

Update on Market Discount Rates

As at 30 June 2019

# **NOW YOU KNOW HOW TO ASSESS YOUR DISCOUNT RATES RELIABLY**



Now you know

**LEADENHALL**

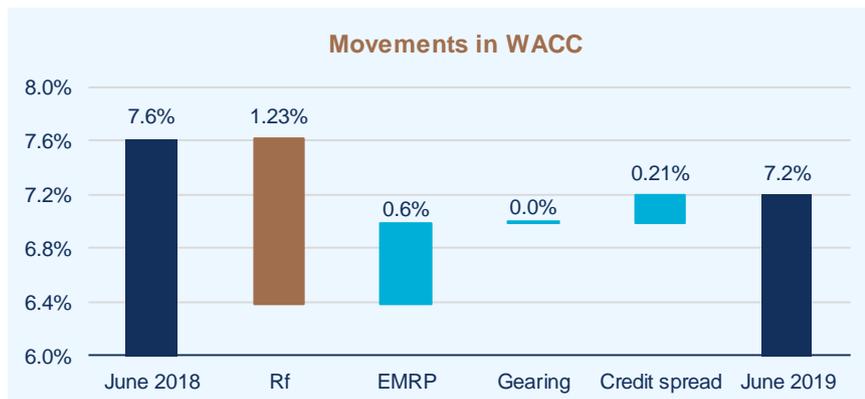


## 1. Introduction

As impairment testing and asset values continue to be one of the key focus areas for ASIC in relation to the 30 June 2019 reporting period, you and your board will want to ensure your process is robust and the selection of discount rates is reasonable.

The following chart presents a summary of the overall change in the weighted average cost of capital (**WACC**) for the market as a whole since 30 June 2018.

### Market discount rates have declined



Source: Leadenhall

The cost of capital has declined over the period, with increases in the equity market risk premium (**EMRP**) and credit spread insufficient to fully offset the plunging risk-free rate. All other things being equal, this will lead to higher asset values.

With ASIC's (and therefore auditor's) ongoing focus on impairment, we note that many businesses have been applying more rigour in their assessment of discount rates. ASIC has also highlighted the importance of the reliability and reasonableness of the assumptions underpinning cash flow forecasts. We therefore continue to stress the importance of utilising a supportable discount rate which is consistent with the cash flows used in your impairment analysis. As recognised experts, this update helps you understand the assumptions we make which you can rely on for a reasonable outcome.

**Leadenhall Solution:** It is important to understand and be able to justify changes that are occurring in your projected cash flows and WACC as well as ensuring cross-checks to market metrics are undertaken where observable. Leadenhall can assist with this analysis.

***“ASIC’s concerns continue to relate to impairment of non-financial assets and inappropriate accounting treatments”***

**ASIC – findings from 30 June 2018 financial reports**

***“The recoverability of the carrying amounts of assets such as goodwill, other intangibles and property, plant and equipment continues to be an important area of focus”***

**ASIC – focuses for 30 June 2019 financial report**



## 2. Framework

We have used the standard WACC and capital asset pricing model formulae.

### Weighted Average Cost of Capital

#### Model

$$\text{WACC} = K_e \times (E/V) + K_d \times (D/V) (1-t)$$

#### Components

WACC	Weighted average cost of capital
$K_e$	Cost of equity
$E/V$	Proportion of equity in capital structure
$K_d$	Cost of debt
$D/V$	Proportion of debt in capital structure
$t$	Corporate tax rate
$V$	Market value of business (where $V = D + E$ )

### Capital Asset Pricing Model

#### Model

$$K_e = R_f + \beta(R_m - R_f) + \alpha$$

#### Components

$K_e$	Cost of equity
$R_f$	Risk free rate
$\beta$	Beta, a measure of exposure to market risk
$R_m$	Required return from investing in the market
$R_m - R_f$	Equity market risk premium
$\alpha$	Company specific risk premium



### 3. Selecting the risk free rate ( $R_f$ )

The risk free rate should be in the same currency as the asset being valued and its maturity should match the life of the investment. In Australia, the most common proxy for the long term risk-free rate is the yield on ten-year Commonwealth Government bonds as follows:

#### Risk free rates remain close to historical lows

June 2018	June 2019	Change
2.63%	1.32%	(1.31%)

*Source: Reserve Bank of Australia Statistical Table F2*

The sharp decrease in the risk-free rate over the last twelve months may result in a material change in overall discount rates, all other things being equal.

Risk free rates are still at historically low levels. Rather than adopting current market observed risk free rates, some valuers are adjusting observed risk free rates to reflect a long-term average rate. However, some valuers are then not adjusting other parameters accordingly – leading to inconsistent and unreliable discount rate conclusions. Furthermore, determining the period over which to estimate a ‘long-term’ average for the risk-free rate is subjective.

**Leadenhall Solution:** We avoid the dangers of normalising by using market observed risk free rates coupled with a contemporaneous assessment of the EMRP. This better reflects the current views implicit in capital markets and responds more quickly to changes in market pricing.

#### 4. Assessing Beta ( $\beta$ )

Beta is a measure of the relative riskiness of a business compared to the market as a whole. An appropriate beta needs to be selected for each cash generating unit (CGU), based on the relative riskiness of that business.

Some industries have seen moderate changes in beta

Sector	June 2018	June 2019	Change
Energy	1.07	1.31	0.24
Media	0.87	1.10	0.23
Real Estate (excl. REITs)	0.82	1.05	0.23
Pharmaceuticals & Biotechnology	0.94	1.11	0.17
Automobile & Components	0.95	1.11	0.16
Banks	1.34	1.19	(0.15)
Software & Services	1.03	1.18	0.15

Source: SIRCA Limited – Risk Measurement Service

There have been a number of moderate changes over the past year and, out of 24 discrete industries reported, only 7 showed a change in beta of 0.15 or greater.

**Leadenhall Solution:** Rather than simply adopting an industry beta, we also undertake a detailed analysis of the companies in a sector that have comparable risk to the business being valued. In order to remove the impact of different gearing levels across companies, the betas for comparable companies generally need to be ‘ungeared’ to remove the impact of actual debt levels and then ‘re-g geared’ to the optimal debt level (which is not necessarily the actual debt level of the business being valued).



## 5. Cost of debt ( $K_d$ )

The cost of debt is generally related to the risk free rate, with the difference being a credit spread. The following table shows that overall lending rates have remained similar to the past year.

### Lending rates remain low and stable

Indicator rates	June 2018	June 2019	Change
Small business	5.70%	5.65%	(0.05%)
Large business	3.65%	3.87%	0.22%
Corporate bonds (BBB 5 years)	3.68%	2.49%	(1.19%)

*Source: Reserve Bank of Australia Statistical Tables F3 & F5. Note: Small business and large business as at 31 March 2019, being the latest available data*

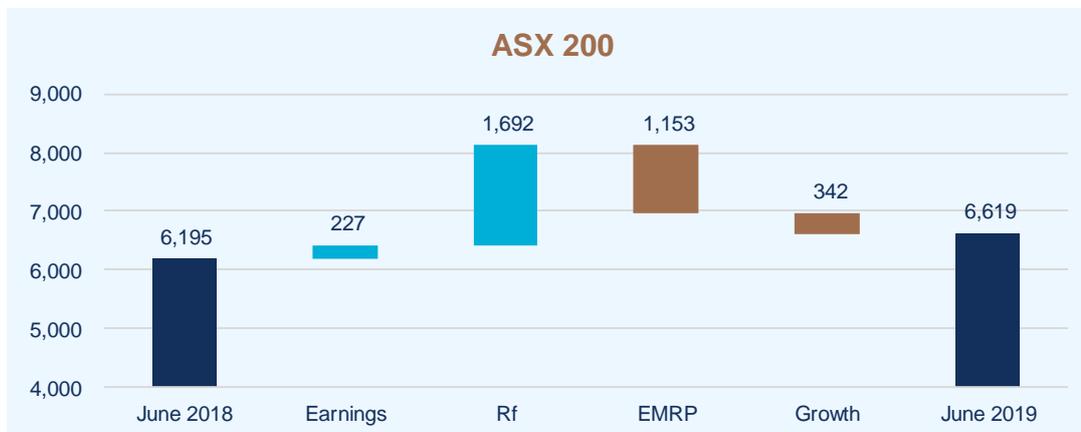
**Leadenhall Solution:** Instead of historical borrowing costs, the cost of debt should be based on the *current* borrowing cost – as if the business were to be refinanced in the current market at ‘optimal’ gearing levels.



## 6. Rising market risk premium

Equity market movements can be broken down into changes in earnings, changes in growth expectations and changes in discount rates. We then disaggregate the change in discount rates into movements in the risk free rate and movements in the market risk premium in the following charts.

### Declining interest rates offset by increase in EMRP



Source: Leadenhall

The chart presented above shows a substantial drop in bond yields driving index growth, offset to some extent by an increase in the EMRP resulting in an overall increase in earnings multiples over the period.

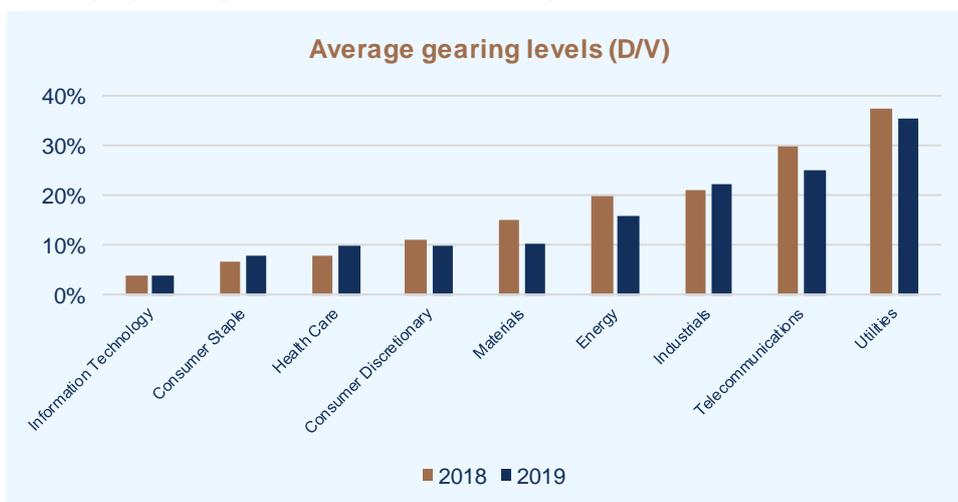
**Leadenhall Solution:** We've increased our assessment of the EMRP from 6.25% at 30 June 2018 to 7.00% at 30 June 2019. This reflects the relatively small rise in major market indices, despite a substantial fall in risk free rates.



## 7. Capital structure

Debt levels across various industries have remained stable on average over the past year, thus changes in optimal gearing are unlikely to significantly impact your discount rates.

### Average gearing levels remain unchanged



Source: Capital IQ

**Leadenhall Solution:** As with the cost of debt, the proportion of debt used in the calculation of WACC should be based on an optimal capital structure. This is not necessarily the actual level of debt in the company. The efficient or optimal level of debt included in a discount rate should be an assessment of the level of debt that can be sustained by the specific business or CGU over the medium to long term.

## 8. Our other concerns that may attract attention

Given the relatively stable discount rate environment, it is not surprising that ASIC's attention has shifted from the discounts rates adopted to the cash flows themselves. Some of our key observations in relation to common issues with cash flows include:

- ◆ Overly complex financial models with material errors
- ◆ Optimistic forecasts with insufficient allowance for capital investment
- ◆ Failure to update forecasts to reflect changes in market conditions
- ◆ Inconsistencies between the discount rate and cash flows
- ◆ Inconsistencies between the carrying values of the CGU and the calculated value
- ◆ Relying on a single valuation methodology without considering any cross-checks
- ◆ Failing to explain movements in the value or key assumptions across periods

# NOW YOU KNOW WE CAN HELP YOU EXPLAIN THE RESULTS IN WORDS YOUR BOARD WILL UNDERSTAND

## Our difference

Leadenhall doesn't just offer thought leadership; it prides itself on *knowledge delivery*. Reports such as these contain the most recent, relevant information available, clearly presented to go beyond the maths and provide you with a deeper understanding of the critical issues.

This analysis is updated regularly throughout the year with reports issued in December and June in line with full year and half year reporting for most Australian companies. Discount rates herein are expressed in nominal post-tax terms.<sup>1</sup>

Further information on impairment testing in general can be obtained from a joint publication published by Chartered Accountants Australia and New Zealand. Download your copy [here](#).

<sup>1</sup> Accounting standard AASB 136 – Impairment of Assets requires value in use to be assessed with a pre-tax discount rate (paragraph 55). However, market practice in Australia is to perform this analysis using a post-tax discount rate (and post-tax cash flows), with the implied pre-tax discount rate being disclosed in the financial statements.

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