

Deconstructing Structured Products

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More and more, we hear alternative investment managers say “We are doing a structured product with XYZ Bank.” Upon taking a closer look at the ins and outs of the structured business, we discovered that there is very little centralized information available. Herein we offer an outline as to what structured products are, who is making them available, and what investors should be aware of when putting a deal together.

Fundamentally, Structured Products most often include a fixed income element which serves to protect investors’ capital, combined with an equity or absolute return generator which can enhance the upside of the investment. The most basic advantage of this combination is that investors who hold their positions to maturity can participate in more volatile asset classes without risk to their principal. This presents an attractive alternative to a risk-averse investor.

While the return generator for a structured product can be as simple as the S&P 500 index, it is the alternative investment community which currently carries much of the performance enhancement responsibility for these investments. There are a variety of reasons for this. First, the heart of the alternative investment industry is built on expertise in derivatives, which often play a big role in creating structured products. Second, as alternatives seek to gain entrance to an investor’s portfolio, placing these strategies within an accepted traditional structure provides a bridge to broaching the mainstream. Finally, as a performance generator, the absolute return construct of many alternative strategies provides diversification opportunities and return potential few traditional strategies can match.

Two Major Types of Structures

To the alternative investment community, structured products define a number of investment mediums that fall into one of two types. First is a simple ***zero coupon strategy*** that guarantees the principal of the investment at maturity, and offers a return based on an alpha provider. In figure 1, we have diagramed a simple flow of funds.

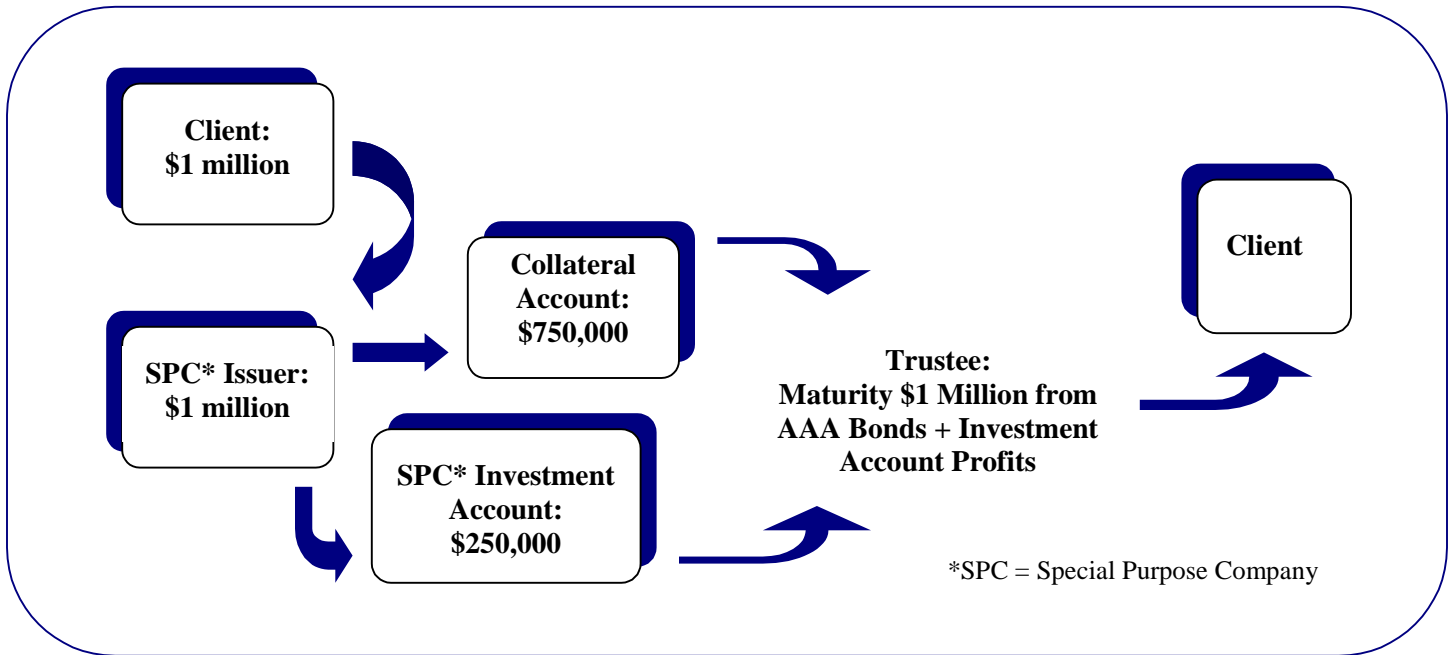


Figure 1

The most basic principal protected products look like this. While this configuration is pretty standard, each of the components can be changed to fit the investor's criterion. For example, an investor puts \$1 million into a special purpose company (SPC) that is divided into two parts. First is a zero coupon bond that sells at a discount. For our example, we bought AAA US Treasury Zero Coupon bonds with a 5-year maturity at 5.92%. The discount or unused portion is used to fund the alternative investment generator. This portion may or may not be levered depending on the risk profile the client is seeking. The SPC is set up to isolate the bonds from the trading vehicle, on the premise that if the trader loses more than the discounted value, the bonds cannot be used to pay debts incurred by the trading losses. Quite often, the value of the zero coupon bond will be provided for through a bank letter of credit (LC), where the bonds are not actually purchased until the proposed net present value (or stop-loss) line is breached. If the trading portion is lost, trading will terminate and the investor will have to wait until maturity to get back his original investment.

Any variations to this theme traditionally manifest themselves in 4 different ways:

- 1) the type of bonds used for the guarantee
- 2) currency base for the collateral portion of the alpha generator
- 3) the investment strategy used as the alpha generator
- 4) substitution of a zero bond purchase or LC with a synthetic bond (option strategy).

The other type of structured product can be referred to as a *leverage facility*. In this scenario, a bank may assess the risk characteristics of the alpha generator and then lend or offer the client leverage against it. Typically, a bank will assess the risk of the portfolio and then allow the pool operators or fund of funds to lever up the pool, increasing both the risk and reward characteristics. Because the bank assumes lending risk, they may place a risk control measure on the portfolio to prevent a portfolio meltdown. While this transaction can be covered by a simple option or swap, financial engineering and transparency become a major issue for the lender to cover their risk at a competitive price.

Like the Zero Coupon based strategy, the swap or leverage facility can take on many different twists. Since there is normally no public pricing of these vehicles, the price charged by the structurer can vary greatly. Typically, the more complex or unique the strategy, the costlier it will be.

Demand Drivers for SP

So why buy, or for that matter, why sell a structured product? The motivation varies for each investor. Institutional investors such as insurance companies and pension funds desire structured products as a way to include alternative investment strategies into their portfolios under the structure of a fixed income investment. Benefits for the institution might include tax deferrals, portfolio diversification, or a desire to take advantage of the latest in financial engineering.

Some retail investors, who are often shielded from directly investing into hedge funds and CTAs, like the idea of owning a speculative investment where their principal is guaranteed for a specific term. In Canada, for instance, The Bank of Montreal issued CDs that swapped the relatively low and stable bank CD rate for the potential of a higher variable rate based on an underlying portfolio of CTAs. This product was simple, appealing, and quite successful in terms of marketing alternative investments on a retail level.

In the States, regulatory hurdles remain as roadblocks for institutions and retail investors alike. On the retail side, only qualified investors are allowed to participate in CTAs and hedge funds, and institutions seeking to import Alternative Investments through a structured product have run into clear regulatory roadblocks.

The Impact of SFAS 133

In an effort to define fair value of all financial assets and liabilities, the Financial Accounting Standards Board (“FASB”), has recently issued a Statement of Financial Accounting Standard No.133, *Accounting for Derivative Instruments and for Hedging Activities* (“SFAS 133”). According to Christopher Bianucci, Senior Manager at Arthur

Please note that this is not an exhaustive list of products or services providers. It should also be made clear that in some institutions, the product line is rapidly evolving and their services may not be centralized.*

Though each particular structure and deal has its own character, many share similar benefits and drawbacks.

While straight zero coupon strategies may not be able to provide the same amount of working capital as option strategies, a benefit is their flexibility to guarantee capital with different grades of investment paper, depending on the needs of an individual investor. In addition, creative structurers will develop a means of freeing up more working capital.

“Instead of a plain zero coupon strategy, we will use a zero coupon swap with a letter of credit,” says Aleks Kins of Credit Agricole Indosuez (Carr Global Advisors). “Then we can put 100% into trading from day one. From there, we can lever up based on the riskiness of the alpha generator.”

Like CAI (CGA), the distributor of the structured notes will generally decide on the appropriate levels of leverage for the alpha generator, as to properly fit the needs of their target market.

One popular options strategy will use a note to guarantee the principal and imbed a long call that will guarantee a percentage of the upside of the return generator’s performance. This tactic combats the effects of de-leveraging during drawdowns, which is what prevents many structured products from guaranteed returns. If there is an early and long portfolio drawdown followed by a sharp rally, for example, the product will be de-levered and will only realize a small part of that rally because most of the assets will be in the guaranteed reserve.

Options strategies can have the advantage of being able to provide more working capital than a straight format zero-coupon strategy. The options trader is taking risk to defend the targeted drawdown levels and has the ability to de-lever the fund, if necessary. In this case, it is important for the investor to be vigilant as to how the structurer is being compensated for taking on the risk.

The different absolute return generators have their own set of benefits and drawbacks. Managed Futures products offer easier access to managed accounts. This ultimate *transparency* allows the risk manager/investor to see the actual positions, marked to market daily. Though a hedge fund of funds may provide more diversification, many hedge funds are reluctant to provide the degree of transparency available to an investor looking for a managed account. Because structurers often measure the risk of the portfolio both on an individual manager level and on a portfolio level, they often demand

to have a separate managed account with a manager for accurate risk control. *Flexibility* is also an issue. We found that some structurers restrict the pool operator from changing managers because it changes the risk characteristics of the portfolio; if they do allow it, there is often an additional fee charged which ultimately gets passed along to the investor.

Thomas Graham of Zurich Capital Markets finds that “Currently, the most popular products *are principal-protected notes linked to hedge funds*. These are popular among investors in low interest rate environments who receive enhanced returns on their fixed-income portfolios, as well as investors who are beginning to enter alternative investments.”

Graham notes that choosing a single hedge fund as an alpha provider in lieu of a fund of funds requires extra vigilance, not only in terms of transparency, but in liquidity as well. In fact, many structurers who also act as distributors are wary of marketing single manager, high volatility notes because the risk of stop-out is so high.

Like any investment that involves alternative strategies, Structured Products are all susceptible to *drawdown risk* from the absolute return generator. With Structured Products, however, this risk is particularly apparent during early stages of the investment. Because investment capital is guaranteed, Structured Products cannot sustain large drawdown levels without stopping out, in which case investors are left waiting for their principal to return with no hope of those once dreamed-of high variable returns.

Factors in Assessing SP

Fees can vary dramatically from one product to another, depending largely on the degree of risk assumed by the structurer. These can range from a flat percentage rate to assuming a share of the upside. Regardless of the fee structure, experienced investors in Structured Products warn that transparency can be an issue in fee arrangements. The complexity of some deals can mean hidden costs.

Virginia Parker of Parker Global Strategies, an experienced participant in Structured Products, notes that even with the guarantees of a principal protection structure investors should proceed with careful due diligence.

“Certainly, part of the due diligence process should always be to *speak with other clients*,” Parker said. “With this segment, too, it’s important to make sure that the entity you’re working with is committed to the structured products business and not just dabbling.”

Researching this article has shown us that there are various levels of commitment and transparency, and that there is of course, no free lunch. The real treat here was finding

some of the world's best financial engineers hard at work finding ways to outsmart the regulators and thus gain shelf space for alternative investments in the global financial supermarket.

**For more background on the strategies and providers section, please contact Rian Akey at rian@colepartners.com.*