STATEMENT 4: SUSTAINING STRONG GROWTH IN LIVING STANDARDS

This statement discusses factors that will affect income growth and living standards over the medium term.

CONTENTS

STATEMENT 4: SUSTAINING STRONG GROWTH IN LIVING STANDARDS

INTRODUCTION

Australians have high living standards relative to the rest of the world, and these have been boosted by rapid growth in incomes over the past two decades. This income growth has been shared broadly across the community.

To a large extent, this growth in national average incomes reflects the pay offs from economic reforms undertaken previously that increased the economy's productive potential, opened up access to overseas markets and capital, and made businesses more competitive.

Australia now faces a number of challenges that are likely to slow growth in incomes in the future. Australia's population is ageing, which means that we will continue to see a lower proportion of our population in the workforce. In addition, Australia's terms of trade have fallen from their historic highs and are projected to continue to fall over the next few years.

For incomes to grow in the future, we will have to pursue new growth opportunities and use our resources more productively. Ultimately, it is the efforts, creativity and risk-taking of businesses, investors and workers together that create new and better goods and services, and more efficient ways of doing things. This then creates wealth, jobs and opportunities. Government policies and decisions influence how well markets operate and incentives for work and enterprise, and can have a profound impact on current and future rates of economic growth.

There is significant scope for structural reforms to improve the productive potential of the Australian economy. At the heart of the changes required is a mindset and culture that rewards individuals' and firms' hard work and initiative. This change in mindset needs to be shared by all sectors of society, including individuals, business and government. On the Government's part, this requires changes to policy settings to encourage people to work and to innovate, and which promote greater openness and competition in markets. This Budget makes a significant down payment on these reforms.

This Budget also begins the task of restoring discipline to public spending while also re-focusing spending to areas that build the economy's productive capabilities. Importantly, this Budget will help the economy to transition from the end of the resources investment boom, including by facilitating targeted infrastructure investment.

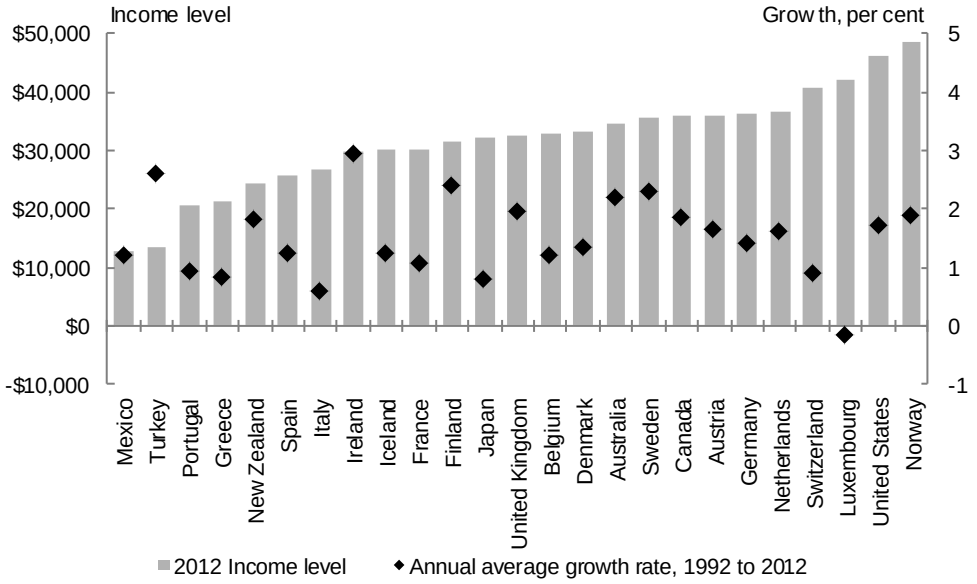
LIVING STANDARDS IN AUSTRALIA

A major goal of policy is to improve the level and sustainability of living standards of all Australians.

Income is one of the most important determinants of living standards. Increasing real incomes allow people the capacity to buy more goods and services, and save and invest, as well as more freedom to choose how to spend their time. Income growth also means that potentially more tax revenue is available to provide government services and income support.

Australians' incomes per person are now relatively high in comparison to most Organisation for Economic Cooperation and Development (OECD) economies (Chart 1). Average income levels per person were around $34,500 in 2012. In the past two decades, average incomes have grown in dollar terms by around $12,000 (after discounting for the effects of inflation), and at annual rates that are among the fastest in the OECD.

Chart 1: Comparison of 2012 national income per capita



Note: Annual average growth refers to the growth rate in income, measured in 2005 international dollars weighted by purchasing power, from 1992 to 2012. Data for New Zealand are from 1991 to 2011.
Source: World Bank.

Australia's income growth has been broadly shared across the Australian population, with households across the income distribution experiencing broadly similar rates of income growth (after taxes and transfers) over the past two decades.

This growth in incomes has contributed to higher living standards over time, and relative to other countries.

Indicators of Australians' life expectancy, education levels and the quality of our urban environment all improved over the past decade.[1] International comparisons of living standards indicate that Australians have among the highest living standards in the world, and that these high standards of living are shared relatively equitably across the community in comparison to other advanced countries.[2]

Our high standards of living did not come about by accident.

In significant part, they reflect a range of reforms taken by governments, particularly during the 1980s, 1990s and early 2000s that led to improvements in the economy's productive capacity and the competitiveness of businesses, as well as greater openness to overseas markets and capital.

It also reflects behavioural responses to those policy changes that saw employers and employees having greater flexibility in negotiating how income gains are shared, and reforms that have supported higher, and better skilled, participation in the workforce.

DRIVERS OF GROWTH IN INCOMES

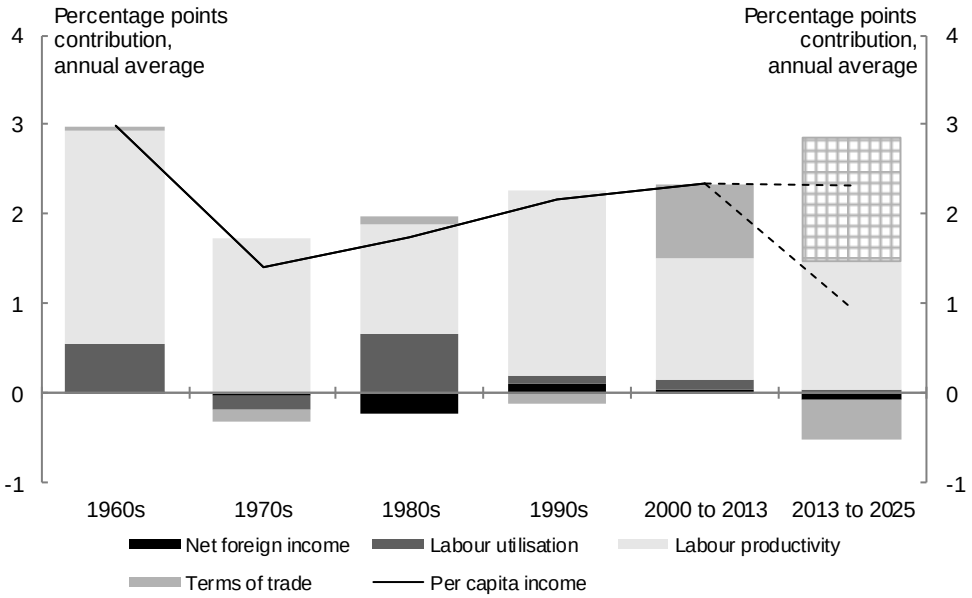
The main sources of income growth nationally are growth in productivity, changes in the terms of trade, changes in output from increased labour utilisation, and growth in net foreign income.

Chart 2 shows the sources of growth in real national income per person over the past half century. It also shows two scenarios for income growth in the future given the likely impacts of population ageing and the projected falls in the terms of trade.

1 ABS, 2013.

2 OECD, 2013. Australia has ranked second (after Norway) on the United Nations Human Development Index since 2000. The ranking remains second (again, after Norway) when the measure is adjusted for inequality, whereas the United States slips 13 places to 16th (United Nations, 2013).

Chart 2: Sources of growth in national income per capita



Note: Contributions to income growth in the period 2013 to 2025 are consistent with the forecasts and projections detailed in Budget Statement 2. The hatched area represents the additional labour productivity growth required to achieve long run average growth in real gross national income per capita.
Source: ABS 5204.0 and Treasury.

Productivity has consistently been the most significant source of income growth. However, over the past decade or so, it has been the dramatic rise in the terms of trade which has maintained growth in gross national income as productivity growth has waned. Over the next decade, the decline in the terms of trade is expected to detract from growth in incomes. This negative impact will be compounded by a declining contribution from labour utilisation as the population ages.

For annual incomes to grow at their historical average of 2.3 per cent over the period to 2025, annual labour productivity growth would need to increase to around 3 per cent per year to counteract the effects of population ageing and a falling terms of trade. This is well in excess of what has been achieved in the past 50 years, and more than double what was achieved in the past decade.

If labour productivity grows at its long-run average of around 1.5 per cent per year over the medium-term, per capita incomes would grow on average by about 1 per cent per year — or less than half of what Australians have become used to over the past three decades. This difference in growth rates translates to a difference in real per capita incomes of $13,000 per year by 2025 ($84,000 under the high growth scenario versus $71,000 under the low growth scenario) — or around 20 per cent of today's average income of $63,500. The drivers of income growth are discussed further below.

Productivity growth

Growth in productivity means that more or better quality goods and services are generated for a given level of resources.

What happened in the 1990s?

Labour productivity grew strongly in the 1990s, at an annual average rate of 2.1 per cent, well above the long-run average of 1.5 per cent.[3] Productivity accounted for about 96 per cent of annual income growth in that decade, in comparison to an average of 90 per cent of growth in incomes in the past four decades.

The increase in productivity growth rates seen in the 1990s was the payoff from the significant policy reforms of that decade and in the 1980s. These included removing industry protections and opening up the economy to overseas trade; reducing controls over labour, capital and product markets; reforms to improve the efficiency of markets providing essential services, such as electricity; and taxation reforms. Reforms were also made to macroeconomic policy settings, including letting market forces determine the exchange rate, introducing the independent setting of interest rates and placing fiscal policy in a medium term framework.

The reforms created more competitive markets, which encouraged businesses to become more efficient and innovative. The reforms also encouraged businesses to adopt and exploit new and improved technologies developed overseas, including those embedded in new capital, such as information and communications technologies. Further, they provided greater flexibility in the use of resources and allowed relative prices of goods and services to reflect the balance of supply and demand more accurately, improving overall resource allocation and returns on investments in both physical and human capital.

The productivity and price changes in key infrastructure sectors, such as energy and water, have been estimated to have increased gross domestic product (GDP) by 2.5 per cent above what it would otherwise have been over the 1990s.[4] The benefits of competition reforms were widely spread across the community, including rural and regional Australia.[5]

These policy reforms helped halt a long-term decline in Australia's income growth rates relative to other countries. Without these reforms, it is likely that Australians' living standards would be significantly lower than they are today.

---

3 Labour productivity is a measure of output produced per unit of labour, usually per hour worked.

4 Productivity Commission, 2005.

5 The only region to experience a decline in regional output over the 1990s was the 'Great Southern' area of Western Australia, which includes Albany, Denmark and Katanning. This region experienced a slight fall of 0.74 per cent. Productivity Commission, 2005.

What has happened since the early 2000s?

Labour productivity growth has slowed since the early 2000s, contributing only around 60 per cent of the growth in average incomes since 2000. However, incomes have grown at similar rates over the past 10 years to that recorded in the previous decade due mainly to a significant contribution from the rise in the terms of trade.

The slowdown in productivity growth since the early 2000s has partly reflected the very high investment activity in the resources and utilities sectors.[6] This investment of capital and labour has long lead times before increased output comes on line. Productivity in manufacturing has also been poor at an aggregate level. Further, cyclical factors may also have played a role since the global financial crisis.[7]

Still, these factors do not explain fully the breadth and magnitude of the slowdown in Australia's productivity growth rates, since the majority of industries have seen a slowing. This suggests that more fundamental factors are at play.

Part of the slowdown may reflect the fading impact of past reforms. Also, there have been fewer significant policy reforms since the early 2000s. Strong income growth, low unemployment, and high rates of profitability through the 2000s may have reduced the incentive for major reform by governments and for businesses to become more competitive.[8] There is also evidence that policy requirements have constrained how inputs are used in some sectors and increased regulatory burdens, thereby detracting from measured productivity growth.[9]

There is little evidence that slower productivity growth has been due to inadequate investment in skills, education and innovation more broadly.[10]

Australia has not been alone among advanced economies in experiencing slower productivity growth over the 2000s, which suggests that the rate of growth in

---

6 The resources sector comprises the mining and metals manufacturing industries as defined by the ABS.

7 Productivity performance fluctuates with economic and business cycles. During downturns, businesses often lower their utilisation of labour and capital, rather than laying them off. This avoids the costs involved in re-employing them when times improve, although it can temporarily reduce productivity. Demand conditions in the non-resources sectors of the economy have generally been below their long-run trends since the onset of the global financial crisis in 2008.

8 See, for example, Eslake, 2011 and Dolman, 2009.

9 Productivity Commission, 2013, IPART, 2010, Eslake, 2011. One prominent example is new environmental and water and electricity service standards, which have required many utility services to invest in higher cost production technologies.

10 Indicators of innovative activity for Australia generally point to higher rates of innovation in the 2000s than in the 1990s (Connolly & Gustafsson, 2013, and Carmody, 2013). When adjusted for education and work experience (a proxy for human capital), estimates of labour inputs similarly show strong increases across the 2000s.

technological advance — which expands production possibilities — may have been slower than in previous decades. This is discussed further in the section on the prospects for long term productivity growth below.

The impact of the resources, utilities and manufacturing sectors

The resources sector has seen significant increases in capacity that have not yet been matched by growth in output. The rate of productivity growth in the resources sector is likely to improve as this additional capacity is used for production and exports.[11]

In addition, high prices for commodities have made activities with higher unit costs, such as the extraction of deeper ores and lower yielding resources, financially attractive. The mining of marginal resources is likely to decline as prices for resource commodities decline — although to the extent that fewer high-value deposits are discovered, the downward pressure on productivity growth may continue into the future.[12]

The resources sector is expected to experience a very strong turnaround in labour productivity over the next few years. After falling a cumulative 19 per cent over the past five years, labour productivity is projected to return soon to positive rates of growth as output from the resources sector rises strongly. The resources sector generates around 16 per cent of Australia's production and is the highest productivity sector in the economy.[13] Therefore, this productivity turnaround will have a sizable impact on national productivity growth.[14]

This will not lead to a commensurate increase in national average incomes as a large part of the resource investment boom (around four-fifths) has been funded from foreign sources.[15] Australians will receive returns from higher productivity growth that reflect the level of domestic investment in the sector, as well as through employment income.

Productivity levels in the utilities sector should also increase as utilisation of new capacity grows, for example, with population growth. The negative impact of other temporary factors, such as drought, which decreased water output, and expenditure to

---

11 Bureau Resources and Energy Economics, 2014.
12 Productivity Commission, 2014.
13 Methodology for constructing resources sector data as in Gruen, 2011. Sectoral output share based on real gross value added.
14 Were labour productivity in the resources sector simply to stop falling, it would raise aggregate labour productivity growth by 0.6 per cent per annum relative to the past five years. Given the sharp increases in output in prospect in the next few years detailed in Budget Statement 2, the sector's contribution to aggregate productivity could be significantly larger than this.
15 The estimate of foreign investment funding in the sector is from Arsov, I, Shanahan, B and Williams, T, 2013.

refurbish or replace assets, for example ageing electricity infrastructure, is also likely to diminish in time.

However, the utilities sector has incurred significant expenditure in recent years in response to policy decisions, including with respect to higher service quality, reliability, environmental and security standards.[16] This could represent a permanent shift to a lower measured productivity level, although these decisions may still contribute to higher and more sustainable living standards to the extent that they take a form of investment akin to insurance.

The manufacturing sector saw a marked slowdown in productivity growth over the mid-2000s and, given its size, was a major driver of the national productivity slowdown over this period.[17] The diversity of this sector makes it difficult to infer broad causes of the slowdown in manufacturing productivity, but long-run trends in the industry show sustained falls in input growth, with larger falls in output growth.

The specific circumstances of these sectors do not explain the aggregate slowing of productivity growth. After removing the effects of these sectors, the slowdown in productivity is still seen, and is broad-based across industries. This suggests that economy-wide factors are at play and there is a need for an economy-wide response.

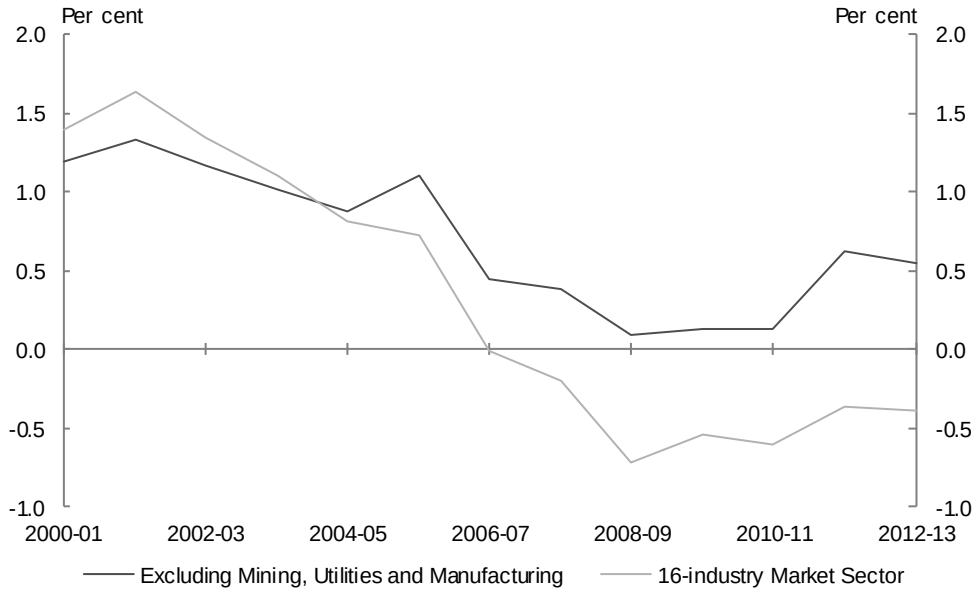
Chart 3 shows Australia's growth in multi-factor productivity (MFP), which has been extremely weak, on average, over the past decade. In contrast to labour productivity, MFP is a more comprehensive measure of productivity, as it captures how efficiently producers use both the key inputs of labour and capital.[18] Poor MFP performance over the past decade contrasts with solid growth on average over the preceding 30 years.

16 These include, for example, the construction of desalination plants to ensure water security and asset enhancements to meet higher electricity reliability, water quality and dam safety standards.

17 Productivity Commission, 2014.

18 Labour productivity (output produced per unit of labour input) ascribes all the value added from resources used in production to labour. As such, it is a more limited measure of the efficiency with which firms use their resources than MFP (output produced per unit of combined inputs of labour and capital).

Chart 3: Multifactor productivity growth



Note: Data are 5-year period-end moving averages.
Source: ABS 5260.0.55.002, unpublished ABS data and Treasury calculations.

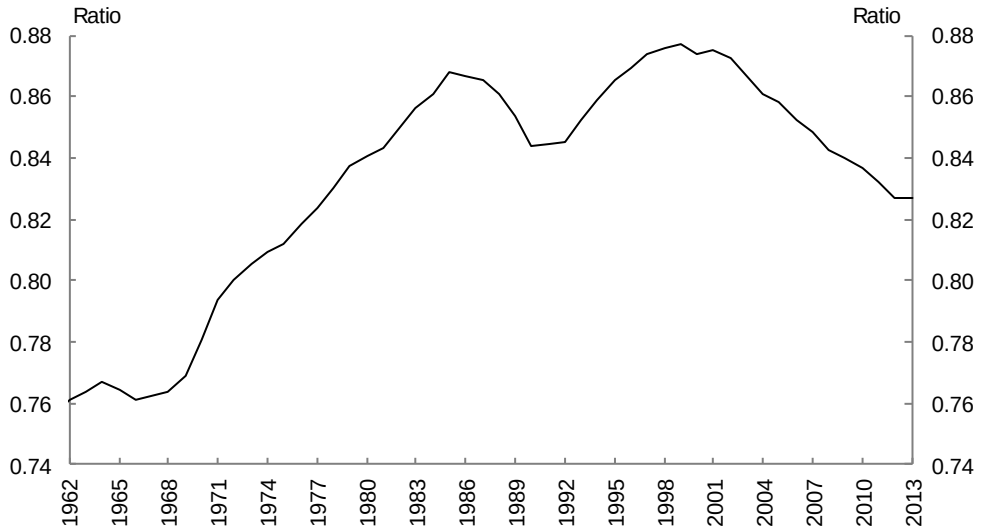
What are the prospects for productivity growth in the long term?

The United States (US) is currently the most technologically advanced country. In general, the US can be said to represent the highest levels of productivity achievable from the use of existing resources given current knowledge and technologies.

Chart 4 shows that Australia's productivity levels relative to the US have trended downwards from around 87 per cent at the turn of the century to around 83 per cent in 2013.

US labour productivity growth has fallen since 2002 but Australia's productivity growth has deteriorated more markedly.

Chart 4: Australia's labour productivity relative to the United States



Note: Data are a 5-year period-end moving average.
Source: The Conference Board Total Economy Database and Treasury.

A large part of the productivity gap between Australia and the US is attributable to differences in historical and geographic circumstances. Australia's large and sparsely populated land mass and geographic distance from key global centres of trade limit opportunities to take advantage of specialisation and economies of scale. Previous work undertaken in Treasury suggests that these factors could explain around 40 per cent of the observed gap in productivity.[19]

While some Australian industries enjoy higher or similar productivity relative to the US (such as resources), other industries lag behind, such as utilities, manufacturing, and wholesale and retail trade. This indicates that there may be further scope to 'catch up' to best practice, particularly within industries where Australia's productivity is relatively low.

Longer term, Australia's prospects for productivity growth will be affected by advances in technology, which will create new possibilities for production. As a net importer of technology and innovations, Australia's ability to absorb advances and convert them into new business opportunities will be particularly important.

Is the frontier expanding more slowly?

As noted above, Australia has not been alone among advanced economies in experiencing slower productivity growth over the 2000s. This suggests that the rate of expansion of the global technological frontier may have been slower than in previous decades. There is little consensus on the reasons for this apparent slowdown.

19 Davis & Rahman, 2006.

There are also differing views as to the scope in future for major productivity improvements. Some suggest that the set of innovations seen over the past 250 years may have been a unique episode in human history.[20]

This suggests future innovations will be less productivity enhancing, and income growth may be lower in future. If this is true, *global* living standards can increase as less developed countries get closer to the frontier, but those at or near the frontier may see a slowdown in income growth.

However, others note that it is not possible to predict when technological change will occur, or necessarily how and when innovations will change businesses processes, and what we produce.[21]

The analyses of slowdowns have generally focused on advanced economies. With the growth of emerging economies, the sources of global economic growth and creative enterprise will expand. This may well boost the stock of 'knowledge workers' contributing to significant advances in the global technological frontier.

To the extent that Australia is geographically closer to new sources of technological advance, there should be greater scope to 'catch up' to, and move with, best practice.

The impact of structural change

Although the resources sector experienced negative productivity growth in recent years, it maintained the highest level of labour productivity. Consequently, over the past decade, the movement of labour to the resources sector has contributed significantly to aggregate labour productivity growth.

Over the decade ahead, changing industry structure is projected to detract around 0.3 percentage points from the 30-year average labour productivity growth rate of 1.5 per cent per year.[22] The expansion of low productivity growth sectors, such as business services, aged care and health, as well as relative declines in high productivity growth sectors, such as financial services, is projected to reduce growth in aggregate labour productivity.[23]

---

20 For example, Gordon, 2012.

21 As noted by Syverson, 2013, it may simply take time for innovations, such as information and communications technologies, to result in significant growth in productivity. Brynjolfsson and McAfee, 2011, further suggest there is significant growth potential stemming from advances in computing and digital technologies that are yet to be seen.

22 Treasury calculations based on the Monash Multi-Regional Forecasting model. This finding is consistent with a recent study by the Productivity Commission, (2012).

23 Productivity Commission, 2013a. It is particularly difficult to measure productivity in the services sectors. Many public services, for example, are not priced or have prices that do not reflect their full costs, and improvements in the quality of services, such as in the areas of

Australia's services sectors are expected to become a larger part of the economy. These sectors currently account for more than three-quarters of total employment and are expected to grow further to meet growth in domestic and international demand.[24] Services sectors tend to be lower-productivity as they are more labour-intensive.

Like Australia, a number of advanced economies are becoming more services-oriented as lower-cost developing economies compete for export share in higher productivity manufacturing-oriented sectors.[25]

The negative impact on aggregate productivity of a shift to labour-intensive service industries — many of them provided or funded by governments — and their increasing prominence as a share of the economy highlights the critical importance of improving productivity in these industries.

Changes in the terms of trade

Over the past decade or so, the second most significant driver of income growth has been income derived from the largest rise in the terms of trade in our history. The economic transformation of China and other emerging market economies drove global prices of Australia's mineral commodities, and the terms of trade, to record highs. This enabled strong wage growth in resources-related sectors, while a higher exchange rate increased the purchasing power of households across the economy. This added 0.8 percentage points a year to growth in average incomes, boosting real incomes per person by about $6,000 since 2000.

Australia's terms of trade peaked in 2011, and has been declining ever since. This decline will continue over coming years as the prices for our key export commodities fall in response to expanding global supply capacity.[26] The falling terms of trade has already begun to detract from growth in national income, and will continue to do so over the medium term.

---

health and ageing, are difficult to quantify. The true values of these services are, therefore, often not reflected in output measures.

24 The international dimension represents predominantly the rapidly increasing membership of the Asian middle class with their rising demand for a broad range of services, including tourism, education, aged care and health, entertainment, financial and professional services. Employment in the Australian services sectors is projected to grow by around 30 per cent to 2030. Gruen, 2014.

25 Spence & Hlatshwayo, 2012.

26 Parkinson, 2014.

Changes in workforce participation

Australia experienced a 'demographic dividend' in recent decades like many other countries. That dividend, which boosted income growth, is coming to an end as the population ages.

Between 1970 and 2010, the proportion of Australia's population between 15 and 65 (those most likely to participate in the labour market) increased from 62.8 per cent to 67.4 per cent, driven by the post-war baby boom and a fall in the birth rate in the 1960s and 1970s. This increase in the share of the working age population helped underpin GDP growth, particularly in the 1980s, when labour productivity growth was relatively slow.

This trend is now beginning to reverse as people who made up that demographic 'bulge' begin to retire. The proportion of the population aged 65 and over is expected to increase to nearly 20 per cent in 2030 from 13.5 per cent in 2010.

An increasing proportion of older people are continuing to work, but their levels of participation in the workforce are lower than the average of other groups of working age.[27] This suggests that, as more people move into older age groups, the aggregate workforce participation rate is set to decline even if individuals in the 65-plus age group increasingly work beyond traditional retirement ages. In addition, younger people are delaying entry into working careers, instead choosing lengthier periods of study, overseas travel, and part-time employment. The combined effect of these phenomena is already placing downward pressure on participation, a process that is likely to continue over the coming decade.

Through this workforce participation effect, population ageing is likely to slow economic growth in coming decades and, in turn, is likely to reduce growth in incomes and the future revenue base of government. Population ageing is also likely to create additional demands on government spending, particularly in health, aged care and pensions. By 2050, it is projected that there will be only 2.7 people of working age to support each Australian aged 65 and over, compared with five working age people per aged person in 2010, and 7.5 in 1970.

SUPPORTING FUTURE GROWTH IN LIVING STANDARDS

For living standards to be maintained and grow in the future, Australia needs a sustainably strong economy and policy settings that maintain the ability of all households to participate in the opportunities created by growth. Having better

27 The employment rate of workers aged between 55 and 64 has increased from 53.5 per cent in 2005 to 61.4 per cent in 2012. This is now well above the OECD and G7 averages of approximately 56 per cent. Australia ranked 11th amongst the OECD countries in 2012, up from 14th in 2005.

standards of living in the future will also require governments to have the capacity to provide goods and services and income support to the community, and to respond to external shocks.

This will require change in policies and mindsets, particularly given the outlook in the years ahead. Income growth is projected to be below its 20-year average over the next few years, reflecting the decline in terms of trade and subdued wages growth. The challenge for governments, businesses and the broader community is to address the constraints to potential economic growth and make the most of our opportunities.

Improving the flexibility and competitiveness of the economy

An important role for government is ensuring that policies support private effort and enterprise. Priorities include removing impediments and disincentives to work and initiative, such as subsidies to unviable businesses and poorly-targeted income assistance. The Government is firmly of the view that an attitude of entitlement removes incentives for change and progress, and reduces the scope for improvements in living standards over the longer term.

Government can also improve conditions for growth by facilitating trade with other countries and maintaining Australia's openness to foreign investment. Open markets give Australians access to overseas goods, finance and new business opportunities, and require domestic firms to be more dynamic and competitive in order to prosper.

Australia's continued openness to trade and foreign investment will also facilitate access to new technologies and ideas, which will be a critical driver of future productivity growth.

To this end, the Government has concluded free trade negotiations with Japan and Korea, and will seek to conclude negotiations with China and the regional Trans Pacific Partnership later this year.

More broadly, Australia's exporting sectors will have a number of new opportunities over the decades ahead, including those provided by anticipated increases in demand for services, agricultural products and high-value manufactures from emerging market economies. Foreign investment and measures to facilitate trade will allow Australia to harness these opportunities and benefit from growth in other countries, particularly in our region.

Competition in both input and product markets is one of the most important drivers of productivity and income growth. It provides incentives for businesses to be more efficient and to respond to the needs of their customers, both other businesses and consumers, creates the incentives for resources to be allocated to their most value-adding uses, and puts downward pressure on prices. The pressure exerted by well-functioning capital markets also encourages businesses to innovate and to raise management performance.

The flexibility and competiveness of the economy can be enhanced by removing government regulation where it is not required, or lessening its burden, and ensuring that frameworks for promoting competition and the efficiency of our labour and capital markets are suited to the needs of Australia's evolving economy.

Evidence suggests that there may have been increases in some forms of regulation over recent years.[28] Removing unnecessary obstacles to business formation and investment by start-up companies is a critical part of establishing an effective innovation system. High costs of entry and exit have the potential to discourage the type of start-up companies that often pioneer new technologies and work practices, and may also shield incumbent firms that may be less efficient from new competitors.[29]

The Government has embarked on a programme to reduce regulatory burdens and it will review the policy frameworks that promote the competitiveness of businesses.

Governments also have an important role in ensuring that the markets for infrastructure, education and innovation work well, and investing where this will produce benefits to the broader community.

This Budget provides for substantial investments in infrastructure to support productivity in the long term. Investment in infrastructure will also be important to generating economic activity in the near term as the economy transitions from resources investment-led growth.

Budget prudence and government efficiency

It is important that the Budget be restored to a sustainable basis and that government improve the productivity of its operations.

The process of restoring the Budget to a sustainable basis can help drive improved economic conditions in a number of ways. Productivity can be enhanced when governments live within their means, by allowing expenditure to be redistributed to productivity-supporting investment and requiring public sector providers to increase their efficiency and look for innovative solutions.

A sustainable Budget position will also place downward pressure on interest rates and exchange rates over time and enable fiscal buffers to be built, helping to support private sector investment activity and providing capacity to respond to future external shocks.

---

28 For example, international data on the burden of government regulation score Australia 2.8 (out of 7, 1 being most burdensome) in 2013-14, compared to 3.2 in 2009-10. Some sectors, for example the small business sector, have unduly borne the burden of these changes (Productivity Commission, 2013b).

29 Dolman and Gruen, 2012.

Government can improve productivity by simply getting out of the way of business and individuals. As many government entities do not directly face the discipline of a competitive market, they are generally less efficient, so reducing or eliminating activity that can be performed by the private sector can also increase productivity.

Further, the Government can increase public sector productivity by ceasing activities that can be performed by other levels of government, which reduces unnecessary duplication and overlap, and undertaking those that it is best placed to do.

The Government's medium term strategy of returning the Budget to a sustainable surplus and reducing the government share of the economy over time will free up resources for the private sector to drive economic growth and create jobs.

CONCLUSION

Australians have enjoyed rapid rates of income growth over the past two decades, which have contributed to high living standards relative to the rest of the world. With the terms of trade and population ageing now detracting from income growth, productivity growth is likely to be the predominant driver of income growth over the next decade. It is reasonable to expect some improvement in Australia's productivity performance from a cyclical turnaround in labour and capital utilisation, particularly in the resources sector. However, longer-run factors, including a gradual shift toward lower-productivity industries, make prospects for productivity growth in Australia more challenging than usual.

Without further effort, the increases in living standards to which we are accustomed are unlikely to continue into the future. It is imperative that we address inefficiencies in the economy and get economic settings right.

The Government has started the process of reform by laying out a plan for fiscal repair, making well-targeted investments in economic infrastructure, and implementing policy changes that will support business effort and creativity and workforce participation. The Government will pursue these, and further reforms, over the medium term.

REFERENCES

Arsov, I, Shanahan, B and Williams, T, 'Funding the Australian Resources Investment Boom', Reserve Bank of Australia Bulletin, March Quarter 2013.

Bureau of Resources and Energy Economics, 'Resource and Energy Quarterly', 2014.

Carmody, C, 2013, 'Slowing Productivity Growth — A Developed Economy Comparison', *Economic Roundup*, Issue 2 2013, Treasury.

Connolly, E and Gustafsson, L, 2013, 'Australian Productivity Growth: Trends and Determinants', Australian Economic Review, Vol. 46, no. 4, pages 473-482.

Davis, G, and Rahman, J, 2006, 'Perspective on Australia's Productivity Prospects', *Treasury Working Paper,* 2006/04.

Dolman, B, 2009, 'What Happened to Australia's Productivity Surge?', Australian Economic Review, vol. 42 (3), pages 243-263.

Dolman, B, and Gruen, D, 2012, 'Productivity and Structural Change', Presentation to the 41st Australian Conference of Economists, 10 July 2012.

Eslake, S, 2011, 'Productivity: The Lost Decade', Paper presented to Reserve Bank of Australia Conference on The Australian Economy in the 2000s, Sydney, 15 August.

Gordon R, 2012, 'Is US Economic Growth Over? Faltering Innovation Confronts the Six Headwinds', NBER Working Paper 18315.

Gorecki, S and Kelly, J, 2012, 'Treasury's Wellbeing Framework', *Economic Roundup*, Issue 3 2012, Treasury.

Gruen, D, 2011, 'The macroeconomic and structural implications of a once-in-a-lifetime boom in the terms of trade', Address to Australian Business Economists Annual Conference, 24 November 2011.

Gruen, D, 2014, 'The Implications of Economic and Financial Trends and Globalisation for the Demand and Supply for Skills', Address to the Australian Workforce and Productivity Agency/ASSA Scenario Development Forum, 28 February 2014.

Independent Pricing and Regulatory Tribunal, 2010, 'Review of the Productivity Performance of State-Owned Corporations'.

Parkinson, M, 2014, 'Fiscal Sustainability & Living Standards — the Decade Ahead', Speech to the Sydney Institute, 2 April 2014.

Productivity Commission, 2005, 'Review of National Competition Policy Reforms', Inquiry Report No. 33, Canberra.

Productivity Commission, 2011, 'Identifying and Evaluating Regulation Reforms', Research Report, Canberra.

Productivity Commission, 2013, 'Electricity Network Regulatory Frameworks', Report No. 62, Canberra.

Productivity Commission, 2013a, 'An Ageing Australia: Preparing for the Future', Commission Research Paper, Canberra.

Productivity Commission, 2013b, 'Regulator Engagement with Small Business', Commission Research Report, Canberra.

Productivity Commission, 2014, 'PC Productivity Update April 2014', Melbourne.

Spence, M, and Hlatchwayo, S, 2012, 'The Evolving Structure of the American Economy and the Employment Challenge', Comparative Economic Studies, vol. 54, pages 703-738.

Syverson, C 2013, 'Will History Repeat Itself? Comments on "Is the Information Technology Revolution Over"', International Productivity Monitor, Number 25, Spring 2013.

United Nations, 2013, 'The Rise of the South: Human Progress in a Diverse World', Human Development Report.

World Economic Forum, 2013, 'The Global Competitiveness Report 2013-14', Geneva, Switzerland.