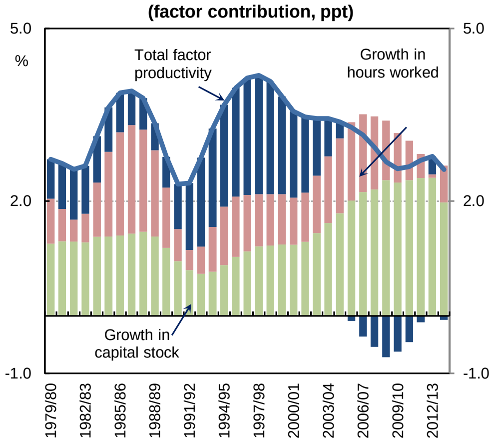
What is trend growth in Australia?

- Weak productivity growth, an ageing population and slower population growth have reduced the potential growth rate of the Australian economy.
- We estimate *current* potential output in Australia at a little under 3%pa. – lower than the commonly referred to 3¼ pa% trend growth rate for Australia.
- A lower potential growth rate means that there is presently less spare capacity in the economy than many commentators assume.
- This means potentially less wriggle-room for the RBA on the interest rate front.
- Policy reforms aimed at fostering innovation and productive infrastructure investment are required if Australia is to lift the potential capacity of the economy.

Last week, RBA Governor Glenn Stevens suggested that Australia's potential growth rate may be lower than what has been previously assumed. Steven's devoted a decent chunk of a speech he delivered at a business luncheon to the present vexing economic disparity in Australia that is below trend growth but an unchanged unemployment rate over the past year. Stevens put forward a few possible explanations, namely data issues, slower wages growth *and a lower new level of trend growth* to explain the conundrum.

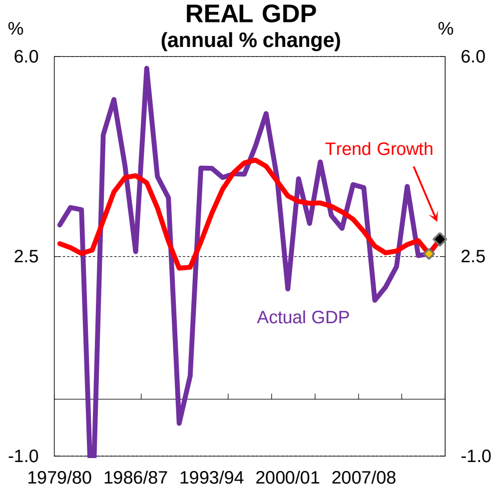
GDP
(factor contribution, ppt)



In August last year, we published a note arguing that "trend growth" in Australia is now lower than the commonly referred to 3¼ pa%. At the time, we put it at 3%pa. Since then, population growth has eased a little in Australia and in light of Steven's comments, we thought it a worthwhile time to revisit our thoughts on 'trend' or 'potential' growth in Australia.

Potential growth is the highest rate of growth that an economy can expand at over the long run without a lift in inflation. In our view, the potential growth rate of the Australian economy has fallen in recent years, primarily due to weak productivity growth, the ageing of the population. More recently, this has been compounded by slower population growth. There will be a boost to productivity growth as the mining boom transitions from the investment phase to the production phase. This is because resource extraction is less labour intensive than mining construction and production will lift. But beyond that, policy reforms, innovation and smart infrastructure investment are required to boost Australia's productivity growth.

REAL GDP
(annual % change)



Measuring potential growth

In summary, output in an economy is a combination of three factors: (i) labour; (ii) capital; and (iii) productivity.

- Labour is most precisely measured as the total number of hours worked.
- Capital is defined as the total *stock* of productive capital, which includes transport infrastructure, factories and mines, but excludes dwellings.
- Productivity can be measured a number of ways, but it is most accurately defined as some measure of output per unit of inputs (capital and labour).[1]

[1] Labour productivity (which is simply measured as output per hour worked) is frequently used as an indicator of productivity growth. But it is an incomplete measure because capital is also part of the equation. To estimate potential growth we use multifactor productivity (MFP), which is calculated as output per unit of a combined bundle of labour and capital.

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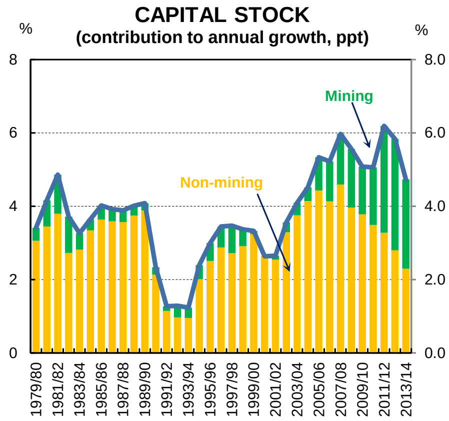
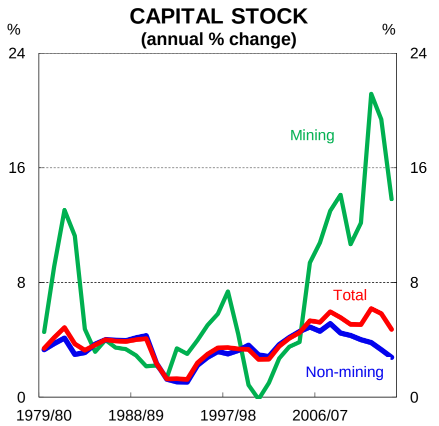
During the 1990s, economic growth in Australia was powered by a significant lift in productivity. A number of key economic reforms undertaken in the late 1980s and 1990s enhanced the productive capacity of the economy and as a result, both real growth and incomes improved. But over the last decade, productivity growth has slowed significantly in Australia.

We have run a Cobb-Douglas production function to solve for multi-factor productivity (the broadest measure of productivity) in Australia. This allows us to estimate the *current* potential output of Australia which we put at a bit below 3%pa.

The Cobb-Douglas function shows that all of the economic growth in Australia over the past eight years has come from a lift in labour (as measured by hours worked) and capital investment. Small increases in labour productivity were offset by a fall in capital productivity due to a big ramp-up in mining investment. Clearly, the massive amount of investment in the mining sector has, to date, weighed on multifactor productivity. This is because there has been a big increase in the capital stock without a commensurate lift in output. The good news is that there will be a pickup in mining-related productivity as production comes on stream. This will be reflected in economic growth through a big lift in net exports. This process has already begun and net exports are making a solid contribution to GDP growth. Notwithstanding, overall productivity growth is still soft, as evidenced across a number of industries, and this is weighing on potential output in Australia.



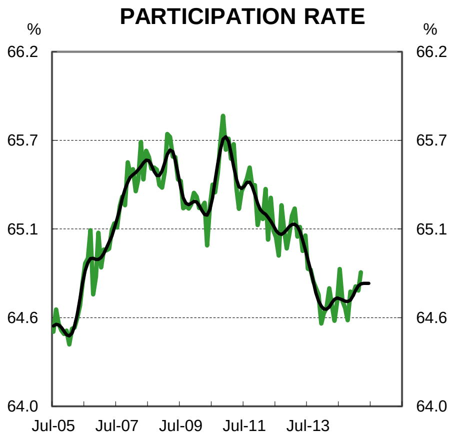


Why is *current* potential growth lower in Australia than a decade ago?

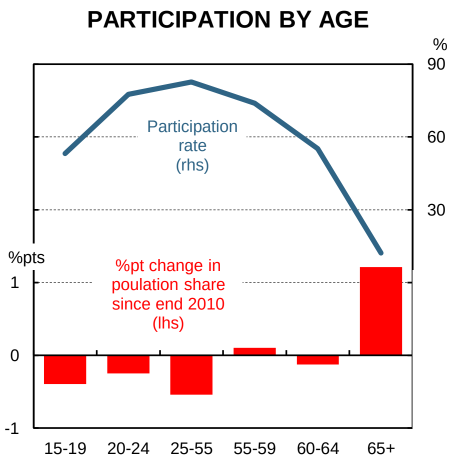
There are three factors which account for the decline in Australia's potential growth:

(i) **Ageing of the population**: In the three years to the end of 2013, labour force participation was on a pronounced downward trend. The biggest single influence causing the decline was the ageing of the population. This is structural. With an increase in longevity, there has been a consequent rise in the number of persons aged 65+ as a share of the working-age population. Demographic influences mean that the part rate has peaked and will continue to slowly trend lower over time as the proportion of the population over 65 increases. This is a drag on labour's contribution to economic growth.

(ii) **Slower population growth:** Australia's population growth has continued to ease as a result of a slowdown in net overseas migration. The most recent estimates of population growth put it at 1.5% in the year to December 2014. This is slower than the ten-year average population growth rate of 1.7%pa. A lower population growth rate reduces potential growth of an economy, all other things equal.



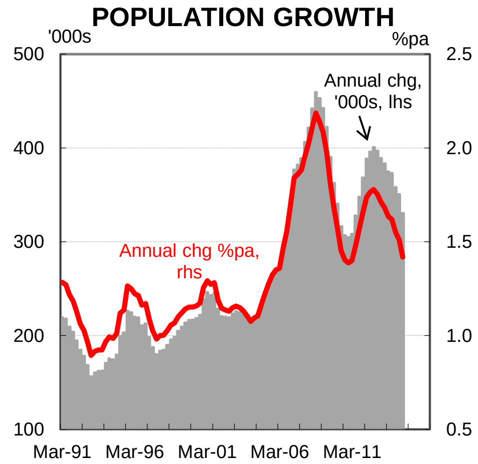
(iii) **Weak productivity growth**: Discussing why Australia has had weak productivity growth is subjective, but we think there a few reasons that explain it. First, a huge lift in the terms of trade in the mid-2000s meant that real incomes, company profits and government revenue lifted fortuitously. As a result, the need to lift productivity to raise living standards receded because incomes were rising anyway. So innovation for many businesses took a back seat. Second, there has been a dearth of government reforms aimed at improving the efficiency of the economy over the last decade. For example, since the introduction of the GST in 2000, there has been no fundamental taxation reform and this has left Australia with an inefficient taxation system. This contributes to the suboptimal allocation of resources across the economy. Third, a substantial lift in the mining capital stock has adversely impacted on productivity growth in the short-run. But this will be reversed over the period ahead as production lifts (i.e. as the mining boom transitions from the investment phase to the production phase the return on capital will lift).



Implications for monetary policy

A lower trend growth rate means that there may be less spare capacity in the economy than has been previously assumed. Indeed, a lower trend growth rate fits in with recent indicators of the labour market which suggest that the unemployment rate may have peaked. We suspect that the weakness in real labour costs is also helping support labour demand. Last week, RBA Governor Stevens was more upbeat on the labour market, stating that it, "appears to be better than we had expected three or six months ago".

A lower trend growth rate suggests that further rate cuts may be less likely as the economy would be assumed to be running closer to its capacity. We believe that there is still a material amount of spare capacity in the economy. But recent indicators of the labour market show that the amount of spare capacity in the economy has probably not lifted. Our views on trend growth, coupled with current conditions in the labour market, mean that a near term rate cut looks unlikely.

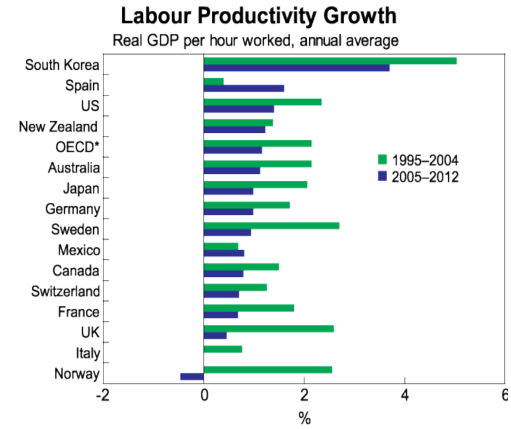


How does Australia lift its potential growth?

As former Treasury secretary Ken Henry said, Australia's GDP growth rate is a function of three P's – population growth, participation rate, and productivity growth.

Government policy has supported Australia's population growth, which remains high by international standards. Australia's population has been rising at a faster rate than the population of almost any other country in the OECD. This is due primarily to net migration. But although positive for headline GDP growth, population growth does little to improve per capita income growth.

The key way in which Australia lifts living standards is to raise its productivity. The primary way this is achieved is through innovation. Establishing an efficient taxation system that incentivises innovation is one area that could help improve productivity. In addition, government policy that supports human capital accumulation and entrepreneurship is another route that could lift productivity growth over the long run.



* 1995–2004 period estimated based on 28 out of 34 countries
Sources: IMF; OECD; RBA

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