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DISCOUNTED CASHFLOWS

MAKING THEM MAINSTREAM IN REAL ESTATE - INTRODUCTION

26 October 2023

DISCOUNTED CASHFLOWS – MAKING THEM MAINSTREAM IN REAL ESTATE

Summary

- Programme Leader for the MSc Real Estate at UCEM.
- 17 years of commercial real estate experience across Ireland and the UK.
- Specialist in investment, office agency, retail asset management and valuation.
- Previous positions with international firms including JLL and Colliers International.
- Acquisition and asset management instructions for clients including Société Générale, Metzler Bank, Mobil Oil, Scottish Widows, Aviva and British Land.
- RICS Governing Council geographical seat holder for the UK and Ireland.
- Visiting Professor, Ecole Supérieure des Professions Immobilières (Paris Campus).
- APC Chairman / Assessor for SCSi and RICS.
- RICS Inspire Ambassador.



David Hourihan MSc Prop Invest
FSCSI FRICS

General House Keeping

To get to most from the workshop:

- I will need your full attention during the workshop.
- I have added 2 comfort breaks to help us maintain our attention levels.
- Please do ask questions during the session.
- Be ready to contribute. I'll be asking for your opinion.
- I will ask for feedback after the workshop.

Rules

- Switch off your mobile phones.
- Do not record the session without my prior consent.
- Keep your social media accounts closed.
- Don't monitor your emails or texts.

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Opening Comments

1. Traditionally, the 'Hardcore' (or 'Layer') and the 'Term & Reversion' methods have been commonly used in the Ireland and the UK to carry out Red Book valuations or non-Red Book appraisals of commercial investment property. More sophisticated investors now expect a level of transparency in valuations or appraisals of commercial property, which these traditional methods struggle to meet.
2. In 2021, a RICS sponsored independent review (led by Peter Pereira Gray) called for a much more analytical profession and one that uses DCF as the principal approach to valuation. As a result, new RICS standards for valuing investment property using DCF will be introduced in 2024.
3. This is not a class in Microsoft Excel but rather a focus on the use of DCF in the investment appraisal process.
4. More advanced DCF models and software packages are available to use for investment appraisal but here today we want to consider the outputs of a multi-tenanted quarterly in advance model as a tool in the wider context of appraising the risk/return characteristics of the investment.
5. At the same time, we will categorise the investment and consider whether the investment aligns with the client's attitude to risk.

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Opening Comments

6. By reviewing the DCF NPV/IRR outputs, profiling the risk/return characteristics of the investment and considering whether the investment aligns with the client's attitude to risk we can ultimately make informed recommendations on whether to buy, reject or revisit the appraisal.
7. The investment scenario while fictitious is loosely based on comparable investments in the local market.
8. In looking at the DCF model the key will be to consider if the 5 key variables are set at the right level in the context of current market conditions (as at the 26 October 2023).
9. Today's workshop will focus on 'Investment Worth (or Value)' as the basis of appraisal.
10. RICS are currently undertaking a review on the use of DCF for 'Market Value' purposes. A report will be issued in H2, 2024. A further training update will be planned based on this report.

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Agenda (9.30am – 1.30pm)

Introduction.

- A. Scenario.
- B. Basis of Appraisal.
- C. Property & Market assessment using SWOT analysis.
- D. Investment Categorisation.

Comfort Break (10 minutes)

- E. The DCF Model.
- F. Measuring Returns (NPV and IRR).
- G. Analysing the 5 key variables:
 - 1 ERV - Hierarchy of Rental Comparisons.
 - 2 Hurdle Rate.
 - 3 Exit Yield.
 - 4 Rental growth rate.
 - 5 Purchase Price.

Comfort Break (20 minutes)

- H. Stress Testing Key Variables.
- I. Conclusions / Recommendation.

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Learning Outcomes:

On completing this CPD course participants would be able to:



Evaluate the 'investment value' or 'worth' of a commercial real estate investment in the context of the Irish market.



Look beyond the figures and critically analyse the systematic and specific risks of an investment.



Stress test the impact of changes in key variables on the 'Net Present Value' and 'Internal Rate of Return'.

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Background

- Dec 2021 - The *Independent Review of Real Estate Investment Valuations* (led by Peter Pereira Gray), was produced by RICS in the public interest to future-proof practices in the valuation of real estate assets for investment purposes. This 81-pages review gathered insights through a public call for evidence and engagement with a broad range of stakeholders. This review called for a much more analytical profession and one that uses DCF as the principal approach to valuation.
- April 2022 - the RICS established a dedicated sub-committee called Valuation Review Implementation Committee (VRIC) (Chaired by Richard Waterhouse). Its purpose is to implement all recommendations from the Valuation Review.
- March 2023 - VRIC carried out a consultation focusing on updating core elements of its standards and practice information, specifically regarding the use of Discounted Cash Flow (DCF) within valuations. VRIC are working on behalf of the RICS *Standards and Regulation Board (SRB). The Standards and Regulation Board is independently led and reports to **Governing Council. The purpose of the VRIC consultation on UK Valuation practice was to ensure market confidence and trust in the use of the investment method of property valuation. The consultation asked respondents to assess the current Red Book, its content, and proposals for change.
- To support the new standard for valuing investment property using DCF RICS proposes developing a DCF 'Transition Hub' to upskill Chartered Surveyors globally with a particular focus on territories where DCF is currently underutilised.
- According to VRIC's *Valuation review implementation roadmap* changes to the Red Book and an updated standard on discounted cash flow will be published in 2024, Q1.

* **Standards and Regulation Board** (Chaired by Nigel Clarke) has exclusive responsibility for exercising RICS' regulatory functions, including strategy, governance, structure, policy and operational oversight in the public interest. It oversees the activities of RICS' professional standards, entry and admission to the profession, education and qualification standards, regulatory operations, dispute resolution services and the Regulatory Tribunal.

** **Governing Council** (President: Ann Gray) is the highest governing body in RICS, setting global strategy and ensuring RICS fulfils its Royal Charter obligations. It provides strategic oversight on requirements for entry into the profession, and the setting and enforcement of professional standards so that we continue to deliver confidence in the built and natural environment. It also shapes our priorities as an influential thought leader and provides high-level assurance on our operations as a sustainable business and professional body.

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Market Context – Ireland Q2, 2023

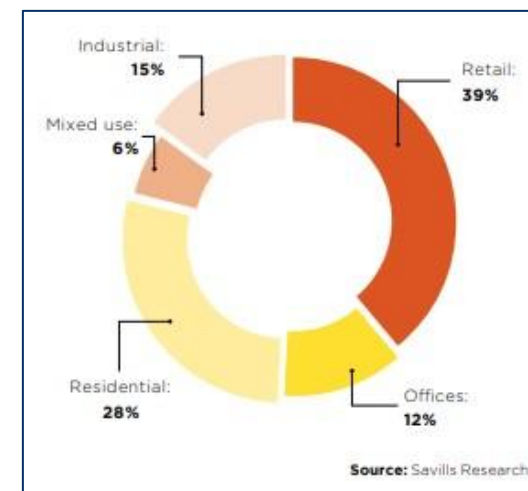
- ▶ Pricing disconnect between vendors and buyers in Irish property investment markets.
- ▶ Yields have been moving outwards since 2022.
- ▶ Transactions levels down, particularly with larger lot sizes.
- ▶ Limited investment opportunities coming to market as investors take a 'wait and see' approach.
- ▶ Yields forecasted to continue increasing in H2, 2023.

Yields

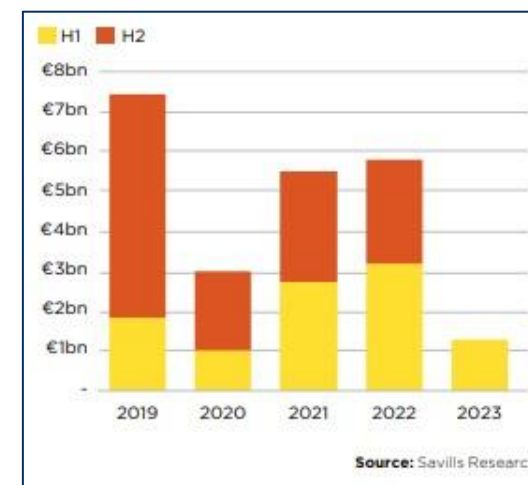
Sector	Q2	Q/Q	Y/Y
Offices - Prime CBD	4.50%	-	+50 bps
Offices - Secondary CBD	6.75%	+25 bps	+175 bps
Industrial - Prime	4.50%	-	+50 bps
Industrial - Secondary	6.00%	-	+150 bps
PRS - Prime	4.25%	-	+65 bps
PRS - Secondary	6.00%	+25 bps	+150 bps
Shopping Centres - Prime	6.50%	+25 bps	+75 bps
Shopping Centres - Secondary	10.00%	-	+75 bps
Warehouse Retail - Prime	6.00%	+25 bps	+100 bps
Warehouse Retail - Secondary	9.75%	-	+125 bps
High Street - Prime (Grafton)	5.25%	+35 bps	+75 bps
High Street - Secondary	7.75%	-	+75 bps

Source: Savills Research

Investment by sector



Investment Volume



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Discounted Cash Flows (DCF)

Following the stock market crash of 1929 DCF analysis gained popularity as a valuation of stocks. Irving Fisher in his 1930 book *The Theory of Interest* and John Burr Williams's 1938 text *The Theory of Investment Value* first formally expressed the DCF method in modern economic terms. Globally, DCF is now used as a primary valuation approach in many markets.

Baum and Hartzell (2012) observed that the measurement, benchmarking, forecasting and quantitative management techniques used in property investment have advanced and are comparable with techniques used in other asset classes. Unfortunately, more recent research would suggest that this observation is not applicable to all real estate markets. Lizieri and Mansley (2017) identified that the United Kingdom (UK) real estate investment sector has not yet adopted into standard practice the capital budgeting techniques commonly used in other investment sectors.

This latest research found that:

1. it is common practice among commercial real estate investors in the UK to use non-cashflow decision-making tools (eg payback, profit-on-cost) in the investment process,
2. there is significant evidence of discretionary behaviour being exhibited by real estate investors in the measurement process which has resulted in inconsistencies in the use of key metrics in the decision-making process, and;
3. there is also a reluctance to adopt more sophisticated quantitative modelling applications.

Challenges to making DCF mainstream in real estate

1. Fear of change

Valuers in the UK market have traditionally used the 'Hardcore' (or 'Layer') method or the 'Term & Reversion' method to carry out Red Book valuations or non-Red Book appraisals.

2. Inconsistency of use

Many valuers are unfamiliar with DCF modelling and unsure about where to get the required data.

3. Lack of transparency on risk

The traditional methods apply risk implicit adjustments, which are problematic for non-real estate investors who are used to more transparent adjustments for risk. Risk in context of property can be defined as either specific or systematic. The drive to net zero carbon is highlighting specific risk in the form of obsolescence in buildings while systematic risk is currently very evident in the form of volatility in local markets and global economies. Geo-political risk also impacts on the valuation as a form of systematic risk. The DCF model can more explicitly address these various forms of risk.

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Challenges to making DCF mainstream in real estate

4. Future Rental Growth not factored in

A DCF model of appraisal or valuation differs from the traditional methods of valuation as it adopts the market's assessment of future growth in an explicit way. This future income stream is then discounted back at a discount rate (Hurdle Rate) to establish market Value. The traditional methods only use today's rental values and discounts the income at a rate based on analysis of comparable transactions.

5. Analytic tools are too basic

'Stress testing' techniques have also been heuristic in nature. Scenarios used but other forms of risk analysis (sensitivity, probability) should be more widely adopted.

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