

Update on Market Discount Rates

As at 31 December 2023

# NOW YOU KNOW HOW TO ASSESS YOUR DISCOUNT RATES RELIABLY



Now you know

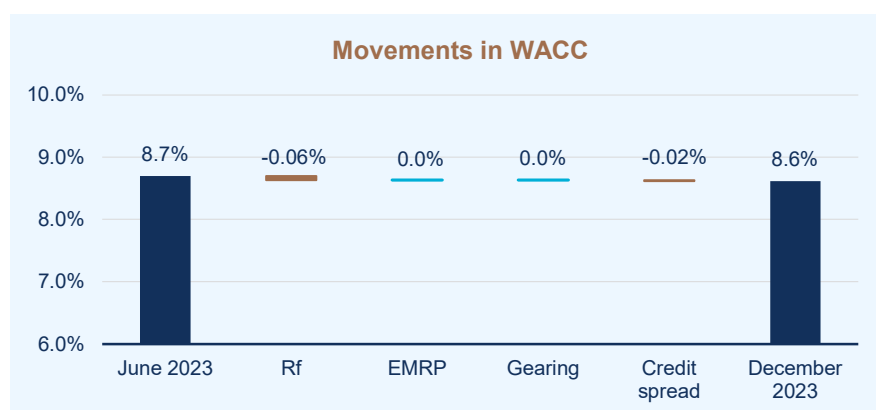
**LEADENHALL**

## 1. Introduction

Optimism around the easing of inflation and potential interest rate cuts led to a rally in equity markets towards the end of December 2023. With markets continuing to fluctuate significantly, the selection of a reasonable discount rate remains a key consideration, whether for the purpose of financial reporting or for any valuation analysis.

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 2023 to 31 December 2023.

### 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 slightly over the period due to a small decline in government bond yields and interest rates. All other things being equal, this will lead to slightly higher asset values.

The ongoing market volatility increases the need to adopt the best practice approach of using expected (i.e., probability weighted) 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.

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. Leadenhall can assist with this analysis.

***“The monthly CPI indicator for October suggested that inflation is continuing to moderate ... Overall, measures of inflation expectations remain consistent with the inflation target.”***

**Michelle Bullock, RBA Governor**

***“Directors should ensure there are adequate resources, skills and expertise applied to promote quality in the reporting process so that assumptions underlying estimates and assessments for financial reporting purposes are reasonable and supportable.”***

**ASIC – ASIC highlights focus areas for 31 December 2023 reporting**



## 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
$\beta$	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

### 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 close to historical lows

June 2023	December 2023	Change
4.03%	3.96%	(0.07%)

Source: Reserve Bank of Australia Statistical Table F2

The negligible change in government bond yields between the two dates is unlikely to result in a material change in overall discount rates, all other things being equal.

Risk-free rates remain 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 equity market risk premium (**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) or business segment, based on the relative riskiness of that business.

##### Observed industry betas have remained broadly unchanged

Sector	Jun 2023	Dec 2023	Change
Real Estate (Excl Investment Trusts)	0.98	1.05	0.07
Technology Hardware & Equipment	1.68	1.61	(0.07)
Automobile & Components	1.18	1.24	0.06
Capital Goods	1.18	1.13	(0.05)
Real Estate Investment Trusts	1.21	1.26	0.05

*Source: RoZetta Institute Ltd – Risk Measurement Service as at 31 March 2023 (latest available)*

There have been minimal changes over the past six months and, out of 24 discrete industries reported, only the 5 industries above showed a change in the observed beta of 0.05 or greater.

**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 2023 and 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 corporate lending rates have declined more than risk-free rates (indicating a narrowing of the credit spread) since June 2023. This is based on the yields of BBB-rated corporate bonds.

### Lending rates are similar to prior periods

Indicator rates	Jun 2023	Dec 2023	Change
Corporate bonds (BBB 10 years)	5.68%	5.43%	(0.25%)
Credit spread (to risk-free rate)	1.66%	1.47%	(0.19%)

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. Stable 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.

### Stable implied EMRP



Source: Leadenhall

Note: Growth relates to longer-term growth expectations, not changes in near-term earnings.

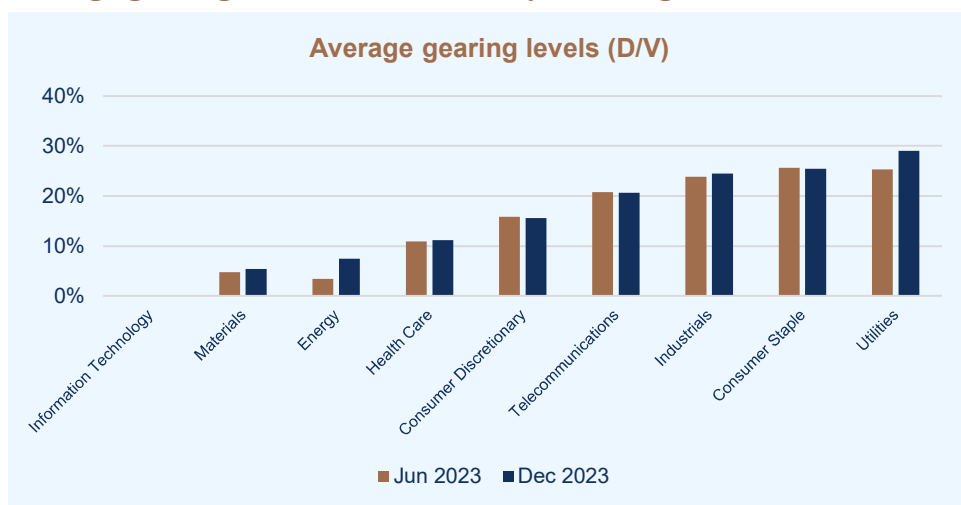
The chart presented above shows an increase in the index driven by stronger earnings and growth expectations.

**Leadenhall Solution:** We have maintained our assessment of the EMRP at 5.5% at 31 December 2023, in line with June 2023. This reflects the changes in market indices over the past six months being largely driven by factors other than the discount rate.

## 7. Capital structure

Debt levels across industries have remained stable on average over the past six months. Thus, changes in optimal gearing are unlikely to significantly impact your discount rate.

### Average gearing levels remain broadly unchanged



Source: S&P 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 or the average observed in an industry at any particular point in time. 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 ongoing market volatility, inflation concerns 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



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## 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>

<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.

