“In search of the Elusive Discount Rate for Australian Property Investment”

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Outline

- Review of discount rates

- Determination of discount rates
  - Valuers framework
  - Capital Asset Pricing Model (CAPM)

- Outlook

- Implications
Review of discount rates
A discount rate is the cost of capital which SHOULD be risk adjusted.

The marginal investor’s required rate of return on a given investment.

The rate at which future income / value is discounted to achieve a present worth.
Review of discount rates: trending down for over a decade

Discount rates for selected property sectors
nominal weighted averages on biannual rests

- Retail
- S&M Regional
- Regional
- Sub Regional
- Neighbourhood
- CBD Office
- Non CBD Office
- Industrial

Source: PCA/IPD and CFS Research.

- Real discount rates relatively stable since 2000.
Since 2000 discount rate spreads hover between 3.5% and 6.25%.
Determination of discount rates
Determination of discount rates: two separate approaches

- Valuers framework
- Capital Asset Pricing Model
Determination of discount rates: valuation approach
Determination of discount rates: valuation approach - the Gordon model

Next period’s anticipated dividend.

\[ P_0 = \frac{D_1}{1+r_c} + \frac{D_1(1+g)}{(1+r_c)^2} + \frac{D_1(1+g)^2}{(1+r_c)^3} + \ldots = \sum_{t=1}^{\infty} \frac{D_1(1+g)^{t-1}}{(1+r_c)^t} = \frac{D_1}{r_c - g} \]

Cost of capital - risk-adjusted discount rate (RADR).

Note that the net present value at period zero \( (P_0) \) is derived as the sum of all discounted future cash flows or current stock price.

Anticipated growth rate of dividends which is assumed constant.

This equality holds only if the absolute growth rate \( (g) \) is less than the discount rate \( (r_c) \).
Valuation approach: Gordon’s equality

\[ r_c = \frac{D_1}{P_0} + g = \frac{D_0(1+g)}{P_0} + g \]

- Cost of capital
- Income component: Current yield
- Capital component: Expected growth rate
Valuation approach: movements in yields over time

Property sector yields
as at year end, average across sub-sectors

Source: PCA/IPD and CFS Research.
Valuation approach: drivers of yield and growth rates

Yields
- Capital market variables
  - Real bond rates
  - Flow of capital funds
- Space market variables
  - Vacancy rates
  - Real rents

Rental growth rates
- Highly variable across time and across sectors
- Space market variables
  - Supply
  - Demand
Yields generally move positively with vacancy rates; i.e., rising vacancy rates is reflected in softening yields.
Valuation approach: yield determination - yields & bonds

- Yields generally move positively with the real bond rate; i.e., falling bond rate is reflected in yields firming.
Determination of discount rates: CAPM
CAPM approach: its basic elements

$$r_c = r_f + \beta[E(r_m) - r_f]$$

Risk free rate (RFR)
It is the risk-free rate in the economy, commonly estimated as the yield on long-term Treasury bonds.

Beta
Measures systematic market risk. Estimated via regression analysis.

Equity market risk premium (ERP)
Estimated as the historic average of the average return of a broad-based market portfolio less RFR.
CAPM approach: trends in RFR and ERP

Risk-free rate has been trending down, in line with the inflation rate.

ERP is highly variable over time and sensitive to the sample period.
Variability in systematic market risk for LPTs

Rolling five year beta estimates

Source: IRESS, RBA and CFSP Research
Outlook for discount rates:
cost of capital estimated to be sub 8%

Trends in cost of capital
Based on annualised monthly returns on monthly rests

Rising beta value

Bond rate
CoE (adj beta value)
Cost of Capital

Note: COK assumes 30% debt & 70% equity.
Source: IRESS, RBA and CFSP Research
Outlook for discount rates
Discount rates are variable, being influenced by a combination of:
- Space market fundamentals
- Capital market forces

Discount rates trending down and likely to continue this move in the short-term, although far more mildly. Relative stability due to benign interest rate and inflation outlook.

Arbitrage opportunities limited due to limited downside movement
Implications
Pricing and business implication

- **Pricing**
  - Returns for the property sector are in the process of moderating towards a new equilibrium

- **Business**
  - Impact on acquisitions / divestments
  - Performance strategies
  - Benchmarking strategies – target or hurdle rates
  - Incorporation into the house-view process
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