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Valuation of DMF

Relevant Factors

During the last couple of years, investment managers, property developers and valuers have used and developed a broad range of models to value Australian retirement village assets and the Deferred Management Fee (DMF) income streams associated with loan lease or loan license resident contracts. The basic underlying tool used to value these assets is a discounted cashflow model (DCF model). However, the methods used to forecast the underlying cashflows often miss relevant factors influencing the realisation date of the actual cashflows and underlying risks.

Classification and Risks of DMF Cashflows

Aviiid applies capital market risk analytics to assess DMF cashflows. The DMF income stream can be separated in two components: (1) the actual DMF income based on the resident entry (purchase) price and (2) the property price appreciation (capital gain sharing) component.

Each income stream has different risk characteristics influencing its present value.

The DMF entitlement is a contractual obligation between the resident and operator which depends on a successful transfer (rollover) of occupancy to a new (incoming) resident after the previous (outgoing) resident moves out.

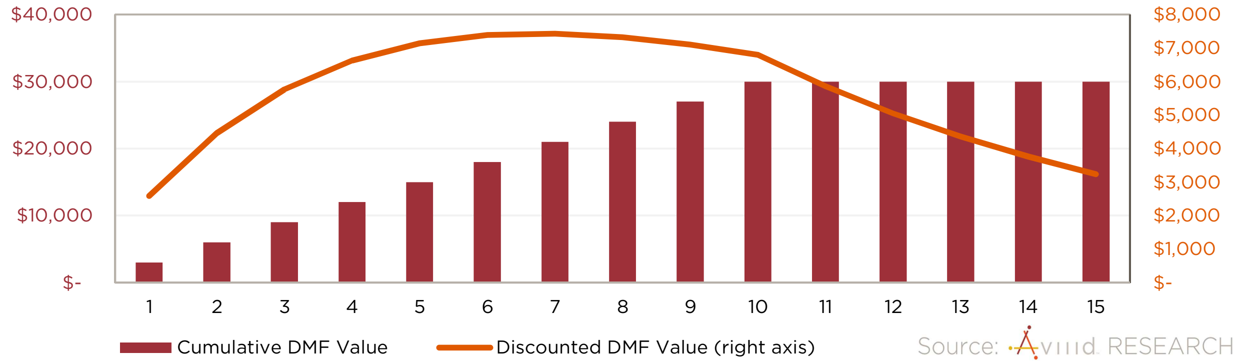
The capital gain sharing component can exhibit correlation to the performance of the local residential market of the relevant ageing cohort demographic surrounding a village. There are a number of reasons why a particular village would perform better or worse than the local market however these are beyond the scope of this article.

DMF Entitlements and Present Values

Generic DMF Contract			
Unit price	100,000	Property growth	3.50%
DMF	30%	Probability to achieve the growth rate	80.00%
Capital gain sharing	50%	Probability to have no growth	10.00%
Discount factor	16%	Probability to have negative growth	10.00%

Based on the assumptions in the contract above, a typical DMF profile can be generated to illustrate the forecasting and discounting of income from resident rollovers. The red bars in Chart 1 show the absolute values of the cumulative DMF capped at their maximum contractual level. For the purpose of simplicity, we can apply a single discount factor[1] of 16% to generate a present value profile (displayed in orange and named: Discounted DMF Value).

Chart 1



Source: Aviiid RESEARCH

[1] It should be noted that an appropriate discount factor should be applied to each future cash flow reflecting the appropriate funding and anticipated refinancing costs associated with the commercial activities required to generate that cash flow; it may also be appropriate to adjust each future cash flow to take into account the probability any uncertainties in its magnitude or timing.

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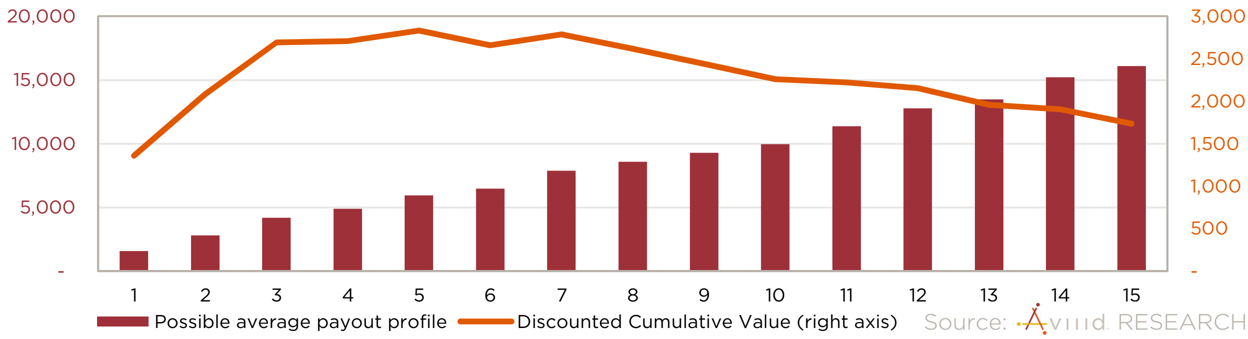
The preceding Chart 1 shows a Discounted DMF value peaking in year-7 and dramatically dropping after the maximum Cumulative DMF is achieved in year-10.

Capital Gain Sharing Entitlements and Present Values

Chart 2 illustrates the cash flows associated with anticipated property growth and the capital gain sharing entitlement (based on the ten scenarios outlined in Appendix A).

Chart 2



Depending on the terms of a resident occupancy contract, an operator may receive some, all or none of the increase (if any) between the incoming resident entry price and the outgoing resident entry price less some or all of the anticipated refurbishment and marketing costs. This capital gain sharing entitlement also has a declining present value over time.

Resident Age and Time Value of Money

The present value of anticipated DMF and capital gain sharing entitlements decline over time if unrealised. Resident ages can significantly influence the timing of future realisation of DMF and capital gain sharing entitlements. Our analysis indicated that newly developed villages often have younger residents in comparison to mature villages. Thus, two identical villages with the same DMF contract terms, but different resident ages can have vastly different values due to relative timing differences in the anticipated realisation of cashflows.

Future DMF Contracts

Future DMF contract terms and incoming resident take-up rates are likely to drive cashflows and influence valuations dramatically. Non-rental retirement villages often have a myriad of contracts executed with residents over many years. It is not uncommon for villages to offer a choice of contract terms to new residents. Effective forecasting requires an assessment of sustainability of contract terms as well as market conditions.

Conclusion

Valuation of a DMF income stream depends on a range of factors including straightforward financial data, local market research and sustainability of future DMF contract terms. Empirical experience shows that the quality of financial data and research can help to create and preserve value. Valuations should not be generated based on a single scenario but rather over a range of possibilities. Recent events within the retirement and aged care industry clearly show that single scenario valuation parameters can provide misleading or inaccurate forecasts and be disadvantageous to operators and their financiers in the long-term.

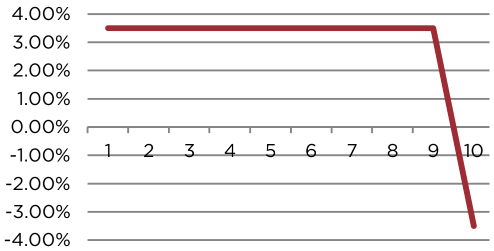
Aviiid Research Series

This analysis forms part of the *Aviiid Research Series* of senior housing and aged care market benchmarking tools and enables some basic comparisons to be made against reported industry data.

It should be noted that this analysis of DMF income streams is only one simplistic component in deriving a valuation for a typical retirement village. Moreover, the information and analysis presented herein is limited in scope, sample size and data integrity. No two retirement villages are the same and it should not be inferred that any retirement village is likely to exhibit cash flow or valuation characteristics similar to the sample data within this article.

Appendix A – Ten Simulated Property Growth Scenarios

Property growth	3.50%
Probability to achieve the growth rate	80.00%
Probability to have no growth	10.00%
Probability to have negative growth	10.00%



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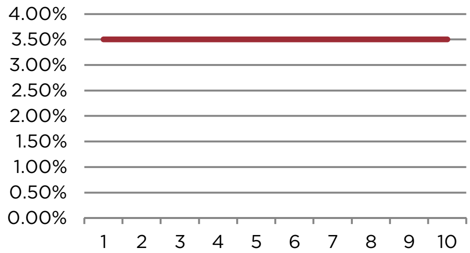

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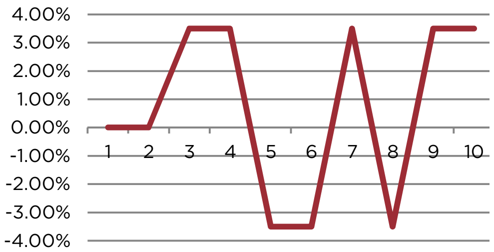

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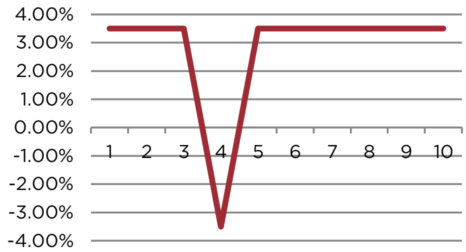

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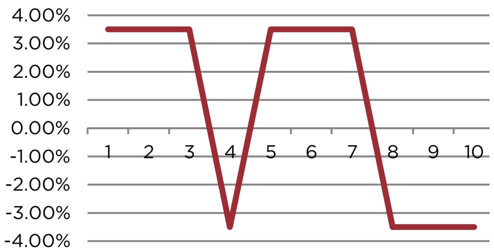

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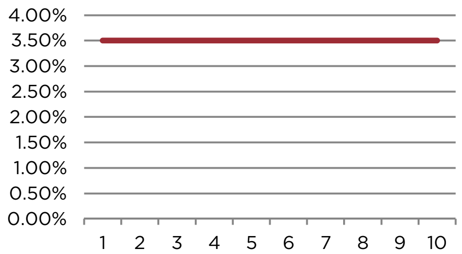

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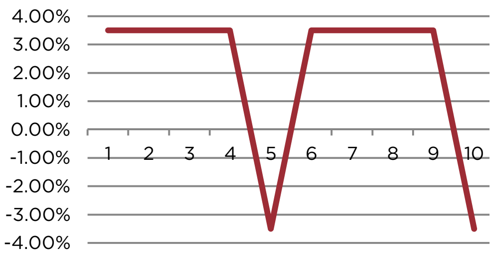

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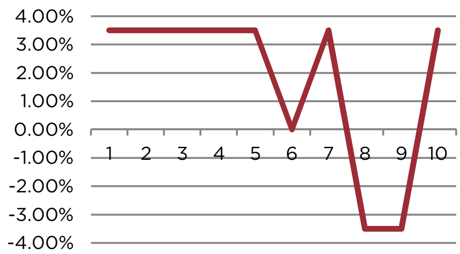

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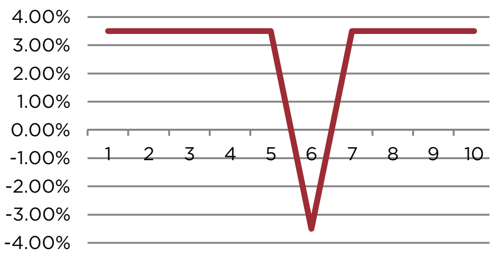

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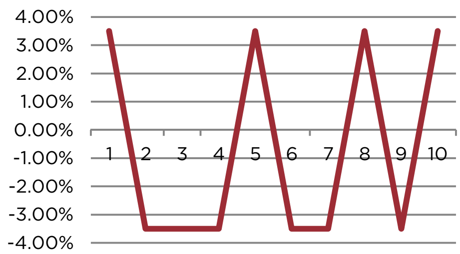

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