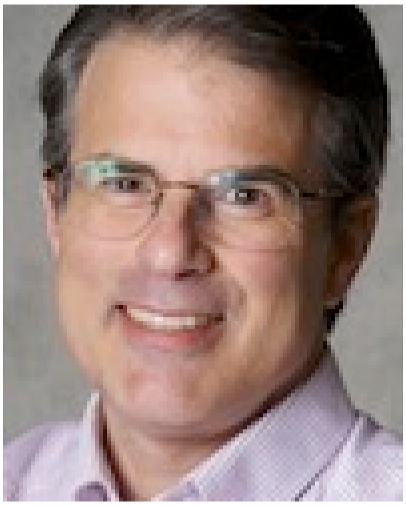
The Fragility of VA Living Benefit Guarantees

By Kerry Pechter *Thu, Jan 25, 2018*

Their reliance on VA with living benefits has made life insurers 'more like pension fund managers because they have risky assets and guaranteed liabilities,' write economists at NYU-Stern and Princeton.



There's a potboiler waiting to be written about the boom and bust of the variable annuity market from the mid-1990s to the mid 2010s. Of that I have no doubt. In the meantime, two economists, Ralph Koijen of NYU's Stern School and Motohiro Yogo of Princeton, have published a technical post-mortem of the VA debacle of a decade ago.

The equation-rich article, "**The Fragility of Market Risk Insurance**" (NBER Working Paper 24182, January 2018), isn't an easy read for the non-economist, even on multiple readings. But it adds some accessible details to the history of VAs—a history that we need to study or risk repeating.

For their part, the authors claim to provide "a more complete theory of the supply side of insurance markets that explains pricing, contract characteristics, and the degree of market incompleteness." I took that to mean: Why some VA issuers had to drop out of the business.

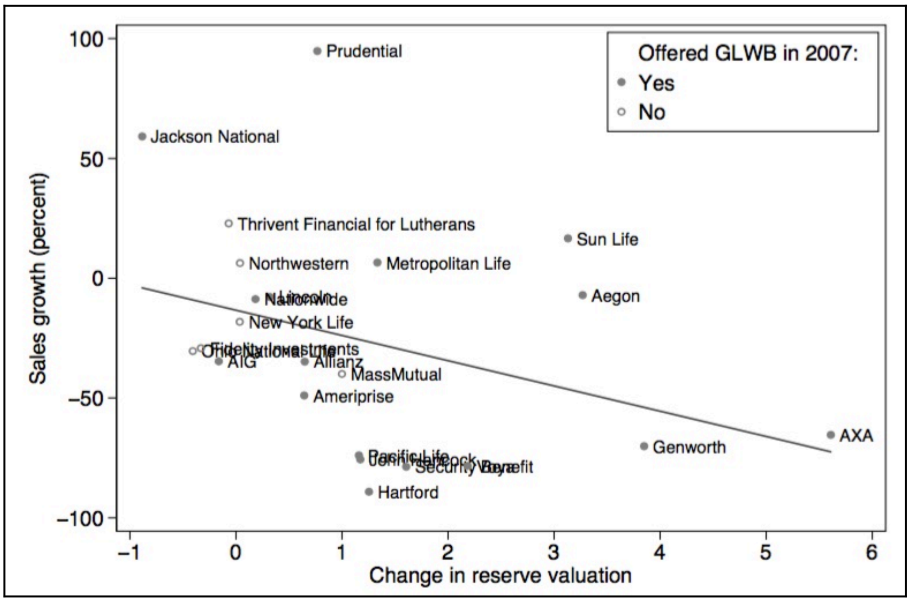
Check out the scatter charts

VA industry veterans won't be surprised at some of the authors' conclusions. Rich roll-up rates fueled demand for VAs with guaranteed lifetime withdrawal benefits (GLWBs) and rising fees depressed it. After the stock market and interest rates dropped in 2008, declines in the valuation of the reserves behind VA guarantees.

These declines led to shrinkages in supply, as issuers with too much "financial friction" (the difference between earnings from capital and the cost of capital) and less "market power" (the ability to raise fees and stay competitive) reduced their sales or fled the space entirely.

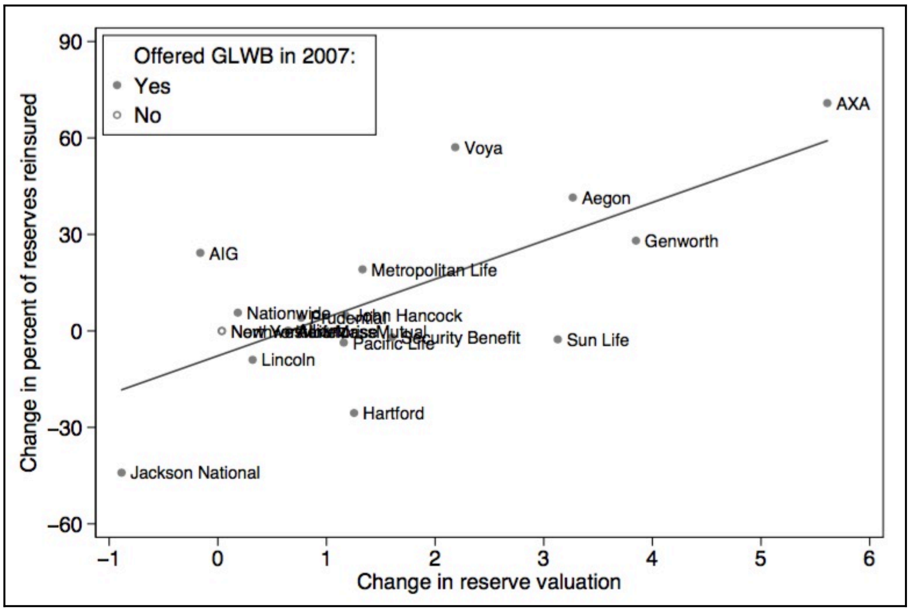
For the reader who wants information about specific companies, the most relevant aspect of the report may be two scatter charts in the appendix. Both charts populated by the names of VA issuers (though some names are unfortunately obscured by others in this version of the paper).

The first chart (below) shows the issuer-by-issuer relationship between VA sales growth and changes in reserve valuations (I took this as an indication of the decline in the value of assets supporting liabilities) between 2007 and 2010. Note the negative correlation between the two, and note the outliers.



AXA and Genworth had the biggest changes in reserve valuations and saw some of the biggest percentage drops in sales growth. Jackson and Prudential, during the same period, enjoyed the biggest increases in sales growth and saw some of the smallest increases in reserve valuations. Little mystery that they could keep selling VAs in volume after 2010. Note also that MetLife, AEGON and Sun Life experienced almost no change in sales growth even as they absorbed a fairly high increase in reserve valuation.

The second chart (below) shows the positive correlation between the percent of reserves reinsured and the changes in reserve valuations over that three-year period.



In this case, Jackson National and AXA again appear as outliers at opposite ends of the chart. “AXA increased the share of variable annuity reserves reinsured by 64 percentage points as its reserve valuation increased by 12 percentage points from 2007 to 2010," the paper said. Jackson National, with a slight drop in reserve valuation, reduced its reinsured reserves by about 45%. A half decade later, Jackson would become the VA sales leader.

Cautionary note

Are sales of VAs with GLWBs down in recent years because of declining supply or because of declining demand? Are they too expensive for most life insurers to offer or too expensive for advisors to recommend to investors? Koijen and Yogo appear to offer evidence for either interpretation.

"The increase in fees during the financial crisis coincides with the decline in sales, suggesting an important role for a supply shock," they write, while adding a page later: "Higher fees and lower rollup rates make variable annuities less attractive to investors, explaining the decline in sales."

The authors conclude their article with two observations about the VA industry: First, that VA liabilities now represent a significant 34% of all life insurance company liabilities; second, that the reliance on VAs has made life insurers "more like pension fund managers because they have risky assets and guaranteed liabilities."

Koijen and Yogo tack on a cautionary note at the end: "The persistent under-funding of pension funds may foreshadow similar problems for life insurers in the future. The fact that [some] life insurers are publicly-traded and subject to market discipline could lead to additional challenges that are not present for under-funded pension funds."