

Response to the  
Economic Insight  
report of March  
2011

Australian Energy  
Regulator

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24 April 2011

Dear Adam

**Response to the Economic Insight report of March 2011**

Attached is our response to the recent report by Economic Insight.

We have addressed the issues you have raised in our correspondence.

This report should be read in conjunction with our updated forecast report to the AER of 23 April 2011.

Yours sincerely,

Chris Richardson  
Director  
Deloitte Access Economics Pty Ltd

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# 1 Background

The AER requested that Deloitte Access Economics comment on the discussion of Deloitte Access Economics' model in the Economic Insights report *Review of AER Draft Decisions on Envestra Queensland's and Envestra South Australia's Input Price Escalators* of 22 March 2011; specifically

- Questions over productivity estimates; and
- The effect of recent natural disasters.

These matters are considered in this report.

## 2 Productivity

Deloitte Access Economics' updated forecast report to the AER of 23 April 2011 notes that:

- Longer term wage outcomes by occupation and by sector reflect developments in labour productivity and inflation.
- Shorter term outcomes also reflect the pace of labour demand and the availability of labour supply among relevant types of skilled labour.

That makes productivity a vital variable to the longer term.

Or, as the economist Paul Krugman puts it, productivity isn't everything, but in the long run it is almost everything.

The Economic Insight report argues (at page 7-8) that:

*"The ABS EGW labour PFP series has consistently declined at the annual rate of 3.6 per cent since 1998. This has been due to relatively low growth in value added and very strong growth in hours worked within the sector. The reasons for the strong employment growth have not been fully established by the ABS but they appear to result from network upgrades, the entry of new players and the growth in renewable energy projects. Given that these influences appear set to continue for some time, forecasts of the EGW labour PFP using the ABS definitions and approach would be likely to continue to decline or, at best, remain relatively flat. In this context, the Access Economics (2010) forecasts of 2 to 2.3 per cent annual productivity growth going forward appear inconsistent. Rather, a productivity effect, were it to be included, should be negative or, at most, zero."*

The first issue is to see what has happened to measured productivity in the individual components of the utilities sector.

These component and total productivity estimates are shown in Chart 2.1. The estimates are shown as levels of output per worker rather than rates of change. (They are smoothed slightly, though that does not affect the general patterns.)

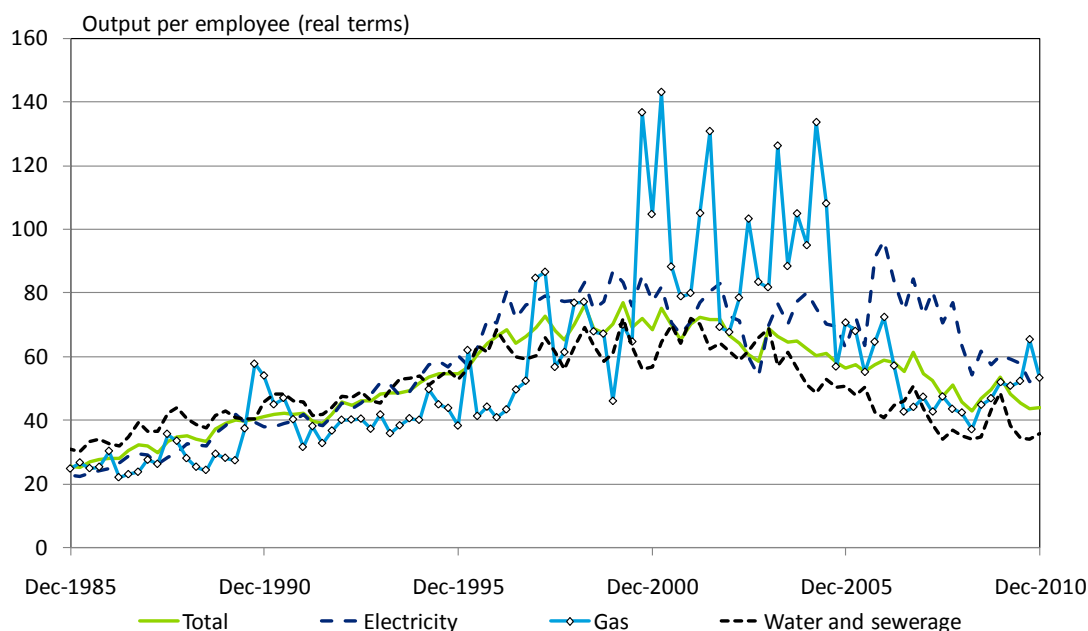
Output per employee in the **water and sewerage** component of the utilities sector has gone from being marginally ahead of both the electricity and gas sectors in the mid-1980s (around a third higher) to being behind (around 20% less), with most of that shift seen in the past eight years.

Part of that weakness reflected the paucity of rainfall for much of the past decade. Dam levels fell, the level of water restrictions rose, and in some cases employment had to increase even though sales fell.

Hopefully rainfall will average something better over the next decade than the last and should boost that component of productivity as well. While it is too much to read into one

result, the December 2010 figure showed a modest increase after slipped across the previous eighteen months.

**Chart 2.1: Productivity levels in the utilities sector**

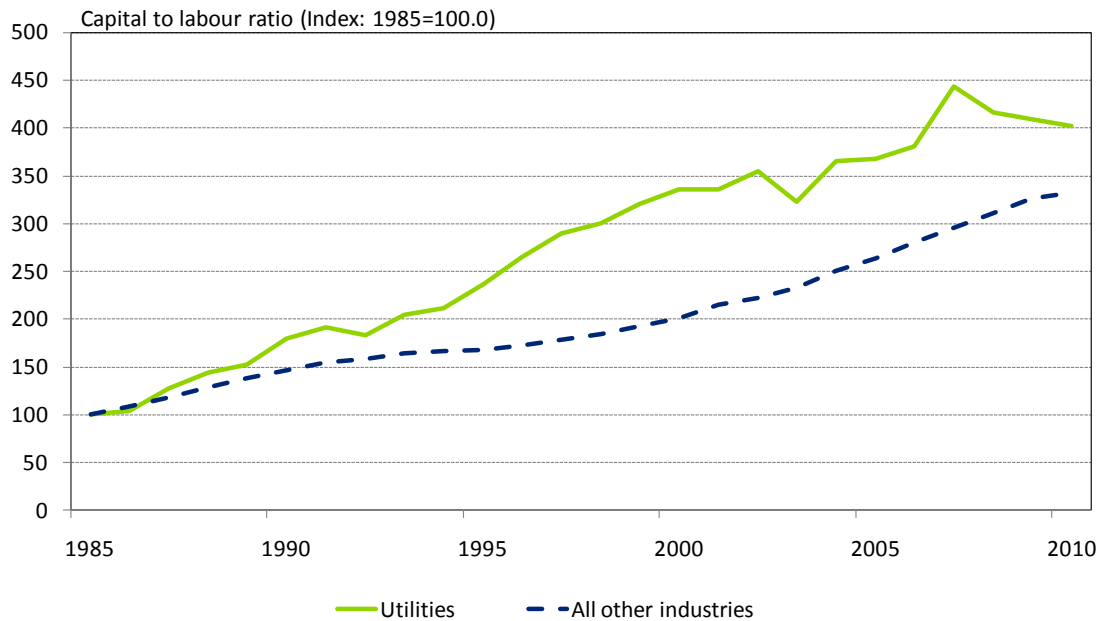


The **electricity** sector's productivity performance outpaced the sectoral average in 2007, but has eased again more recently.

It may be that the electricity sector's productivity performance eased in part because increasing demands from mandatory renewable energy targets (MRET) have lowered measured productivity by shifting output towards less technically efficient (but more greenhouse efficient) channels.

In effect the rise of regulation around mandatory renewable energy targets has tended to benefit lower productivity sectors of the industry rather than the higher productivity sector.

Nor has the lack of investment certainty that has developed around carbon pricing over the past few years helped the sector's productivity performance. Indeed, data for capital-to-labour ratios in the sector (see Chart 2.2) shows how those concerns have begun to play out in the market, with the long running increase in the ratio for utilities (both in absolute terms, and relative to all other industries) reversing sharply since 2007.

**Chart 2.2: Capital-to-labour ratios**

The Productivity Commission notes productivity slowdown as a more generalised factor as well, stating in its Draft Report on Australia's Urban Water Sector:

*"In recent years, Australia's multi-factor productivity performance has been below average, which the Commission largely attributes to lags between high levels of investment and subsequent output in the mining industry, increased capital investment in the utility sectors — including water — and drought conditions reducing agricultural output."*

That said, much of the measured weakness in productivity in the utilities sector in recent years reflects increased employment rather than decreased output.

That raises an additional factor here. The wave of privatisation and corporatisation which swept through the utilities sector in past decades saw private sector owners subsequently make cost savings, notably through reduced employment.

Other things equal, that raised measured productivity.

To the extent that public sector owned utilities followed suit, that reinforced this trend.

However, those employment reductions arguably eventually went too far, and recent years have seen employers in the sector play catch up — adding to employment without adding to output.

The end result has been a sharp run up in employment and an associated worsening in measured productivity — a payback for the earlier period of artificial strength.

At the same time the lack of investment certainty in the sector led to a steadying in the earlier rapid gains seen in capital-to-output ratios in the utilities.

These two effects both hurt measured productivity. Yet their maximum impact is passing.

So sharp has been the pick up in employment in the sector in recent times that it suggests employers have more than caught up to their earlier period of parsimony on employment levels.

Moreover, the worst of the MRET effects on productivity may have already occurred, while the current moves to price carbon should free up much needed investment.

In combination, that suggests that the worst of the one-offs which have operated to drag may have passed or be passing. If so, then that would suggest a more positive outlook for utilities sector productivity than seen across recent years.

Yet there are other reasons for this expectation. Most importantly, measured productivity typically rises in recoveries. As unemployment and underemployment among the workforce goes down, and as the capacity utilisation in factories, mines, shops and offices increases, then output per worker increases. As the utilisation of labour increases, workers are shifted to more productive tasks, retrained as necessary, or simply used more efficiently

Hence as recoveries continue and unemployment falls – as has happened in Australia – then it is typical for productivity levels to lift. We would judge there is also relatively more ‘slack’ in the system in Queensland at present, particularly as the State is suffering more than most from the lingering impact of the GFC, pointing to the potential for greater productivity gains.

In our response to the comments of Professor Jeff Borland’s report we addressed the questions he raised over productivity expectations.

Our response to Professor Borland noted that the recent period is one in which:

- Deloitte Access Economics’ forecasts of global growth – and particularly emerging economy growth – went up,
- our forecasts for industrial commodity prices and national income growth rose,
- our forecasts of real business investment went up, and
- our forecasts for employment went up, but
- our forecasts for working age population went down.

Accordingly, the mix of revisions to Deloitte Access Economics’ forecasts across the time period to which Professor Borland refers was a potent recipe for upward revisions to the outlook for productivity.

Similarly, those productivity revisions could be expected to be more notable in sectors and States where the impetus in demand relative to supply would have the largest impact.

Accordingly, and as would be expected from the mix of revisions over time, Professor Borland notes that our upward productivity revisions were more notable in Queensland than South Australia, and more notable in the utilities and construction sectors.

Hence a return to positive productivity gains in the forecasts makes sense.



### 3 The effect of natural disasters

A number of natural disasters in recent months have undoubtedly added to the expected demand for labour, and particularly skilled labour, in those regions.

As the Economic Insights report notes:

*“... there have been a number of significant changes in labour market conditions since the BIS Shrapnel (2010) and Access Economics (2010) reports were prepared. The Queensland and Victorian floods in early 2011 have caused unprecedented infrastructure and building damage and will lead to a marked increase in the demand for tradesmen and blue collar field staff. This will increase the competition for field staff with similar skills and experience to those used by Envestra Qld in particular. This effect will be further exacerbated by the recovery effort required following the recent Cyclone Yasi in North Queensland”.*

These are quite true, and our latest update to the data includes an allowance for these types of effects.

Indeed, the rebuilding and repair task are a key reason why expected LPI growth rates have therefore increased for 2010-11 and more significantly for 2011-12 since our 13 December 2010 report.

In fact Deloitte Access Economics *Business Outlook* – released on 27 April – had the following to say about the natural disasters in Australia:

*“... the cruel impact of floods and cyclones has placed a short term dent in Australia’s productive capacity, particularly our ability to export to the world.*

*That said, we should be clear that we don’t see the series of natural disasters at home or abroad as major growth inhibitors beyond the next six months or so. Terrible human tragedies are rarely also economic tragedies, with the overall productive capacity of economies not usually gravely affected, or not for long, and the rebuilding phase likely to swamp the bad news arising from lost confidence. Accordingly, Australia’s local woes and the earthquakes and tsunamis affecting key trading partners such as Japan and New Zealand are likely to prove short term hurdles for Australian economic growth rather than lingering negatives”.*

The comments in *Business Outlook* on the Queensland outlook began with the following words:

*“The usual rule of thumb is that natural disasters are more human tragedies than they are economic disasters. But the sheer – almost biblical – impact of the early 2011 floods and cyclones generated some enormous short term losses to output. Mines couldn’t be worked, sugar, banana and cotton crops were destroyed, livestock drowned, wheat fields were flooded, building sites were*

*abandoned, employees couldn't make it to work, shoppers couldn't get to the stores, and tourists stayed away in droves – the impact was huge.*

*How huge? The most commonly quoted estimate for Queensland's share of the butcher's bill is \$4 billion, and it could well be higher. (Certainly if lost coal output hit 25 million tonnes, as is possible, and some 30,000 homes had notable flood damage, then the cost may well be higher than the oft-quoted \$4 billion.) Moreover, this series of unfortunate events came atop a State still struggling to gain traction in the wake of the global financial crisis. It is harder to get a loan in the Sunshine State than elsewhere in Australia, and that difficulty in finding finance is weighing on both housing construction – especially of apartments, and perhaps most notably on the Gold Coast – and commercial construction in Queensland”.*

Finally, the comments in *Business Outlook* on the housing construction outlook noted:

*“... the twin disasters of floods and cyclones will also add to housing activity in 2011 and 2012. Flood damage was particularly bad in Queensland (which suffered from Cyclone Yasi as well), but Victoria also felt pain from natural disasters. These two States bookend the regional experience with respect to housing activity of late, with Queensland building approvals recently back down to levels last seen in the early recession of the 1980s, whereas Victorian approvals continue to be the best in the nation.*

*Other things equal, that suggests the capacity to rebuild and repair flood damage in Queensland is likely to be greater than in Victoria. That said, although the floods may, of themselves, generate some \$4 billion dollars of spending, that is still less than one in \$20 of Australia's annual spending of building new homes and renovating old ones. Or, in other words, the rebuilding phase following floods and cyclone damage will be a notable boost to housing activity, but far from make or break for sectoral activity as a whole.*

*The overall outlook – as NAC Chart 5 above shows – is expected to see a delayed and modest upswing, with rising interest rates and reduced subsidies to first homebuyers an important negative, even though past undersupply, population growth and the need to repair flood damage are key positives.”*

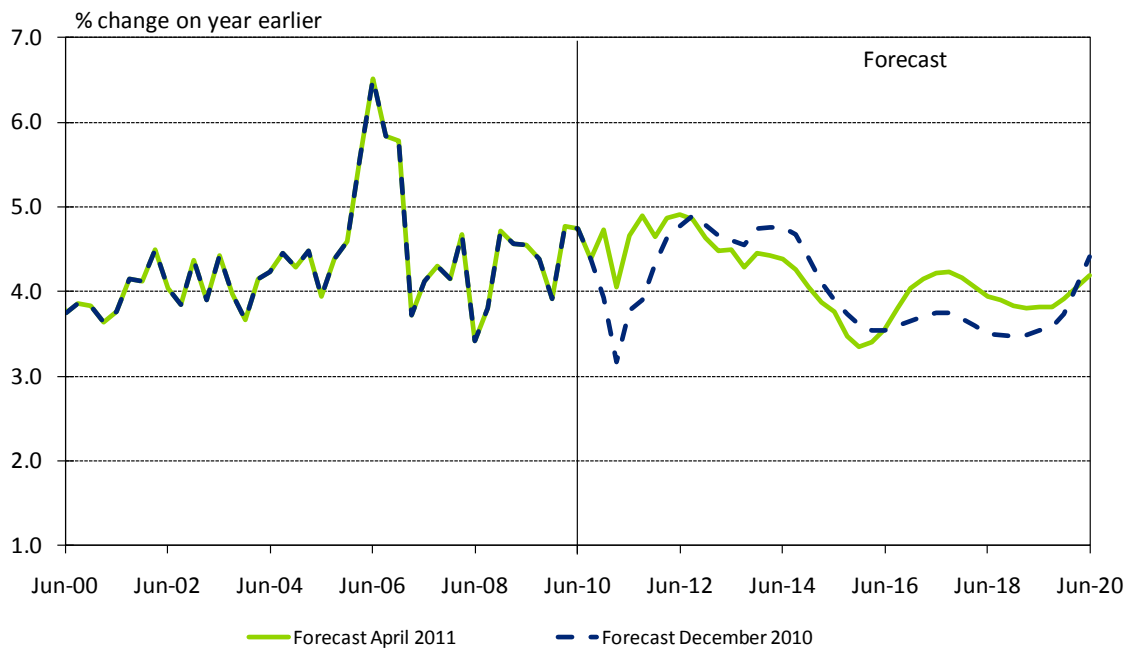
The import of the above is that, yes, the updated forecasts in our 23 April report for the AER do indeed allow for the impact on the outlook – national, State and sectoral – of the natural disasters evident in recent times.

That said, although that impact is important, it is not dominant. As our comments in *Business Outlook* made clear, in Queensland the impact on the demand for workers in the utilities and competitor sectors such as construction is now expected to be greater, but not substantially greater, given:

1. the slower turn in the national housing construction cycle than previously forecast,
2. on-going weakness in the Queensland economy, and
3. abstracting from the effects of natural disasters, the particular weakness in housing construction in Queensland.

More broadly, we note that floods and cyclones aren't the only important developments since our 13 December 2010 report for the AER. Our expectation is that the net balance of these impacts is slightly upwards. Accordingly, as Chart 3.1 shows, we have increased our expected utilities LPI growth in the short term, although the gains are eaten away in the longer term.

**Chart 3.1: Changes in the forecast for utilities LPI growth**



Source: ABS, Deloitte Access Economics' labour cost model

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