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DEBATE

The benefits achieved by marketconsistent valuation and risk technology have not yet justified the huge costs of developing them

SUPPORTING



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OPPOSING



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JOS: If you look back to 2007 and 2008, you see that all the models we produced did not prevent us from entering the crisis as a victim. Theoretically, you could say that the data used for calculations for interdependencies were wrong, in which case the argument for models is still alive. But there is hardly anybody in the world who is 'buying' it and, as a result, everyone is relying instead on old systems (i.e. on accounting based metrics rather than fairvalue based metrics), on nominal systems, on percentages of capital. Whatever you do for risk management purposes, the system that we designed based on economic capital or MCEV is not bought by our investors, regulators or politicians. So we had no choice but to go back to the old system in order to show regulators that we were still solvent.

If only a handful of sophisticated people within the insurance industry are buying what you are thinking, then it is never right to make such an enormous investment. And we did make an enormous investment on the assumption that people would look at our balance sheets in terms of accounting, in terms of disclosure, in terms of risk management, and would all buy the same kind of model. And that is no longer the case, and it is not going to happen. So part of the investment is absolutely lost, and that is the external part.

TOM: I'd like to travel back in time to 2004/2005, the heyday of financial markets. At that time there was a general perception that Life insurance businesses were being undervalued by the market, a consequence of the so-called "transparency discount". In response, European CFOs got together to promote greater transparency through

voluntary disclosures and demonstrate that the earnings were in fact attractive and should enjoy a higher multiple. The result was the birth of the CFO Forum's European Embedded Value approach, focused on two objectives: the first was to get something more economically grounded than traditional accounting and statutory frameworks and, the second, to provide a measure that was comparable and consistently communicated between insurers.

In 2005/2006 the equity analyst community thought that, while a good first step, the industry still hadn't gone far enough in terms of achieving consistency and accuracy in fair valuation, primarily because EEV still allowed some management discretion with regards to future investment returns and the valuation of options and guarantees was not consistent with market valuation approaches. In order to address these issues, and ultimately to improve the valuation multiples applied to life businesses, the CFO Forum got together again and MCEV was born.

Ignoring the market volatility between 2008 and 2009 and the different responses by companies in their MCEV reporting, the original issue which the CFO Forum wanted to address – the transparency discount – has not disappeared. We still have the same fundamental problem as an industry. More important for this debate is the fact that we also know that turning the clock back five years and reverting to more "stable" measures won't solve the problem - to use an Americanism, "we have been there, done that and bought the t-shirt", but the shirt didn't appeal 5 years ago so what makes us think it will appeal now? I do not believe that a reversion to what we had in the past is

an option and that some market-consistent measure will need to be carried forward.

JOS: Tom is right that at the beginning of the millennium the investment community was not satisfied. They said EEV was not enough to show that insurers were undervalued. So we went a step further, and at the same time assumed that risk management could benefit from all these developments. The CRO Forum said the Solvency models and European Embedded value, and later MCEV and the IASB, could do both in one big strike.

Those were the reasons for the big investments that were made. And theoretically, I'm still convinced that it is the right way of allocating capital. Of course you should use the MCEV of the products you sell to make decisions about where to put your money. But all the other advantages have vanished because the market is no longer buying that kind of methodology, because in a crisis they fall back to the old accounting rules and our problem is that MCEV is not the rule.

I had to appear before the credit crisis committee. I explained that we were managing the company properly on an economic basis and, as the markets settled, and volatility decreased to normal levels, the company would not have any problems. But the rest of the world thinks you are in deep trouble, and you are losing clients because you are using your own model that nobody believes in. I still believe that capital allocation should be based on MCEV. But if you cannot use it for formal, external disclosures, then the basic assumptions that we took in around 2003 to make a big

investment in economic measures were too much.

If you only use it for management purposes to allocate your capital, you can use a less exact analysis than a detailed economic capital model.

TOM: The crux of it is, what is the market buying? Are they buying MCEV results? Or are they buying statutory? This is the most pertinent, and difficult, question to answer. I believe that what the market is buying may very well be different from your portrayal. Based on anecdotal information from the 2008-2009 period, I personally believe that the market was valuing insurance companies as if they were taking MCEV seriously.

Take, for example, the case of Allianz: at year-end 2008 Allianz saw a 43% drop in our MCEV, from EUR 21.9 to 12.5 billion. From the analysts' perspective, the average Allianz Life sum of parts valuation from a series of different analysts dropped 46% and, from a shareholder's perspective, Allianz's market value dropped 44%. What is interesting is that the drop in our MCEV was within a rounding error of the drop in our share price and of the sum of parts valuation for our Life businesses.

Allianz was not alone in the 2008-2009 rollercoaster: For those in the industry reporting MCEV including Allianz, Aviva, AXA, Ergo, Swiss Life and ZFS, the average MCEV drop at the time was 32%. We know however that there were inconsistent applications of MCEV principles at the time for yearend 2008; if you remove only one of those inconsistencies – the liquidity premium which was applied by some firms in different

ways – the average drop was actually 40%! So, under MCEV, the industry as a whole for European life businesses dropped 40% in terms of their in-force block of business. From the same analysts' perspective, the fall in sum of parts valuation for these companies was 50% and the Eurostoxx insurance index dropped 63%. Whether acknowledged or not, it appears as if the market was at least thinking about MCEV when they were valuing insurance companies.

It is sometimes said that the exceptions prove the rule. Consider the firms reporting on traditional EEV at year end 2008, which includes Aegon, Generali and ING; their reported drop in the more stable EEV measure was 13%, not surprisingly a lower number than MCEV reporting firms. But their actual market valuation drop was 64 %, a number much closer to the drop in the Eurostoxx insurance index.

What do I take from these observations? Two things: first of all, it appears as if the market's valuation, whether for good or for ill, is highly correlated to our MCEV valuations. Second, equally as intriguing, firms which published more stable numbers "reflecting the long term value of the business" got no benefit, but rather to the contrary.

JOS: A couple of questions remain. First, for Allianz, if MCEV goes down by 40%, the share price goes down by 40%. But if you take Allianz as a whole, which comprises more than 50% P&C business, I think the depreciation of the Life company must have been much more than 40% because P&C has remained relatively stable. So if you unravel those two things - P&C companies in the world went down 20% or 30% or so, then Life

companies have come down much more than 40% to arrive at the 40% depreciation of share price of Allianz as a whole.

TOM: If you take Life vs. P&C companies, both sum of parts valuations dropped but the sum of part valuation for P&C dropped by much less than Life, so you are right about that. Nonetheless, I find it illustrative that market valuations seemed to reflect MCEV more than more stable EEV valuations and that any adjustments to MCEV seemed to be "backed out" by the market. So if a firm applies 300 basis points in terms of liquidity premium onto the value, I would argue that that was discounted. The market is a lot smarter than many give it credit for when it comes to interpreting our disclosures and traditional long-term EEV perspectives don't even come close to the share valuation discount that we saw during 2008-2009.

never know what is the head and what is the tail. Most of the analysts in the Insurance industry, especially the Life part, were in the same school as the risk managers and actuaries. So they both believed that the policy guarantee should look like the state guarantee. We are the only type of financial institution that offers that kind of security to the customer. Are we not creating overshooting and under-shooting in the market because we have expressed such theories?

The market turned its back on that reasoning and is punishing us for it. We know from other theories that in a down market you have under-shooting of prices and in an up market you have over-shooting. By promoting market consistent valuation, we created a part of our own volatility.

We also know that some of the products that we sell to our customers will not survive market-consistent analysis. With a 3% guarantee on a fixed annuity, you'd never sell it. But as long as the twenty largest insurance firms in the US are selling that, you must either give up your position in the market, or accept a risk, that risk managers would probably say we shouldn't.

question. We have talked about the volatility of MCEV and the pro-cyclicality. I am optimistic, that through Solvency II, we will somehow come up with a framework which mitigates that. I do believe market-consistency is a good measure of shareholder value. But I don't believe we should trigger capital raising efforts and regulatory intervention based on something that is as pro-cyclical as MCEV. In terms of management signals it's great, in terms of the signals for regulatory interventions and capital raising I think we need to apply some common sense.

Now to your second point - what do you do if you're faced with a business that doesn't look attractive under market consistency? If we believe that insurers raise policyholder funds in order to invest in assets and participate in investment returns (so it's basically a funding business) understanding our cost of funding makes sense. As a large institutional firm, I can raise funds in many different ways. In the wholesale markets I can raise funds though a straight bond, I can raise funds with an interest rate option imbedded in it – a callable or putable bond – or I can raise funds through an equity-linked instrument such as a convertible.

The only way that I can make the cost of funding comparable on each of these alternatives and choose the right one is to use an option adjusted spread measure. If I want to know whether a 4% coupon on a straight bond is worth the same as a 3.5 % on a convertible, I need to adjust for the embedded options. Using an option adjusted spread measure, you are able to determine whether you are raising funds at above or below LIBOR.

This same concept can be applied borrowing funds through Life insurance policies. What is really very interesting is that the MCEV value of new business margin for a single premium product is directly related to the option adjusted spread concept. Why? Because an option adjusted spread equilibrates what you get in terms of cash with the embedded economics of what you issue, and it adjusts the spread appropriately. The same is accomplished by the MCEV value of new business margin! Suppose you have a value of new business margin of 3% on a 10-year product (single premium); looking at this from an option adjusted spread perspective, you would be raising funds at roughly 30 basis points under libor (or 3% divided by the products weighted average maturity). If interpreted in this manner, the MCEV approach tells me some incredibly useful information about one of the primary drivers of the economics of my business model, how much does it cost me to raise funds in order to participate in future investment earnings?

For a retail financial services company, 30 bps under LIBOR sounds OK. But, at what point do we say my cost of raising funds from a retail network (where I have employed a tremendous network of IFAs, brokers and tied agents) is too much or too little? The unique

thing about market consistent approaches is that it gives you a metric to answer this important strategic question. Before 2008, based on our published new business margins, Allianz was funding at LIBOR minus 30 or 35; during 2009, as a consequence of the market crisis, we were funding at LIBOR minus 10. That is interesting information that I think we should know as an industry in order to understand the economics of our business model.

JOS: I'm not fighting that, because that's for internal purposes: Where should you allocate your capital and what's your risk profile? In a crisis though, you have to watch the cost of funds for all insurers, because the insecurity in the market goes up. Many insurance managers took their new prices off the cost of funds, and allowed themselves to pay to the distribution channels even more to keep the cash inflow streams intact, which will put a lot of risk in later years. Warning against that within the model that we designed ourselves is pretty difficult.

TOM: I agree, and hence my support of the liquidity premium, but not because of what I can earn on the assets. During normal times, 2005 and before, well rated insurance companies were able to raise short-term money in the commercial paper market at something like LIBOR or LIBOR minus 5. If I wanted term funding at the time I needed to come up with a Medium Term Note programme or something else. What did that cost me? If I wanted a 5-year term, my starting point would be LIBOR. I would add my CDS spread, so maybe anywhere between 12 and 20 bps. On top of that I would add a cost of funding. Issuing a 5-year floating rate vs. a 6-month revolving would probably cost

me 25 bps additional spread at the time. So the cost of funding for term funding – the value of getting committed financing – was about 35-45 bps for a well rated insurance company during normal times.

But during the crisis, CDS spreads blew out. I don't have the figures; I think well rated companies were at least up to 90 bps, something like that. The other thing that happened was that "cash was king", and the difference between having a 6-month revolving commercial paper line vs. a 5-year floating rate note would have probably been another 125 bps. Well, that's your liquidity premium, and it has nothing to do with how you invest your funding and what you can earn on the assets and has everything to do with how much it costs to raise committed funding. It is because if you want longer term financing, especially during a crisis, you are going to have to pay for it.

the liquidity premium. The problem is that your cost of funds is higher and you still have to make a spread for your business model to survive. You cannot use at least 30% of the asset allocation that you were used to for risk reasons. In other industries (such as telecoms) the credit spread rose. That means you have to exclude all such assets when trying to make a spread over your higher cost of funds. You can hardly find assets where you're pretty certain that you can make a spread over your costs of funds.

TOM: This is interesting, because there is a distinction. For traditional business there are sufficient management levers to manage the business over the cycle, for example crediting rates, recognition of

investment earnings, etc. Because of these management levers, we didn't drop anywhere close to the lower levels in terms of values of new business and the cost of funding that occurred in different markets. So there are products and markets which, even in distressed times, can provide clients with a product that is sufficiently remunerated on a market-consistent basis to make do.

The products and competitive behaviour in the United States tend to be different, with many fewer management levers built into the products and a highly competitive environment. It makes sense to ask what it takes to create shareholder value in such a market, but also in every other market we operate in. If market consistent metrics, combined with other metrics such as cash flow or earnings generation, capital stability, etc., help to answer this question, all the better.

JOS: There's still another problem. Because, model-wise, we know the cost of funds. We go to the asset side of the balance sheet and we try to match the cost of liabilities, including their duration. And here you saw an enormous problem in the crisis. Many highly rated assets fell by 35 or 40% during the crisis. If the volatility of your assets with a good diversification is so high then there is a mismatch in the models that you use for your liabilities and for your assets. In our capital model there is no distinction between the two, because we consider our own calculations of the cost of funds, and therefore the valuation of liabilities as the fair value, and we take the market price of the assets as their fair value. We do that because most of our stuff on the asset side is publicly quoted. Not so in the banks. All

the portfolios in the banks are valued at 85% on average in the US. Only the suckers in the insurance industry value it at 60% and run into capital problems.

TOM: I agree with you we are holier than thou – putting the entire insurance balance sheet on a mark-to-market basis rather than making a "banking" and "trading" book distinction like banks do – we are holier than the Pope, we are half way between the Pope and...

JOS: Jesus Christ himself!

TOM: Exactly! If we had applied the same market consistent standard to the entire balance sheet of all banks during the crisis then there would not have been one regional bank, one commercial bank or any bank which would have been left standing at year end 2008. But let's go back to the economics of this situation. Our MCEV values things against swaps; we don't take Greek government bonds to discount our Greek positions.

If we value against a swaps, and if the only way that we can sell the product is if we back it with a credit spread risky product, then it's not clear we are generating value. When the liquidity goes out of the market, the spreads blowout. We've seen that time and time again. We saw it with commercial mortgages in '97, and that's why the companies with the large commercial mortgage portfolios took a beating. Whether the right price is 40% or 20% of face value - that's basically for the Cargill's, the Goldman's and the bottom feeders to decide.

JOS: I agree. The problem therefore is more on the asset side than the liability side.

Suppose your cost of funds is LIBOR minus 20 and you invest in LIBOR plus one. It is an acceptable risk. At some time in the duration of the 10 years, that credit spread widens to 250 basis points and is probably coming back. Economically, you might have taken the right decision. But in the meantime, in the immediate valuation, you might run out of equity. And that is a big problem because there is no synchronisation in the analysis of the assets and the liabilities. The liabilities are pretty constant because they are based on a valuation that we developed ourselves. We did not develop the asset valuation; we leave that to others under other assumptions with a totally different convexity structure from our liabilities. So eventually you always run into problems. So for internal purposes, to take the right decisions as a management board, where you should allocate your capital, I'm totally with you. But there's a big difference between the valuation of the assets and liabilities – especially in a crisis. Then your solvency models on an economical capital model basis do not work. That's my problem.

TOM: I draw different conclusions with regards to the experiences in 2008. The conclusion I draw is that we better be careful how solvency measures are translated into solvency requirements and the triggering of either capital calls or regulatory intervention. The fact that our earning streams are highly volatile, the fact that they are market dependant, is in our valuation. Shareholders recognise it already. What I would like to do is minimise the possibility that there is a forced capital call. Under Solvency I those firms that could muddle through were able to signal they were able to muddle through. If you've got a highly pro-cyclical balance sheet due to Solvency II and, from a regulatory

perspective, forced capital calls, it's going to cause a problem.

which is your license to operate. If your clients lose confidence because of the volatility we have built in our systems, in our public disclosures, then even if you are right, if you can't get new clients, you have a big problem. One of the reasons that my former company defended an AA rating for liabilities was because, otherwise, you would lose your licence to operate for the big pension businesses. And Aegon is a big pension provider. We had no choice but to defend the AA rating. If you lose your licence to operate to your customers by showing too much volatility, you're entering a dead end street.

TOM: Again, I don't think you are giving enough credit to the analysts and the broader insurance community. I think shareholders and equity analysts cut right through all the games we play with the numbers.

But not your clients, because they read the papers on an IFRS basis.

TOM: I don't think so. Most of my clients don't read Allianz's financial reports. What they may pay attention to is the rating.

JOS: But they may pay attention to reading in the paper "Allianz profit down 50%"

TOM: For large institutional investors where the margins are much slimmer, they may be more attune to that. But I think that for building a retail financial services franchise that produces a steady earning stream, it's less clear. If we want to get our valuation, part of it may be growth in the

bull market. But building a retail financial services franchise that is operationally efficient, capital-optimised, and producing a reasonably stable earning stream - I would put a higher value on that than the growth opportunity of riding the bull.

JOS: But let me give you an example. In the US portfolio you typically have RMBS. If you analyse the cash flows coming out of the assets, and you're confident that only a small part of your portfolio will suffer credit losses under IFRS you lose a lot of equity, and that's what's in the newspaper. Total certainty is impossible. But suppose you're pretty sure that through the crisis you will only lose 10% of your assets which, with the portfolio you have, will not cause you any problems. But your supervisors and your clients calculate on a totally different system. Then I go back to my opening statement. We invested all that money to have synchronisation between these things. But synchronisation did not happen and will not happen in the next 10 years. All the investments we made can be used for internal analysis about what our risks are and how we should allocate our capital, but for your licence to operate and for the confusion that you've created to a large part of our investors, it's not money well spent.

TOM: That's a good closing statement.

BIOGRAPHIES

Jos Streppel

Jos began his career in 1973 at one of AEGON's predecessors occupuying several treasury and investment positions. In 1986, he was appointed Chief Financial Officer for FGH Bank and joined the Bank's Executive Board the following year. In 1991, he became Chairman and Chief Executive Officer of Labouchère and four years later he also took on the role of Chairman of FGH Bank. In 1998 he joined AEGON NV as their Chief Financial Officer and was appointed a member of their Executive Board in May 2000. Jos is also a key member of several Boards including Chairman of the Supervisory Board of KPN, Vice-chairman of the Supervisory Board of Van Lanschot Bankiers, Chairman of the Monitoring Committee for Corporate Governance Code and a Member of the Advisory Board for the Dutch Society of Actuaries.

Thomas C. Wilson

Tom is the Chief Risk Officer for Allianz Group, responsible for global risk controlling and risk management policies and guidelines. Prior to joining Allianz in 2008, Tom was the Chief Risk Officer for ING's global insurance operations. Before joining ING in 2005, Tom was the Global Head, Finance & Risk Practice at Oliver Wyman & Company (OWC). Before that, Tom was the CFO & CRO for Swiss Re New Markets (SRNM), responsible for the risk management, financial / management reporting, treasury and backoffice operations for the alternative risk transfer and capital markets activities of Swiss Re. Prior to joining SRNM in 1998, Tom was the Global Head, Risk Management Practice, at McKinsey & Company. Tom has spent most of his professional career in Europe, having lived and worked in Munich, Amsterdam, New York, London and Zurich. Tom earned his BSc in Business Administration with honors from the University of California at Berkeley and his PhD in Economics from Stanford University. Tom is a dual American-/ Swiss-citizen.

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