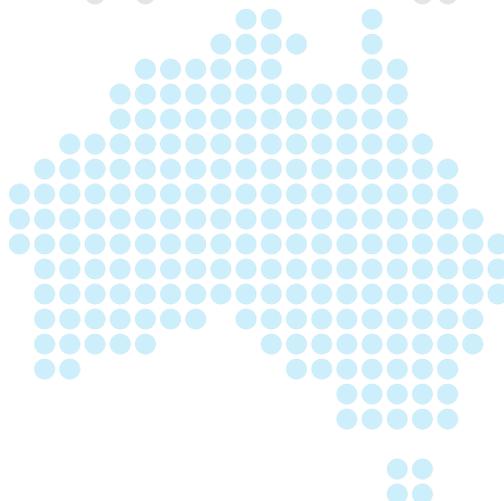


McKinsey Global Institute



August 2012

Beyond the boom: Australia's productivity imperative



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Beyond the boom: Australia's productivity imperative

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Past performance

6th

among OECD countries in GDP
per capita ... up from 16th in 1990

58% of income growth since
2005 has been driven by
temporary boom factors

35% of income growth came from resources ...
but so did

99%

of the drop in
capital productivity

0.7% annual decline in productivity
between 2005 and 2011 ...
compared with a 2.4% increase
from 1993 to 1999

Threats and opportunities

If the boom slows and productivity doesn't improve, income growth could potentially drop to

0.5%

Investment in the resources sector could rise between 50% and

170%

National income could be

A\$90 billion

higher by 2017 if productivity is restored to long-term averages ... while up to

A\$135 billion

of 2017 income depends on continued strength in investment and terms of trade



Executive summary

Although they may not always feel it, Australians are more prosperous than ever. As recently as 1990, the nation ranked 16th among OECD countries in terms of per capita GDP; just two decades later, in 2010, it stood in sixth place.¹ Australia overtook the United States in terms of income per head back in 2005.

Capitalising on its geography and geology, Australia has been riding the wave of Asia's rapid growth, providing many of the raw materials used to power new industry and build the vast infrastructure needed in China and other emerging markets. As commodity prices have spiked in recent years, Australia has attracted a flood of investment into its mines, processing plants, pipelines, and ports—in fact, there has been greater investment in resource projects over just the past five years than in the previous 20.

Asia's economic and demographic trends point to sustained demand in the decades ahead, but growth fuelled by natural resources carries risk. Australia's reliance on its resource sectors could leave the economy vulnerable to any growth slowdown in China, volatility in commodities markets, and the eventual normalisation of resource prices when supply catches up with demand (or potentially a precipitous drop in resource prices if supply gets *ahead* of demand).

The boom also belies some weaker fundamental trends in the economy that could put Australia's future prosperity at risk unless they are addressed. Notably, growth in labour productivity has fallen to 0.3 percent per annum in the last six years, down from an average of 3.1 percent from 1993 to 1999. This slowdown has taken place at a time of significant wage inflation, with average private-sector weekly earnings growing at 4.4 percent per annum over the same period. Lacklustre labour productivity growth is all the more striking in light of the substantial capital deepening that has taken place in the Australian economy. The amount of capital per hour worked is 25 percent higher today than it was six years ago—yet workers on average are producing only 7 percent more output per hour. Moreover, capital productivity is now a drag on income growth. Improving productivity performance is imperative if Australia hopes to prepare for a future that may not offer the tonic of record investment and export prices.

In this report, we first use a new MGI model for income growth accounting to explore the current dynamics of the Australian economy. We then discuss potential scenarios for future growth through 2017, and home in on individual sectors of the economy to analyse their key growth drivers and better understand what businesses and policy makers might do to maximise productivity and income growth.

We now summarise our main findings.

¹ Among nations in the Organisation for Economic Co-operation and Development. Based on per capita GDP, adjusted for purchasing power parity (PPP), using OECD national accounts.

AUSTRALIA'S CURRENT INCOME GROWTH IS BEING DRIVEN BY A NUMBER OF ONE-OFF FACTORS

The magnitude of the resources boom has distorted perceptions of the economy's overall health. Since 2005, Australia's income has risen 4.1 percent per year, a pace consistent with recent history.² But a closer look reveals some troubling trends: Australia has enjoyed this prosperity despite a decline in multifactor productivity of 0.7 percent per year. Indeed, without the one-off factors of an investment surge and high commodity prices, Australia's brisk income growth would have been cut in half—well below what has historically been achieved.

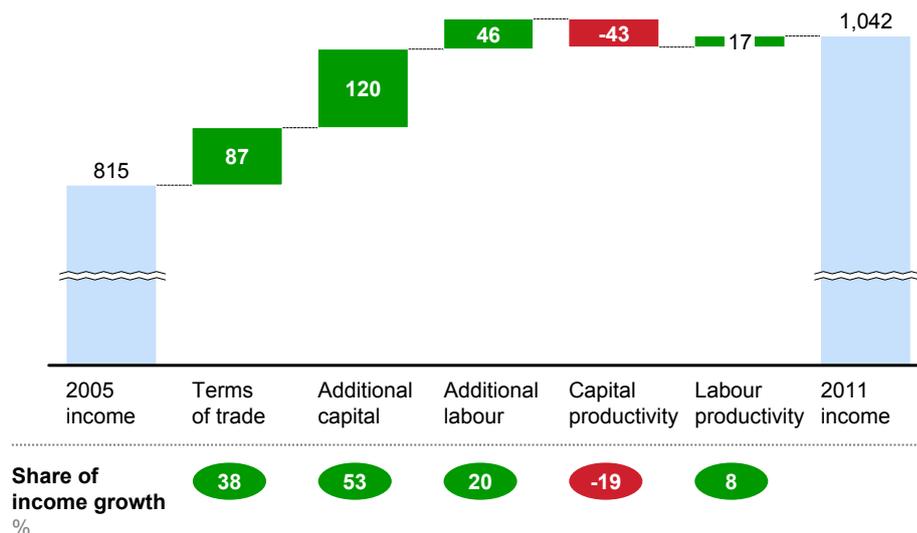
Among the dynamics now at work:

- Capital investment and the terms of trade, not productivity, are driving growth.** Before the resources boom, productivity delivered at least half of Australia's income growth. But since 2005, both capital and labour productivity have fallen dramatically. More than 90 percent of income growth now comes from Australia's favourable terms of trade (especially the increase in resource prices) and the associated surge in capital investment (Exhibit E1). The terms of trade may be a simple ratio between the prices of Australia's exports and the prices of its imports—but a powerful story is embedded within this number. Historic highs in Australia's terms of trade reflect China's newly voracious appetite for coal and ore, which sent prices for these commodities soaring, as well as the steady flow of cheap manufactured goods shipped from Chinese factories to the Australian consumer.

Exhibit E1

New capital and terms of trade have driven income growth since 2005

Gross domestic income (GDI), market sectors, 2005–11
A\$ billion, real 2010



SOURCE: Australian Bureau of Statistics; McKinsey Global Institute analysis

² This report uses a measure of income called gross domestic income (GDI), which includes the terms of trade. We focus on income rather than GDP in this report to reflect the reality that an economy earns more when it receives higher prices for the goods that it exports and that effective incomes are higher when goods that an economy imports become cheaper, giving consumers greater spending power. For detail, see the appendix, section D, "Measuring Australia's income".

- **10 percent of the economy has driven a third of recent income growth.** Since 2005, a third of Australia's income growth has been generated by a resources sector that accounts for 10 percent of the nation's output and just 3 percent of its direct labour. Resources have absorbed 64 percent of the terms of trade improvement and half of the investment increase. This shift in emphasis has caused huge disparities among both sectors and regions.
- **More than half of recent income growth is due to temporary boom-time effects.** Underlying growth in income is not as significant as the headline number suggests. The biggest one-off impact has been an A\$87 billion boost from the terms of trade, but capital deepening (an increase in capital per hour worked above historical rates) also gave an A\$39 billion boost.
- **Capital productivity is the biggest drag on growth.** Capital productivity actually lowered income by A\$43 billion from 2005 to 2011, or A\$53 billion when including the impact of a shift in capital to more productive industries. While A\$24 billion of the deterioration can be explained by large investments sunk in projects that have yet to be completed and A\$13 billion represents declining yields (a factor that cannot be controlled), A\$16 billion in income has been lost economy-wide since 2005 to higher costs and inefficiencies (which can be at least partially addressed).

IF PRODUCTIVITY GROWTH DOESN'T RECOVER, AUSTRALIA MAY HAVE LITTLE OR NO INCOME GROWTH IN THE FUTURE

The Australian economy has enjoyed uninterrupted annual growth for more than two decades, but that track record is not guaranteed to last. Future income growth hinges on two major factors: 1) the duration and intensity of the resources boom; and 2) productivity growth. This report examines likely high and low projected outcomes for the major drivers behind these two factors and then builds four scenarios based on possible combinations of these results to illustrate a range of potential impacts on Australia's future income growth.

The best possible scenario involves productivity growth returning to its longer-term average, the current terms of trade being maintained, and all advanced capital projects plus three-quarters of less advanced projects coming onstream. Even then, our projections suggest that income growth would amount to 3.7 percent, weaker than its historical rate of 4.1 percent.

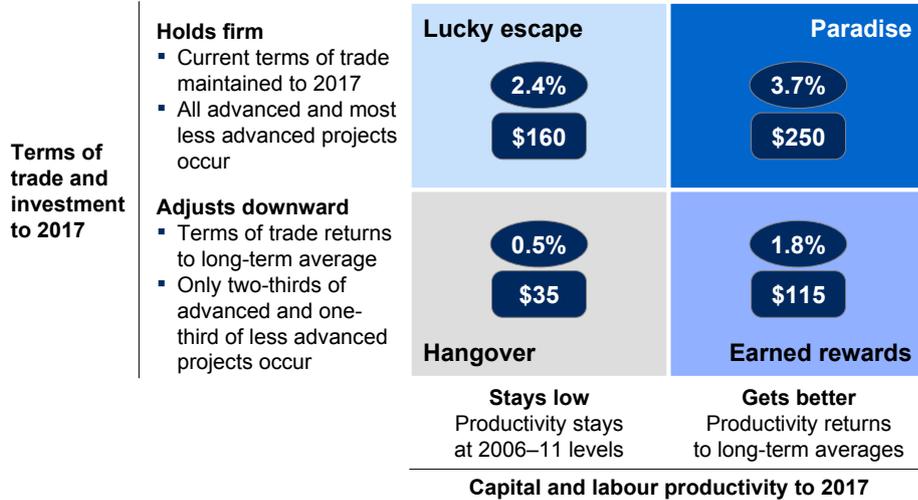
But the worst-case scenario is sobering. It involves the terms of trade trending toward their long-term average, only two-thirds of advanced capital projects and one-third of less advanced projects coming to fruition, and no improvement in recent productivity growth. Under those conditions (and excluding any dynamic economic feedback loops that may result from the scenario), there is a risk that Australia could see only 0.5 percent income growth to 2017 (Exhibit E2).

Exhibit E2

Four scenarios illustrate a range of potential outcomes

Scenarios for annual growth in GDI, 2011–17¹

○ Income growth rate %
 ○ Income growth² A\$ billion



¹ Adjusted for lagged returns from capital recently added.
² Difference in income between 2011 and 2017, rounded to the nearest A\$5 billion.
 SOURCE: Australian Bureau of Statistics; McKinsey Global Institute analysis

Looking ahead to 2017, national income could vary by up to A\$135 billion depending on the direction of the terms of trade and the strength of associated investment trends—but unfortunately, Australia cannot control the intensity and duration of the resources boom. It *can*, however, take steps to boost productivity. Although slower income growth is probably unavoidable, improved productivity can ensure a much softer landing if and when the resources boom abates. Returning to good productivity performance can add A\$90 billion to national income by 2017.

CAPTURING THE A\$90 BILLION PRODUCTIVITY PRIZE REQUIRES ACTION IN FOUR SECTOR CLUSTERS

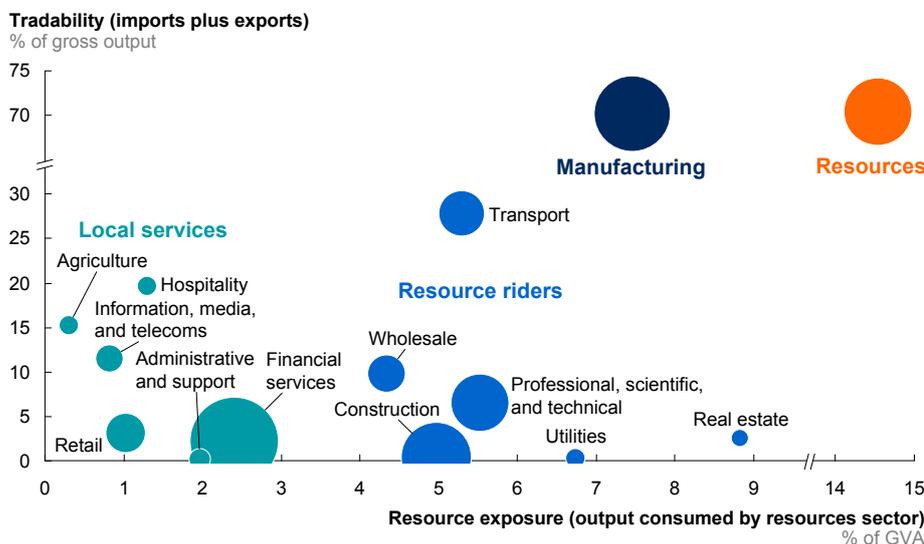
Before a serious productivity push can begin, it is crucial to understand the particular nature of the challenges facing individual sectors.

Conventional wisdom says that Australia has a two-speed economy: a thriving resources sector versus all other sectors, which are growing more slowly. But our analysis finds it more useful to describe Australia as a four-part economy, with clusters defined by their proximity to the resources boom and their exposure to trade competition (Exhibit E3). When the productivity challenge is viewed through this lens, priority areas for future action begin to come into focus.

Exhibit E3

Sectors group into four clusters based on their links with resources

○ Size of bubble reflects sector Gross Value Added in 2011



SOURCE: Australian Bureau of Statistics; McKinsey Global Institute analysis

- 1. Resource sectors: Drive capital productivity to make good on investment.** Resource sectors have experienced rapid growth but falling capital productivity. Some A\$40 billion in new net capital stock was added in 2011, a number projected to rocket to A\$71 billion in 2012 and past the A\$100 billion mark in 2013. We estimate that Australia is less than halfway through the capital boom; even the lowest projection used in the scenarios for future income growth illustrated in Exhibit E2 predicts that investment in the resources sector over the next six years will exceed the already historic levels posted since 2005. This underscores the urgency of getting capital productivity right; it is a priority area that can reap large rewards in future income growth.³ Major capital projects are complex undertakings that are prone to inefficiencies and overruns, but the analysis reveals opportunities to boost performance by up to 30 percent. Both individual companies and policy makers can help capture these gains. There is a clear role for government in influencing the time and cost of major resource projects. This includes ensuring that environmental approvals, infrastructure development, and

³ For further commentary, see Ed Shann, *Maximising growth in a mining boom*, Minerals Council of Australia, March 2012.

industrial relations deliver the right balance between development and other social good, and that regulators provide maximum clarity, certainty, and speed to companies while fulfilling their mandates.

2. **Resource rider sectors: Improve efficiency, especially in utilities.**
Resource riders, such as transport and professional services, have grown rapidly because of their links with the mining and energy boom, but at the same time, they have experienced a decline in productivity. These sectors attracted the vast majority of the overall economy's increase in labour from 2005 to 2011, but the contribution of labour productivity to sector output fell to virtually zero during this period. This stagnation is especially notable because it occurred in spite of 37 percent growth in net capital stock between 2005 and 2011. Finding new ways to make infrastructure development more cost-efficient and adopting a more integrated cross-sector approach to resource productivity that can reduce the need for expensive new infrastructure will be crucial.
3. **Local services: Recommit to microeconomic reform.** Sectors such as retail trade and telecommunications have been largely unaffected by the resources boom and have posted solid productivity growth (albeit with gaps to international benchmarks). This cluster contributed A\$49 billion to income growth in 2005 to 2011. But there is room for further gains, given the average productivity gap of A\$32 per hour with the equivalent US sectors from 2005 to 2010. MGI research shows that new operating models within individual companies and sectors (automating supply chains, for example) can boost productivity, as can actions by governments to streamline regulation, encourage innovation, and promote competitive markets. To close the gap, Australia needs to re-embrace the cause of microeconomic reform that drove growth in the 1990s.
4. **Manufacturing: Build the foundation for long-term competitiveness.**
Like other developed economies, Australia has experienced a long-term erosion in manufacturing output and employment. Capital productivity has fallen significantly over the past six years and has been only partly offset by gains in labour productivity. But the decline has not been uniform across all subsectors. Unsurprisingly, the subsectors facing the greatest threat from low-cost overseas producers have posted the greatest job losses and the greatest productivity increases. At the same time, productivity growth in more innovative manufacturing sectors has lagged below international benchmarks. Improvement will depend on three factors: further cost efficiencies in those subsectors that compete primarily on price (with a particular focus on the neglected area of management quality); higher labour mobility within the manufacturing sector; and a more supportive ecosystem for innovative manufacturing (the area in which Australia has the best long-term potential to be competitive).

Successful action along these lines could deliver additional national income of up to A\$90 billion a year over and above a business-as-usual scenario by 2017.



Thanks to the resources boom, Australia has had strong growth but has also been able to avoid confronting some deteriorating fundamental trends, a luxury that it cannot afford indefinitely. This report describes both the challenge now facing the economy and the size of the prize if productivity is improved. We hope it will also contribute to a constructive debate on the best way to capture that prize and build a more balanced, resilient Australian economy.

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Farewell to cheap capital? The implications of long-term shifts in global investment and saving (December 2010)

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