

# Developments in the Mining and Non-mining Economies

Philip Lowe, Deputy Governor

Address to the ADC Future Summit  
Melbourne, 14 May 2012

---

Thank you very much for the opportunity to speak today. It is a pleasure to be in Melbourne again.

As you are all no doubt aware, the Australian economy is currently going through some major structural adjustments. It is adjusting to a once-in-a-century boom in mining investment and the terms of trade, and to a very high exchange rate. It is also adjusting to a return to traditional patterns in household spending and borrowing after more than a decade in which both consumption and debt grew much faster than household income.

These changes are occurring in an economy that has, over recent times, performed much better than other advanced economies. The unemployment rate in Australia remains low, output is continuing to expand, inflation is contained, the banking system is strong and public finances are in much better shape than in other advanced economies. Yet the structural changes that are taking place are creating a sense of unease for many in the community, particularly among those who are not benefiting directly from the mining boom.

So this morning, I would like to touch on three interconnected issues, all of which are related to structural change.

The first of these is the recent GDP growth and inflation outcomes and what they tell us about the evolving balance of demand and supply in the economy.

The second issue, and one that the Bank staff have been grappling with for some time, is the different growth paths for the mining-related and non-mining-related parts of the economy. A particular question here is what rate of output growth in the non-mining-related part of the economy is likely to be consistent with low inflation during the once-in-a-century investment boom that we are now experiencing.

And the third issue that I would like to touch on is the recent decisions on monetary policy and the Reserve Bank's latest forecasts.

## GDP Growth and Inflation

A year ago, the Reserve Bank's central forecast was for aggregate output in Australia to increase by around 4¼ per cent over 2011. Our forecast for aggregate demand growth was a bit higher than this, with some of the very strong growth in demand being met by even stronger growth in imports.

As things turned out, the outcome for aggregate demand was pretty close to the expected outcome – at an above-trend rate of 4½ per cent compared with the forecast 4¾ per cent. In contrast, growth in aggregate output – at a below-trend rate of 2¼ per cent – was slower than we had expected.

When we look at why output growth over 2011 was not as strong as forecast, well over half of the difference is accounted for by unexpectedly weak growth in exports, particularly of coal. It has taken

longer than was originally expected to remove water from the flooded coal mines and for firms to take advantage of increases in port and rail capacity. As a result, despite all the talk about Australia's resources boom, the volume of resource exports increased by only 1 per cent over 2011. A much stronger outcome than this is likely both this year and next.

But exports are, by no means, the full story. Other factors were also at work, with more of the strong growth in domestic demand being met through overseas production – rather than domestic production – than was originally expected. An important factor here has been the composition of the growth in demand.

As I mentioned a moment ago, growth in *aggregate* demand was pretty close to what was expected. However, the *composition* of that growth contained a few surprises. In particular, while the Reserve Bank had long expected a very large lift in investment in the resources sector in 2011 – and this indeed occurred – the increase was even larger than had been forecast. As one indication of the very strong outcome, the ABS estimates that engineering investment increased by almost 50 per cent over 2011. On the other hand, growth in demand not directly related to mining investment was not as strong as was forecast.

The biggest surprise was probably in terms of home building. We had expected dwelling approvals to pick up gradually over 2011, but this pick-up did not eventuate. One possible explanation for this is that it is one of the side effects of a return to more traditional savings and borrowing behaviour by households. This change in behaviour is having ripple effects through the economy, including through a lowering of expected capital gains on housing. This has made developers, financiers and households less willing to commit to new construction despite rising rental yields, lower prices relative to income and ongoing growth in population. While, at some point, the improving fundamentals should generate a pick-up in home building, the recent forward-looking indicators do not suggest that this is imminent.

Another area that was weaker than expected was private business investment outside the resources sector. This partly reflects the decline in business confidence over the year, with a number of factors, including renewed concerns about the fiscal problems in Europe, adding to uncertainty. Public demand was also weaker than was expected. In contrast, consumption growth – at around 3½ per cent – was in line with our forecasts, with total consumption increasing broadly at the same rate as household income.

This composition of demand growth – with its heavy weight on mining-related investment, which tends to be very import intensive – has contributed to very strong growth in aggregate imports. Or put a little differently, it has meant that the strong growth in aggregate demand that we have seen has, at least to date, not boosted domestic production in the same way as might have occurred in the past. As a result, there has been less pressure on domestic capacity than earlier expected.

One consequence of this is that the inflation pressures that were evident in the beginning of 2011 have moderated. At the beginning of last year, underlying inflation looked to have reached a low point of about 2¼ per cent and was starting to rise and was expected to be close to 3 per cent by the end of 2011. As things turned out, inflation did pick up in the June quarter last year, but it then began to moderate, with the latest readings for underlying inflation over the year to the March quarter being in the lower part of the medium-term target range of 2–3 per cent.

Not surprisingly, the prices data reflect the particular composition of aggregate demand that has been witnessed over recent times. In parts of the resources sector, costs remain under upward pressure, with very strong demand for some intermediate inputs and for a range of occupations, predominately in engineering and science, but also in accounting, legal and human resources. In contrast, in a number of other parts of the economy, the subdued demand growth is putting downward pressure on prices. In

the latest CPI, there were, for example, declines in the prices of most goods, the price of domestic holidays, and for the price of new dwellings. These are all areas where demand growth has been soft and firms' margins are under downward pressure.

So, to summarise, the overall picture is one in which aggregate demand has grown strongly, and is expected to continue to do so. However, a higher-than-average share of that growth in demand is being met through imports, not only because of the high exchange rate but also because of the heavy weight of resource sector investment in overall demand. Partly as a result of this, as well as the direct effects of the exchange rate appreciation on the prices of imported goods, the recent inflation outcomes have been subdued.

## The Mining and Non-mining Economy

I would now like to turn more directly to the second issue – that is, the size and growth rates of the mining-related and non-mining-related parts of the economy.

While for many decades, the ABS has published separate data on farm and non-farm GDP, it does not publish separate data for mining and non-mining GDP. The ABS does, however, publish gross value added of the mining sector. This is currently equivalent to a little less than 10 per cent of the output of the economy as a whole. But this figure does not include the very significant inputs into the mining sector produced by other domestic industries, and given this we have found it helpful to consider broader measures of the mining-related economy.

The main approach we have used is to start with the expenditure components of GDP, summing resource exports and investment in the resources sector and then subtracting the imported component of that investment. To this, is added resource production for domestic consumption, less the imported inputs that go into that production. This gives an estimate

of total expenditure on resources production and investment that is satisfied by domestic activity. To complement this analysis, we have also used the input-output tables published by the ABS to understand the linkages from demand for mining output and investment to activity in other domestic industries. Not surprisingly, this analysis shows that mining investment draws significantly on construction activity, which in turn generates activity in industries such as business services, manufacturing, transport and wholesale trade.

This work suggests that the resources sector accounts for around 16 to 17 per cent of current GDP. Of course, different approaches and assumptions could generate either a higher or lower number, although most alternatives deliver estimates in the 15 to 20 per cent range.

The approach that we have adopted here includes the output of workers who indirectly provide inputs to the mining sector. Defined this way, mining-related employment accounts for around 8 per cent of total employment, although only around 2¾ per cent of the workforce is employed directly in mining and resource processing. The rest of the 8 per cent are involved in a wide range of activities related to the mining boom, including construction, utilities, project management, legal services, surveying, leasing, etc.<sup>1</sup>

Based on these figures, mining-related activity is estimated to have expanded by around 12 per cent over the past year and similar growth is expected over the next couple of years. If this expected growth eventuates, the mining-related sector's share of GDP will continue to increase and there will be strong jobs growth both directly in resource extraction and processing and in a wide range of ancillary activities. Indeed, it would not be surprising if, over the next

<sup>1</sup> These figures exclude the boost to Australia's real income, as opposed to output, from the rise in the terms of trade. If this rise had not occurred and instead the terms of trade over recent years were equal to their average during the 1990s, real income in Australia would be around 15 per cent lower than it currently is. This is a very big effect and it is in addition to the current boost to output that is occurring because of the investment phase of the boom.

few years, growth in mining-related employment, broadly defined, was as high as one-half of the total growth in the Australian workforce.

If these broad forecasts for the mining-related sector come to be realised, then employment growth in the non-mining-related part of the economy averaging around  $\frac{3}{4}$  to 1 per cent a year is likely to be needed to maintain the unemployment rate around its current level. The rate of growth in output in the non-mining-related economy would then depend upon the rate of productivity growth. If, for example, growth in labour productivity were to average 1 to  $1\frac{1}{4}$  per cent per annum, then non-mining output might be expected to grow by around 2 per cent per year on average. This is above the recent rate of growth of the non-mining economy – which we estimate to be a bit less than 1 per cent – but below the long-term average of a bit over 3 per cent.

There are, of course, a wide range of other scenarios and these calculations are best thought of as a guide to what broad configuration of output growth might be possible given the supply-side constraints. Inevitably, there are a number of uncertainties, foremost among which are the future rate of productivity growth in the non-mining economy and the ability of the labour market to effectively match workers with the new employment opportunities that are being created. These are both issues that we will need to watch carefully over the period ahead as we continue to assess the balance between supply and demand in various parts of the economy.

The overall conclusion from this work is that given the huge pipeline of mining investment and the current relatively low unemployment rate, it is likely that conditions will continue to vary significantly across industries for some time to come. This work also serves as a reminder that improving productivity growth remains the key to strong output growth in the non-mining-related parts of the economy. It also suggests that there is some scope for non-mining-related demand to grow a little more quickly than has been the case in the recent past.

## Monetary Policy

I would like to draw all this together, with a few remarks about monetary policy and the Reserve Bank's latest forecasts.

In the first half of 2011, our judgement was that strong growth in demand, together with evidence that inflation had picked up, required mildly restrictive financial conditions. As the year progressed though, and it became evident that this strong demand growth was not putting the expected pressure on domestic capacity and thus prices, the Board eased monetary policy, lowering the cash rate in both November and December. And then following the recent CPI data which provided confirmation of the subdued inflation pressures, the Board lowered the cash rate by a further 50 basis points, bringing the cumulative decline since November to a full percentage point. Over this period, most lending rates in the economy have fallen by around three-quarters of a percentage point and are now at slightly below-average levels.

The Bank's latest inflation forecast is for underlying inflation, abstracting from the effects of the carbon price, to stay close to its recent rate over the next one to two years. Given that the disinflationary impact of the appreciation of the exchange rate on prices of imported goods is likely to lessen over time, this forecast incorporates some moderation in domestically generated inflation pressures. In particular, it is based on an expectation that productivity growth will pick up somewhat as firms respond to the difficult trading environment that many currently face. It is also based on an expectation that the current pressures on margins being experienced by many firms in the non-mining-related parts of the economy will work their way up the production chain, leading to some moderation in growth in input costs, including in the cost of labour.

In terms of output, overall GDP growth is expected to return to around trend over the forecast horizon, with the recent reductions in the cash rate providing some boost to demand in the non-mining-related parts of the economy. However, it does seem likely that growth in some sectors will remain below the average experienced over the past couple of decades. How things develop will depend importantly on the ability of firms to improve their productivity and on the ability of the labour market to match workers with the new jobs being created.

Finally, as we work our way through these myriad issues, it is important that we do not lose sight of the considerable benefits to Australia from the lift in the prices of our key exports and the unprecedented level of investment that is taking place. This morning I have talked about how these developments are

changing the structure of the economy. I have also talked about the challenge that they pose for assessing the balance between supply and demand. Yet for all this, the high commodity prices and high investment provide Australia with tremendous opportunities – opportunities that many other countries wish they had. As our society works out how best to take advantage of these opportunities, the job of the Reserve Bank is to ensure that inflation remains low and stable and that the overall economy remains on an even keel. The medium-term inflation-targeting arrangements that have been in place for nearly two decades now provide a strong framework in which to do this.

Thank you for listening and I look forward to your questions. ✎

