DISCOUNTED CASH FLOW ANALYSIS

Practical Application

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TOPICS COVERED

- **DCF Applications**
- **When is DCF most useful?**
- **Benefits & Shortcomings**
- **Key Inputs & how are they determined and applied**
- **DCF models- Proprietary vs In-house models**

DCF APPLICATIONS

Most Obvious Applications are:

- **Investment property**
- **Terminating investments**
- **Going concerns**

WHEN IS DCF MOST USEFUL?

Situations where DCF is most commonly used:

- **Multi tenant properties**
- **Substantial assets**
- **Small single tenant investments?**

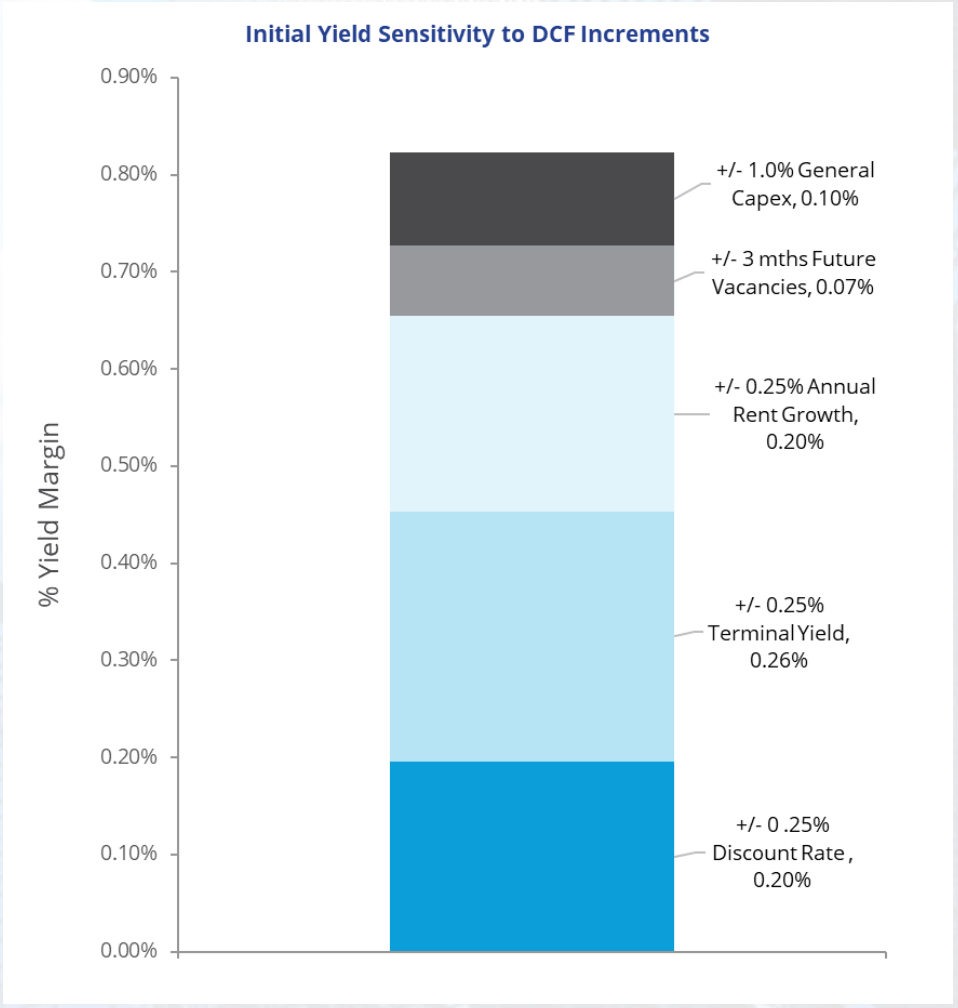
BENEFITS & PITFALLS

Benefits

- Unpacks assumptions implicit in cap method
- Good with uneven income

Pitfalls

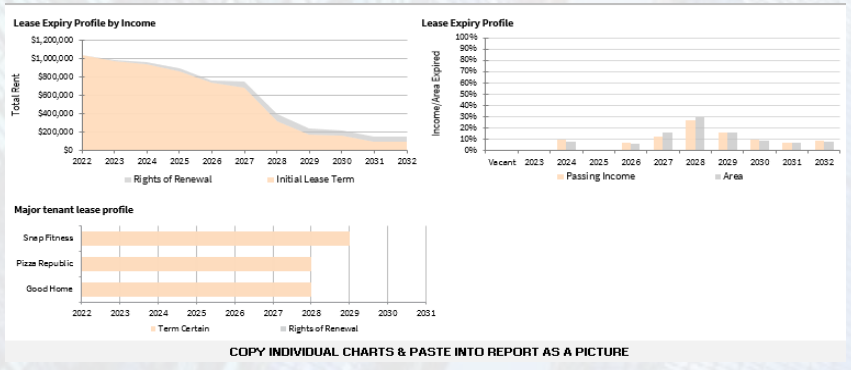
- Forecasts are inherently risky
- Compounding effects



BENEFITS & PITFALLS (CONT'D)

How do we Traverse the Pitfalls

- **Always ensure consistency in analysis & application**
- **Audit cashflow forecasts**
- **Always check outcome with passing yield/equivalent yield**



KEY INPUTS

What are the main Variables?

- What cash flow are we dealing with?
- Discount rate
- Terminal cap rate
- Market rent growth
- Treatment of vacancy, letting up periods, incentives and transaction costs
- CAPEX

Discounted Cashflow Method Assumptions										
Cashflow Period:	10 years									
Growth Forecasts:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
- Prime Retail	0.00%	0.00%	2.50%	2.40%	2.20%	2.20%	2.10%	2.50%	2.50%	2.50%
- CPI	3.20%	2.10%	2.50%	2.40%	2.20%	2.20%	2.10%	2.50%	2.50%	2.50%
- Expenses	3.20%	2.10%	2.50%	2.40%	2.20%	2.20%	2.10%	2.50%	2.50%	2.50%
Capital Expenditure:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	$0	$0	$0	$0	$175,000	$0	$0	$0	$0	$200,000
Future Vacancy Allowance										
- Tenant 1:	6 months	from March 2028								
- Tenant 2:	6 months	from June 2028								
- Tenant 3:	6 months	from June 2028								
- Tenant 4:	6 months	from February 2031								
- Tenant 5:	6 months	from June 2023			and	6 months	from December 2029			
- Tenant 6:	6 months	from April 2026			and	6 months	from October 2032			
- Tenant 7:	6 months	from April 2029								
- Tenant 8:	6 months	from April 2025			and	6 months	from October 2031			
- Tenant 10:	6 months	from June 2031								
- Tenant 11:	6 months	from December 2028								
- Tenant 12:	6 months	from April 2026			and	6 months	from October 2032			
Leasing Commissions:	17.00%									
Annual Net Cashflow:										
- Period End:	Mar-2023	Mar-2024	Mar-2025	Mar-2026	Mar-2027	Mar-2028	Mar-2029	Mar-2030	Mar-2031	Mar-2032
- Net Cashflow	$1,082,083	$1,023,303	$1,087,839	$1,037,528	$800,417	$1,119,161	$799,247	$1,044,238	$1,144,776	$865,906
Terminal Capitalisation Rate:	6.85%									
Discount Rate:	7.35%									

KEY INPUTS (CONT'D)

Cash flow characteristics

- Cash flow length
- Tax & finance costs

KEY INPUTS (CONT'D)

Discount Rate

- **What is it?**
  - The theoretical answer – The rate of return on and of investment
  - The practical answer – A Unit of Comparison
- **Where do we get it from?**
  - The theoretical answer – Financial Concepts
  - The practical answer - The market

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KEY INPUTS (CONT'D)

Terminal Capitalisation rate

Should it be higher because the building will be older?

Consider:

- **The lease profile in 10 years time**
- **CAPEX treatment during cash flow period**
- **Terminal income relative to market**
- **Market perception**

Always treat this on a case-by-case basis

KEY INPUTS (CONT'D)

Market Rent Growth Rates

- **Where do these come from?**
  - **Analysis of historic trends**
  - **Listen to market**
- **How do we apply them?**

KEY INPUTS (CONT'D)

Capital Expenditure (CAPEX)

- **General allowance?**
- **Specific works?**

KEY INPUTS (CONT'D)

Other considerations

- **Treatment of vacancy**
- **Letting up periods**
- **Incentives**
- **Disposal costs**

DCF MODELS

Options

- **Proprietary**
- **In-house**

DCF MODELS (CONT'D)

Proprietary Model

- **Benefits**
  - **Stakeholders like the consistency and often use them themselves for crosschecking**
  - **Versatile with multiple inputs & variables to deal with complex situations**
  - **When you know them well, they can make your life very easy**

DCF MODELS (CONT'D)

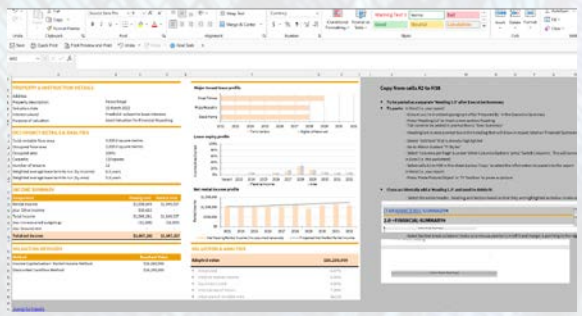
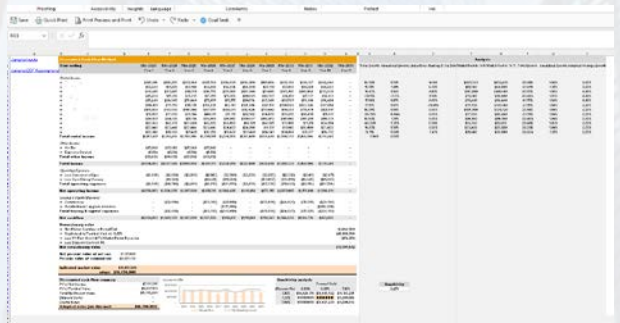
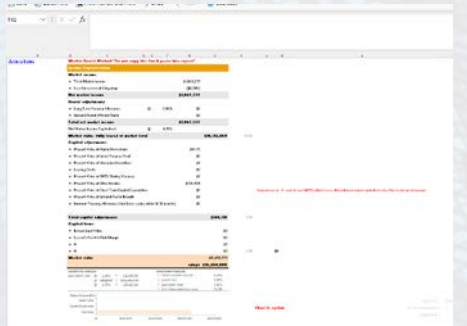
Proprietary Model

- **Shortcomings**
  - **Licensing costs**
  - **Can be cumbersome**
  - **Extensive upskilling & training required**
  - **Can be difficult to check/audit calculations**

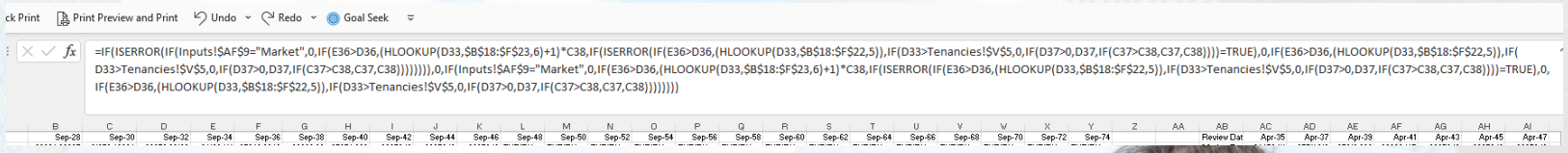
DCF MODELS (CONT'D)

In-house Model

- **Benefits**
  - **You can make it what you want/need- simple or as complex as you dare**
  - **You know what goes into calculations and can easily check them**
  - **Can be modified to suit requirements**
  - **Free to run**
  - **Can be re-branded or re-formatted easily in-house**

DCF MODELS (CONT'D)



In-house Model

- **Shortcomings**
  - **Expertise required**
  - **Can be very time consuming to create and maintain**
  - **Testing and modifying can be frustrating and painstaking**
  - **Not easy for stakeholders to crosscheck**
  - **Regular overhauls required where trends & requirements change**
  - **Key person risk**
  - **Automation is not for the faint-hearted!**

THE END