Professional Conferences
Valuation Briefing Paper – Summer 2024

Explicit Discounted Cash Flow Models: A panacea for the property valuation profession?

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Introduction

In early January 2022, the findings and recommendations of the Independent Review of Real Estate Investment Valuations chaired by Peter Pereira Gray was published. The review made 13 proposals albeit Recommendation 8 was split into two so, technically, there are 14 recommendations for the RICS to address.

The report was commissioned by the RICS Standards and Regulation Board (SRB) in 2021 with a brief to provide a recommended framework that would ensure confidence in property valuations in today's markets. This will apply particularly to valuations which are relied upon by third parties.

The SRB has accepted all the recommendations from the Review and the relevant teams at the RICS have spent the last two years discussing and consulting upon the best way to implement the recommendations in good time.

Recommendation 8(i) – Discounted Cash Flow

The consideration of all the review recommendations is outwith the remit of this article beyond saying that the report presented considered and pertinent recommendations. This article will concentrate upon the Recommendation 8(i) that says:

"The valuation profession should incorporate the use of discounted cash flow as the principal model applied in preparing property investment valuations".

Now, forgive me pedantry as I was an academic for 38 years but the review has fallen into the trap of colloquialism of our industry of using the term "discounted cash flow" to specifically refer to explicit discounted cash flow models. This is wrong.

All investment valuations are based on the present value of a projected cash flow so all such valuations are, in fact, discounted cash flow regardless of the model used. The actual distinction between valuation models is whether they are an implicit capitalisation model or whether they are an explicit discounted cash flow model. Implicit models capture any market growth expectation (in rents and/or capital value) in the yield whereas explicit

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The Peripatetic Property Professor

"As an art form, property valuation has adopted the status of a mystical skill" (Brown, 1998)

models allow for any growth expectation in the cash flow and discounts that cash flow at an (normally, higher) required rate of return. The role of the valuer is, and always has been, to use the most appropriate model for the valuation task in hand.

Valuation is a process; a market analysis. But it is also, once the market has been analysed and assumptions determined, a mathematical model. There are principally two models. There are an implicit capitalisation model (sometimes referred to as the traditional or all-risks yield (ARY) method) and an explicit discounted cash flow (DCF) model. Both models do the same. Both estimate the Market Value of the property. It is the way in which they do so that is different. The implied model, as the names suggests, hides all the assumptions by using one capitalisation multiplier (x the rent) to estimate the Market Value. The other, the explicit DCF, uses all the same assumptions but it shows what those assumptions are within the valuation. Both will estimate the same Market Value but the explicit DCF model is simply more transparent.

This was acknowledged by the principal author of the review, Peter Pereira Gray, who stated:

"I acknowledge that traditional measures of value can correctly identify the exchange price at which an asset will likely trade (the ARY is merely the mathematical summary of the many assumptions that go into a valuation), but the use of the ARY does not provide sufficient information and clarity to the client on the make-up of the value of their property…………instead, the models should be 'explicit' to achieve the required levels of transparency, understanding, and education."

And this was the crux of the review, property investors no longer are accepting of the valuation figure alone, they also want to know what are the underlying assumptions. If there is more transparency, then investors can see why the Market Value at any one point differs from their view of worth.

Once upon a time when markets were driven by a desire to be in a specific locality, the valuation adage was "location, location, location". This changed, in subsequent recessions and downturns when the proliferation of bankruptcies led to the default of leases, to "covenant, covenant, covenant". Today, where we are in a world of sophisticated investment decision modelling, I would suggest the adage now should be "transparency, transparency, transparency".

There is the old adage that one should "value as you analyse" applied perfectly here. If a market analyses the attractiveness of an investment by simple heuristics such as the initial yield and market rent, then the appropriate valuation model will be an implicit capitalisation model where the market value is derived by the multiplication of the market rent and, in some cases (term and reversion/layer), the rent passing. In the UK, we refer to the capitalisation rate used as the All Risk Yield (ARY) or equivalent yield if used for a reversionary property.

However, if you value in a market where the main players analyse the property by explicitly projecting forward the likely rents over time (say 10 years) and allowing for specific expenditures before discounting all net rentals back to a present value using an overall

required rate of return, then it can be argued that the appropriate valuation model will mirror this layout and valuers will use the explicit discounted cash flow model. This would apply to cash flow driven property investments such as shopping centres, student housing, storage units, build to let residential properties etc.

In such markets the appropriate valuation model will become the principal model. So Recommendation 8(i) is only confirming the natural progression toward the use of more explicit valuation models for cash flow driven property investments and the RICS' response to recommendation 8(i) will simply accelerate the transition to the same.

The baby and the bathwater

Although the member response to the review was very positive, some articles and social media comments picked up on the apparent implication that investment valuations should exclusively use explicit discounted cash flow models and move away from implicit ARY models. This is not the case as witnessed by the FAQ section on the RICS website where one of the responses directly addresses this concern.

What is the Valuation Review suggesting about the use of (explicit) Discounted Cash Flow (DCF) models? *The Review does not call for absolute prescription of a particular valuation model……. The Chair accepts that different methods and models may be used and supports the use of cross checking with different models. It is highlighted in the Review that clients are becoming less accepting of 'implicit' valuation inputs, assumptions, and outcomes within the method and models used; instead, the models should be 'explicit' to achieve the required levels of transparency, understanding, and education. The Review also notes that DCF has the potential to better consider operational factors and the impact of time. There was substantial support for the widened use of DCF from the Review call for evidence.*

So there is no prescription of only using explicit DCF modelling being proffered, it is about using the appropriate model or models for the task in hand. It is important that the use of implicit models isn't thrown away in a desire to make everything explicit. The capitalisation model has the advantage of anchoring on market evidence.

That said, there is a "modified" or "short-cut" version of the DCF model and the use of this model for single asset valuations and this model has the advantage of anchoring on the market driven capitalisation rate (all risk yield) and yet incorporating the required overall required rate of return (DCF rate) and revealing the current market expectation for rental/capital growth for that type of property. All of that adds to the transparency of the valuation. All these aspects are discussed more later in this briefing note.

But the main point is that implicit and explicit models and the short cut variants are all valid and important valuation models at the valuer's disposal. The choice of model remains with the valuer.

For the large cash-flow driven investments with multiple cash flows it makes sense that full annual or quarterly or monthly cash flow models will become the norm and, indeed, for many of the large or niche market valuation firms this is already the case. But there is also an argument that the transparency being sought by clients, as witnessed by the review comments, shouldn't be restricted to just the top end of the market. In a world where single direct property investments are competing side by side with other asset classes (bonds, stocks, chattels/art and indirect property vehicles), all investors, large and small, want to

assess the expected performance of all the options relative to a common benchmark. The target rate or required rate of return is that benchmark and it makes sense that all property professionals and valuers in particular get used to talking about the target rate as easily as they talk about the net initial yield. And, more importantly, as more and more valuers use the target rate, then the analysis of the market will allow for it to be decanted out of previous transactions as easily as the net initial yield. These are now the market signposts that clients want and need.

In other words, the use of the implicit ARY models will continue where appropriate, maybe as a double check to an explicit DCF model, maybe as the principal valuation model depending upon the asset type. The point of the review is to highlight that many of the asset types that investors buy are at a juncture where their analysis is by full explicit DCF models (e.g. shopping centres, student accommodation, multi-occupancy offices etc) and so the principal valuation model will be also be an explicit DCF model[2]. And then, added to this mix, there is the short-cut DCF model for smaller investments where the transparency of the valuation assumptions is just as important and where the need for a common benchmark with other investments is just as essential as it is for the larger property asset types.

Market Evidence and data availability

As noted above, all valuations rely upon comparison. In the case of implicit investment valuations, this normally refers to the analysis of comparables to determine NIYs and the Market Rent. And, one of the advantages of implicit models is that they price to market with reference to only those two variables. The greater use of explicit DCF models will require that the valuer looks at, and has access to, other comparable evidence. This may be the discount rates used in the investors' analyses or it could be turnover information that underpins the increased use of turnover-based rents or a better insight into how clients price risk. Valuers can only provide valuations on an explicit basis if this data is available to them either via aggregated third party data or if valuation teams have sufficient confidential information direct from the principal investors in the market.

Concentrating upon the discount rate, this will require clients sharing details of their current required rate of returns (target rates) with the valuation profession as a whole[3]. Internal Rate of Return (IRR) information is readily available in real time in the stock market but this tends not to be the case in the property market. MSCI (previously IPD) provides data on historic performance measurement but regular surveys of investors' target rates by property type would greatly facilitate the transition to explicit DCF models as promoted by the review.

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[2] NB. It is noted that some valuers explicitly state the cash flows over a 5 -10 year period but still keep rental figures in today's terms. This is not an explicit DCF in the normal sense. Instead, it is an elaborate implicit term and reversion model. Care should be taken not to refer to these models as DCF. If they only use the ARY (equivalent) yield as the discount rate, there are still implicit models capturing any growth expectation within the yield and not in the cash flow.

[3] At the moment, this happens on an ad hoc basis and it could be that the predominance of implicit models in some markets has endured this long because this sharing of more explicit information has been lacking.

But the main advantage of moving toward explicit modelling is that it "does what it says on the can" and information and assumptions are revealed and justified much more so than when using implicit models. Implicit models have the advantage of capturing the previous market pricing of similar assets and explicit models have the advantage of revealing the market expectations used within the valuation.

Implementation of the Review Recommendations

As noted on the RICS website, the RICS has progressed with the implementation of all the recommendations via a number of avenues. This included changes in the RICS Valuation UK National Supplement from May 2023, proposed changed to RICS Global Valuation Standards (together with the national supplement this is known as the Red Book) to come into effect in 2025.

But Recommendation 8(i) and 8(ii) have been dealt with mainly by the revision of the RICS Guidance Note "Discounted cash flow for commercial property investment" which has been rewritten and updated as the **RICS Practice Information, (Global) Discounted Cash Flow Valuations (2023).**

The RICS DCF Practice Information

The new Practice Information was commissioned to update the RICS' guidance on the use of DCF valuations and to incorporate, amongst other things, the recommendation to move toward explicit valuation models to increase transparency.

It also addresses, at length, the difference between value and worth, summarising this by saying:

"Market value is based primarily on market evidence and is not an entity specific value to the particular individual……………."

Investors want to know why is the Market Value (an estimate of price in the current market) as provided by the valuer different from their own calculations of worth (a subjective assessment of the benefits of ownership to that particular investor) for the same asset?

Value (price) and worth are different concepts driven by different assumptions. Market valuation decants market expectations, from comparable market evidence, and uses those assumptions in the valuation model either implicitly or explicitly. Worth calculations uses the investor's own forecasts and return requirements in an explicit model to determine what the same asset is worth to them. If the market expectations are different to the investors own view of the future then, unsurprisingly, the Market Value will be different to the investor's worth calculation.

This is often misunderstood and some investors believe that the Market Value should be the same as what THEY think it is worth. That is why we often hear investors saying, especially in market downturns, "That can't be Market Value because we wouldn't sell it for that price".

So, apart from providing more overall information and guidance on the use and interpretation of explicit DCF models, there are two main takeaways from the RICS Practice Information.

One is that the use of an explicit model won't change the Market Value as that is determined by the underlying assumptions and they are the same in both the explicit and implicit models. The only difference is that the explicit model requires the valuer to reveal those assumptions. That is the benefit of the explicit model. It is transparent. The second takeaway is that Market Value is not the same as worth. They are two different concepts.

The confluence of the two is that explicit models, by being transparent, can show the investor where their own forecasts differ from the market expectations captured in the valuation.

Conclusion

DCF modelling is not a panacea. Market values will still rise and fall in line with the vagaries of the market. Valuers will still have days where comparable transactions are plentiful and the decantation of market assumptions is straight-forward. Conversely there will be downturns where market sentiment is more important due to the lack of transactional evidence. But in all cases, explicit models force the valuer to make explicit all those assumptions. And that was the battle cry of investors in the review.

In essence, the Review has acted as a catalyst to ensure that investment valuations are provided to clients with increased transparency and that can only lead to the greater confidence in property valuations that everyone desires. To use an odd analogy, if a valuation is a water fowl, investors are saying: “don't just tell us that it is a swan, tell us what is happening below the water too.”