

# FACT SHEET

## WACC Biannual Update

February 2015

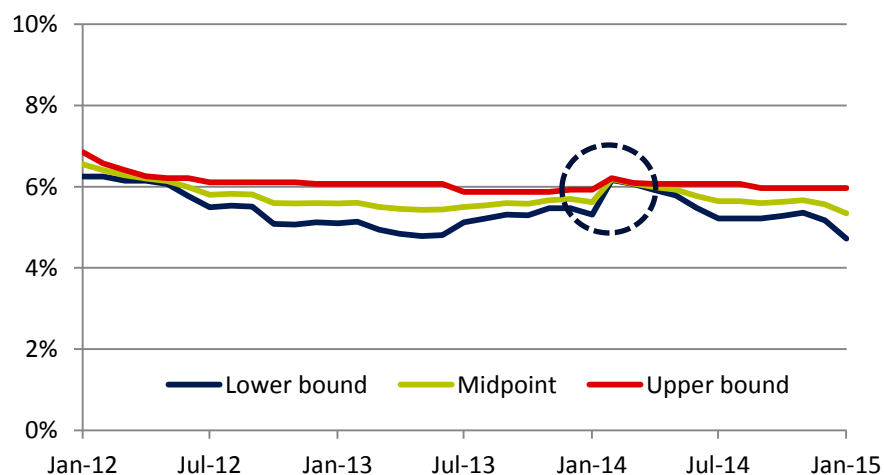
We publish a biannual market update to help our stakeholders replicate and predict our WACC decisions. This update incorporates market data to 31 January 2015. We also publish a spreadsheet containing a working copy of our full WACC model. The model contains market data sampled to 31 January 2015.

We release market updates biannually in August and February.

### 1 Overview

Figure 1 contains our calculation of the real post-tax WACC over the last three years, using an equity beta of 1 and a gearing ratio of 60%. Table 1 shows the current values for the underlying market parameters. Table 2 shows our calculation of the WACC range.

**Figure 1 Estimated WACC parameters and range based on an equity beta of 1 and a gearing ratio of 60%**



**Note:** The effect of our decision to use RBA data is highlighted.

**Table 1 Market-based parameters as of 31 January 2015<sup>1</sup>**

	Risk free rate	Debt margin	Market risk premium	Inflation
40 days	2.7%	2.2%	8.3% <sup>a</sup>	2.5%
10 years	4.9%	2.9%	6.0%	2.9%
Midpoint	3.8%	2.6%	7.2%	2.7%

<sup>a</sup> Midpoint estimate.

**Table 2 IPART's WACC range as of 31 January 2015 (using an equity beta value of 1 and a gearing ratio of 60%)**

	Lower	Midpoint	Upper
Nominal	7.3%	8.2%	9.0%
Real	4.7%	5.3%	6.0%

Figure 1 shows that WACC estimates have been relatively stable over the last two years. Over the last six months, WACC values have decreased slightly for the industries we regulate.

The recent reduction in the WACC is primarily driven by the reduction in the short term (40-day) risk free rate. Over the last six months, it has fallen by around 90 basis points. The 40-day average of the 10-year risk free rate is currently 2.7%, down from 3.6% in July 2014.

The other market-based parameters have been relatively stable over the last six months. Since July 2014:

- ▼ the short term inflation rate has decreased by 20 basis points
- ▼ the short term debt margin has increased by 6 basis points
- ▼ our measure of the short term market risk premium has increased by 20 basis points.

In April 2014, we changed our approach to estimating the debt margin.<sup>2</sup> The effect of this decision on the WACC is evident in Figures 1, 2 and 3. Our full calculation of the WACC can be found in the accompanying [spreadsheet](#).<sup>3</sup>

<sup>1</sup> The risk free rate, debt margin, market risk premium and inflation are midpoint values and expressed in nominal terms. The parameters in Table 1 and the WACC estimates in Table 2 have been calculated using our current WACC methodology. See *IPART, Review of WACC Methodology – Final Report, December 2013* for more details.

<sup>2</sup> *IPART, WACC - IPART's New Approach to Estimating the Cost of Debt – Fact Sheet, April 2014.*

<sup>3</sup> Select an industry from the drop-down menu in the accompanying [spreadsheet](#) for industry-specific WACC estimates.

## 2 Analysis

### WACC analysis for the industries we regulate

IPART conducts price reviews for some regulated water and transport businesses. Table 3 shows the industry-specific parameters we typically adopt for these industries. Figures 2 and 3 show the resulting WACC range and midpoints over the last three years:

- ▼ For the water industry, the current WACC ranges from 3.8% to 5.3%, with a midpoint of 4.5%.
- ▼ For the transport industry, the current WACC ranges from 4.4% to 5.7%, with a midpoint of 5.1%.

Each time we review prices, we consider the appropriate valuation for each parameter. In some cases, we depart from these standard industry parameter valuations after taking account of the individual regulated business's circumstances. For example, in our decisions for the water industry, we typically adopt a gearing level of 60%. However, in the previous [determination](#) for Essential Energy's water business, we determined that a gearing level ranging from 50% to 60% was appropriate for this particular decision. Similarly, in our previous [determination](#) for Sydney Ferries, we determined that a gearing level ranging from 40% to 60% was appropriate.

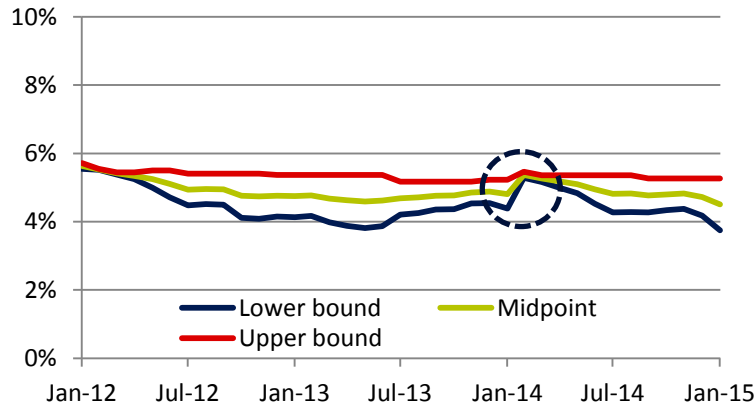
**Table 3 Typical industry-specific WACC parameters**

Sector	Beta			Target term-to-maturity	Gearing ratio
	Low	Mid	High		
<b>Water<sup>a</sup></b>	0.6	0.7	0.8	10 years	60%
<b>Transport<sup>b</sup></b>	0.8	0.9	1.0	10 years	60%

<sup>a</sup> For the water industry, we determine a WACC for Sydney Water Corporation, Hunter Water Corporation, Gosford City Council, Wyong Shire Council, Essential Energy, Sydney Catchment Authority, Sydney Desalination Plant and State Water Corporation. We determined a lower level of gearing in our previous decision for Essential Energy's water business due to its greater exposure to risks, compared to other metropolitan water businesses we regulate.

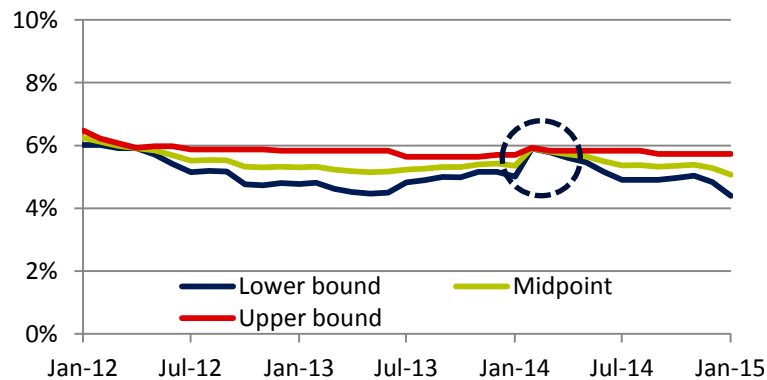
<sup>b</sup> For the transport industry, we determine a WACC for Sydney Trains, Sydney Ferries, the private ferries and metropolitan and outer metropolitan buses. We departed from our typical parameter valuations in the previous reviews for the ferry businesses.

**Figure 2 Water industry WACC midpoint and range based on beta and gearing values from Table 3**



**Note:** The effect of our decision to use RBA data is highlighted.

**Figure 3 Transport industry WACC midpoint and range based on beta and gearing values from Table 3**



**Note:** The effect of our decision to use RBA data is highlighted.

**Table 4 Half-yearly WACC midpoints and ranges based on beta and gearing values from Table 3**

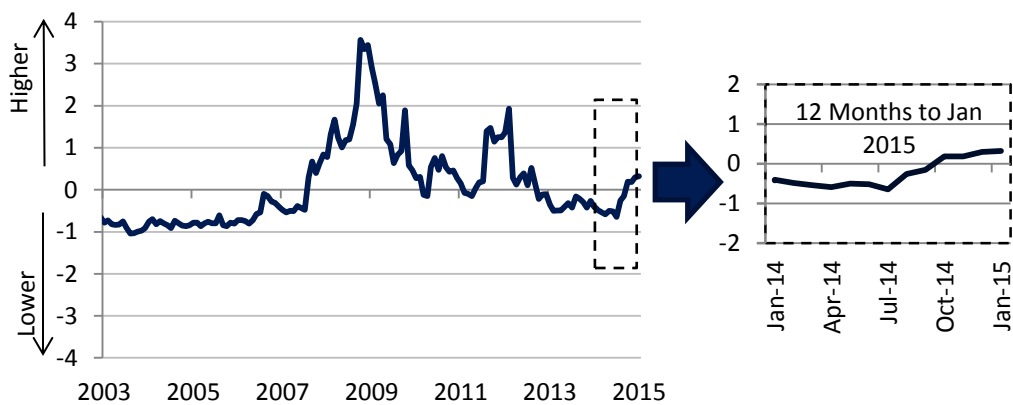
	Jan-13	Jul-13	Jan-14	Jul-14	Jan-15
<b>Water</b>					
Lower bound	5.4%	5.2%	5.2%	5.4%	5.3%
Midpoint	<b>4.7%</b>	<b>4.7%</b>	<b>4.8%</b>	<b>4.9%</b>	<b>4.5%</b>
Upper bound	4.1%	4.2%	4.4%	4.4%	3.8%
<b>Transport</b>					
Lower bound	5.8%	5.6%	5.7%	5.8%	5.7%
Midpoint	<b>5.3%</b>	<b>5.2%</b>	<b>5.3%</b>	<b>5.4%</b>	<b>5.1%</b>
Upper bound	4.8%	4.8%	5.0%	5.0%	4.4%

**Note:** Data from July 2014 onwards in Table 4 has been calculated using our new approach to estimating the debt margin. Our decision can be found [here](#).

## Uncertainty index

Figure 4 shows our uncertainty index. The uncertainty index is currently within 1 standard deviation of the long term average value of 0. According to our WACC decision rule, we would use the midpoint WACC. Our 2013 [final report](#) on the WACC methodology contains our methodology for calculating the uncertainty index.

**Figure 4 Economic uncertainty**



## Additional market information

**Table 5 Additional financial market and economic information**

	Cost of Debt	Cost of Equity
<b>Market Data</b>	Stable	Stable
<b>Analyst and consultant reports</b>	Stable	Stable

### Market data

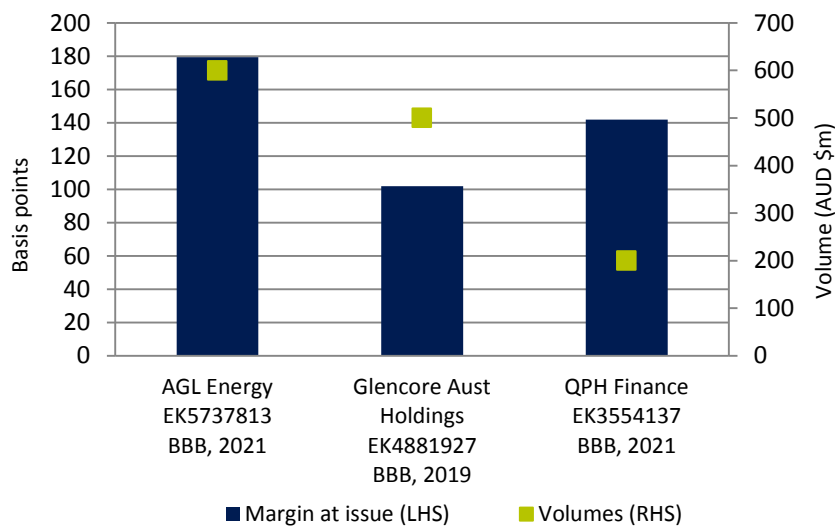
- ▼ 2014 was the biggest year for Australian initial public offerings (IPO) on record. There were 58 IPOs in 2014 which raised around \$16 billion. This was nearly double the amount raised in 2013. While IPO activity was strong in 2014, merger and acquisition activity is expected to improve in 2015.<sup>4</sup>
- ▼ Over the last six months, the risk free rate has decreased from 3.6% to 2.7%.
- ▼ Australian corporate bond yields at the aggregate BBB rating have been stable over the last six months.
- ▼ There have been three BBB/BBB+ rated fixed bonds recently issued in the Australian market by Australian corporations (Figure 5). The Glencore issue has a tenor of five years. The other bonds have a seven-year tenor. The

<sup>4</sup> Bloomberg, *Large caps dominate IPO market*, 1 February 2015; Sydney Morning Herald, *Mergers and acquisitions to dominate markets in 2015*, 6 January 2015.

average yield for the longer-termed debt is around 160 basis points over the yield on 10-year Australian Commonwealth Government bonds.<sup>5</sup>

- ▼ The RBA’s measure of 10-year BBB rated debt currently indicates a margin of around 205 basis points over the risk free rate.<sup>6</sup> Bloomberg’s 7-year BBB fair value curve currently indicates a margin of around 160 basis points over the risk free rate.<sup>7</sup>
- ▼ The 3-month bank bill swap rate is currently 2.4%.<sup>8</sup> While it was relatively stable over the last six months, it has dropped around 30 basis points following the RBA’s February [decision](#) to reduce interest rates.

**Figure 5 Bond spreads at issue date**



**Source:** Bloomberg, Thompson Reuters.

**Note:** Margins are expressed over the 10-year yield on Australian Commonwealth Government bonds.

### Analyst and consultant reports

- ▼ We have reviewed recent equity analyst and consultant reports for their cost of capital assumptions:
  - In assessing AGL Energy (AGK.AX), Morgans and CIMB use a 10-year risk free rate of 4.25%, an equity beta of 0.97 and an MRP of 6.0%.<sup>9</sup>
  - Similarly, in its valuation for Leighton Holdings (LEI.AX), Morgans use a risk free rate of 4.25% and an MRP of 6.0%.<sup>10</sup>

<sup>5</sup> KangaNews and Thompson Reuters.

<sup>6</sup> RBA Statistics, *Aggregate Measures of Australian Corporate Bond Spreads and Yields - F3 - Non-financial corporate BBB-rated bonds – Spread to CGS – 10 year*, accessed on 2 February 2015.

<sup>7</sup> The difference in the spreads is likely to be due to data and methodological differences. Notably, the RBA adjusts yields to a 10-year tenor (compared to Bloomberg’s 7-year term) and excludes financial corporate data.

<sup>8</sup> Accessed on 2 February 2015 from Bloomberg, ticker ADBB3M.

<sup>9</sup> CIMB, *AGL Energy: Adding MacGen to the fold*, 20 August 2014; Morgans, *AGL Energy: guidance trails expectations*, 23 October 2014.

<sup>10</sup> Morgans, *Making further progress*, 12 December 2014.