The Actuary India

Magazine of the Institute of Actuaries of India

July 2022

EMBEDDED VALUE REPORTING

A WANING STAR?

LIGHTHOUSE CONVERSATION

WITH PREETI CHANDRASHEKHAR

USAGE BASED INSURANCE

METER DOWN

BOOK EXCERPTS

QUANTITATIVE VALUE INVESTING

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Editorial

The online avatar of The Actuary India actuarial magazine (TAI) has made significant strides since its inception. I am happy to share that the actuarial community has been very active in contributing to the magazine's growth in its digital forms. We have also been getting regular contributions from the entire spectrum of generations:, senior members to freshers combined and from the various fields that actuaries currently practise in. This diversity embodies the aim of the actuarial magazine, to become a community centre for the profession encompassing all facets of its members.

For those more inclined towards coding, we now plan to bring some real cases and solutions to them through Python programming language. This will bring out the benefits and ease of using Python compared to other solutions and help those looking to understand the actual implementation of this framework in their day-to-day activities.

A common grouse I have heard from recruiters is the lack of problem-solving ability among candidates and even within their current technical teams. Many candidates have pure technical experience and understanding of syntax but no hands-on experience in dealing with unclean and unstructured data, making decisions around data proxies and assumptions and converting statistical results to business insights and decisions. As actuaries, we aim to bring to the market technical expertise through our knowledge but also learn the practical applications of our theorems and the communication skills required to explain them to our internal and external clients. This is increasing in importance as we now also foray into the fields of more generalised data science (even though we have been doing the same in a limited fashion since the start) and advanced modelling techniques such as machine learning.

Additionally, the complexity of our offerings is also increasing on account of using these techniques and more specific product specifications covering unique risks. These factors place us in an ideal scenario to take on and succeed in areas which might be outside our direct expertise (for example, insurance) but revolve around the same skillset (risk analysis). I hope our profession can take advantage of this to expand its boundaries further and increase the scope for the profession and its incoming members.

The next few months will see TAI moving to enhance the breadth and depth of our publication while increasing the ability and scope for interaction and feedback from the wider actuarial audience – so watch this space for more! We hope that you will find your increased participation and input are being actively considered in shaping the future of the magazine and our esteemed profession.

Regards,
Prakhar Mody
Editor, The Actuary India
Magazine of the Institute of Actuaries of India

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Letters to the Editor

Sampad*ji*,

I read with interest a recent article published in The Actuary India, titled 'Embedded Value Reporting – A waning star?', presenting views of Mr Nidhesh Jain (Lead Analyst, Investec) and Mr Sanjeev Pujari (Consulting Actuary) on this subject.

As someone who has been involved in numerous embedded valuation (EV) assignments, three of the four life insurance IPOs and having interacted with the investor community myself over the past 25 years, I found the views expressed in the article quite interesting (albeit at some places, divergent to the views held by me). Although I do agree with many of the comments in the article, I have counterarguments/views on some of the issues discussed.

I share my comments on the same below.

De-rating of life insurance stocks may not be due to investors losing faith in EV disclosures

Mr Jain argues that one of the reasons for the de-rating of life insurance stocks is that investors have started losing faith in EV disclosures. To support his arguments, Mr Jain cites investors' discomfort over the growth in EV not getting translated to book value growth, with aggregate profits remaining flat for the listed players; and the book value compounding at a CAGR of 14% over the past six years.

- Negligible disclosures around assumptions, with investors having to rely on management commentary. The recent strengthening of the 'long term' mortality assumption is cited as an example of this.
- Usage of risk-free rate in the Indian Embedded Valuation (IEV) framework, leading to 'high' present value, for-profit cash-flows several years in the future.

Although I agree with Mr Jain about the need to improve EV disclosures, in my mind, the real issue is the fact that the industry (which includes the actuarial profession) has not succeeded in educating the various stakeholders (shareholders, management, analysts and investors) about the nuances of EV and how to read the disclosures.

I recall meeting one of the large mutual fund house's Investment managers soon after the IPO of the first life insurer in 2016. Having taken exposure to the life insurance stock, he wanted to understand what EV was, how it is calculated, etc. I was surprised - not about him not knowing what EV was, but about the fact that this question was being asked post-facto - after having invested in the life insurance stock!

- Shouldn't the investors understand what they are investing in before they do so? And if they do end up investing without understanding, and if the investment turns out to be not providing the desired level of returns, is it not the investor himself to be blamed and not the insurer or the EV disclosures?
- We keep talking about 'mis-selling' in the life insurance industry. However, I have always believed that as much as 'mis-selling' is a problem, 'mis-buying' is also a problem. The same argument (perhaps more so) can be extended to investors' interest in the life insurance industry. There is no excuse for investors (especially the large investors, mutual funds, PE firms etc.) not understanding the nuances of the sector before actually investing in the same.

The historical euphoria over life insurance stocks is well known. There have been several articles/papers/analyst reports stating how the Indian life insurers (who were getting valued at 3x-4x-5x EV) were 'over-valued' as compared to other insurers in different countries, including China. I am sure most (if not all) actuaries themselves have held views, even if they were not publicly expressed, about how the 3x-4x-5x EV is not the 'right way' (and level!) to value life insurance stocks.

Despite this, if investors ended up investing at such high valuations, the consequent de-rating of the stocks is not because of the EV metrics or disclosures having flaws but because the investors failed to understand how one should be looking at life insurance stocks, to begin with.

Commenting on the technical aspects of EV computation and the examples cited by Mr Jain –

1. Disclosures on assumptions –

- I agree that we should always be looking to improve the level of disclosures.
- However, one way to look at the sanctity of the projection assumptions used in the disclosed EV results is to see if the 'variance analysis' (i.e. the impact of actual vs expected demographic experience) and the 'demographic assumptions change' related contributions in the movement of EV analysis have been positive or negative.
- Looking at the historical disclosures of listed companies, in most years and in most insurers, these have had a positive contribution to the change in EV – indicating that at least at an aggregate level, the demographic assumptions have not been 'aggressive' (i.e. EV have not been 'overstated').

- Besides, all the listed life insurance companies have been seeking certification of their EV disclosures by external actuarial consultants. This itself should provide some comfort to the investors about the sanctity of the management disclosures.
- So, it may not be appropriate to cite lack of disclosures as a 'symptom' to conclude that somehow the disclosed EV results have been systematically 'overstated'.

2. Strengthening of mortality assumption - The example of the strengthening of mortality assumption in recent years, as cited by Mr Jain, may also be red herring -

- The strengthening of mortality assumption is mainly in response to the reinsurers having increased their risk rates. It has been a well-known fact in the industry that due to the intense competition amongst the reinsurers, the risk premiums charged by them (and therefore the term insurance premium rates charged by the direct insurers) have been very 'low' for certain segments of the population.
- However, considering the fact that the insurers have been heavily reinsuring their protection business, from an EV perspective, the strengthening of mortality assumption can't be cited as a reason to conclude that insurers have been systematically adopting 'aggressive' assumptions in their EV disclosures. Even if, for a moment, we assume that they were, it would not have had a material impact on their historical EV numbers – as had been evident from the positive 'variance analysis' in the historical disclosures.
- An additional point to consider is – the Indian Embedded Valuation (IEV) framework, to a certain extent, allows for an adjustment (through haircut for the Cost of Residual Non-hedgeable Risk, or 'CRNHR') in the EV results. If the base results for the present value of future profits (PVFP) are somehow 'overstated' assuming they are based on the management adopting slightly aggressive demographic assumptions (e.g. too low mortality rates, as has been cited by Mr Jain), to a certain extent, there will be a higher haircut for CRNHR. Of course, it may not eliminate the overstatement of PVFP completely, but the point is – there is already some in-built mechanism in the IEV framework to adjust for such 'aggressive' assumptions if used by the management and monitoring the movement of CRNHR (which are disclosed) provides more insights to investors to identify any such systematic aggressive assumptions.

3. Risk-free interest rates –

- I agree with Mr Jain that the usage of risk-free interest rates in lines of businesses such as protection, where future emerging profits do not depend as much on the projection interest rate (which too would be risk-free), would overstate the present values.

- However, in my mind, this again is an example of 'mis-buying' by investors in my mind. In the IPO disclosures, there are some 25 sensitivity results for EV and the value of a new business (VNB). In my mind, they are there for a purpose – to alert investors that the numbers ARE vulnerable to changes in future experience (including interest rates) and investors, therefore, shouldn't have assumed that the base EV number is the 'right' number!
- As to how the future interest rates would move would be anyone's guess. But again, it is not the EV framework or the disclosures by insurers that are to be blamed for investors disregarding the vulnerability of the numbers in the disclosures and going ahead with their investment decisions.
- The market-consistent EV framework, by definition, would lead to volatile results. One has to simply accept this – because the alternative (e.g. the previously used Traditional Embedded Valuation framework in India) has bigger issues related to the set of assumptions (which didn't change, reflecting the emerging experience/outlook for future best estimates) and usage of a risk discount rate (which was very subjective).

Is the Indian life insurance industry 'slowing down'?

Well, there can very well be different views on this. Considering the gross under-penetration and the longer-term positive macro-economic outlook, many would argue that the industry is unlikely to experience low growth rates in the long term. Just to note - the operative phrase here is 'long-term'. It is quite possible that there may be a temporary slowdown for a few years. But if one believes in the India growth story, then one has to believe in the future for the life insurance industry as a whole (not necessarily company A or company B).

However, in my view, the recent 'slowing down' of the growth in the industry shouldn't have been the reason for the de-rating of the insurance stocks. The de-rating should have happened anyway, given that, as per the commonly held actuarial view, the valuations of 3x-4x-5x EV had been high, to begin with!

Way forward

I agree with Mr Jain that investors are getting increasingly uncomfortable about the growth in EV not getting translated to book value growth. Indeed, in some other markets, investors have been looking at statutory / GAAP earnings (i.e. cash or dividend stream) instead of measures of earnings based on economic valuation (e.g. EV operating profits).

However, for a country like India, if one assumes that the future new business growth (and hence the VNB) will continue to dominate (at least for mid-ranking players and smaller-players) the growth in EV over the years, it may not be appropriate to look at only 'cash' to begin with. In the long-term, this may turn out to be an expensive mistake by the investors if they fail to recognise the long-term value creation reflected through the EV movement and if they base their investment decisions purely based on statutory earnings in the short term (which may continue to be depressed due to new business strain etc.)

So, what are the alternatives? In my mind, the only alternative is for investors too –

- Continue to demand more disclosures from the insurers
- Continue to seek external certification of the EV disclosures
- Educate themselves about the nuances of the EV disclosures and not make the same mistakes as in the past.

I think the actuarial profession, too, has a role to play - in educating the investor community at large about the nuances of the EV framework so that they don't lose their faith in the same as feared by Mr Jain.

Thank you,
Sanket Kawatkar
26 July 2022

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The Institute of Actuaries of India (IAI) is a statutory body established under The Actuaries Act 2006 (35 of 2006) for regulating the profession of Actuaries in India. The provisions of the said Act have come into force from the 10th day of November 2006, in terms of the notification dated 8th November 2006, issued by the Government of India in the Ministry of Finance, Department of Economic Affairs.

The Actuary India is the flagship magazine of the IAI that has been in publication for over two decades. We aim to provide our members and the larger actuarial community a platform to connect, exchange views and promote thought-leadership and research beneficial to the profession.

www.theactuaryindia.org