Life Settlement Valuation Methodologies: Mark-to-Market *vs* Mark-to-Model

Introduction

A Life Settlement is an asset resulting from the sale of an existing life insurance policy to a third party. The third party pays the premiums and receives the claim payout on the death of the insured. Thus the third party investor needs to consider how to place a value on the policy.

In line with other similarly difficult-to-value financial investments, there are two commonly used methods for producing valuation figures for both assets and liabilities; Mark-to-Market and Mark-to-Model. Historically, both methods have been used in the periodic valuation of a portfolio of Life Settlements.

In general, Mark-to-Market refers to the practice of determining the value of an asset or liability with reference to the most up to date price or value attainable in the marketplace. Where a fully functioning market does not exist, similar assets and liabilities could be used as a proxy, or alternatively a set of assumptions could be derived based on industry market analysis. As the market for Life Settlements is not transparent, market prices would need to be obtained either by obtaining quotations from the market for each individual policy in the portfolio or by establishing a set of valuation assumptions with reference to an industry standard market analysis.

An alternative approach is to use a Mark-to-Model methodology. Mark-to-Model refers to the practice of determining the value of an asset or liability by using a financial model and a set of assumptions which have been set based on the judgement of the party conducting the valuation. The model will use a pre-determined set of formulae, parameters and rules to determine the value of a policy and as such is not directly affected by changes in market conditions over time (although some assumptions may themselves be linked to markets). Regular testing is required to ensure both the model parameters and the model itself remains suitable for purpose. For a Life Settlement portfolio, the Mark-to-Model valuation is usually a discounted value of the expected outflows (i.e. premiums) and inflows (i.e. maturity benefit), with the key assumptions being the allowance for mortality and the discount rate.

Mark-to-Market is often referred to as a “fair value accounting basis” and Mark-to-Model as an “actuarial valuation basis”.

Pros and Cons

Mark-to-Market

Pros

- The market valuation of a portfolio is an easy concept to understand and explain, and, in theory at least, does not require the use of any judgement.
- The market valuation of a portfolio represents the realisable value of the portfolio. This means that any reports, financial statements and promotional material they are quoted in are a ‘realistic’ representation of the current position.

- In an open ended fund, thought needs to be given to ensuring investors who join at different times are treated fairly. A Mark-to-Market valuation basis ensures that no internal bias exists towards new, existing or departing investors, and that the value is determined only by the market conditions prevailing at the time.
- Mark-to-Market has been a component of US General Accepted Accounting Principles (GAAP) for over two decades and is widely considered to be best practice in many other financial situations. Life Settlements are covered by the International Financial Reporting Standards under IFRS13 (Fair Value Measurement) and when held in a regulated entity in the EU are likely to fall under the Alternative Investment Fund Managers Directive (AIFMD).

Cons

- It is time-consuming and costly to update market prices frequently. There is no standard market place to look up the value of policies and so policies would need to be 'put to market'. This requires collating documents such as Life Office projections - and incurs costs associated with sourcing third party information (e.g. Life Expectancy reports). This makes obtaining a market value, more frequently than on an annual basis, difficult to manage.
- The market can be volatile. Therefore even once a market offer has been obtained, it is still only a best estimate. As the sales process can, on average, take over two months, the valuation figure at a given point in time could be very different to the realisable sale value at an earlier or later point.
- A Life Settlement portfolio generally has a long term to maturity. Therefore market volatility makes projection modelling for a Life Settlement fund, using a Mark-to-Market basis, difficult to justify and apply - increasingly so the further the projection goes into the future. Major assumptions on how the market will perform in future years are required in order to produce projections. Regular review of parameters and the model itself work towards ensuring projections are more realistic, but will likely mean significant variations in the model results within the periods between reviews.
- For a closed fund where the strategy is to hold the assets until maturity, using a Mark-to-Market basis is arguably not showing the 'true' value to the investor. If the investor has no intention of selling the policies in the future then the value to them is the value of the net cashflows, rather than the sale price.

Mark-to-Model

Pros

- Once the underlying method and formulae have been set, subjectivity is removed from the process. This makes figures comparable and means any discrepancies are clearly identifiable.
- In direct contrast to Mark-to-Market, projection modelling becomes easier to perform and to justify as no assumptions (other than those derived from market testing exercises) are required due to the formulaic approach being applicable throughout.
- When operating a 'hold to maturity' strategy a Mark-to-Model basis that takes account of expected cashflows and survival probabilities can arguably show a more representative

value of the asset. If the investor's intention is to never sell the asset then a probabilistic value of the future benefits over liabilities may be more suitable for their purposes.

Cons

- If it is necessary to sell policies then the realisable value upon sale may bear little relation to the valuation calculated by the underlying Mark-to-Model basis. Testing parameters and the model regularly will help to quantify the differences, but the Mark-to-Model figures may still vary to market values, depending on the market conditions at that particular time.
- An infinite number of combinations of methodologies and parameters are available, so a level of subjectivity is introduced into the underlying formulae and calculations at the outset.
- It is more difficult for the investor to understand the underlying basis and to assess the suitability of specific assumptions, especially when compared to the simple Mark-to-Market basis.
- Figures can be both misinterpreted and misrepresented if given without a suitable explanation. For example the valuation could have been prepared to give a worst case scenario, or conversely could be showing a best case scenario. Establishing which it is depends on which set of assumptions has been used.
- When using a Mark-to-Model basis for an open ended fund, investors who join and leave at different times could be treated unfairly (both positively and negatively).
- The basis is open to manipulation in an open ended fund as it is possible to introduce bias to either new or existing investors.

Conclusion

Reasoned arguments can be made to support both the Mark-to-Market and Mark-to-Model valuation bases for a Life Settlement portfolio. In determining the most suitable basis for your portfolio, consideration should be taken of the particular circumstances that apply to the portfolio and the investors in question.

It can be argued that a Mark-to-Market approach is more suited to an open-ended fund where investors are entering and leaving the fund throughout. It is also less complex to both explain and understand to all interested parties (i.e. investors, regulators, auditors etc).

However, in practice an industry standard market index does not exist, so obtaining a market price for all policies on a regular basis is neither cost-effective nor straightforward (and in some cases near to impossible).

Mark-to-Model allows for a valuation that is unbiased and relatively simple to calculate for all time periods. Therefore it can be reasoned that for closed funds that are holding policies to maturity, this valuation methodology is likely to demonstrate a "truer" value of the underlying asset.

However a Mark-to-Model basis is more difficult both to explain and to understand without the appropriate knowledge of the assumptions, and is therefore more open to misinterpretation. They are unlikely to show the realisable value should portfolio sales be required for liquidity purposes or other reasons.

In general, SL Investment Management would recommend a valuation basis that is a combination of the two discussed above. A Mark-to-Model methodology that is both initially informed by, and indirectly affected by, changes in the Life Settlement market and industry as a whole would be preferred. Underlying methodology and formulae should be determined through on-going analysis of market conditions, alongside regular review of the model parameters and the model itself. The analysis needs to cover both financial experience supporting the choice of discount rate and mortality experience supporting the survival probability distribution function. If supported by appropriate analysis then this methodology is open to revision as circumstances dictate, with the overall aim being to provide the most accurate and suitable valuation figure possible for the entity that requires it.

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