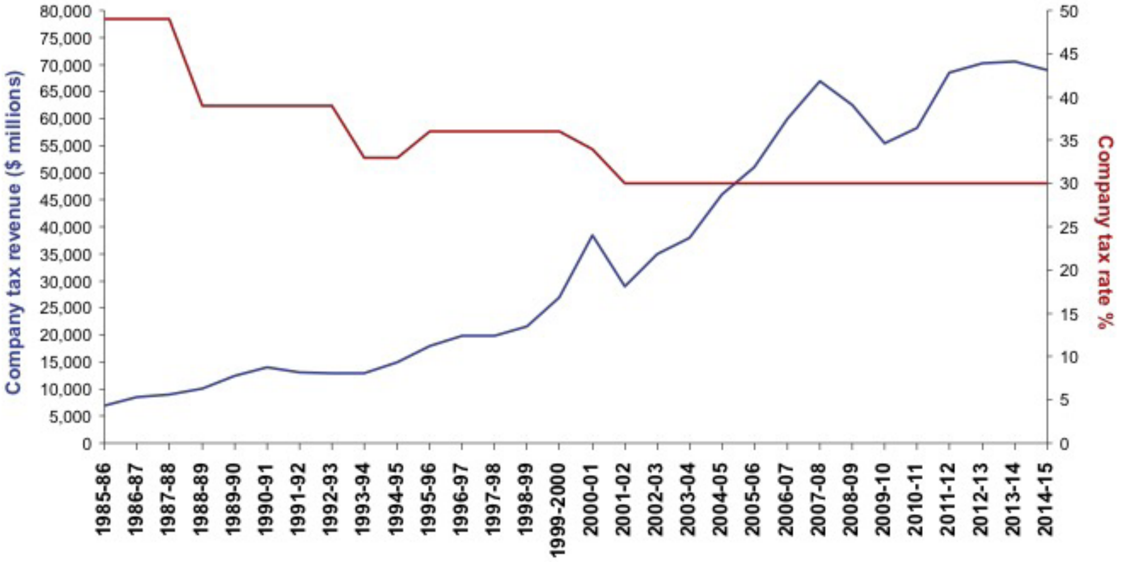
[36] KPMG, *Corporate Tax Tables*, 2016

[37] World Bank, *Ease of Doing Business Index*, 2016

[38] KPMG, *Corporate Tax Tables*, 2016

A reduction in the corporate tax rate would not only improve the nation's desirability as a destination for foreign investment, but a recent analysis of corporate tax rates by the Australian Chamber of Commerce and Industry actually showed a correlation between a cut in the corporate tax rate and a rise in corporate tax revenue (Figure 3.7).[39]

Figure 3.7: Revenue from company tax and tax rate



An inflexible labour market

Australia's desirability as a destination for Foreign Direct Investment is also hampered as a result of its poor labour market efficiency. Ai Group's analysis of the Global Competitiveness Index provides some insight into this:

> *Australia continues to rank relatively poorly on 'labour market efficiency' despite a large movement in this indicator, up 8 places to 28th place. Australia still trails behind other economies on many labour market measures. Australia still ranks poorly on hiring and firing practices (118th), flexibility of wage determination (111th) and taxation incentives to work (111th).*[40]

In fact, restrictive labour regulations have been identified by Australian businesses year after year as one of the most problematic factors when doing business and investing in Australia (see Figure 3.8).[41]

Restrictive labour regulations prevent firms from making adjustments to labour inputs in response to economic shocks and technological developments, which can handicap domestic firms relative to countries where labour market rigidity is low. In the resources sector alone, KPMG estimates our relative lack of competitiveness costs thousands of jobs and $11 billion per annum in GDP growth.[42]

---

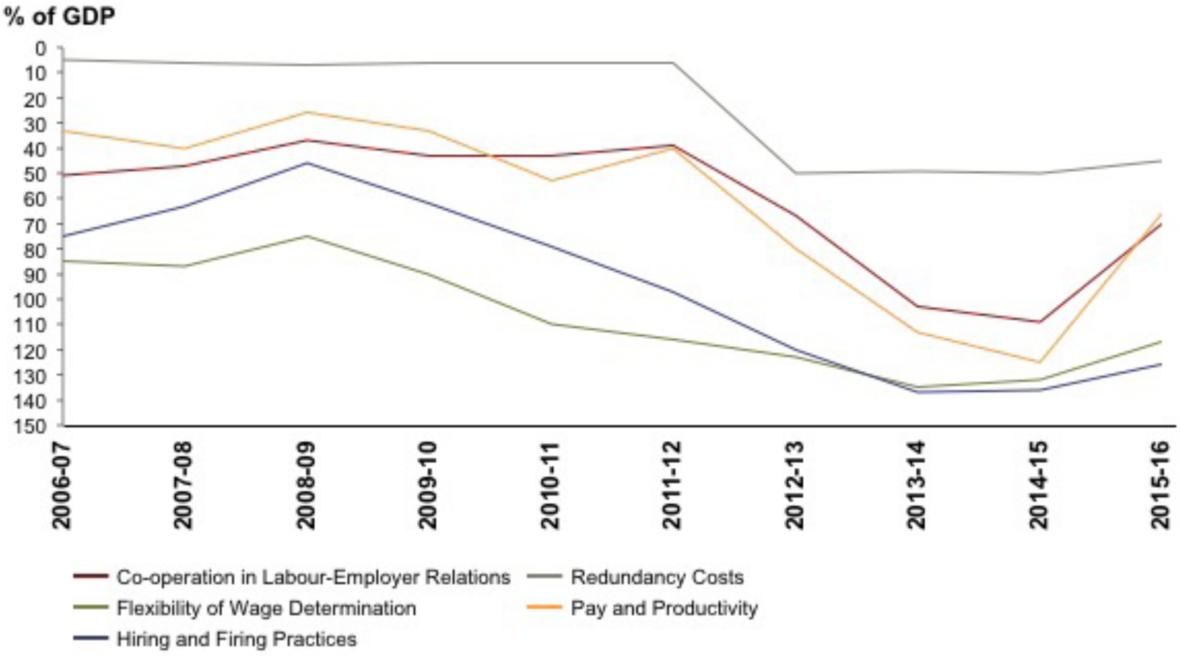
[39] Australian Chamber of Commerce and Industry, *No risk to budget from company tax cut, analysis shows*, 13 February 2017

[40] Ai Group, *WEF Global Competitiveness Rankings Slip in 2016-17*, 28 September 2016

[41] World Economic Forum, *Global Competitiveness Index*, 2016-17

[42] Australian Mines and Metals Association, *Workplace Relations and the Competitiveness of the Australian Resources Sector*, 2015

Figure 3.8: Labour Market Efficiency Indicators: Australia's Ranking



Slow and rigid regulatory system

In recent years, attempts to improve our competitive position have been examined in acknowledgement of the country's deteriorating competitiveness. These have included various tax reviews, as well as investigations by the Harper Competition Review, Productivity Commission and Heydon Royal Commission with respect to Australia's industrial system.

While some progress has been made, changes have been slow. In November 2016, the Parliament passed laws to improve governance of trade unions and employer organisations, and restored the Australian Building and Construction Commission. However, the Heydon Royal Commission recommendations are yet to be progressed. Implementing these and other recommendations expeditiously will be critical in boosting Australia's competeviness.

Options paper three "Boosting Australian competitiveness" will catalogue the major drags on our competitive position – this will include tax, investment and industrial relations.

Maintaining free and open international trade

Australia must also maintain free and open international trade.

By supporting a thriving export sector, Australia increases its productivity through growing the market beyond our small domestic demand. Exploiting our comparative advantage in certain sectors (eg resources, agriculture, education and legal, finance and accounting), exposes businesses to global best practices and technologies and in doing so raises Australia's standard of living.

Indeed, free and open trade has underpinned Australia's performance from European settlement in 1788 making it the 13th largest economy in the world despite a relatively small population.

The challenges for increasing competitiveness via free and open trade are twofold, namely:

1. Maintaining growth in the export of goods and services through expanding free trade and lifting our competitiveness; and
2. Maintaining supply of cheap imports of goods and services as inputs for our exports.

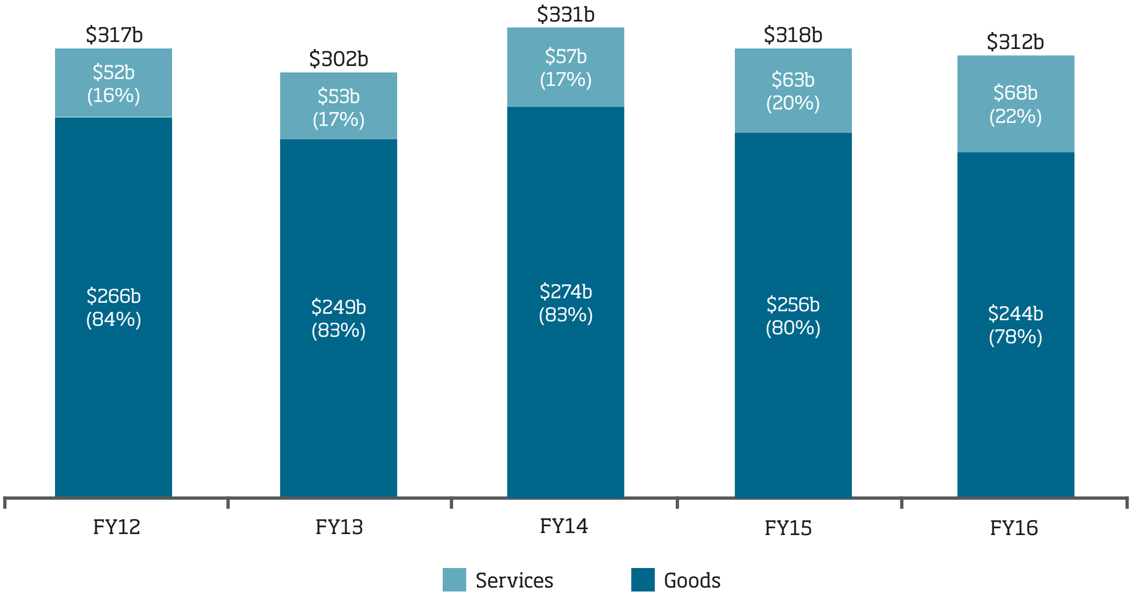
Growth in Exports

Australia's export value is significant at over $312 billion in 2016, and represents around 20 per cent of GDP. Australia must look to deliver:

1. Better support growth in service exports; and
2. Reforms which encourage the export of goods by increasing Australia's competitiveness.

Australia must work harder to achieve success in the export of services. While services represent 70% of the economy, they remain only 22% of exports. Barriers to trade in services are not tariffs but legal architecture, and abolishing non-tariff barriers requires the creation or reform of legal frameworks.

Figure 3.9: Exports of Goods and Services in Australia[43]



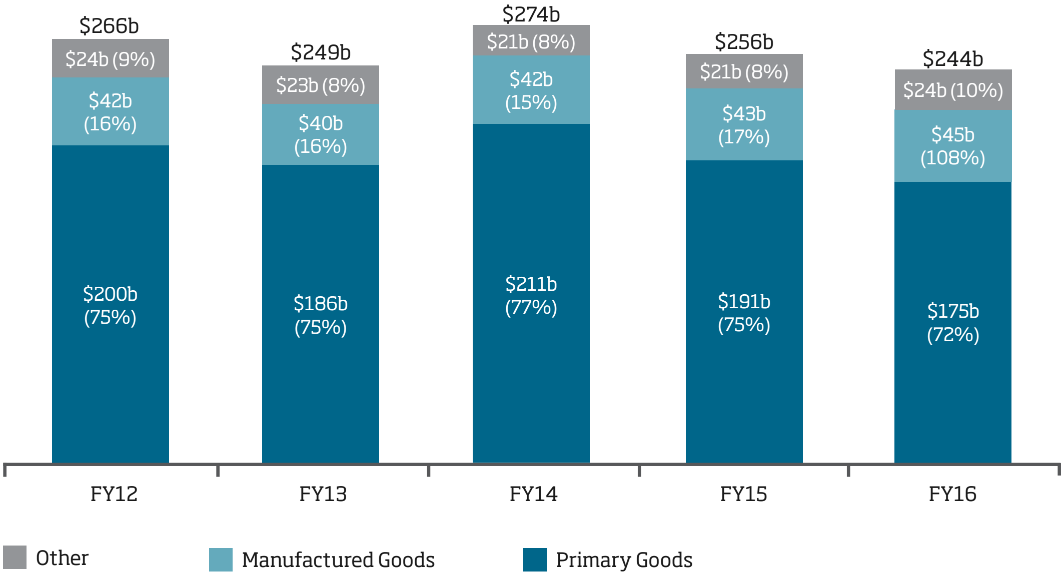
In terms of goods exports, the decline is mainly attributable to the export of primary goods or raw materials that do not enter a manufacturing process. Between 2012 and 2016, this segment alone fell by $25b, and was not compensated by a $3b growth in the manufactured goods segment (Figure 3.10).

This further elaborates that while Australia has historically been a nation focused on primary goods exports, competitive advantage is being eroded. Agriculture remains a globally competitive exporter but is constrained by regulation, lack of efficient infrastructure and high input costs, particularly energy.

---

[43] DFAT, *Composition of Trade*, 2015-16

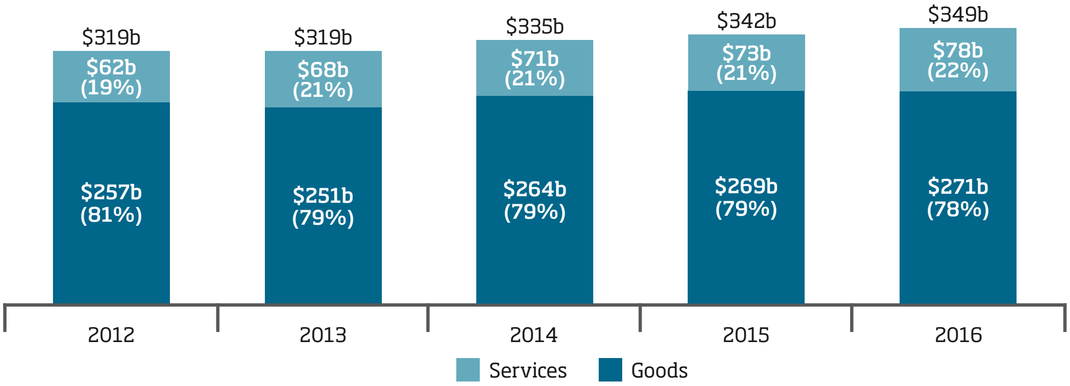
Figure 3.10: Export of Goods in Australia[44]



Cheaper imports for input goods

Simultaneously, free trade allows for cheaper imports into Australia lowering our cost of living and reducing the cost of inputs to our export sector. In 2016, Australia's import sector was valued at over $349 billion in goods and services, and has experienced strong growth over the last five years (Figure 3.11).

Figure 3.11: Imports of Goods and Services in Australia[45]



Low cost imports reduce the cost of living for ordinary Australians and reduce the input cost for value added goods for export.

This is crucial as Australia transitions towards a broader based economy. It is vital for Australia to encourage policies that help businesses become more competitive through cheaper inputs.

Options paper three "Boosting Australian competitiveness" will also catalogue the factors needed to maintain free and open international trade and examine how to boost goods and services exports.

---

[44] DFAT, *Composition of Trade*, 2015-16

[45] DFAT, *Composition of Trade*, 2015-16

4. Infrastructure and energy underpin our future

Australia depends on continued investment in nation building infrastructure and affordable and secure energy supplies to remain productive and competitive

Infrastructure and access to affordable and secure energy are key to fuelling a productive and growing economy and to improving the quality of life to all Australians. Australia must carefully and strategically consider its pipeline of investment in new infrastructure and develop a long term strategy with respect to reliable and affordable energy.

Infrastructure

High quality economic and social infrastructure which directly lift productivity is vital to maintaining Australia's high standard of living. Properly executed, infrastructure lays the foundation for future prosperity. It fosters business and trade, connects people and communities and builds a healthy and educated society.

Infrastructure investment policy in Australia should be long term and strategic and coordinated at all levels of Government. Australia falls well short in the world rankings despite our relative wealth and good fortune. The World Economic Forum ranked the quality of Australia's transport overall infrastructure as 35th in the world (including 34th on railroad infrastructure, 32nd on port infrastructure and 41st on road infrastructure).[46] A global report produced by Akamai on the state of internet connectivity, Australia ranked 50th in the world (behind developing nations Thailand (36th) and Kenya (43rd).[47] This is disturbing for a large country with a dispersed population relying so heavily on transport.

Pressure for high quality infrastructure will only intensify as Australia's population grows. Australia's population is projected to grow by 30% to 32 million by 2035, with capital cities accounting for the majority of growth. As a direct result, Infrastructure Australia estimates that each of Australia's largest cities would need to provide for the development of around 500,000 to 700,000 new dwellings over the next 15-20 years, and additional roads, precincts and other infrastructure amenities that would be required to service the growing population.[48]

Energy

Energy affordability and resilience is also essential to Australia's economic success. Its availability, affordability and efficient use underpin the competitiveness of Australia's industries and the cost of living for Australian households. Simultaneously, as a net exporter of energy (primarily coal), Australia derives considerable national wealth from satisfying global demand for low-cost energy (Figure 4.1).

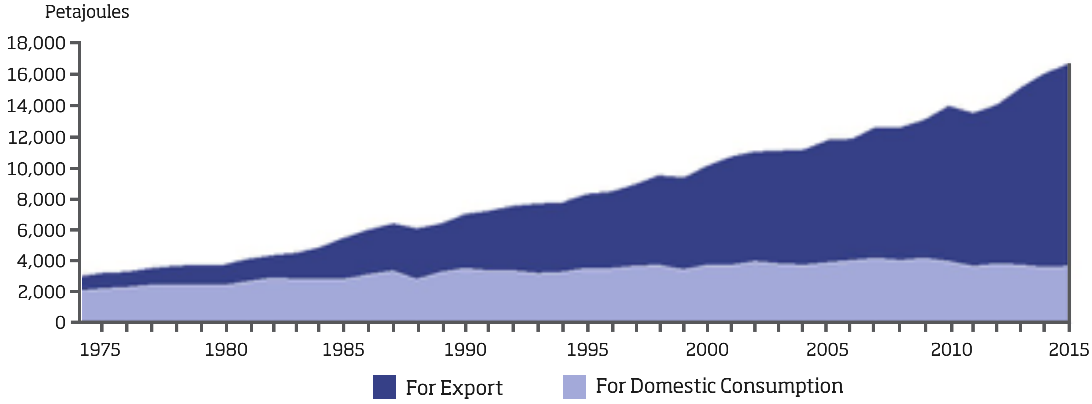
---

[46] World Economic Forum, Global Competitiveness Index: Transport Infrastructure, 2015-16

[47] Akamai, *State of the Internet: Q3 2016 Report*, 2017

[48] Infrastructure Australia, *Australian Infrastructure Audit*, 2015

Figure 4.1: Energy Production in Australia[49]



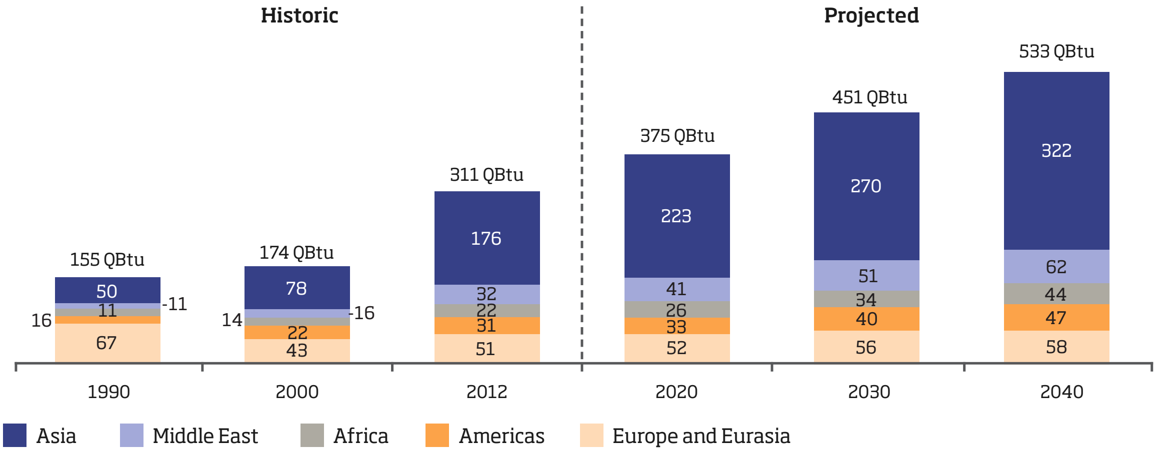
Australia has a vested interest in supporting its existing position (as a world leader in the supply of low-cost and sustainable energy). Australia faces three key challenges in this regard, principally:

1. Deteriorating global competitive advantage;
2. Rising energy costs; and
3. Reliability and security of supply.

Deteriorating competitive advantage

In the past, Australia has enjoyed a competitive advantage in the export of energy as a result of its wide variety of large, low cost energy resources. Energy exports have been, and still are, a cornerstone of Australia's economic growth. Looking forward, the expected increase in global demand for energy from emerging economies (in particular Asia) represents a significant opportunity for Australia (Figure 4.2).

Figure 4.2: non-OECD Energy Consumption by Region[50]



---

[49] Infrastructure Australia, *Australian Infrastructure Audit*, 2015

[50] U.S. Energy Information Administration, *International Energy Outlook*, 2016

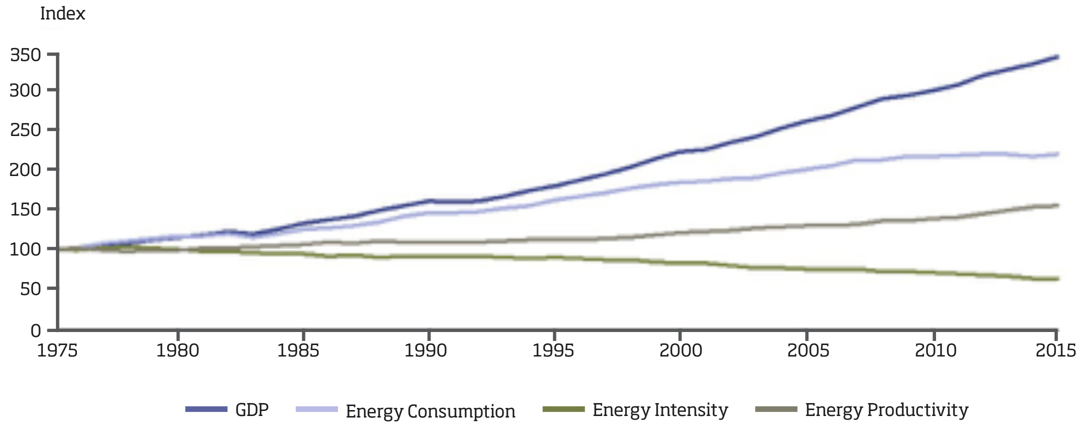
However, a range of market trends - downturns in the price of gas and coal, shifting demand conditions and increasing international export competition – are eroding Australia's competitive advantage. Australian resources projects are approximately 40% to 200% more costly to deliver than the United States,[51] and the cost of delivering Australian LNG to Japan is up to 30% higher than in competing projects in Canada.[52]

Given the significance of Australia's energy sector to economic growth of the economy, failure to address these competitive pressures could overexpose the country to unexpected energy shocks and steadily increasing production costs.

Rising domestic costs

Due to improvements in energy efficiency and a shift in the economy towards less energy intensive sectors (e.g. services), growth in domestic energy consumption in recent decades has remained below the rate of economic growth (Figure 4.3).

Figure 4.3: Australian Energy Intensity and Energy Productivity[53]



More concerning, the cost of energy has been surging, and is evidenced as prices for energy increase at a faster rate than CPI despite a decrease in demand (Figure 4.4). In Australia, household energy costs have increased on average by a staggering 72% for electricity and 54% for gas between 2003 and 2013, despite a 7% decrease in household energy consumption.

Similarly, the energy price for manufacturing businesses have increased by 60% for electricity and 29% for gas, despite a 14% decrease in consumption.[54] Failure to address rising domestic energy costs is increasing barriers for households and businesses to increase productivity and grow the economy.

---

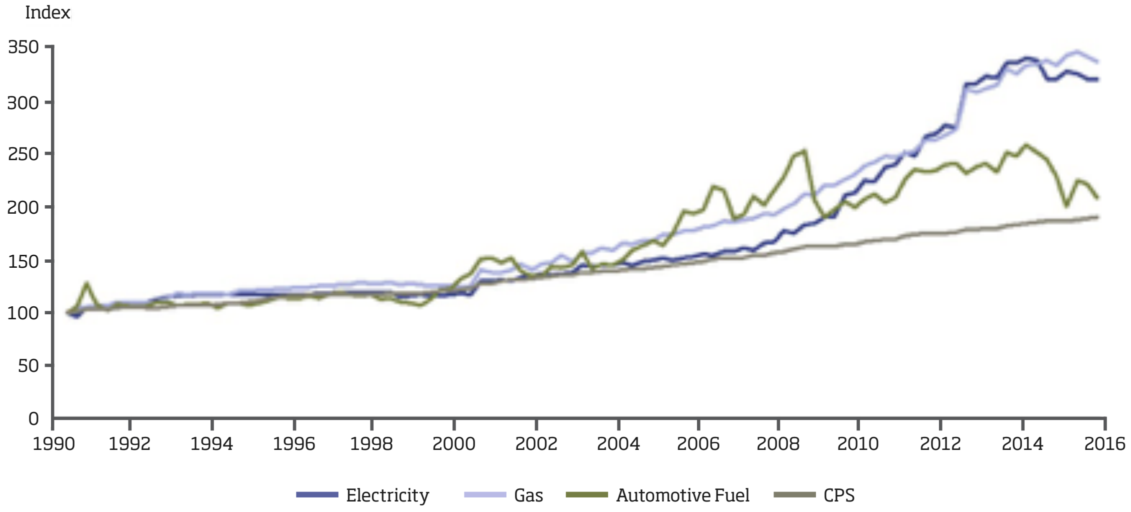
[51] Business Council of Australia, Pipeline or Pipe Dream? Securing Australia's Investment Future, 2012

[52] McKinsey & Company, Extending the LNG Boom: Improving Australian LNG Productivity and Competitiveness, 2013

[53] Bureau of Resource and Energy Economics, *Australian Energy Statistics Table B*, 2016

[54] Parliament of Australia, *Energy Prices – The Story Behind Rising Costs*, December 2013

Figure 4.4: Household Energy Price Index [55]



A large driver of cost increases according to the Australian Energy Market Operator is the policy mess on renewable energy and a lack of exploration for gas on the East Coast for which the states are primarily responsible.

A growing unreliability of energy supply is developing into a significant challenge. The national renewable energy target of 23.5 per cent at the national level and over a half dozen inconsistent state targets ranging from zero to 100 per cent has led to the closure of some coal-fired power stations and a fall in the output of reliable base-load power.

In 2015, the average South Australian reliance on renewables was 41 per cent. The state's over-reliance on intermittent sources of renewable energy and its falling supply of baseload conventional energy has made its electricity system unstable. A major failure of supply in September 2016 cost businesses hundreds of millions of dollars, threatening jobs and deterring investment.

Further, why would we export coal and gas to power the world but not use it at home? As Bluescope CEO Paul O'Malley said, gas was being "hoovered up and sent overseas... If there is gas in Australia and we say it can go overseas, and we don't have any baseload generation, I think we are going to have an energy catastrophe in Australia."

Australia's second and third exports should not become affordable indulgences only away from home.

Options paper four "Securing and building our platform" will unpack the options to ensure Australia has reliable, affordable and efficient energy supplies.

---

[55] Australian Bureau of Statistics, *Consumer Price Index*, June 2016

5. Imagination and adaption

Australia must be ***imaginative and adaptive*** in dealing with a changing economic landscape. Innovation drives improvement in the standard of living of all Australians, which is the gift that the current generation can pass on to future generations

Australia is at the crossroads of a changing global, regional and local economic landscape. In a post-mining boom investment economy, Australia's core engines of growth are slowing while traditional industries are being challenged by new and disruptive forces unprecedented in scale, scope and speed. Simultaneously, engines for new growth – critical to our future economic success – are still to emerge.

If Australia is to maintain its economic growth, productivity growth and competitiveness, greater regard must be given to:

1. Proactively exploiting global disruptive technologies and developing our own;
2. Taking full advantage of the other growth technologies such as computing, biotech, materials, nano; and
3. Nurturing a culture and our natural capability in innovation to create, deliver and capture value for future generations.

In this way we will take full advantage of new technologies that will maximise the productivity of the nation and create new industries and products.

The decisions we take today will impact future generations and underwrite a commitment that each generation makes to the next – to leave the nation in a better state and with a higher standard of living than when we found it.

This is a commitment to intergenerational fairness that has always applied in Australia and is inherently achievable as long as we take full advantage of the tailwinds of innovation.

Impact of disruptive technologies

Technology change is occurring at an unprecedented speed. New trends have the potential to challenge current business models, define new industries, and disrupt consumer interactions and expectations. In a recent study prepared by A.T. Kearney, twelve disruptive technologies are projected to hit Australia over the next decade.

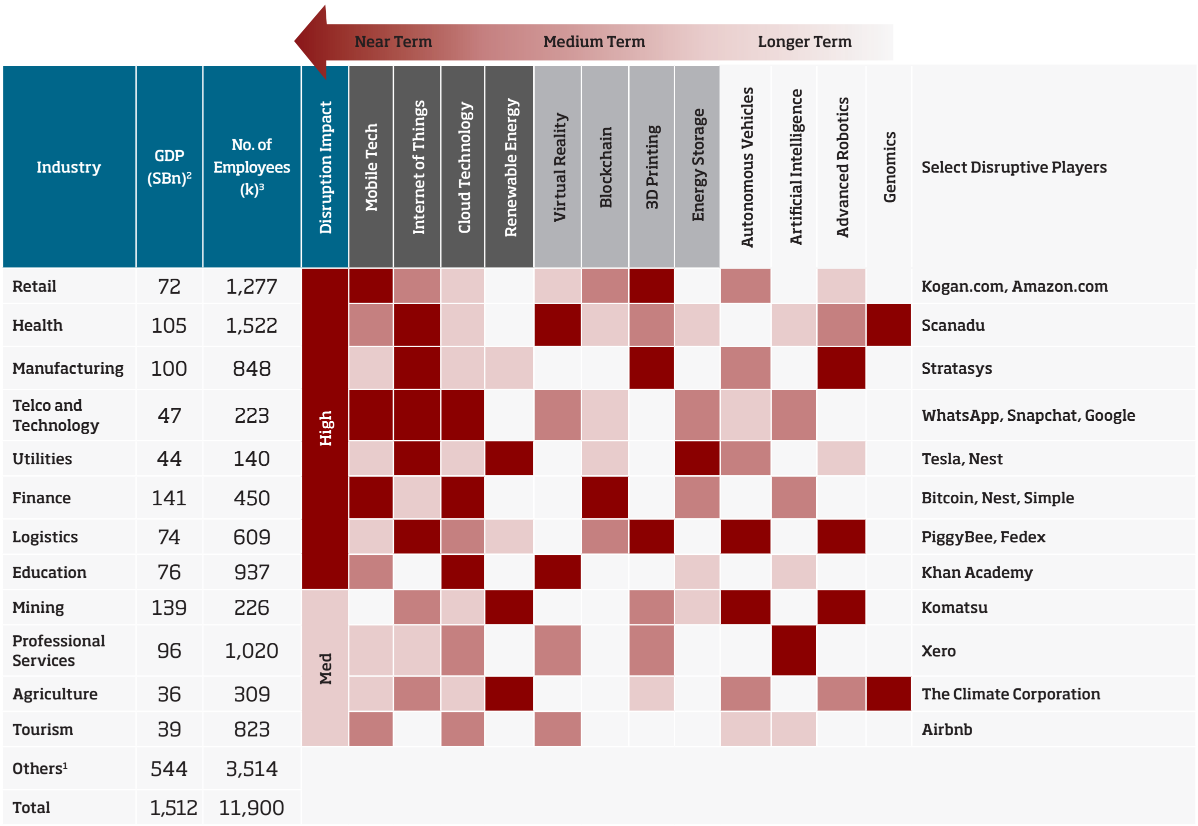
These technologies have the potential to erode or even eviscerate elements of Australia's economy. A.T. Kearney's analysis on Australia's largest industries demonstrates the potential impact of such technologies (Figure 5.1).

However, at the same time those technologies could also offer unprecedented opportunities to achieve accelerated growth on a global scale.[56] The question is not *if* industries will be affected, but rather when and to what degree disruptive technology will impact Australian industries.

---

[56] A.T. Kearney, *Taking Bigger Steps,* 2016

Figure 5.1: Disruption Impact on Australian Industries



				Near Term				Medium Term				Longer Term				
Industry	GDP (SBn)[2]	No. of Employees (k)[3]	Disruption Impact	Mobile Tech	Internet of Things	Cloud Technology	Renewable Energy	Virtual Reality	Blockchain	3D Printing	Energy Storage	Autonomous Vehicles	Artificial Intelligence	Advanced Robotics	Genomics	Select Disruptive Players
Retail	72	1,277	High	■	▨	░		░	▨	■		▨		░		Kogan.com, Amazon.com
Health	105	1,522		▨	■	░		■	░	▨	░		░	▨	■	Scanadu
Manufacturing	100	848		░	■	░	░			■		▨		■		Stratasys
Telco and Technology	47	223		■	■	■		▨	░		▨	░	▨			WhatsApp, Snapchat, Google
Utilities	44	140		░	■	░	■		░		■	▨		░		Tesla, Nest
Finance	141	450		■	░	■			■		▨		▨			Bitcoin, Nest, Simple
Logistics	74	609		░	■	▨	░		▨	■		■		■		PiggyBee, Fedex
Education	76	937		▨		■		■			░		░			Khan Academy
Mining	139	226	Med		▨	░	■			▨	░	■		■		Komatsu
Professional Services	96	1,020		░	░	▨		▨		▨			■			Xero
Agriculture	36	309		░	▨	░	■			░		▨		▨	■	The Climate Corporation
Tourism	39	823		▨		▨		▨				░	░			Airbnb
Others[1]	544	3,514														
Total	1,512	11,900														

Australia and Australian businesses cannot wish these disruptive technologies away, and nor should they do so, as they represent an opportunity to be part of a reshaping of the global economy and should be embraced.

However, ensuring Australia takes advantage of the environment of change requires Australia to be proactive rather than reactive – to play offensive rather than defensive. Doing so will require a culture and capability of innovation and far greater flexibility.

Culture and capability to innovate

Amidst the challenge posed by new technologies, Australia's ability to leverage, or even develop its own, disruptive technologies depends on businesses creating a culture and capability of innovation and governments and markets reducing the limitations and impediments.

Despite general acceptance that "persistent innovators significantly outgrow other businesses in terms of sales, value added, employment and profit growth",[57] the performance of Australian businesses to date has been lagging. In the latest Global Innovation Index for example, Australia's position fell for the second consecutive year to 19th in the world.[58]

However, more concerning was the fact that Australia's innovation *output* scores ranked significantly lower than its innovation input scores, at 27th in the world for outputs and 11th for inputs.

---

[57] Office of the Chief Economist, *Australian Innovation Systems Report*, 2016

[58] Cornell INSEAD WIPO, *Global Innovation Index*, 2016

The challenges of fostering an imaginative and adaptive environment include:

1. The administrative and regulatory burdens imposed on all Australian companies – particularly SMEs, including startups, which are often at a regulatory disadvantage in relation to larger incumbent companies – by Australia's complex regulatory environment;
2. The underlying capability of Australian businesses to adapt in an unpredictable world;
3. The poor performance of the education and training sector in producing STEM qualified people;
4. Twenty-five years of continuous growth has bred a culture of complacency in business and government and this is exacerbated by the short term investment horizons of investors; and
5. A regulatory environment which sacrifices global competitiveness for domestic competition.

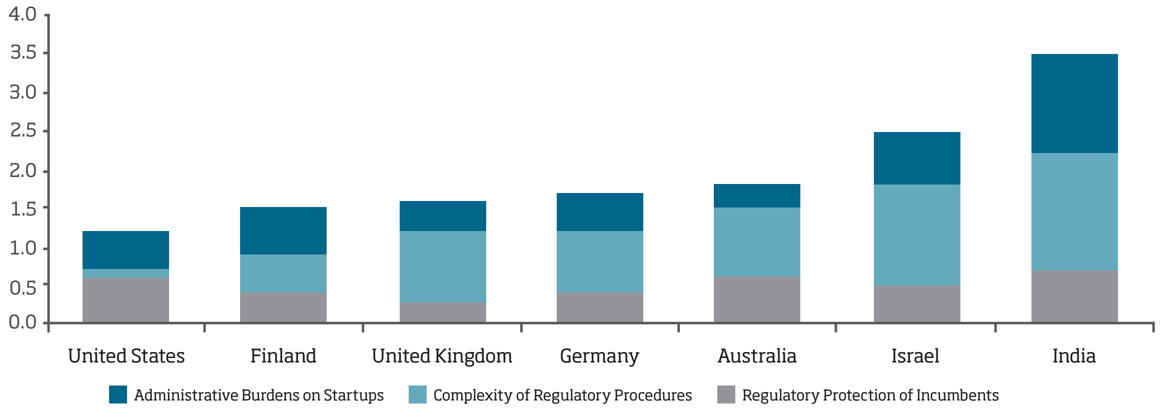
Complex regulatory environment

The administrative and regulatory burdens required to manage a business and navigate complex regulatory procedures in Australia disproportionally affects start-ups and small businesses who do not have the support or experience of larger firms.

As an example, it takes Cochlear 18 months to obtain clearance of a new product in Australia, compared to just 6 months for the same product in Europe. This has long been the case in Australia, and has had minimal change in the ten years between 2003 and 2013 (Figure 5.2).[59]

Robust government policy is required to reduce these compliance hurdles that burden small business, so as to facilitate the rapid and adaptive business culture that Australia requires to realise its national potential.

Figure 5.2: Barriers of Entrepreneurship, Rating from Least Restrictive (0) to Most Restrictive (6)



---

59 OECD, *Science Technology and Industry Scoreboard*, 2015

Underlying capability to innovate and adapt

In addition, Australian businesses and their investors must develop and encourage the underlying capability sets to rapidly adapt in an unpredictable world. In particular, this will mean:

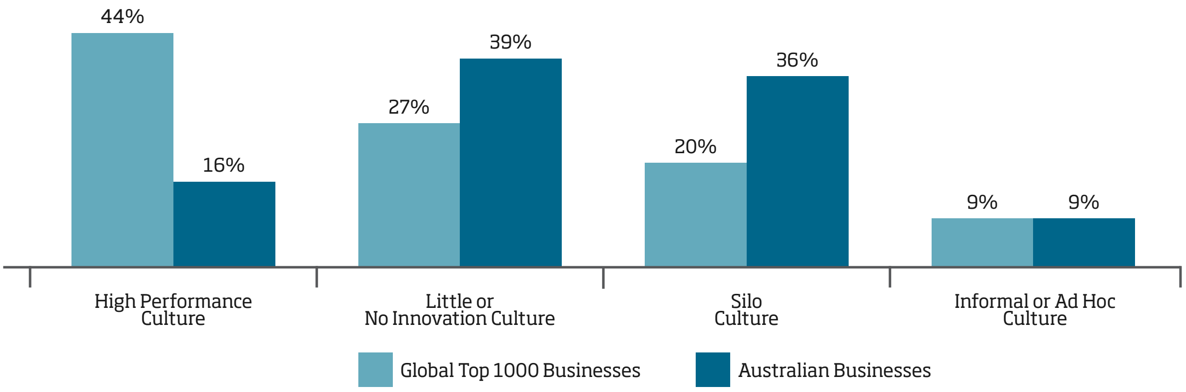
1. Adopting an expansive mind-set;
2. Instilling an agile culture to create new and greater value;[60] and
3. A longer term view of investment beyond the six monthly return.

After 25 years of economic growth, many companies may not have tested and honed their ability to constantly explore new value-creating opportunities. Our focus on the half yearly return encourages short term investment horizons and an abhorrence to risk taking. The ever increasing weight of regulation has had an effect also.

An expansive mindset encompasses the ability to understand and imagine where value will be found as it migrates across a broadening economic landscape. Two mega trends stand out in this regard: engaging with Asian (new markets) and unlocking shared value (understanding that markets now value the societal and environmental consequences of traditional business activities which cannot be measured in dollars and cents).

Additionally, disruption will severely impact Australian industries that have not adopted an agile enterprise DNA. This capability is necessary to rapidly change in response to new opportunities and challenges. While this concept is widely recognised in Australia, it is rarely seen. Moreover, when compared against the top global 1000 businesses, Australia's attitude towards implementing innovative culture patterns as a matter of routine is lagging (Figure 5.3), demonstrating our underlying conservatism. The global business environment is changing, and a negligent attitude by companies and fund managers towards fostering the capabilities required to win is a significant challenge to the longevity of Australia's business interests.

Figure 5.3: Innovation Culture of Australian and Global Businesses (2012-13)[61]



Options paper five "Ready to exploit tomorrow" will explore the impact of disruptive technologies and the changes in terms of innovation, adaptability and flexibility required to lead in the Australian landscape.

---

[60] N Andrade & P Munro, *Australia 2034: Luckier by Design*, 2015

[61] Department of Industry, *Australian Innovation System Report*, 2015

RG Menzies House
Cnr Blackall & Macquarie Streets
Barton ACT 2600

PO Box 6091, Kingston ACT 2604

www.menziesrc.org