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STRUCTURED-NOTE ANNUITY: A NICHE INDUSTRY

# Born With Endless Possibilities

By Joe Halpern and Greg Henke

## Challenges in the variable-annuity market have sown the seeds for the next phase of growth within the annuity industry: risk-focused innovation.

Challenges in the variable-annuity market following the financial crisis of 2008 and the current government-fed financial environment of low rates and volatility have sown the seeds for the next phase of growth within the annuity industry: risk-focused innovation. Products that can gain the attention of the consumer while protecting the balance sheet of the insurance company are key. Early success with structured-note annuities by AXA Equitable Financial Services LLC, along with compelling product characteristics, such as the transfer of a level of risk to the consumer and reduced basis risk resulting in more effective hedging, have caused the industry to take notice.

From an offering context, structured-note annuities (SNAs) sit nicely between

fixed-index annuities (FIA) and fund-based variable annuities (VA). Structured notes are similar in design to fixed-index products, which have a more defined outcome as compared to a fund and therefore minimal basis risk, but have much more flexibility to customize return profiles including the ability to pass on downside risk to the consumer. While manufacturers and regulators may debate whether SNAs should be designed as securities or insurance products, it is clear the securities route will allow for more creativity in creating diverse payout profiles to meet clients' needs. These characteristics suggest that SNAs should benefit from the same factors contributing to the popularity and growth of both FIAs and structured notes, and possibly do even better due to other characteristics discussed later.

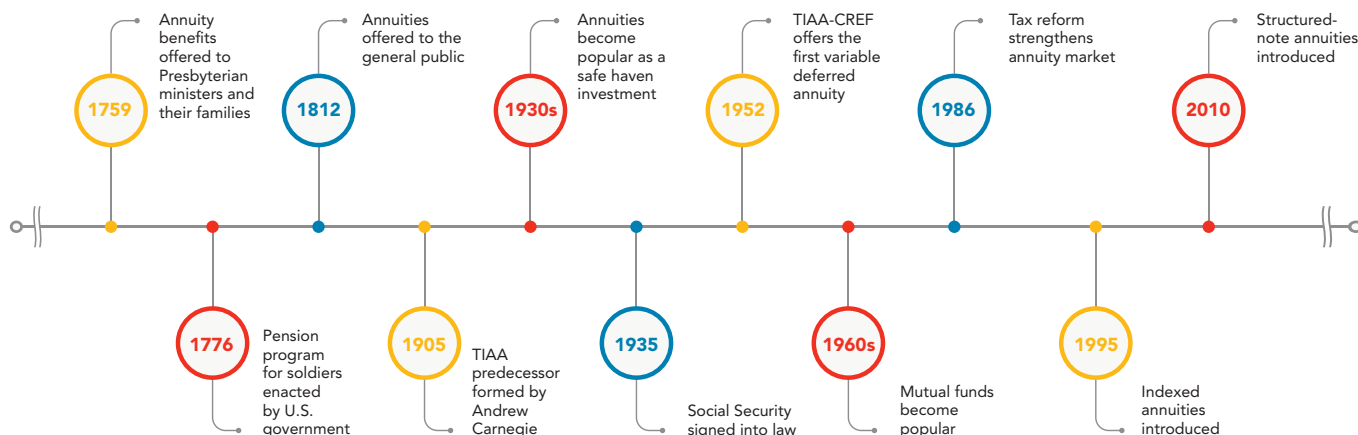
This additional flexibility permits the manufacturer to adjust more levers associated with the product, resulting in a customized approach to the customer's risk/reward profile. For example, in the current yield environment, an FIA that tracks the S&P 500 might offer a very low annual cap, say 5 percent, or be forced to reduce the participation rate to below 100 percent of the index. A structured-note annuity can provide a much higher cap, such as 15 percent, by simply reducing the floor to -15 percent. The consumer would receive more participation in the S&P 500 on the upside in return for an increased level of risk on the downside—a risk that is acceptable to many investors.

### A RECENT HISTORY OF THE VA SPACE

The VA industry had grown materially more complex in the late 1990s and early 2000s

## Timeline: Development and Growth of the U.S. Annuity Industry

The design and popularity of annuities have changed significantly since Roman soldiers received "annua" for their service and tontines accrued to survivors in the Middle Ages. The seeds of the actuarial profession were evident to issuers that realized that annuity applicants tended to live longer than the general population. Annuities helped fund retirements for pastors before the American Revolution and the innovations have continued ever since.





from its beginnings as a tax-deferred vehicle for simple mutual fund strategies. The sales and marketing arms of large annuity issuers created a dizzying array of investment options and guaranteed benefit programs allowing the consumer (but most likely not the actuary) to sleep better at night. However, the complexity of the programs and the competitiveness of the pricing made these impossible to hedge effectively. So while on the surface the industry seemed extremely successful with dramatic growth up to its apex in 2007 of \$184 billion in sales, according to life insurance research group LIMRA, the reality was, the entire risk structure was faulty and, in hindsight, extremely sensitive to a severe bear market.

2008 was such a market. The financial crisis exposed the complex, material risks embedded within the VA platform—seemingly hedged portfolios took on massive losses due to basis, correlation, interest rate, policyholder behavior and other risks not completely hedged. The industry reported billions of dollars in losses, causing a number of issuers to either significantly curtail or close VA programs. Senior management re-assessed programs as the pendulum swung from sales and marketing to a focus on risk management and balance-sheet preservation. As a direct result, sales in 2009 sank to \$129 billion, a 30 percent drop from its high just two years earlier.

Exacerbating the now conservative risk approach of the insurance companies is the financial market environment of artificially low rates and volatility due to federal government programs in place that are just now starting to unwind. Between the low yield and risk environment, it has become harder than ever to provide meaningful returns to policyholders who in many cases are relying on insurance products to maintain their lifestyles through retirement.

### OUT OF THE ASHES COMES INNOVATION: STRUCTURED-NOTE ANNUITIES

Historically, this sort of market displacement and environment, while difficult in the short term, eventually results in innovation and growth. The insurance companies' challenge has been to manufacture compelling products given the low-interest rates and a new emphasis on risk containment. A SNA (e.g., AXA's Structured Capital Strategies or MetLife's Shield Level Selector) is one of the innovations taking form and finding a level of early success.

The structured note (aka equity-linked note) was first created by the banking industry in

*the primary market for structured notes in the bank channel is high-net-worth individuals purchasing through their advisers, primarily within the wirehouses and private banks.*

the late 1980s and became a popular retail product in Europe during the '90s and then in the United States in the first decade of the 21<sup>st</sup> century. While it is difficult to fully size the current U.S. structured-note market, estimates of around \$100+ billion in annual issuance are reasonable (divided between shelf registered notes, structured CDs, privately placed notes and 3(a)(2) programs, which allow foreign banks to issue unregistered structured notes stateside with certain preconditions). More importantly, the industry has been growing, surpassing its pre-2008 highs.

The primary market for structured notes in the bank channel is high-net-worth individuals purchasing through their advisers, primarily within the wirehouses and private banks. Bank of America and JPMorgan Chase and Co. are among the largest issuers and

distributors of the product, which is typically based on the S&P 500. More recently, there has been a push by issuers and third-party wholesalers to expand the market into the Independent Broker Dealer and Registered Investment Adviser space. While some of the simpler structures have application to the broader market, regulatory concerns in regard to complexity and the vehicle being more of an over-the-counter (OTC) product have resulted in limited access for the general investor.

Structured notes are a natural complement to the insurance franchise from a structural and an offering context. The vast majority of notes offered by the banks have a one-

to three-year term. At the end of the term, there is a tax event. By placing notes within an annuity or a variable life policy, investors would be able to roll potential gains into the next structured investment and thereby take advantage of one of the major features of insurance vehicles when used for long-term investing: tax efficiency.

Additionally, structured notes have compelling risk characteristics for the insurance complex. Unlike funds, structured notes are both term dated and derivative (i.e., easily hedged through the derivatives market). Due to these characteristics, there is a defined outcome at maturity eliminating basis risk and therefore allowing for more effective hedging as compared to hedging an actively managed mutual fund position. Furthermore, by providing the option of

partial protection, the insurance company is able to pass some of the downside risk on to the customer.

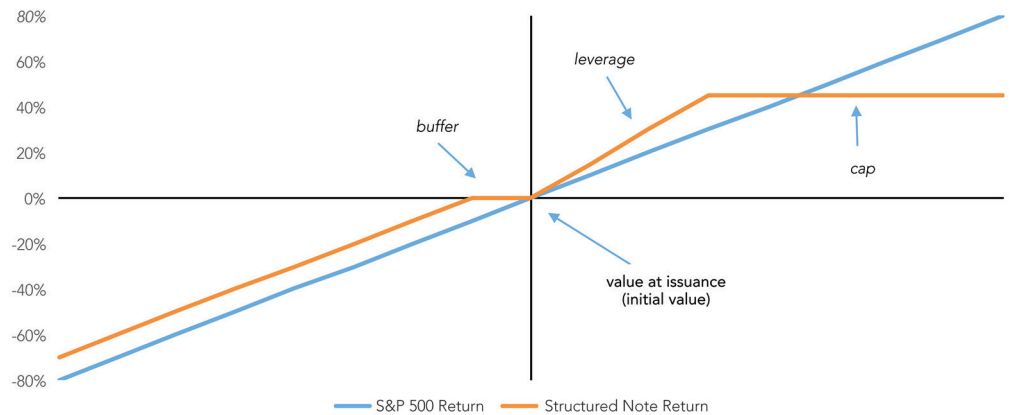
**WHAT IS A BANK-ISSUED STRUCTURED NOTE?**

A bank-issued structured note is a senior unsecured debt obligation of a major bank whereby in place of the expected yield based on the term of the paper and issuer, it is based on a formula tied to a particular index, security or group of indexes and/or securities.

As mentioned earlier, due to low rates, a current FIA with a minimum guarantee of 0 percent either has to have a low cap on returns, like 5 percent, or a low participation rate, e.g., 50 percent of the upside index movement. By lowering the minimum guarantee to -15 percent, it allows the cap to move higher. The combinations of floors, caps and participation rates among other building blocks borrowed from the structured-note industry are limitless.

Illustrating a buffer (see illustration at top of page) through an example: JPMorgan Chase might issue a three-year note on the S&P 500 where the investor is protected for the first 10 percent downside move in the S&P 500 and receives 150 percent of the return of the S&P 500 up to a maximum gain of 45 percent. This is a similar product to what AXA and MetLife utilize within their SNA programs.

**10% Buffer, 150% Leverage, 45% Cap Performance at Maturity**



The investor matches or outperforms in bear, neutral and slightly bullish markets but underperforms in strong bull markets.

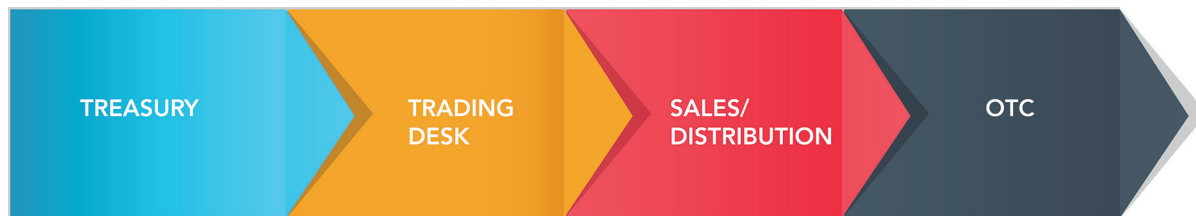
**THE PROCESS OF CREATING AND SELLING A NOTE**

The bank structures (and also hedges) the note by using the yield provided by the treasury desk to purchase and/or sell the necessary derivatives that result in the characteristics of the note. One can synthetically create the same product by purchasing three-year JPMorgan Chase paper (or Credit Default Swap), selling a three-year 10 percent out-of-the-money (OTM) vanilla put on the S&P 500, purchasing 1.5 at-the-money (ATM) vanilla calls and selling 1.5 30 percent OTM

vanilla calls (the calls together would be considered a call spread). Fees are also embedded in the note.

Below is an example of a relatively simple structured note. These products can become quite complex in their construction and payout features.

The compelling characteristic of a structured note to the investor is its customization. A structured note allows the customer to tailor an investment to their particular risk/reward parameters. Between technology and the growth of financial engineering, capital markets should be able to offer extreme investment customization in an ever-increasing efficient manner.





The downside of structured notes and a potential reason the industry is not significantly bigger is the credit/counterparty risk, and issues with liquidity,

Another potential area where the insurance complex has an edge over the bank is in the perceived advantage from a credit/counterparty risk perspective. Insurance policies were deemed

Issuing banks have the capability to offer almost any conceivable product utilizing the derivatives desks within capital markets. As investors demand more customization, insurance companies should think strategically about what level of customization is optimal given the subsequent costs and complexities. Technology investments may be key to offering product flexibility in a cost-effective manner and to maintain hedge effectiveness. The best way for the insurance industry to maintain its advantages would be to learn from the structured-note industry's mistakes (potentially opaque market practices, issues with agents misleading investors and a lack of industry standards in the face of focused attention from the regulators, namely the U.S. Securities and Exchange Commission and the Financial Industry Regulatory Authority) and look to mitigate other issues holding back the potential growth of the industry. At the same time, the industry is well positioned to expand its capabilities and effectively go head to head with the banks on additional strategies.

*The success of target-date funds and other strategies have helped educate investors that the most important decision most of them will make is the size of their equity allocation.*

transparency and efficiency due to its opaque over-the-counter nature. These are areas the insurance complex should be sensitive to as it develops its programs, as it will provide an advantage in competing with the banks.

safe through the financial crisis as policyholders benefit from both state guarantee funds and by ranking higher in the capital structure than debt holders. Current structured-note investors are now sensitive to issuer risk given the demise of Lehman Brothers and the effect on billions of dollars of structured notes that became nearly worthless overnight.

**CAN INSURERS EFFECTIVELY COMPETE WITH BANKS IN THE STRUCTURED-NOTE SPACE?**

A material advantage the insurance complex has over banks regarding potential structured-note offerings is its tax-advantaged products. Tax-deferred annuities and tax-free death benefits allow investors efficient tax treatment on investments while providing the insurance company a better hold on investor assets as compared to the banks. Terms of equity-linked notes tend to range from one to three years, resulting in capital gains or losses taken every few years. Furthermore, once the term is over, banks need to compete to retain the client's capital in the form of a note or other bank product. Both of these issues are mitigated within an annuity and life structure. Furthermore, annuities allow investors to transfer longevity risk to the insurer by converting their investment into a lifetime annuity, a feature not available in the bank offering.

However, the insurance complex currently falls short of the banks in two areas. First, while the structured-note market is not known for its liquidity, it does allow the investor to exit a product at any time. The current insurance offerings typically impose a surrender charge if the policyholder wishes to exit the investment in the early years of the policy.

Second, the industry currently provides a limited set of investment strategy choices.

**FUTURE USE AND EXPANSION WITHIN THE INDUSTRY**

These are early days for the insurance complex in regard to structured notes. And the jury is still out on how successful these products might become. The strategies offered by just a handful of providers are the most basic of those provided by the banks

**Fun Fact**

**BENJAMIN FRANKLIN** left the cities of Boston and Philadelphia an annuity in his will. The Boston annuity continued to pay out until the early 1990s and only discontinued due to Boston electing to take a lump-sum distribution of the remaining balance. The will is a testament to Franklin's grasp of the power of compounding interest well before the advent of the HP12C. Read more at <http://sln.fi.edu/franklin/family/lastwill.html>.



## Select Popular Building Blocks from the Structured-Note Industry

**BUFFER:** A fixed level of protection down to a specified level. For example, a 10 percent buffer would result in the protection of the first –10 percent move in a security or an index, the reciprocal of a floor.

**BARRIER (AT MATURITY):** A *contingent* level of protection down to a specified level. For example, a 10 percent barrier would result in the protection of the first –10 percent move in a security or an index as long as the index finishes at maturity above –10 percent (e.g., index down 15 percent results in a 15 percent loss, down 8 percent results in no loss). In other words, this protection disappears, or knocks out, once the specified level is surpassed.

**DIGITAL:** A *contingent* level of yield whereby as long as a specified yield is surpassed, the investor receives the yield. This is also known as a binary. For example, there is a yield payment of 10 percent only if the S&P 500 closes above 1900. MetLife offers a variation within their Shield Level Selector program.

In conclusion, structured notes represent a compelling retirement solution for the masses while allowing effective hedging and balance sheet usage for the insurance complex. It is a win-win situation with real potential. It will be interesting to see how the industry further innovates and takes advantage of a compelling investment structure to turn what is currently a niche offering by a select few into a home run for the entire insurance complex. **A**

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and are only offered in an annuity. These early movers are also simply offsetting the positions created with the customer directly with the capital markets of the banking complex as opposed to analyzing more efficient methods that might be beneficial for other areas of the insurance complex.

Yet, the seeds for a large potential market have been planted. As illustrated above, the insurance industry can more effectively compete with the banking industry in a significant and growing market, representing potential for dramatic annuity growth (internationally, the structured-note industry is tremendous, with an estimated \$2 trillion in global Assets Under Management). At the same time, the insurance complex can expand these structures to other business areas. For example, variable life, as mentioned

above, is yet another potential vehicle that can provide tremendous advantages to the structured-note investor due to potentially tax-free death benefits.

The development of structured-note annuities is also timely in relation to broader investment trends. Financial advisers have transitioned from stock pickers, to active fund allocators, to beta managers. The success of target-date funds and other strategies have helped educate investors that the most important decision most of them will make is the size of their equity allocation. Structured notes give investors an incredibly efficient tool to modify their beta based on changes to finances, family, personal goals or outlook. Insurance agents are the only planners who can have this strategic conversation with their taxable clients, and then have tax-efficient vehicles to implement their clients' plans.