

Deloitte Access Economics

# Response SP AusNet regulatory proposal

Australian Energy Regulator

20 May 2013

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20 May 2013

Dear Paul,

**Responses to issues raised in SP AusNet's submission 28 February 2013**

The Australian Energy Regulator (AER) has asked Deloitte Access Economics to provide detailed responses to a range of issues raised by BIS Shrapnel and SP AusNet in their February 2013 submission to the AER (Appendix 4E: BIS Shrapnel Real Labour Cost Escalation Forecasts to 2016/17 (Australia & Victoria)).

Yours sincerely,



Chris Richardson  
Director  
Deloitte Access Economics Pty Ltd

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# Glossary

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ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
AWOTE	Average weekly ordinary time earnings
EBA	Enterprise Bargaining Agreement
EGW	Electricity, Gas and Water (ANZSIC 1993). This definition preceded the current utilities industry used by the ABS.
EGWW	Electricity, Gas, Water and Waste Services (ANZSIC 2006). This is the current definition of the utilities industry used by the ABS.
LPI	Labour Price Index

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# 1 Background

The Australian Energy Regulator (AER) has requested that Deloitte Access Economics comment on criticisms of Deloitte Access Economics' wage forecasting model and modelling approach raised in SP AusNet's Victorian Electricity Transmission Revenue Proposal for 2014/15-2016-17.

This document responds to a number of issues raised in those reports, including:

- The choice between LPI and AWOTE as an appropriate wage measure;
- Deloitte Access Economics' labour cost forecasting methodology and approach; and
- Deloitte Access Economics' labour productivity forecasts.

It also addresses a number of relevant shifts in the economic backdrop to labour cost growth in Australia.

## 2 The best wage measure

This chapter discusses the appropriateness of using the WPI rather than AWOTE for wage forecasting purposes. A number of issues raised in the BIS Shrapnel report are addressed.

### 2.1 The Deloitte Access Economics view

Deloitte Access Economics' view on the choice between WPI and AWOTE has been covered in numerous reports to the AER.

DAE acknowledges that the WPI is not a perfect measure – some of the criticisms of it are reasonable. But the WPI is a rather better measure than AWOTE, and that gap is now wider as the ABS only publishes AWOTE on a six monthly basis, and no longer publishes any AWOTE information at the State by industry level at all.

Our view is consistent with that of the Australian Bureau of Statistics (ABS), which noted in the October 2005 issue of *Australian Labour Market Statistics* (catalogue 6105.0):

*“Information on changes in the price of labour is available from the quarterly Labour Price Index (LPI). The LPI is compiled from information collected from businesses on changes in wage and non-wage costs. Information collected on wages is used to produce a Wage Price Index (WPI).”*

*The WPI was first compiled for the September quarter 1997 and is the main ABS measure of changes in wages. The WPI measures quarterly changes over time in the cost to an employer of employing labour, and is unaffected by changes in the quality or quantity of work performed.”*

As the above discussion from the ABS suggests, they see the LPI as their preferred measure for “changes in the price of labour”.

That is the task at hand here, and hence the WPI (excluding bonuses) is Deloitte Access Economics' preferred measure for this type of analysis.

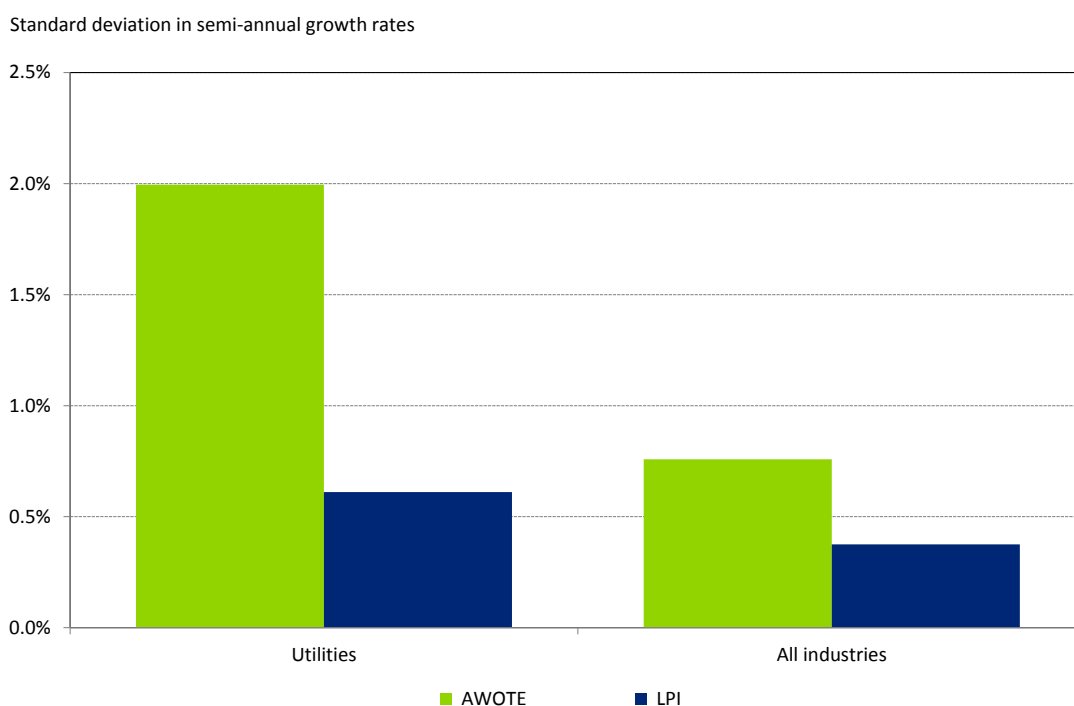
Indeed, the WPI was originally developed because of the shortcomings of existing wage measures for this type of analysis. For example, AWOTE is affected by shifts in the composition of employment. As such, if a sector employs relatively more high paid full time workers over time (as has happened, for example, in the manufacturing sector as low skilled jobs have been lost to competitors in developing Asia), then that will tend to raise measured AWOTE even if the wage levels for a given level of skill have not changed at all.

Those compositional effects tend to make AWOTE far more volatile than the WPI. Chart 2.1 shows the standard deviation in semi-annual growth for AWOTE and WPI in the utilities

sector and across all industries over the past decade<sup>1</sup>. The chart shows that AWOTE has been notably more volatile than the WPI over that period.

Indeed the volatility of the AWOTE numbers has increased substantially now that it is being calculated on a semi-annual basis. For example, the standard deviation in the 10 years to December 2011 for the utilities sector (calculated using quarterly data) was 1.4%. The comparable value for the decade to December 2011 using semi-annual data is 1.9%, and underscores DAEs point that less frequent data results in less reliable numbers with which to create forecasts.

**Chart 2.1: Standard deviation in semi annual wage growth, ten years to December 2012**



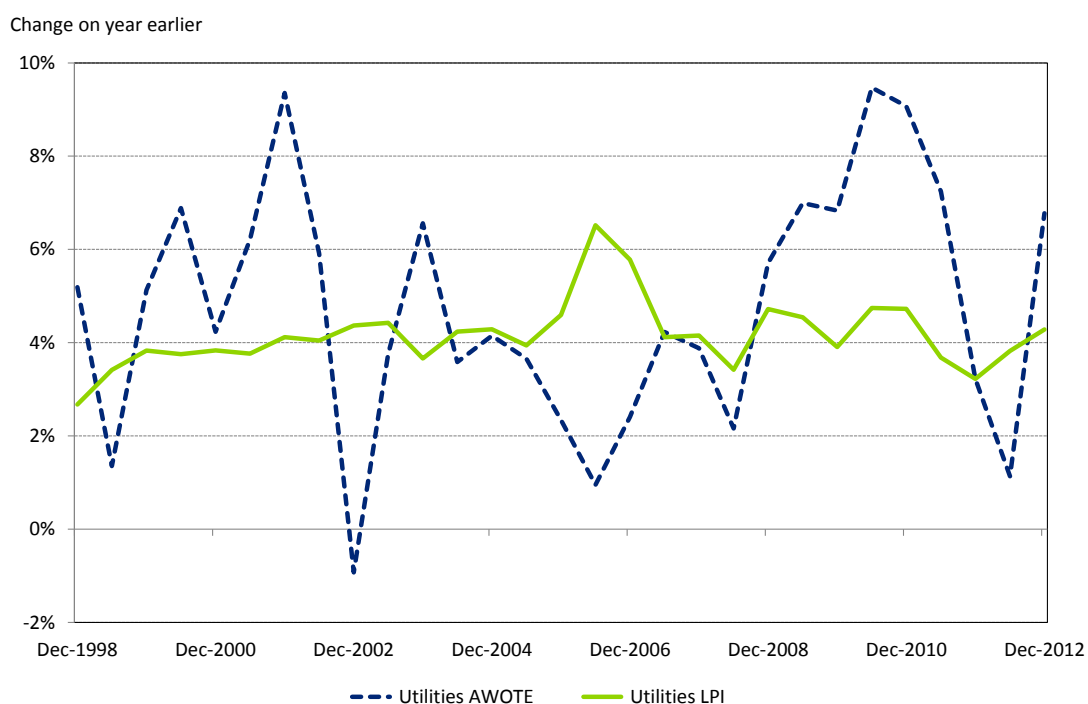
Source: ABS, Deloitte Access Economics

As the analysis at issue here is not merely at the sectoral level, but at the sectoral by State level, these volatility problems compound rapidly.

These compositional effects and the resultant volatility make AWOTE a poor base for undertaking wage forecasts for the utilities sector. The volatility in the series does not accurately reflect wage outcomes for utilities employees, and can result in important starting point (or “jumping off”) problems at the beginning of the forecast period.

The latter point is highlighted by Chart 2.2. It shows year-to growth in AWOTE and WPI for the utilities sector.

<sup>1</sup> The analysis has in the past been undertaken on a quarterly basis, however the ABS now only produces AWOTE data on a semi-annual basis. The following charts have been created using data from the June and December quarters for WPI, and the May and November quarters for AWOTE.

**Chart 2.2: Growth in AWOTE and WPI, Australian utilities sector**

Source: ABS, Deloitte Access Economics

The greater volatility in the AWOTE series compared to the WPI series is clear. As the chart shows, utilities wages grew by close to 10% over the year to September 2010 according to the AWOTE measure – more than twice the pace recorded by the WPI series. More recently, growth in utilities AWOTE moderated sharply in the first half of 2012, but bounced right back in December 2012, recording 6.8% growth over the previous December<sup>2</sup>.

More broadly, compositional changes arising from the business cycle, changed educational levels, the pace of recruitment and retirement, the degree of outsourcing, changed relativities in the employment of men and women and compositional changes arising from shifts in average hours worked can all distort AWOTE as a proxy for “changes in the price of labour”.

That said, ‘best measure’ is not the same as ‘perfect measure’, and there are also drawbacks to using the WPI.

First, the WPI is published by State and by sector separately, but not by State and by sector. That is, the WPI for NSW is published, and the Australian mining sector WPI is also published, however the NSW mining sector WPI is not. The latter data is only available by special request and, in the case of small sample sizes, the ABS does not release their estimates.

<sup>2</sup> Note that while March 2013 LPI data is now available, AWOTE data is now semi-annual, so a comparison in the March 2013 quarter cannot be made. March 2013 data shows a rise of 0.9% in the quarter for Australian utilities, with a corresponding jump of 1.6% in the quarter in Victoria.



However, it is possible to ‘back out’ reasonable estimates of WPI at the ‘by State and by sector’ level. Appendix E of our 15 August 2011 report discusses how Deloitte Access Economics does that<sup>3</sup>. The resultant series were rather less volatile than were the matching ABS AWOTE series across the period where both were available.

Second, it is sometimes relevant that the composition of the workforce is changing. That is particularly true in analysing the implications of wage developments for the Australian economy as a whole.

As the WPI has only existed since 1997, and Australia’s long economic expansion began in 1992, there is an argument that the WPI has understated true ‘like-for-like’ wage gains across most of the time it has been in existence. However, that bias is unlikely to have been large, and must be measured against the rather more significant types of problems with AWOTE measures discussed above (and highlighted even at the national level in Chart 2.1 and Chart 2.2).

A more detailed response to issues regarding the appropriateness of the WPI follows.

## 2.2 Data availability

The issue of availability of WPI data at the ‘by State by sector’ level was raised in the BIS Shrapnel report.

As noted, at the State level WPI data is only available for the utilities sector for New South Wales and Victoria. WPI data for Victoria in the March 2013 ABS release was available for all industries except Mining, Rental services, Recreational services and Other services.

Deloitte Access Economics’ approach to estimating the data where it is unavailable is to incorporate known data. Previously, this approach relied on the use of AWOTE information (which was previously available at the ‘by State by sector’ level), as well as drawing on information from relevant enterprise bargaining agreements (EBAs).

The construction and definition of the AWOTE series, and the volatility of the data, meant that it was not consistent with WPI. As a result, and as described in our 15 August 2011 report, rather than using the raw AWOTE data to obtain a State by sector WPI, we used the deviations in specific AWOTE growth from broader measure.

For example, if the Victorian mining sector AWOTE measure rose faster than the overall Victorian AWOTE measure, then we would allow the Victorian mining sector LPI measure to rise faster than Victoria’s overall WPI over that quarter.

State by sector enterprise bargaining agreement (EBA) data has been made available from the Department of Education, Employment and Workplace Relations (DEEWR) for the period since June 2010. Deloitte Access Economics also assesses this information in deriving a final estimate of unavailable historical State by sector WPI movements. Since the discontinuation of State by industry AWOTE and AWE figures from the start of 2012, the

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<sup>3</sup> DAE methodology has changed slightly since then, due to changes in data availability from the ABS, and the inclusion of DEEWR EBA data at the State by Industry level.

methodology now relies on specific EBA growth rates, and only on general (that is, whole of State or whole of industry) AWOTE measures.

A separate issue regarding data availability is the recent change to biannual rather than quarterly AWOTE data from the ABS.

The shift to biannual data will make wage forecasting based on AWOTE data more difficult. The principal reason is that AWOTE will be less successful at picking up ‘turning points’ (or the timing of changes in wage movements). Just as biannual data is more useful than annual data, and annual data is more useful than biennial data, quarterly data is more useful than biannual data in terms of providing an informed view of wage movements.

As such, while there may be no change in the statistical quality of the information being released by the ABS, the usefulness of the data for the purposes of examining and forecasting wage movements has been diminished.

## 2.3 Data volatility

Deloitte Access Economics maintains that the greater level of volatility in the AWOTE data makes it a less reliable base for wage forecasting. As discussed in Section 2.1, the reason the volatility makes AWOTE less reliable is that it does not accurately reflect wage outcomes for utilities employees, can result in “jumping off” problems at the beginning of the forecast period, and is not as accurate in showing inflection points.

Overall, the BIS Shrapnel report appears to generally conclude that (a) the AWOTE data is more volatile than the WPI data, and (b) bonuses, incentives and the like add markedly to volatility through the cycle, thus the volatility is not necessarily a bad thing.

Deloitte Access Economics agrees with the first point, and notes that BIS Shrapnel state on pp 35-36 of its 28 February 2013 report that

*Given its [AWOTE’s] volatility over the past decade, it makes more sense to take a longer term view of changes and use a period average to assess the overall up skilling effects, compositional effects, bonuses, incentives and allowances.*

While we address the point regarding compositional effects in the next section of this report, we would make the point that if it makes sense to use period averages to assess these points, it would perhaps make sense to use period averages when assessing the overall measure by State and industry as well.

Further, DAE disagrees with the second point. As outlined in this report, there are a number of reasons why the WPI should be the preferred wage measure used by the AER.

The volatility and relative unreliability of the AWOTE data is one such reason.

One of the reasons for this change is the high standard error of the estimates for these series. When the detailed AWOTE data by State and industry was available, the sample selection was stratified across States and across industries, but not both. That means that as the businesses in the sample changed from quarter to quarter (and about 8% of the

5,000 do each time) there was no guarantee that the published State by industry samples could be readily compared.

This problem obviously led to questionable comparability of detailed AWE/AWOTE results from quarter to quarter as the changes may have been driven by changes in the sample, rather than changes in wages.

The WPI, by contrast, suffers as little as possible from this problem because their sample follows specific “jobs” over an extended period (at least five years). This limits the rotation problems that the AWE/AWOTE series is suffering from.

Accordingly, Deloitte Access Economics remains comfortable with its conclusion that the considerable volatility displayed by AWOTE is an important drawback to arguments supporting its use as a base by the AER in its determinations.

### 2.3.1 EBA volatility

The BIS Shrapnel report also makes the following comment (p 31):

*We note that the latest DEEWR report (March quarter 2012) had an average increase of 3.7 per cent for the EGW sector. This figure is an aberration and is not an indicator for any general slowdown in wage increases under collective agreements. The March quarter result was dragged down by the relatively low (3.6 per cent) wage negotiated by Queensland utility providers. Because this agreement covered about 9,500 employees (80 per cent of all employees covered by agreements lodged in the quarter), the overall increase for the EGW sector was pushed down by the Queensland outcome.*

Note that EBA data refers to the EGWW sector, rather than just EGW.

This argument strikes us as a strange approach to interpreting movements in the latest data for the EGWW sector. Not only does BIS Shrapnel provide no evidence to support its assertion that the Queensland result is ‘an aberration’, they suggest that it is less important because it is dominated by a single large agreement covering a substantial share of employees under agreements lodged in that quarter.

To the extent that data on average wage growth under new agreements in a particular quarter represent a useful measure of the latest wage pressures in the sector, it should be immaterial whether they are the result of one large agreement or many smaller agreements.

Furthermore, it is likely that the Queensland agreement in question is a reflection of substantial pressure on State Budgets, which is resulting in State Governments taking a harder line in wage negotiations.

Those pressures on State finances are ongoing, and are likely to worsen in the short term due to developments at the Federal level.

Pressures on the Federal Budget have indirect flow on effects on the States via the flow of Federal funding. At the same time, both the States and the Federal Government will now have to finance substantial commitments to DisabilityCare and Gonski as well.

DisabilityCare (previously known as the National Disability Insurance Scheme), represents the Government response to the recommendations of the Productivity Commission's 2011 report into Disability Care and Support.

Current funding allows for limited trials in five States and Territories at a cost to the Federal Budget of around \$1 billion over four years. When fully operational in 2018-19 the scheme will require a total of around \$22 billion in funding each year, or a net injection of \$10.5 billion per year over and above existing programs according to the latest analysis by the Australian Government Actuary. Much of this cost will ultimately fall to the States and Territories, representing a significant spending commitment for States struggling with Budget pressures of their own.

The Gonski-inspired reforms to school funding will see school funding increase by \$14.5 billion over six years from 2014 to 2019, with some \$5.1 billion of that cost falling onto State and Territory governments.

To date the Federal Government is only committing to funding part of DisabilityCare and the Gonski school reforms. The rest will fall on State Budgets, and the latter have problems of their own. After all, roughly 42% of all State spending is Federal-funded, with only 58% raised from other sources such as State taxes and charges.

That says two things – that the Federal Government won't be in a position to assist the States (as the Feds are already heavily committed well into the future), and that the States themselves will have to fund their share of DisabilityCare and the Gonski school reforms.

We agree that volatility in the data, however it occurs, presents a problem when it comes to wage forecasting. However, this particular result is real, it is the result of a substantial agreement, and it reflects pressures which are likely to apply across similar agreements in other States.

It may therefore be better interpreted as an emerging trend rather than a 'one off'.

If BIS Shrapnel do indeed think it appropriate to discount the low wage increases seen in this instance, DAE would also expect to see matching efforts to point out unusually strong wage gains in particular agreements in the future.

## 2.4 Definition, coverage and compositional change

The BIS Shrapnel report argues that AWOTE rather than the WPI should be used by the AER because of the definition and coverage of the series.

The BIS Shrapnel report argues at page 25 that:

*“The LPI also does not reliably measure the changes in total labour costs which a particular enterprise or organisation incurs, because the LPI does not reflect the changes in the skill levels of employees within an enterprise or industry. As skills are acquired, employees will be promoted to a higher grade or job classification, and with this promotion will move onto a higher base pay. So the change in the cost of labour over, say a year, includes increases in the base pay rates (which the LPI measures) and the higher average base pay level. The*

*Average Weekly Ordinary Time Earnings (AWOTE) captures both these elements, while the LPI only captures the first element. Basically, promoting employees to a higher occupation does not necessarily show up in the LPI, but the employer's total wages bill (and average unit labour costs) is higher, as is AWOTE. The AWOTE measure also includes bonuses, incentives, penalty rates and other allowances, which are also part of an enterprises total wage bill."*

This argument is the same as the one made in previous submissions to the AER, and our response is largely the same as previously submitted (see, for example, *Forecast growth in labour costs: Victoria and South Australia 25 February 2013*).

There are two broad arguments put here. The first is that the WPI is not sufficient because it does not include bonuses, incentive payments and other allowances. The second is that the WPI is insufficient because it does not capture the impact of promotions (or a changing workforce structure).

A few points are worth making on the issue of bonuses, incentive payments and other allowances. An initial, albeit small, point is that Deloitte Access Economics uses the WPI series 'total hourly rates of pay excluding bonuses' rather than the 'ordinary time hourly rates of pay excluding bonuses' in our analysis and forecasts. The sole difference between these series is overtime (which is included in the measure used by Deloitte Access Economics). Deloitte Access Economics agrees that the WPI does not include bonuses, incentive payments and other allowances.

Deloitte Access Economics' view is that the issue of bonuses, incentive payments and other allowances in the AWOTE wage measure is irrelevant. The AER makes determinations based on *growth* in labour costs. In contrast, the inclusion of bonuses, incentive payments and other allowances will affect the *level* of the AWOTE series. The size (or level) of the wage bill is of rather less concern. Rather, it is the growth in wages which are more relevant.

Bonuses, incentive payments and other allowances will not have a noticeable impact on growth in the AWOTE series because, as noted in the BIS Shrapnel report (page 35), to be included in AWOTE the payments must be a "normal" part of an employee's earnings. AWOTE is, after all, a measure of 'ordinary time earnings'.

More specifically, in the case of bonuses only those that are paid regularly and frequently are included in the AWOTE data, with one-off or infrequent payments excluded.<sup>4</sup> As noted above, while regular and frequent payments are legitimately included in AWOTE, Deloitte Access Economics expects that these would affect the level of wages, not the growth.

Deloitte Access Economics disagrees with the argument that AWOTE is a superior measure because it includes bonuses and similar payments.

The BIS Shrapnel report also argues that AWOTE is a superior measure to WPI for reasons of compositional change in the labour market. Indeed, the second point raised relates to

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<sup>4</sup> The ABS National Statistical Service Statistical Clearing House contains more information regarding the coverage of AWOTE, including the questionnaire used by the ABS. See [www.nss.gov.au](http://www.nss.gov.au).

the coverage of the WPI with respect to not capturing the impact of promotions (or changes in workforce structure more generally).

The compositional change in skill mix is a business choice. If the business chooses to pay for a skill mix with a higher (or lower) average wage, then it also gets the associated productivity benefit (loss) of that decision.

If these compositional changes are taking place, then they should be having an impact on the productivity of the firm's workforce. That is, the higher skills should mean higher productivity – meaning that if the firm is choosing to have a higher skilled workforce then, other things equal, that higher skilled workforce should be able to achieve the same output than would otherwise be achieved with more (lesser skilled) workers.

The reason why the preferred wage series for forecasting purposes should exclude the impact of these factors is that the firm already benefits from the shift to a more skilled workforce. Were this to be compensated by the AER, the firm would benefit twice (once through an increase in productivity from the higher skilled workforce, and once through the AER determination).

The BIS Shrapnel report (at page 25, quoted above) notes that as individuals acquire skills they are promoted, and therefore move to a higher base level of pay. The WPI captures the increase in pay for a specific job, and does not capture the change in an individual's base level of pay when promoted.

Deloitte Access Economics does not believe the impact of this type of compositional change is significant. Promotions within a firm do not generally affect the firm's organisational structure over the medium to long term. It is not the case, for example, that over the long term a firm's workforce would consist entirely of managerial staff.

Individuals are indeed promoted, and more junior (less skilled) individuals are hired to fill their place. A number of promotions will be made to fill vacancies at more senior levels created through turnover. Where the promotion is not for a vacancy, but is rather an addition to the number of more senior (highly skilled) staff, it is logical that this would be the result of growth in the firm more generally, and would therefore be accompanied by an increase in less skilled staff as well.

We would also note that the issue of compositional change is used to justify a substantial component of the forecasts presented in the BIS Shrapnel report, despite questions as to whether the difference between the AWOTE and WPI measures of wage growth is an appropriate measure of such effects.

Footnote (b) to Table 4.5 on p 26 notes that:

*Because of relatively small workforce (and therefore small sample size) in EGW, Indiv Agreements picks up all the standard errors of LPI and AWOTE estimates by ABS*

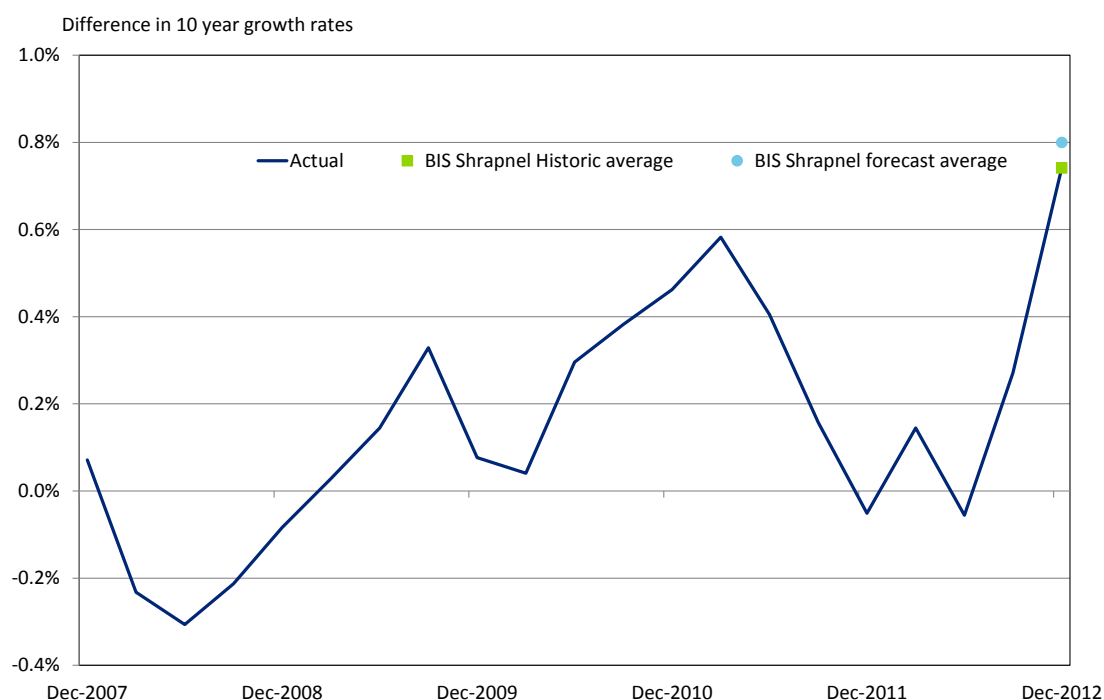
Yet in noting the importance of compositional effects and the role of incentives and other payments, BIS goes on to later claim on p 35 that:

*In table 4.4, the bottom line shows the calculation for the collective up skilling effects, compositional effects, bonuses, incentives, other allowances, etc. – which is simply growth in AWOTE minus the growth in the LPI. Given its volatility over the past decade, it makes more sense to take a longer term view of changes and use a period average to assess the overall up skilling effects, compositional effects, bonuses, incentives and other allowances. Over the past decade, these effects have added 0.7 per cent on average in total labour costs growth (AWOTE) compared to LPI growth over the period.*

That is, BIS Shrapnel attributes all differences between AWOTE and WPI growth over time to “up skilling effects, compositional effects, bonuses, incentives and other allowances”, without recognising that these differences also reflect differences in the sampling and other errors in the makeup of each series.

Further, in attempting to account for the volatility in this measure, they use a 10 year average that was at a record high over the 10 years to December 2012, as Chart 2.3 below shows.

**Chart 2.3: Differences in historic average growth in AWOTE and WPI for the utilities**



Indeed, altering the timing of this average by just six months would dramatically alter the conclusions of such an analysis.

Of course, that is a natural consequence of the volatility of AWOTE as a measure of wage outcomes – a concern which DAE has been highlighting for some time. Perhaps more surprising is the fact that this difference is forecast to further outpace even the elevated historic average noted by BIS Shrapnel over the over the period between 2013 and 2017.

That said, and as noted above and in past reports prepared for the AER, DAE is of the view that these up skilling and compositional effects are in any case purely a business decision and not relevant to AER's consideration of labour price growth.



### 3 The economic climate

The BIS Shrapnel report mentions the pressure that it predicts will be brought to bear on utilities wages due to the “heighted competition from the Mining, Construction and (to a lesser extent) Manufacturing sectors for similar skilled labour as those sought in the utilities sector, driven in particular by the resources investment boom, which is expected to ramp up substantially over the next four years and remain at high levels over the following five to ten years.” (see pp 21)

Since the BIS Shrapnel report was written, there have been several significant developments in the Australian economy, including the decision by Woodside to shelve its proposed \$43 billion Browse LNG project that included a large onshore LNG processing facility at James Price Point.

DAE has been saying for some time (and indeed before the Woodside decision was announced), that mining investment is very close to peaking. There are a few reasons for this scenario of a peak then a fall in Australia’s investment spending:

- First, we have already spent a fortune on resource-related investment, and even after the slowdown we are predicting, the deluge of dollars in resource-related construction will remain humungous. Indeed, engineering construction (where most of the resource-related work shows up) is currently 6% of the economy, versus an average of a mere 1% in the 1980s and 1990s. Hence, even a slowdown in spending on resource-related investment will still leave us spending a multiple of what we used to.
- Second, not only is there an enormous pipeline of production in resources in Australia and around the world well on its way, analysts are beginning to question the size of future growth in commodity demand. Because China’s development model has been so overweight in infrastructure and housing, it has been similarly overweight in its demand for the likes of coal and iron ore. (China accounts for 60% of the world’s iron ore usage.) Yet it’s clear the pace of steel output growth in China is slowing, and that although there are notable future gains to be made, they may still fall well shy of some of the more courageous predictions made for Chinese and global commodity demand. That reassessment of medium term prospects says there is less of a need for a new round of resource investment – the pipeline of coming supply is already large, and the demand it seeks to fill may grow more slowly than some imagined.
- Third, Australia’s share of global resource investment is already falling. A large reason is what has happened to relative costs in recent years. Many of these (new taxes, exchange rates, interest rates, environmental and native title and other approvals, the lift in wage rates for given occupations) aren’t in the control of individual businesses. And while some cost levers are under the control of individual businesses in the resources and mining services sectors, it definitely doesn’t help that recent times saw the \$A stay strong – unmoved, in fact – even though commodity prices fell.

In addition, there are few signs as yet that the easing in resource-related investment will be offset by an increase in investment from other sectors. Most business surveys are suggesting that capacity utilisation is down, forward orders have softened, and that profitability is off its peaks.

So there is a peak coming. The questions is when, and how big the subsequent fall will be. Much depends on the decision which will be made by mining companies during 2013, and conditions are becoming less favourable. Coal demand has fallen as the United States increasing moves towards cheaper gas supplies, while slowing demand from China is also likely to and a similar p. The first couple of months have already seen the largest project fall off the radar (the \$43 billion Woodside Browse Basin project), and many of the other projects are likely to suffer the same fate.

If most do not go ahead, then an analysis of our *Investment Monitor* database would suggest a pretty big pothole could loom from the middle of 2014 onwards. Or, in other words, our own database suggests good news in the near term, and not-so-good in 2014 and 2015. In contrast, the capex survey done by the Bureau of Statistics suggests an earlier peak – indeed, it may have already occurred – but with a longer lasting plateau. And the official measure of the pipeline, the ‘work yet to be done’ in engineering construction, is already falling fast.

And what does that mean for labour markets – and hence for the role of mining construction as a competitor sector for the same workforce skills needed by the utilities? To quote the labour market discussion in the latest issue of Deloitte Access Economics’ Business Outlook, “*new themes in job markets include the brakes going on in **mining**, where coal cuts are biting, and in the **public sector**, where cost cutting is also the order of the day.*”

## 4 Excluding waste services from the utilities sector

The BIS Shrapnel report argues that the Waste Services component of the Electricity, Gas, Water and Waste Service industry classification should be excluded from the index. They argue on page 23 that:

*The inclusion of the waste services subsector (from November 2009) has led to lower wage growth outcomes for the combined EGW and Waste Services sector. Hence, it is not an accurate indicator for the mostly higher skilled (and more highly demanded) occupations in the EGW sector.*

Deloitte Access Economics undertakes LPI forecasts for the utilities (EGWW) industry as a whole because historical LPI data at a more detailed level does not exist. We agree that forecasts of the LPI for the electricity supply sector, or the gas sector, would more closely reflect the labour market conditions for various sub sectors of the utilities industry. However such a forecast is simply not possible given available data. As noted previously, the ABS does not even release all LPI industry data for Victoria.

Deloitte Access Economics agrees that, for the period for which comparable data is available, the EGWW sector did grow more slowly, on average, than the EGW sector. However there were instances where the EGWW sector grew at a faster quarterly rate than that of the EGW, so it is clearly not cut and dried.

Additionally, the argument that, because waste services has seen slower growth in the past, it will continue to do so into the future is another case of BIS Shrapnel arguing that the status quo on growth rates will continue forever. As we have argued previously, one industry cannot continue to increase relative wages indefinitely. At some point, other industries have trouble attracting people, and a period of catch up ensues.

It is unclear from the report how BIS Shrapnel have created the EGW LPI historical numbers where they are unavailable from the ABS. In order to create AWOTE historical data, they appear to have estimated the movements using AWOTE (rather than LPI from the EGWW sector as stated in the footnote to Table 4.7 - see p 32) at the State and national level.

This would seem to be an indication that this is the methodology BIS Shrapnel intends to use. While a move to EGW may be preferable, the loss of AWOTE data at the State by industry level means that future forecasts will require movements in LPI for EGWW to be applied.

DAE continues to argue that the greater the degree of disaggregation, the greater the volatility. Disaggregating the EGWWS LPI into an EGW only LPI would increase volatility, which is not ideal as a base from which to forecast.

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