

FACT SHEET – WACC UPDATE

August 2014

1. Introduction

As part of our 2013 review of our WACC methodology, we decided to release a bi-annual financial market update. This is our second market update in this series. We have also released a WACC spreadsheet which includes a working copy of our full WACC model.

We have published this market update to allow our stakeholders to better replicate and predict our WACC decisions. It incorporates market data to 31 July 2014.

We will release future market updates bi-annually in February and August.

2. Overview

- ▼ WACC estimates have increased marginally over the last six months.
- ▼ We changed our approach to estimating the debt margin earlier this year.¹ The effect of this decision on the WACC is evident in Figure 1.
- ▼ While WACC values have been fairly stable since February 2014, the risk free rate has fallen from 4.2% to 3.6% (40-day averages). The reduction in the risk free rate has been offset by our **decision** to use data from the RBA to estimate the debt margin. This decision has increased the debt margin. The debt margin was 1.5% in February 2014 using our previous method. At the end of July 2014, we calculate a debt margin of 2.2% using data from the RBA.
- ▼ The accompanying [spreadsheet](#) contains the full calculation of our WACC.²

Estimated WACC parameters and range based on an equity beta of 1 and a gearing ratio of 60%³

Table 1 Market-based parameters as of 31 July 2014

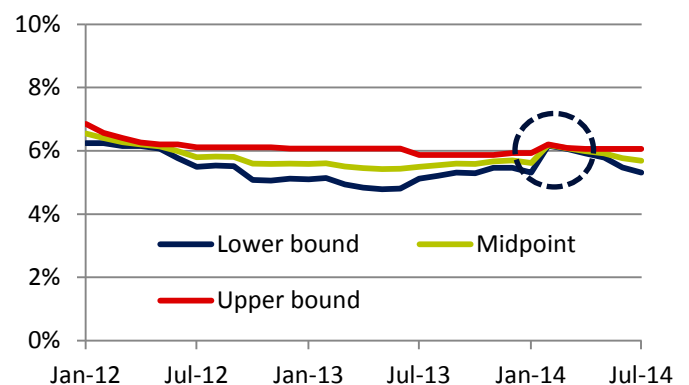
	RFR	DRP	MRP	Inflation
40 days	3.6%	2.2%	8.1%	2.7%
10 years	5.0%	2.9%	6.0%	2.9%
Midpoint	4.3%	2.6%	7.1%	2.8%

^a Midpoint estimate.

Table 2 IPART’s final WACC range as of 31 July 2014

	Lower	Midpoint	Upper
Nominal Vanilla WACC	8.2%	8.7%	9.1%
Real post-tax WACC	5.3%	5.7%	6.1%

Figure 1 Real post-tax WACC



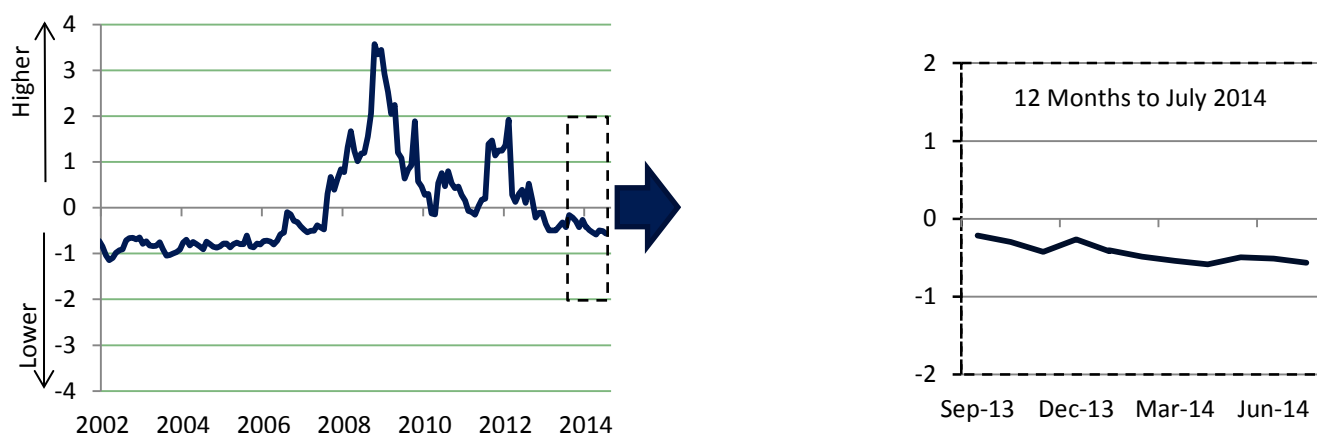
Note: The effect of our decision to use RBA data is highlighted.

¹ IPART, *WACC - IPART’s New Approach to Estimating the Cost of Debt – Fact Sheet*, April 2014.

² For industry-specific WACC estimates, select industry from the drop-down menu in the accompanying [spreadsheet](#).

³ RFR, DRP and MRP in Table 1 refer to risk free rate, debt risk premium, and market risk premium. RFR, DRP, MRP and inflation are midpoint values and expressed in nominal terms. The WACC estimates in Table 2 are post-tax WACCs and based on an equity beta of 1, 10-year target term-to-maturity and a gearing ratio of 60%. The WACC ranges are based on IPART’s new WACC methodology. See IPART, *Review of WACC Methodology – Final Report*, December 2013 for more details.

Figure 2 Economic uncertainty



- ▼ 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.
- ▼ The uncertainty index shows that economic uncertainty has trended down following positive spikes in 2008, 2009 and 2011.

3. Analysis

WACC analysis for industries we regulate

Table 3 Industry-specific WACC parameters^a

Sector	Beta			Target term-to-maturity	Gearing ratio
	Low	Mid	High		
Water ^b	0.6	0.7	0.8	10 years	60%
Transport ^c	0.8	0.9	1.0	10 years	60%

^a We consider the appropriateness of our industry equity beta and gearing ratios each time we review prices. In some reviews, we depart from our standard industry valuations, after analysis and consideration of the individual regulated business's circumstances. While we usually use a gearing level of 60% for our decisions in the water and transport industries, we have lowered this assumption in some decisions. In our recent [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 [determination](#) for Sydney Ferries, we determined that a gearing level ranging from 40% to 60% was appropriate for this particular decision.

^b We determine a WACC for Essential Energy, Gosford City Council, Hunter Water Corporation, Sydney Desalination Plant, Sydney Catchment Authority, Sydney Water Corporation and Wyong Shire Council.

^c We determine a WACC for Sydney Trains, Sydney Ferries and Metropolitan and Outer Metropolitan Buses.

Industry WACC midpoints and ranges based on beta and gearing values from Table 3

Figure 3 WACC for Water

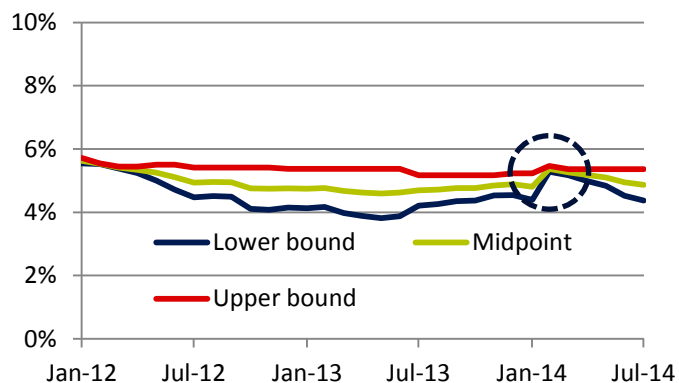


Figure 4 WACC for Transport

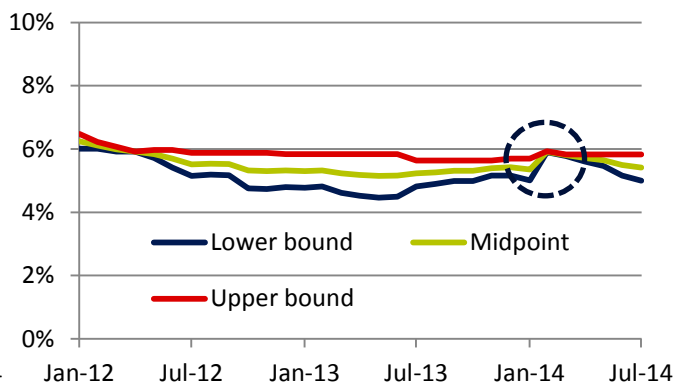


Table 4 Half-yearly WACCs for water

	Jan-13	Jul-13	Jan-14	Jul-14
Upper	5.4%	5.2%	5.2%	5.4%
Midpoint	4.7%	4.7%	4.8%	4.9%
Lower	4.1%	4.2%	4.4%	4.4%

Table 5 Half-yearly WACCs for public transport

	Jan-13	Jul-13	Jan-14	Jul-14
Upper	5.8%	5.6%	5.7%	5.8%
Midpoint	5.3%	5.2%	5.3%	5.4%
Lower	4.8%	4.8%	5.0%	5.0%

Note: The effect of our recent [decision](#) to use data from the RBA to estimate the debt margin is highlighted in Figures 3 and 4. Similarly, July 2014 data in Tables 4 and 5 has been calculated using RBA data.

Uncertainty index

- ▼ The uncertainty index is based on four key financial market indicators. As of 31 July 2014:
 - Expected equity market volatility is currently **below average**.
 - Dispersion in analysts' forecasts is currently **below average**.
 - Credit spread is currently **below average**.
 - Bills-OIS spread is currently **below average**.
- ▼ The uncertainty index is currently within 1 standard deviation from the long term average.
- ▼ The methodology for the uncertainty index and our decision rule relating to moving away from the midpoint WACC are provided in our recent [final report](#) on the WACC methodology.

Additional market information

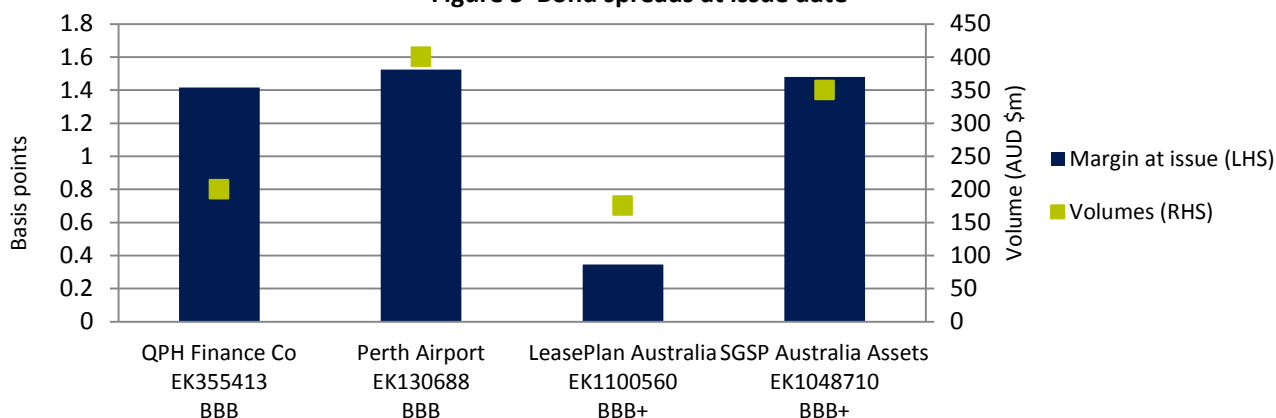
Table 6 Additional financial market and economic information

	Cost of Debt	Cost of Equity
1. Market Data	Conditions favourable	Conditions favourable
2. Analyst Reports	Stable	Stable
3. Expert Consultant Reports	Stable	Stable

▼ **Market data:**

- Globally, the number of initial public offerings (IPOs) in the first six months of 2014 has been the highest in any half-year since the global financial crisis. In Australia, the amount of money raised from IPOs (\$4.6 billion) was six times higher during January to June 2014 compared with the year-earlier period. The number of IPOs (21 deals) was broadly unchanged.⁴
- Over the last six months, the risk free rate has decreased from 4.2% to 3.6%. In the corporate bond market at the aggregate BBB rating, the last six months have seen improvements in liquidity and a reduction in yields.
- There have been four BBB/BBB+ rated fixed bonds recently issued in the Australian market (Figure 5). The LeasePlan issue has a tenor of three years. The other bonds have a seven-year tenor. The average yield for the longer-termed debt is around 120 basis points over the risk free rate.⁵
- The RBA’s metric of 10-year BBB rated debt currently indicates a margin of around 200 basis points over the risk free rate.⁶ Bloomberg’s 7-year BBB fair value curve currently indicates a margin of around 140 basis points over the risk free rate.⁷
- The 3-month bank bill swap rate is currently 2.6%.⁸ It has been stable since August 2013.

Figure 5 Bond spreads at issue date



Note: Margins are expressed over the 10 Commonwealth Government bond yield. The LeasePlan bond has a tenor of 3 years.

▼ **Analyst reports:**

- We have reviewed recent equity analyst reports on utilities and the utility sector. Analysts have not substantially changed their cost of capital assumptions:
 - Deutsche Bank uses a beta of 0.70 and a MRP of 6.0% for its valuation of AGL Energy.⁹
 - J.P. Morgan has valued SP AusNet, Spark Infrastructure Group and Duet Group. It applied a risk free rate of 4.5%, an MRP of 6.0% and a gearing ratio of 60%. The debt risk premium

⁴ Thompson Reuters, *EY Tips IPO Rush to Continue as Family Owners Head for the Exits*, 15 July 2014.

⁵ KangaNews and Bloomberg.

⁶ 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 15 August 2014.

⁷ 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.

⁸ Accessed on 15 August 2014 from Bloomberg, ticker ADBB3M.

⁹ Deutsche Bank, *Assessing the impact of the carbon tax repeal*, 17 July 2014.

ranged from 1.9% to 2.2% for the three companies. It valued the beta and 0.75 for SP AusNet and Spark Infrastructure Group. Beta was valued at 0.7 for Duet Group.¹⁰

▼ **Expert consultant reports:**

- A recent independent expert report prepared by Grant Samuel¹¹ uses the following WACC parameters in its valuation:
 - Risk free rate: yield of 4.2%, based on 10-year Australian government bond yields.
 - MRP: 6.0%
 - Equity beta: 0.6 to 0.7
 - Level of gearing: 55% to 65%
 - Debt margin: 280 basis points.

[Upcoming IPART WACC decisions](#)

Table 7 IPART forthcoming WACC decisions to end of December 2014

	Draft decision	Final decision
Private Ferries	October 2014	December 2014

¹⁰ J.P. Morgan, *Network Utilities - Winter Wrap - Key Themes & Result Previews*, 15 July 2014.

¹¹ Grant Samuel, *Financial Services Guide and Independent Expert's Report to the Independent Board Sub-committee in relation to the Proposal by APA Group*, 3 March 2014.