

NOW YOU KNOW HOW TO ASSESS YOUR DISCOUNT RATES RELIABLY

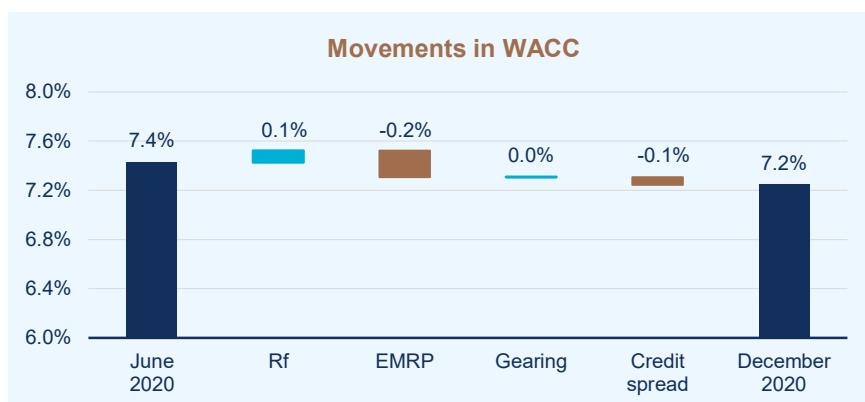


1. Introduction

With the uncertainty created by COVID-19 continuing to impact businesses and markets, the selection of a reasonable discount rate remains a key consideration, whether for the purpose of financial reporting or for broader valuation requirements.

The following chart presents a summary of the overall change in our assessment of the weighted average cost of capital (**WACC**) for the market as a whole from 30 June 2020 to 31 December 2020.

Market discount rates have declined



Source: Leadenhall

Note: Movement in WACC is for the overall market and is not company specific

The cost of capital has decreased over the period as the equity market risk premium (**EMRP**) has declined with an improving economic outlook and expected recovery from COVID-19. All other things being equal, this will lead to higher asset values.

The impact of COVID-19 does not alter the best practice approach of using expected cash flows as the basis for valuations. In fact, the greater uncertainty associated with future earnings indicates that additional rigour may be required in developing robust projections. These forecasts should be coupled with an appropriate discount rate calculated using post COVID-19 inputs.

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 the assumptions that support your projected cash flows and WACC as well as ensuring cross-checks to market metrics (such as market capitalisation and EBIT multiples) are undertaken where observable. Leadenhall can assist with this analysis.

“Following the largest contraction in decades, the global economy is in the early stages of recovery, as is Australia. However, the level of GDP in a number of major economies is expected to remain below pre-pandemic forecasts for the next couple of years, and a high degree of uncertainty continues to surround the outlook.”

RBA – Statement on Monetary Policy – November 2020

“Entities with businesses adversely affected by the COVID-19 pandemic should continue to focus on the reporting of asset values and financial position. Investors will expect clear disclosure about the impacts on an entity’s businesses, any risks and uncertainties, key assumptions, management strategies and future prospects.”

ASIC – focus areas for 31 December 2020 financial reports under COVID-19 conditions



2. Framework

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

Weighted Average Cost of Capital

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

Application to Specific Businesses

Determining an appropriate discount rate to apply to a specific business may require consideration of variables and risks unique to that business. This may be addressed through the inclusion of a company specific risk premium in the discount rate.



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 which have been as follows:

Risk free rates remain at historical lows

June 2020	December 2020	Change
0.87%	0.97%	0.10%

Source: Reserve Bank of Australia Statistical Table F2

The slight increase in government bond yields since June 2020 is unlikely to result in a material change in overall discount rates, all other things being equal.

Risk free rates are 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 of these valuers are then not adjusting other parameters accordingly – leading to inconsistent and unreliable discount rate conclusions.

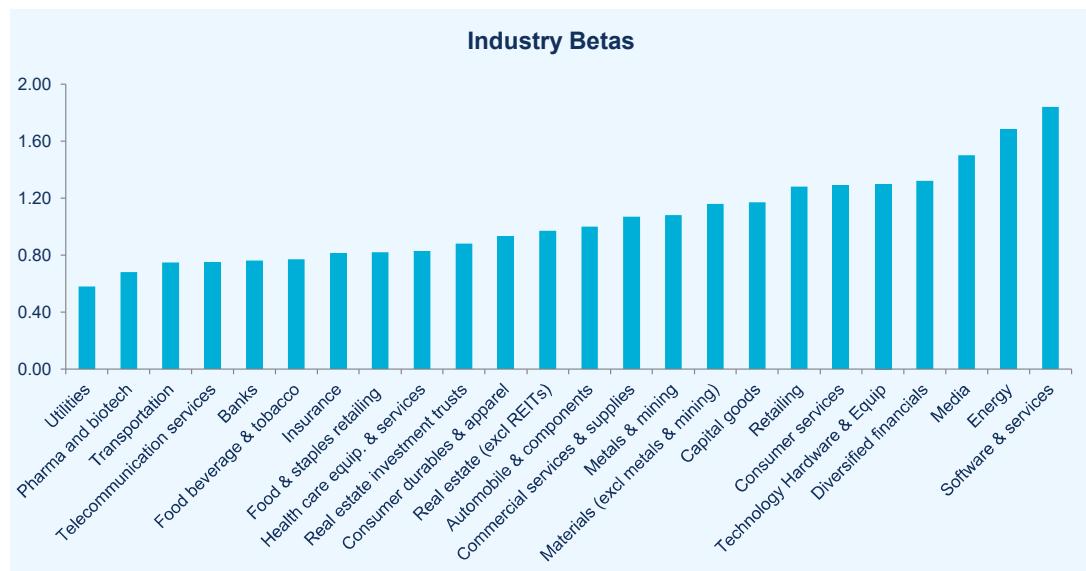
Leadenhall Solution: We avoid the dangers of normalising by using market observed risk free rates coupled with a contemporaneous assessment of the EMRP. This better reflects the current views implicit in capital markets and responds more quickly to changes in market pricing.



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) or business segment, based on the relative riskiness of that business.

Industry betas should remain broadly unchanged



Source: RoZetta Institute Ltd – Risk Measurement Service as at 30 September 2020 (latest available)

In our view, COVID-19 is not a beta issue. It has not impacted industries in proportion to their betas and there is presently no reason to expect underlying beta has changed for any specific industry. The incidence of COVID-19 will introduce significant noise into beta estimation. We are therefore excluding the share price volatility created by COVID-19 during March and April 2020 when estimating beta.

Leadenhall Solution: Rather than simply adopting an industry beta, we recommend undertaking a detailed analysis of the companies in a sector that have comparable risk to the business being valued. The betas for comparable companies should be based on data up to 31 December 2020 and generally need to be ‘ungeared’ to remove the impact of actual debt levels and then ‘re-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 corporate lending rates have declined (narrowing the credit spread) since June 2020. This is based on the yields of BBB-rated corporate bonds.

Lending rates remain low

Indicator rates	Jun 2020	Dec 2020	Change
Corporate bonds (BBB 10 years)	2.97%	2.45%	(0.52%)
Credit spread (to risk-free rate)	2.10%	1.48%	(0.62%)

Source: S&P Capital IQ

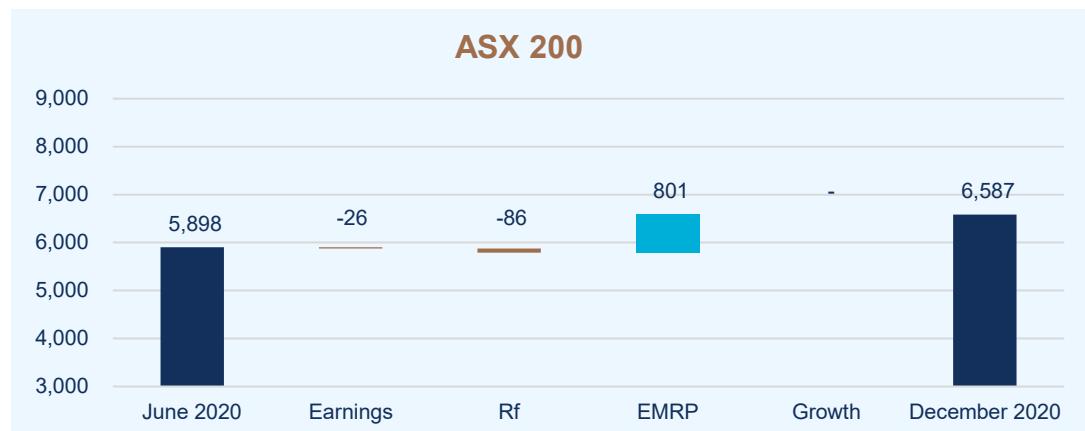
Leadenhall Solution: Instead of historical borrowing costs, the cost of debt should be based on the *current* borrowing cost – as if the business were to be refinanced in the current market at ‘optimal’ gearing levels.



6. Declining 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, debt levels and movements in the market risk premium in the following charts.

Decline in the implied EMRP



Source: Leadenhall

Note: Growth relates to longer-term growth expectations, not the near-term earnings which are expected to be impacted by the COVID-19 recovery.

The chart presented above shows an increase in the index driven by a decline in the EMRP, with all other factors remaining relatively stable since June 2020.

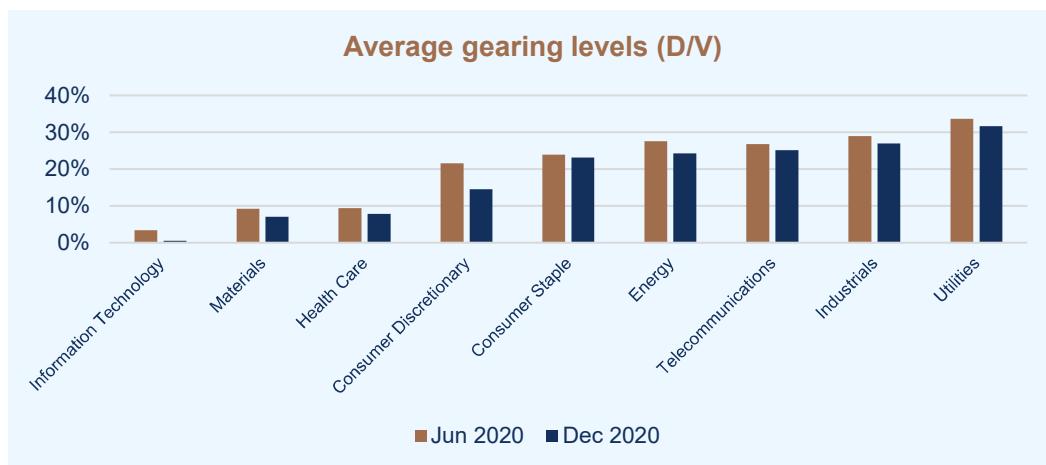
Leadenhall Solution: We've decreased our assessment of the EMRP from a range of 7.25% to 7.75% at 30 June 2020 to a range of 7.0% to 7.5% at 31 December 2020. Whilst our analysis implies an EMRP closer to 7.0%, we consider that a widened range continues to reflect the uncertainty over cash flow projections associated with the COVID-19 recovery.



7. Capital structure

Debt levels across industries have declined on average over the past six months. A potential decline in optimal gearing may impact (increase) your discount rate, all other things being equal.

Decline in average gearing levels



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.

The apparent decline in gearing levels was anticipated in our previous analysis of market discount rates in June 2020. Due to timing delays in financial reporting, available market data at that time had not yet incorporated these reduced debt levels. Furthermore, the recovery in markets has, on average, increased the market capitalisation of companies since June 2020 (reducing the relative proportion of debt in the company). As we had already reflected a decline in gearing levels in our June 2020 assessment of market discount rates, no further adjustments are required.

8. Our other concerns that may attract attention

Given the impact of the COVID-19 response on economic activity and the heightened uncertainty around future earnings and cash flows, emphasis should be placed not only on the discount rates adopted but on the preparation of robust cash flow projections. Some common issues we have observed are:

- ◆ Optimistic forecasts with insufficient allowance for capital investment and / or time to recovery
- ◆ Inconsistencies between the discount rate and cash flows
- ◆ Relying on a single valuation methodology without considering any cross-checks

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

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.