

Weekly Analysis

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OPTIMIZING AN INVESTMENT STRATEGY WITH STRUCTURED PRODUCTS

SMART BRC+ Yield enhancement : a BBGI concept focused on the use of BRCs

Key points



- A brief overview and classification of structured products?
- Institutional and private investors increasingly convinced
- The 3 main forms of structured products
- Demystifying supposed risks
- Flexible instruments for all types of markets
- How to assess their effectiveness?
- SMART BRC+ Yield enhancement : a BBGI concept focused on the use of BRCs
- An alternative to bond investments?

A brief overview and classification of structured products?

Structured products may appear complex, but their popularity has grown over the last few decades, thanks to their ability to respond precisely to investors' needs and market expectations. Legislators generally consider structured products to be a specific asset, and include them in a typology that classifies non-traditional investments into a category often referred to as alternative investments. This includes virtually all assets other than cash, bonds, equities and real estate. In OPP2, in Article 53, « Permitted investments », structured products are included among « claims that are not listed in para. 1, let. b, d bis or d ter, are treated as alternative investments, in particular claims that are not denominated in a fixed amount or whose full or partial repayment is linked to conditions... ». The structured products are also explicitly mentioned as a type of financial product that falls into the category of alternative investments (Art 53 al4). Structured products often offer de facto bond-like features with certain risk and opportunity characteristics linked to another asset, defined as the underlying asset. Like bonds, they incorporate a credit risk, a coupon or a predetermined

profitability structure linked to the underlying asset. Convertible bonds, which have long been well known to institutional and private investors, also incorporate the concepts mentioned above, by offering a return linked to the performance of a share, for example, under certain conditions. Bonds with options linked to inflation or gold, for example, have also long been part of the universe of investments considered by many investors as simple bonds. Art. 53, par. 1, let b, point 4 of the OPP2 simply classifies « bonds, including convertible bonds or bonds with option rights », although from a technical point of view the distinction with certain structured products is not obvious. In the case of structured products, the link with an underlying asset also exists, and can expose the investor to some or all of the upside potential, as well as some or all of the downside risk, in exchange for a coupon that is often significantly higher than the short-term market rate. In practice, many investors see structured products as extensions of their specific asset class strategies, and view them as sub-segments of their underlying asset class. For example, an equity-linked structured product could be considered as potentially forming part of an investor's overall equity allocation in order to estimate the overall exposure to equity risk over the life of the product, and in particular at maturity if the structured product were to lead to the receipt of securities instead of repayment of the note. The same would apply to equity convertible bonds.

Institutional and private investors increasingly convinced

Over the past few years, institutional investors have significantly increased their allocation to real and non-traditional assets, with the main aim of improving risk diversification and maximizing returns on their strategies by integrating real estate, private debt, commodities and structured products. It then became clear that diversification into a wider range of asset classes, with little or no correlation with equities and bonds, could improve the risk-return profile of their investment policies. Recently, when it comes to asset allocation, 60/40 (bonds/equities) or 40/60 strategies have once again proved ineffective compared to better

diversified strategies. In 2022, strategies incorporating non-traditional assets, such as commodities and fully decorrelated structured investments, were more likely to outperform these strategies. In recent years, institutional investors have gradually included structured products among these non-traditional assets, not least because of their direct absence from the two main asset classes (bonds and equities) that often represent the core of their long-term investment policy.

The many advantages of structured products have thus overcome the main drawback initially mentioned, namely the absence of a specific benchmark, suitable for all forms of structured products, which can be used for comparison and trajectory control purposes. For this reason, it is difficult to integrate structured products into a classic optimization model based on historical data, which can be used to justify the optimal allocation for a given return or risk objective. The introduction of structured products into an investment policy therefore generally follows a pragmatic approach on the part of investors. They integrate them into their diversified investment policy to meet specific needs in terms of flexibility and tactical vision, taking into account elements linked to their time horizon and risk appetite. The integration of structured products must be based on a sufficient understanding of the dynamics of the products chosen. We'll see later that their characteristics and objectives can be very different, and correspond to different needs.

Diversification between different forms of non-traditional assets can be strategic or tactical, with the merits of the various categories varying according to the objectives set and the expected evolution of the economic and financial environment over the coming years. An environment of rising interest rates, for example, is generally unfavorable to investments in private equity or venture capital, and conversely particularly favorable to investments in commodities, all of which are considered alternative products. As far as structured products are concerned, a systematic and significant strategic allocation makes even more sense, given the potential total decorrelation of the strategies pursued, thus justifying an unchanged tactical allocation whatever the financial environment. Investors can therefore dynamically adjust their exposure to certain alternative segments on a tactical basis, but should consider structured products as the best way of ensuring that they always have the right products for current conditions. In our view, the added value of these types of investments clearly justifies the growing interest of institutional investors, particularly in terms of diversification, and in terms of the superior and truly unique match between the profitability and risk objectives of structured products in particular.

The year 2022 marked a new turning point in institutional investors' appreciation of new risk and return parameters. The joint fall in equities and bonds has underlined the importance of having alternative forms of investment available to deal more effectively with the new challenges ahead. While the future environment seems more uncertain than in the past, due in particular to the totally different interest-rate cycle that has prevailed for several decades, new opportunities exist and will be increasingly considered by institutional and private investors alike. We'll see later how the introduction of a strategic allocation to certain forms of structured products contributes

very effectively to reducing risk and improving the results of conventional strategies. One of the key aspects of structured products is the desired asymmetry of the risk-return profile, offering performance profiles adjusted to the market views and risk-taking desired by the investor. This characteristic makes it possible to better match the investor's objectives. These asymmetrical characteristics are also undeniably attractive to private investors. For example, a capital-protected exposure to equities would ideally enable an investor nearing retirement to retain exposure to a remunerative asset while limiting his level of risk in the event of an impromptu market downturn. As life expectancy lengthens, a structured product of the capital protection type may thus be considered more optimal by this investor.

The 3 main forms of structured products

Structured products are first and foremost instruments for achieving return and risk objectives that cannot be achieved through direct investments (securities) or indirect investments (funds, ETFs...) in traditional investments in bonds, equities, commodities, etc. The profile of structured products thus corresponds to the specific objectives of conservative or dynamic investors who view these products as complements to their existing allocations, and who see them as tools for improving their risk-return profile. Their objectives can be diverse, ranging from capital protection and hedging to yield enhancement and risk diversification optimization, not to mention tax optimization.

- Capital protection at a level chosen by the investor
- Risk hedging for certain investments
- Enhanced returns associated with risk control
- Access to certain market components such as volatility, correlations, etc.
- Benefit from tax-efficient structures
- Diversification with instruments that adjust risk-return and optimization

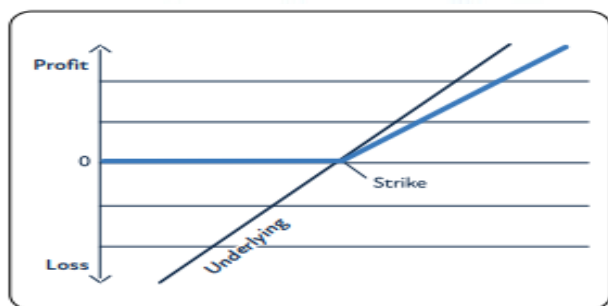
There are many different types of structured products. We'll take a brief look at them here, distinguishing three main product families to identify their main aspects in terms of both risk and return profile. First, there are capital preservation products, followed by yield enhancing products and enhanced participation products.

Capital preservation products are designed to offer protection in the event of a fall in an underlying asset and participation in any rise, according to a predetermined ratio and conditions. At maturity, investors receive a participation in the event of an increase, or regain their capital protection in the event of a decline.

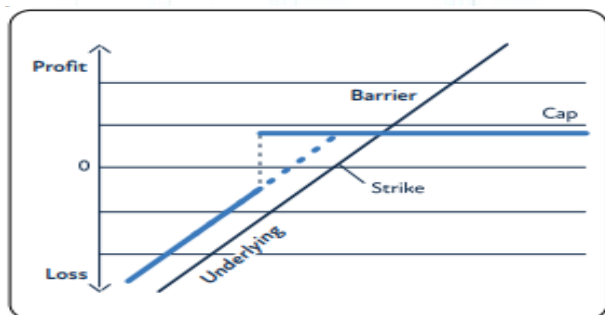
Yield enhancement products do not offer initial capital protection and may sometimes limit participation in an underlying's upside. The aim is to generate a higher return than an investment in bonds, considered the least risky investment. These products may resemble bonds in that they pay a coupon, often much higher, and are redeemed at par. In general, they have different risk characteristics associated with the occurrence of a specific, pre-determined event which may have an impact on the product's long-term profitability. A barrier, for example, may be associated with the movement of an underlying, which, if exceeded, could potentially transform the final value of the investment. BRC Barrier Reverse Convertibles are thus characteristic of yield enhancement structured products.

Enhanced participation products are generally associated with leveraged up or down strategies, with or without partial, total or conditional capital protection. Usually, no coupon is involved. There are many variants of these products, generally known in the form of certificates, most often based on equities or commodities, but can be built on most assets. A participation rate is generally agreed, to be applied at maturity to the performance of the underlying.

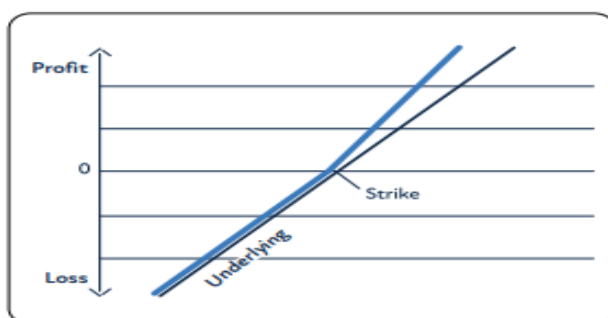
« Capital preservation »
Participating capital-protected note



Yield enhancement »
Note Barrier Reverse Convertible



« Enhanced participation »
Certificat Outperformance



Demystifying supposed risks

Structured products are not necessarily complex and can often be described in very simple terms. A structured is generally made up of two parts, like a convertible bond for example, offering the possibility of investing in an interest-bearing bond that can be converted into shares under certain conditions. The two components of structured products are ultimately very simple: on the one hand, there is a note bond, typically a zero-coupon bond that protects all or part of the capital at maturity, and on the other, an option-type instrument that provides the additional payoff to the bond payment. This instrument is linked to the performance of an underlying asset and takes the form of a coupon or a gain/loss at maturity. In its simplest form, it may be a zero coupon acquired with a discount and an option. At maturity, the zero coupon is repaid at par, thus protecting part of the capital invested. The option will have the value defined contractually according to its characteristics, when this is above the strike price. Structured products are thus generally designed with a specific objective: capital protection, yield enhancement (alpha) or participation. They generally combine a bond component with some form of exposure to an underlying in the form of a derivative. In this sense, they are considered alternative investments, like hedge funds, but because they incorporate a derivative, a number of investors consider them risky. This is generally because many still don't understand how they work or their characteristics. **On the contrary, because of their flexibility, their suitability for a specific market vision and their role in an investment strategy, many structured products can in fact be considered to have the real aim of mitigating risk and reducing it**, by incorporating, for example, a capital protection component and outperformance potential. Structured products are therefore often wrongly regarded as complicated and lacking in transparency. Understanding complexity is in most cases not that difficult, and is in fact made accessible to anyone wishing to understand the risk-return profile built into the product under consideration, thanks to particularly effective legislation requiring issuers to provide total transparency in their issue prospectuses. Issue prospectuses are generally very clear, detailing the risk-return profiles and giving precise examples of the product's performance under various types of market conditions, both favorable and unfavorable. In this way, investors can clearly understand the opportunities and risks associated with the strategy incorporated in the structured product. In this way, payout transparency is achieved in advance, without any surprises. The same applies to the other key components of each structured product, which must be described in detail in the issue prospectus. The credit risk of the issuer of the note is specified, as is the pricing applied, for example.

Flexible instruments for all types of markets

Structured products can be used at any time, and are not tailored to a single type of financial market - quite the contrary. In fact, structured products are extremely flexible and can be adapted to all market conditions. They can be created, for example, to generate returns during periods of market stability or downturn,

in any phase of the cycle for traditional asset classes (bonds, equities, commodities, currencies, etc.), but also during bull or bear markets. Generally speaking, a structured product should enable an investor to achieve three main objectives over time: either a return with little risk associated with his or her capital, or a higher return in periods of volatility and consolidation, or an alternative to generate additional returns in the portfolio. In terms of time horizon, structured products can be created with short durations of a few months, but they can also have long maturities of one or more years. While they are often intended to be held until maturity, they can generally be liquidated at any time, as there is usually a secondary market enabling the investor to sell them at conditions that are often predetermined and mentioned in the issue prospectus.

How to assess their effectiveness ?

The effectiveness of using structured products can be assessed in a number of ways, but above all it must be measured against the objective initially set by the investor. If the objective was to preserve capital by retaining even a limited capacity to participate in the rise of an underlying, the investor should judge the result of his structured product positively in the event of a rise, even if it allows him to participate only partially in this rise of the underlying. On the other hand, in the event of a fall, they should be satisfied with having suffered only part of the decline. The quality and effectiveness of a structured product within an investment strategy will, however, depend above all on the investor's or asset manager's ability to anticipate market fluctuations. By designing a product that is best suited to a given forecast, its creator optimizes the risk-return function of the investment to his or her forecasts. If these turn out to be fairly accurate over the long term, the strategies developed and implemented using structured products will be more effective. The strategic, tactical and directional vision, as well as the risk and volatility mitigation method, are essential elements for the creator of structured products to optimize their effectiveness and relevance. A robust and disciplined structured product construction process must be available to guide all decisions.

The asymmetrical nature of structured products is an unique and distinguishing factor, reinforcing its central role in investment strategies. This characteristic is in fact essential to ensure the closest possible match between the product's maturity profile and the specific market views (profitability expectations) of its creator. This characteristic is precisely what allows us to take into account the fact that no anticipation of the expected evolution of a financial asset by investment professionals or non-professional investors has a 100% probability of occurrence. Structured products make it possible to take account of the probabilities associated with any investment decision. For example, without the possibility of using structured products or option strategies, if an investor estimates a 70% probability of a +10% rise in an equity index over three months, and a 30% probability of a -10% fall, he will undoubtedly decide to buy this index by increasing his asset allocation, for example by arbitraging cash and reinvesting it in the equity market. A simple binary decision to buy and take 100% exposure, while still considering a potential 30% risk of being wrong and having to take a loss in the event of a market downturn. This binary decision does not

allow him to obtain an exposure that truly corresponds to his non-binary risk assessment. A structured product could, on the contrary, enable him to participate in the potential rise, partial or total, of +10% over three months and protect his capital by, say, 95% in the event of a fall. The profile of this structured product would then correspond perfectly to his market and risk vision, enabling him to adjust his investment policy as closely as possible to his expectations. Structured products are therefore better suited to representing the real complexity of any investment decision, by going beyond a classic policy of exposure or non-exposure to a given asset, and taking into account both the chances of being right about one's main prediction, and the risks of the market behaving differently than expected if this prediction does not come true. In this way, they can be finely adapted to any form of market trend forecast, taking into account both the probability of a positive or negative event occurring.

SMART BRC+ Yield enhancement : a BBGI concept focus on the use of BRCs

By way of example, we share below the results of one of the concepts we propose to our institutional, family office and trustee clients for diversification of an asset allocation in the alternative investments section, achieved through a dedicated, professional and disciplined SMART BRC+ strategy. This concept focuses on a type of yield-enhancing structured product called Barrier Reverse Convertible (BRC).

The strategy selects international blue chip stocks using a proprietary quantitative and judgmental model. The stock universe is broad, focusing primarily on companies with market capitalizations in excess of \$5 billion at issue, across all sectors of the MSCI World indices. The robust stock selection process used to create a BRC structured product follows a rigorous methodology, with fundamental and technical characteristics designed to minimize the probability of prices fluctuating below the set barrier during the life of the structured product. The stock selection process does not depend as much on the stock market cycle and general market conditions as on the specific characteristics of each company.

A quantitative process for optimizing volatility and fluctuation risks supports the selection of candidates for the creation of BRCs. This reduces the probability of the barrier being exercised, maximizing the success of each product and the overall strategy. A composite portfolio is ideally made up of 20 positions for diversification purposes, with an average time horizon of 4 to 5 months. Historically, this method has led to particularly impressive results: in less than 5% of cases, the barriers have been touched, activating the dynamic exit control of the securities positions received, which could then be resold under favorable conditions for the investor. The SMART BRC+ concept has demonstrated its superior effectiveness, thanks in particular to the robustness of its predictions in terms of volatility and return to the mean of the prices of the selected candidates; characteristics which are only marginally dependent on market cycles, and which

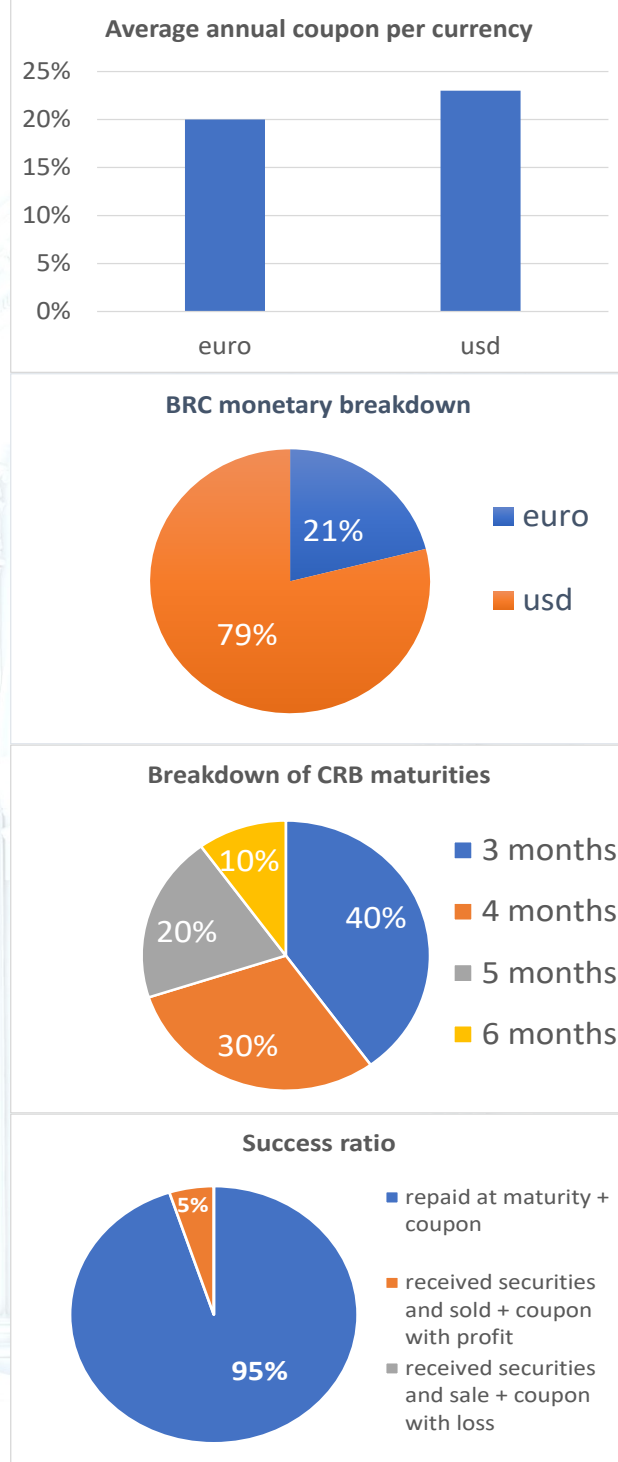
reinforce the exceptional diversification character of the concept within a global asset allocation strategy. Geographical, sectoral and monetary diversification is ensured at all times. Issuer risk is also measured and diversified across a sufficient number of counterparties.

Average returns on the structured products that make up this strategy have been in excess of 20% p.a. net of fees. Even with a reduced asset allocation, this represents an exceptionally positive contribution to the overall performance of any traditional diversified strategy such as LPP40 for Swiss institutional investors. From a regulatory point of view, this approach is part of the alternative segment and therefore cannot represent more than 15% of a Swiss IP's assets.

An alternative to bonds investments ?

Philosophically, our **SMART BRC+ concept offers an alternative to bond investments, with a much higher return thanks to its theoretical and optional indirect exposure to the equity asset class.** A theoretical link also exists indirectly between these two asset classes, since the underlying assets of structured products are equities. The maximum market risk of such a strategy would be for all structured products to be affected at the same time by declines in all selected securities falling below their barriers. Without ruling out this risk, the staggered weekly creation of structured products also minimizes the risk of market volatility, as not all products are issued at the same time and with the same sensitivity to any external shock that may occur. In this extreme case, the investor would still benefit from the coupons received (18%) and would receive the securities corresponding to the structured products issued. Considering that it is exceptional to observe investment strategies positioned on their maximum points in equities, the extremely unlikely occurrence of this scenario would in fact lead to a temporary increase in the equity portion within the defined fluctuation bands until the end of the exit pilot for the securities received.

Historically, if 10% of the portfolio had been allocated to the SMART BRC+ Yield enhancement strategy, only 0.5% would have been temporarily added to the portfolio's equity allocation before being reintegrated into the alternative segment, for an overall return in excess of +20%/year.



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