

Update on Market Discount Rates

As at 31 December 2018

NOW YOU KNOW HOW TO ASSESS YOUR DISCOUNT RATES RELIABLY



Now you know

LEADENHALL

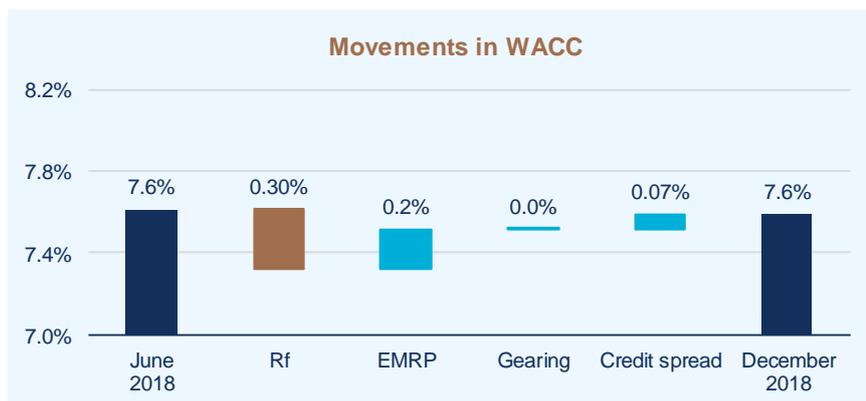


1. Introduction

Whilst the spotlight is currently on the impact of new accounting standards on financial reporting, impairment testing and asset values continue to be one of the key focus areas for ASIC in relation to the 31 December 2018 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 remain stable



Source: Leadenhall

Whilst the WACC has remained stable overall, this is due to a reduction in the risk free rate, offset entirely by increases in the equity market risk premium (**EMRP**) and credit spreads. We therefore expect reduced discount rates for companies in low beta industries (e.g. utilities) and increased discount rates for high beta industries (e.g. banking).

With ASIC'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 continues to identify concerns regarding assessments of the recoverability of the carrying values of assets, including goodwill”

ASIC – findings from 31 December 2017 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 31 December 2018 financial reports



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
β	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
α	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:

Risk free rates remain close to historical lows

June 2018	December 2018	Change
2.63%	2.32%	-0.31%

Source: Reserve Bank of Australia Statistical Table F2

The decrease in the risk free rate over the last six months would lead to a reduction in overall discount rates, all other things being equal. However, this is offset by an increase in the EMRP and credit spreads as discussed further below.

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.

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 (β)

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.

No industries have seen a significant change in beta

Sector	Jun 2018	Dec 2018	Change
Pharmaceuticals, Biotechnology & Life Sciences	0.94	1.10	0.16
Capital Goods	0.78	0.66	(0.12)
Metals & Mining	1.07	0.97	(0.10)
Technology Hardware & Equipment	1.02	0.92	(0.10)
Real Estate (excl. Investment Trusts)	0.82	0.89	0.07
Utilities	0.66	0.72	0.06
Consumer Durables & Apparel	0.97	0.92	(0.05)
Health Care Equipment & Services	0.93	0.98	0.05

Source: SIRCA Limited – Risk Measurement Service

There have been only a handful of modest changes over the past six months and, out of 24 discrete industries reported, only the 8 industries above showed a change in beta of 0.05 or greater.

Leadenhall Solution: Rather than simply adopting an industry beta, we undertake a detailed analysis of the companies in a sector that have comparable risk to the business being valued. The betas for comparable companies generally need to be ‘ungeared’ to remove the impact of actual debt levels and then ‘re-gearred’ 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 (and therefore credit spreads) have risen slightly between June and December 2018.

Lending rates have increased slightly

Indicator rates	Jun 2018	Dec 2018	Change
Small business	5.70%	5.65%	(0.05%)
Large business	3.65%	3.85%	0.20%
Corporate bonds (BBB 5 years)	3.68%	3.78%	0.10%

Source: Reserve Bank of Australia Statistical Tables F3 & F5. Note: Small business and large business as at 31 March 2018 and 30 September 2018 for the June 2018 and December 2018 periods respectively, being the latest available data at each period end

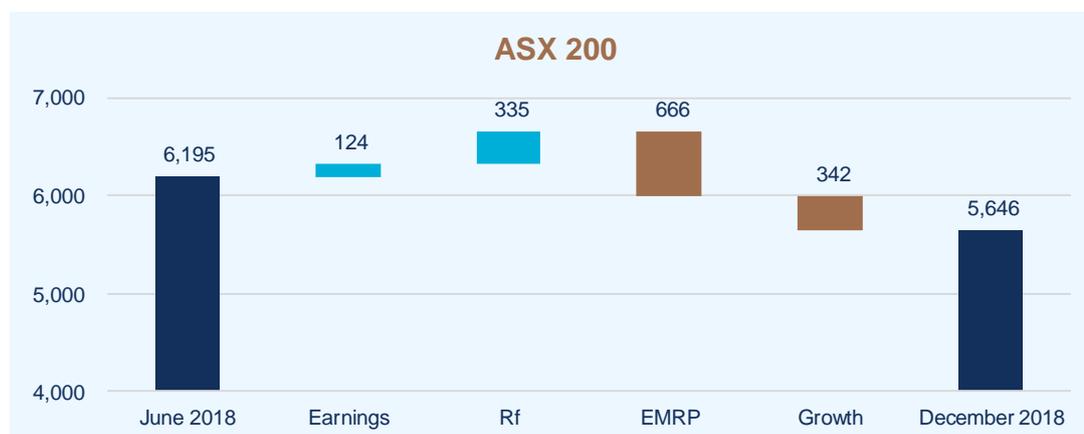
Leadenhall Solution: Instead of historical borrowing costs, the cost of debt should be based on the *current* borrowing cost – as if the business were to be refinanced in the current market at ‘optimal’ gearing levels.



6. Increased 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.

Fall in index driven by lower growth and a higher EMRP



Source: Leadenhall

The falls in the indices presented above are attributable to a combination of multiple compression and declining growth expectations. Decreasing market multiples can be further broken down into an increase in the EMRP implied by market trading, offset to some extent by a lower risk free rate.

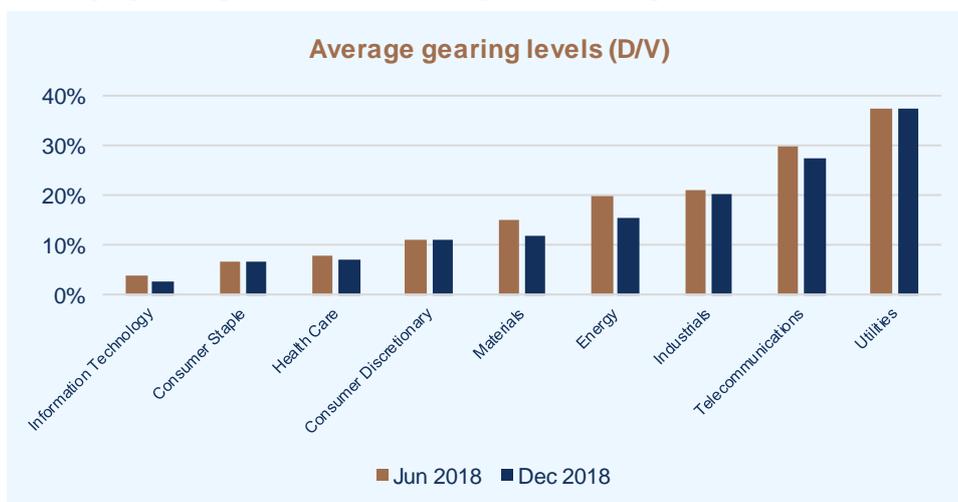
Leadenhall Solution: We've raised our assessment of the EMRP from 6.25% at 30 June 2018 to 6.50% at 31 December 2018. This reflects that the EMRP contributed moderately to the fall in major market indices.



7. Capital structure

Debt levels across various industries have remained relatively stable on average since June, thus changes in optimal gearing are unlikely to significantly impact your discount rates.

Average gearing levels remain largely 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.¹

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](#).

¹ 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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