Structured Product Investments

An integral part of the Portfolio Asset Allocation and Diversification story

In this article , we take a detailed look at a non-traditional investment strategy: **Structured Products .....**

- What are Structured Products?
- Is there a market for Structured Products?
- Is there a coherent investment rationale for such products?
- Should Structured Products form part of an investor's portfolio asset allocation?

What are Structured Products?

Structured Products can be loosely defined as investment products where the return is linked to an underlying asset with pre-defined features (maturity date, coupon date, capital protection level ...). They belong to the range of products with 'non-traditional' investment strategies. A Structured Product can be seen as using three main components:

1. A medium-term note, bond, certificate
2. One or more underlying assets
3. Financial instruments linked to these underlying assets (the derivative strategy)

The Note Bond component

Depending on the investment objective of the structured product, the interest generated by the "Note" component is used to buy the "derivative strategy" part and:

- either provide the capital guarantee; redemption of the invested capital at maturity is thus guaranteed by the issuer unless the issuer defaults.
- or improve the return on a non-capital-guaranteed product.

The capital guarantee or protection is provided by the issuer or its guarantor, except in the case of default. It is therefore essential to check the quality of the rating attributed to the issuer by credit rating agencies.

Capital protection scenarios/ Options can include:

Full: 100% capital protected at maturity date e.g. 5 years... 6 years ... 7 years ... 10 years.
Partial: e.g. 90% capital protected at maturity.
Conditional: capital is protected at maturity date as long as the underlying investment has not fallen by more than a pre-determined barrier level e.g. 40%.

The Underlying Component

The underlying asset can be stocks, index of stocks, government bonds, corporate bonds, country's credit risk, corporate credit risk, index of credit risks, currency, crypto currencies, exchange rate, real estate, oil, gold, energy, funds, mortgages, asset backed securities (credit card, student loans etc), in fact, exposure can be anything if an active market of buyers and sellers exist.

HOW DOES IT WORK?

Consider a structured product that aims to return the initial investment at maturity i.e. 100% capital protected plus an interest payment (coupon) linked to the performance of an underlying asset, i.e. the EuroStoxx 50 index, over a 5-year period.

For example: For every €100 invested an amount, say, €90 is placed into an instrument (usually a note or bond) which pays a set return which produces a return of €10 over the 5-year period. This €10 is added to the €90 at the end of the period to give the €100 i.e. 100% capital protection.

Therefore, from the original €100 there is a residual €10. From this amount, let us say approximately €3 is taken out in fees leaving c €7 remaining to buy an "option"which provides the exposure to the underlying index or market which then produces the return on the product. In this example, let us assume the product provides 100% participation in the underlying EuroStoxx 50 index and that the index produces a return of 30% over the 5-year period. The outcome in this case - the structured product will produce that same return i.e. 30% which is then added to the capital to return 130% of capital to the client over the investment term of 5 years.

This is a simple example but this basic concept of combining a fixed income instrument (a note or bond or certificate) with an option which gives exposure to the underlying asset is central to all structured products.

The Derivative component

The “derivative strategy”, usually comprising options, is of paramount importance in the construction of a structured product. Most of the time it is what determines the level of return. The choice of derivatives will depend on:

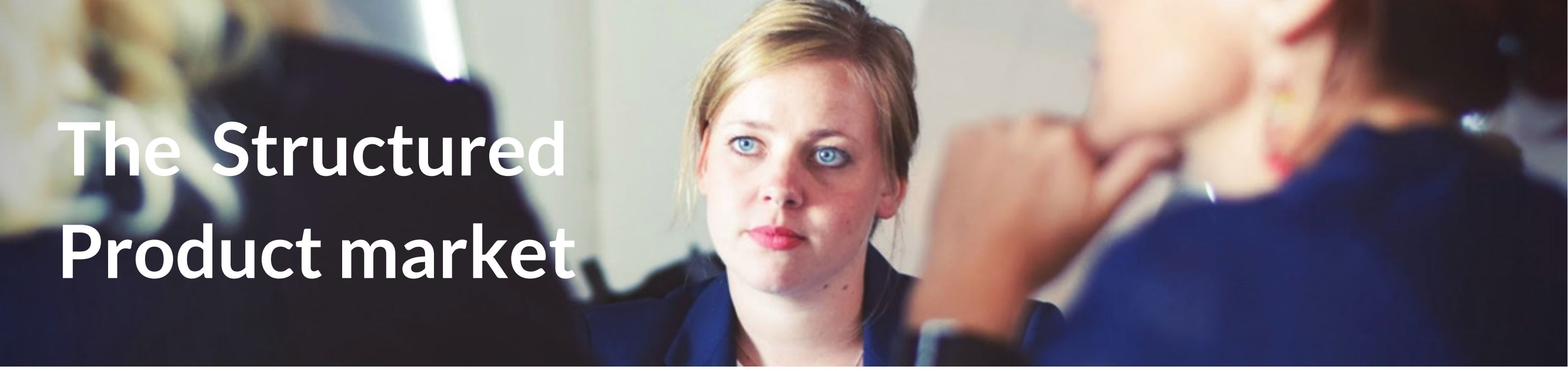
- the desired risk level for the product (capital protection or not),
- the preferred investment horizon,
- the type of return and exposure sought, and market conditions.

Every strategy, from the simplest to the most complex, is based on the use of derivatives, most often in the form of options.

Structured products are usually issued by the financial institution (issuer) and usually have a senior unsecured debt rank within its capital structure. If the issuer defaults, investors will be treated similarly to an investor who bought a senior unsecured bond guaranteed by the bank. The performance of the underlying asset is irrelevant at this stage.

Under normal market conditions the primary risk for the investor is the performance of the underlying asset. Therefore, knowing what moves the asset up or down and how the value of the structured product could change to these moves, is important. Once educated by their financial adviser, investors realise that structured products, despite being labelled as complex, can and do offer better risk adjusted returns.

Structured products are designed to provide retail investors with opportunities to access and participate in financial markets in the same manner as institutional investors e.g. pension funds, asset managers, hedge funds etc. Structured products are a large global industry and an important part of investment and capital global market activity. Nowadays, structured products are well established in most countries and are no longer manufactured just by banks or financial institutions.



The Structured Product market

The $7tn structured products market is sizeable to say the least. While structured products account for only 1% of the $700tn derivatives market, structured products still outsize the total ETF market ($5.3tn) and more than double the total hedge fund market ($2.9tn)*.

In an environment when ultra-low interest rates – negative benchmark yields in many cases – and declines in capital guarantees are driving investors to ever more exotic products and more risk taking in search of yield, structured products are providing dependable returns.

Structured products offer a range of benefits that make them attractive to both institutional investors – who make up the lion's share of the market – and the retail sector, with which the assets are often most closely associated. Chief among them is the ability to customize assets to an individual investor's expectations and risk appetites.

*Source: "Sure time to grasp the potential of structured products", Bloomberg, October 16, 2019. Karim Faraj and Abdessamad Khaled

Investment Rationale

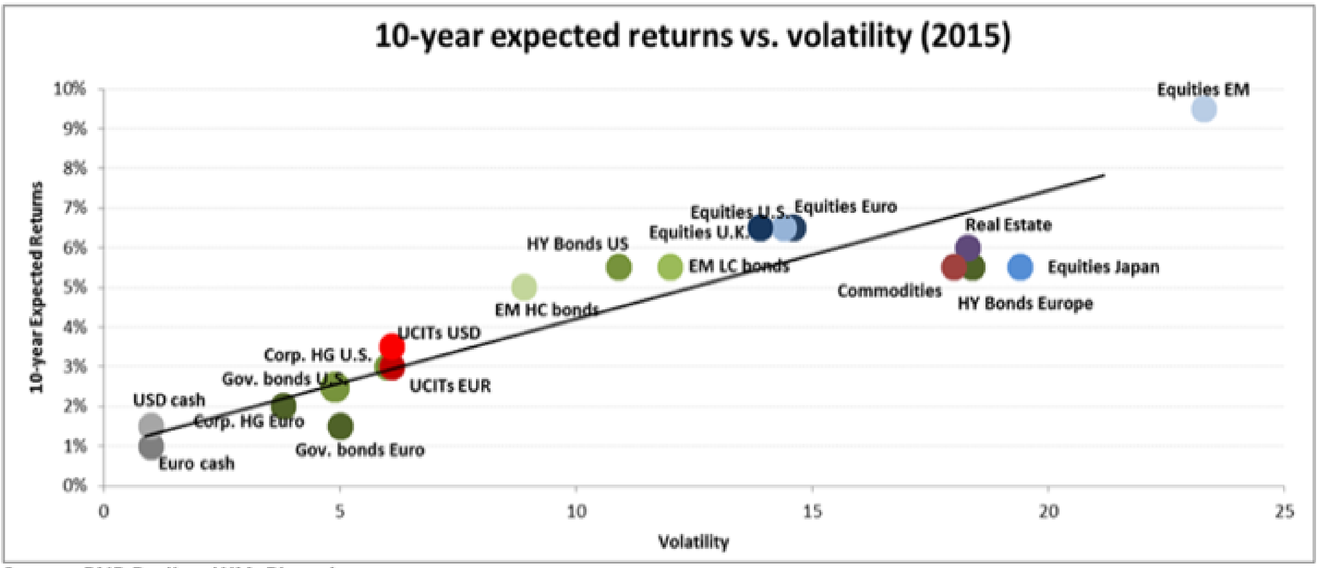
The investment environment for the next ten years is likely to be characterised by lower nominal returns than over the past number of decades .

Asset Class	10 Year Future Returns Estimates	10 Year Historic Return (per annum)*
Global Equities	6.0%	8.7%
Developed Market Government Bonds	1.6%	8.0%
Investment Grade Corporate Bonds	2.6%	8.3%
Commercial Property (Prime Europe)	6.1%	8.0%
Liquid Alternatives (Absolute Return)	3.6%	n/a
Inflation	1.7%	n/a
60/40 Equity/Govt. Bond split	4.2%	8.4%

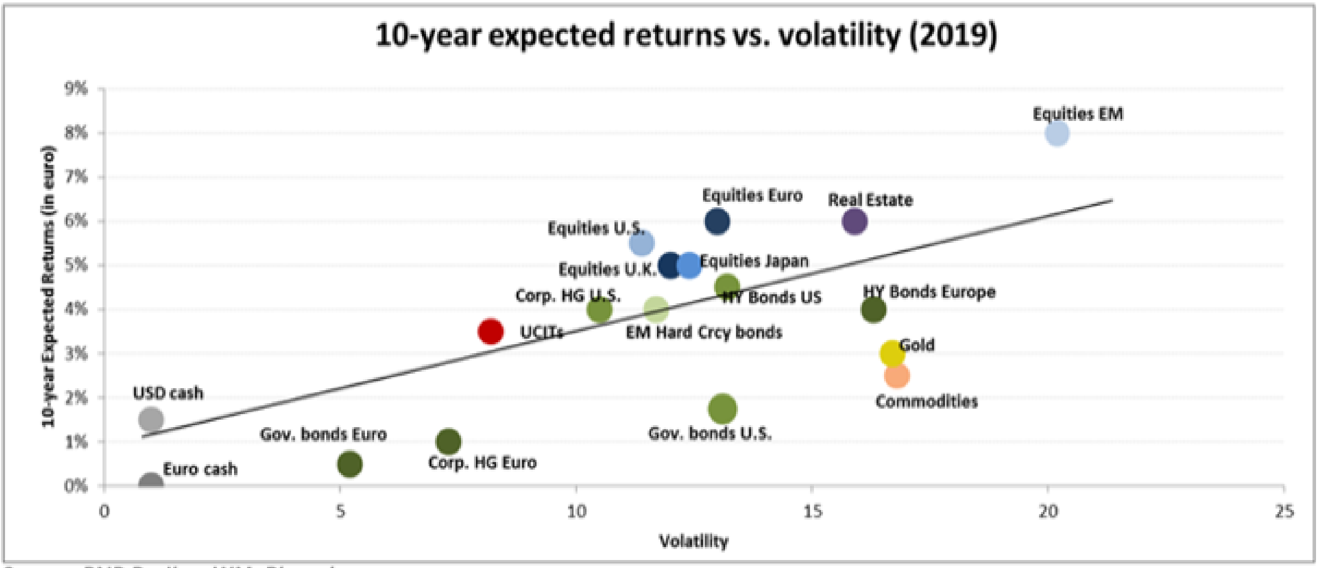
Source: Bank of Ireland Investment Markets, Moodys Analytics, December 2019
US Government Bond Historic return from Citi USBIG 7-10 Year Treasury Index
US Corporate Bond Historic return from Citi USBIG Corporate Index
Historic Global Equity returns, source Morgan Stanley Capita International (MSCI)
Historic Property returns from combination of CBRE Prime EU-15
Capital Value and Rent Indices Q2 2008-Q2 2018
With regard to the historical return projections column, thes figures are indicative over a 10-year period and are based on an average 10-year vintage for respective indices.
NB: These figures are estimates only.

Investment Rationale

In the graphs below – we also take a look at 10-year expected returns vs volatility for the periods 2015 -2025 and 2019 to 2029 :



Source: BNP Paribas WM, Bloomberg



Source: BNP Paribas WM, Bloomberg

•In this environment it will be very challenging for advisers to build portfolios which will deliver to client expectations.
•Either clients will have to accept lower aggregate returns or advisers will have to look further afield and be more creative (more risk!) in building portfolios.
•A typical 60/40 equity/bond portfolio is estimated to deliver circa 4% - 5% per annum nominal returns over the next ten years.
(Source above Bank of Ireland Investment Markets / Moody Analytics December 2019)

The use of Structured Products in Portfolio construction – Theory and Practice:

In this section we look at recent research undertaken by Tiago Fernandes and his recent White Paper published in November 2019: *The power of Structured Products correlation in a passive portfolio:*

"When looking at the correlation of structured products with other asset classes, we reached two conclusions:

- **Compared to fixed income** (in this particular case, 10-year US Treasury bills), there is a negative (but almost no) correlation between these two asset classes. Although structured products have a fixed income component, their behaviour is much closer to that of equity markets.
- **Compared to equity** (in this particular case, the S&P 500 index), the performance of structured products is positively correlated, but only on 25%. This means that although they move in the same direction as equity markets, structured products performance is not strongly correlated with them.

Therefore, as an asset class, structured products provide a higher level of diversification due to their different payoff profiles. As most structured products sold in the US market are yield enhancement products, where investors obtain a higher return as long markets are stable or bullish, this means that their usage can provide more diversification even in a passive portfolio".

Correlation between structured products and other asset classes (Jan 2007 to Feb 2019)

	SP's	S&P500	10Y T-bill
SP's	1		
S&P500	0.2548	1	
10Y T-bill	- 0.0187	-0.1004	1

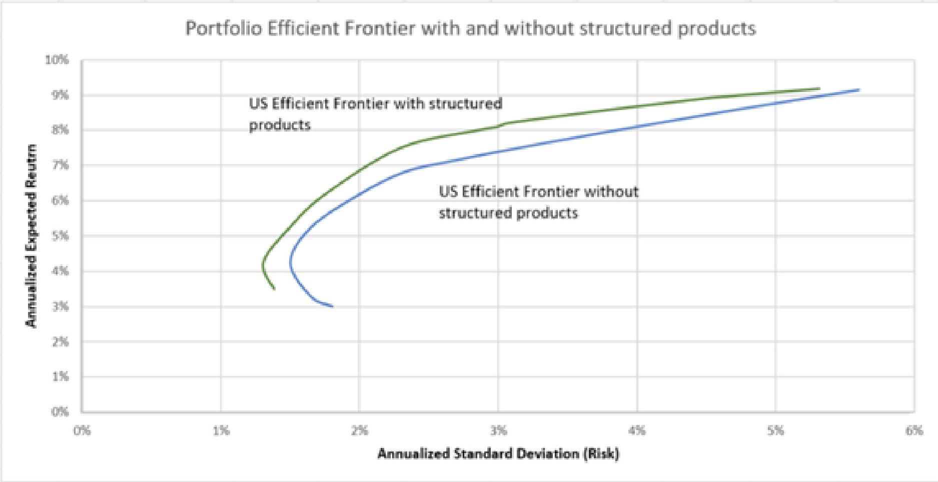
Source: www.StructuredRetailProducts.com, Ycharts and NYU

As Modern Portfolio Theory (MPT) is used to determine optimal portfolios that offer the highest expected return for a predefined level of risk, we compared an efficient frontier, using historical data between 2007 and 2019, that could invest in equity (10 different assets), fixed income (six different assets), others (two different assets) and structured products (one asset class).

We then created two different scenarios: one without structured products (17 assets) and another with structured products (18 assets). Looking to both efficient frontiers, we found structured products improve the Sharpe ratio for US investors.

SEASPRAY PRIVATE
Creating Investment Solutions

Source: Tiago Fernandes



To demonstrate the practical implications of structured products in a portfolio, we simulated a series of different risk profiles, from risk averse (minimising the risk that investors are willing to take) to appetite for risk. Using the historical performances of the different asset classes, we concluded that risk-averse investors are the ones who should be using structured products as an asset class. Although we are including different types of structured products, applying the MPT tells us that a risk-averse investor should have 20% of their portfolio invested in structured products.*

*Source: Tiago Fernandes, Structured Retail Products, a division of Euromoney Global Limited

An integral part of the Portfolio Asset Allocation story?

Our conclusion!... The argument for an allocation to Structured Products in portfolio construction is compelling. In addition, the use of Structured Products within the overall portfolio asset allocation mandate can provide better risk adjusted portfolio performance.

At Seaspray Private, we believe as investment solutions in their own right, structured products represent an original and effective alternative to the usual financial investments. They offer solutions that are creative and opportunistic and can be adapted to the needs of each investor, for example in terms of strategy, risk/return profile, maturity, or the amount to be invested. They enable investments in a wide range of underlying assets (equities, interest rates, foreign exchange, indices, commodities ...) and offer various redemption possibilities.

Indeed, they can be structured to provide real returns for investors in flat or falling markets – no positive performance required.

Structured Products can therefore provide tailored solutions in line with a specific strategy in all market configurations. Whilst they are a useful tool for portfolio management and risk control, they are nonetheless very sophisticated. This sophistication is needed to meet the specific requirements of investors who each have their own investment profile and market knowledge and seeking to match investment needs and wants:

- **Protection**
- **Income**
- **Growth**

Structured Products are hence bespoke, tailor-made solutions that can be adjusted to different market conditions and that entail different risks, which must be monitored. As a conclusion, we can define Structured Products as integrated product solutions, which can provide your portfolio with efficient diversification and an integral part of the Portfolio Asset Allocation and Diversification story.

Warning: Past performance is not a reliable guide to future performance. **Warning:** The value of your investments may go down as well as up. **Warning:** If you invest in these products you may lose some or all of the money you invest. **Warning:** These products may be affected by changes in currency exchange rates.

SEASPRAY PRIVATE
Creating Investment Solutions

+353 65 6710 507 | www.seasprayprivate.ie | Main Street, Quin, County Clare, V95E8N4, Ireland