STRUCTURED PRODUCTS

DYNAMIC PORTFOLIO INSURANCE FOR GUARANTEED RESULTS

DPI methodology has been designed to balance the allocations between risky and non-risky investments in order to maximise returns

The priorities of Europe's leading groups providing alternative solutions (structured asset management, hedge funds, private equity and real estate) include the search for absolute performance and product innovation in combination with strict risk control.

A key example of this is the development of unique expertise in dynamic portfolio insurance (DPI) methodology. This allocation process between risky and non-risky assets gives investors high returns with specific and dedicated constraints (minimum yield, partial or total capital guaranteed).

The best providers of such strategies would typically benefit from experience and expertise of fund management and dedicated research teams as well as proven quantitative models. Sound methodology coupled with an impressive track record and healthy volumes of assets under management can increase the appetite of institutional and retail clients.

'The allocation between the two asset classes (risky and non-risky) is actively and dynamically managed in order to maximise the expected return of the fund'
Olivier Nolland, SGAM AI

DPI TECHNIQUE

The DPI strategy is a cushion management technique that quantifies the level of risk borne by the investment in the risky asset. These risky assets could be equities, bonds, mutual funds or hedge funds. The non-risky assets are generally money market instruments.

The exposure to risk depends on the volatility, the liquidity, the returns and the result of the stress test performed on the risky asset. Other factors that are taken into account include the correlation with a benchmark and the current term structure of interest rates.

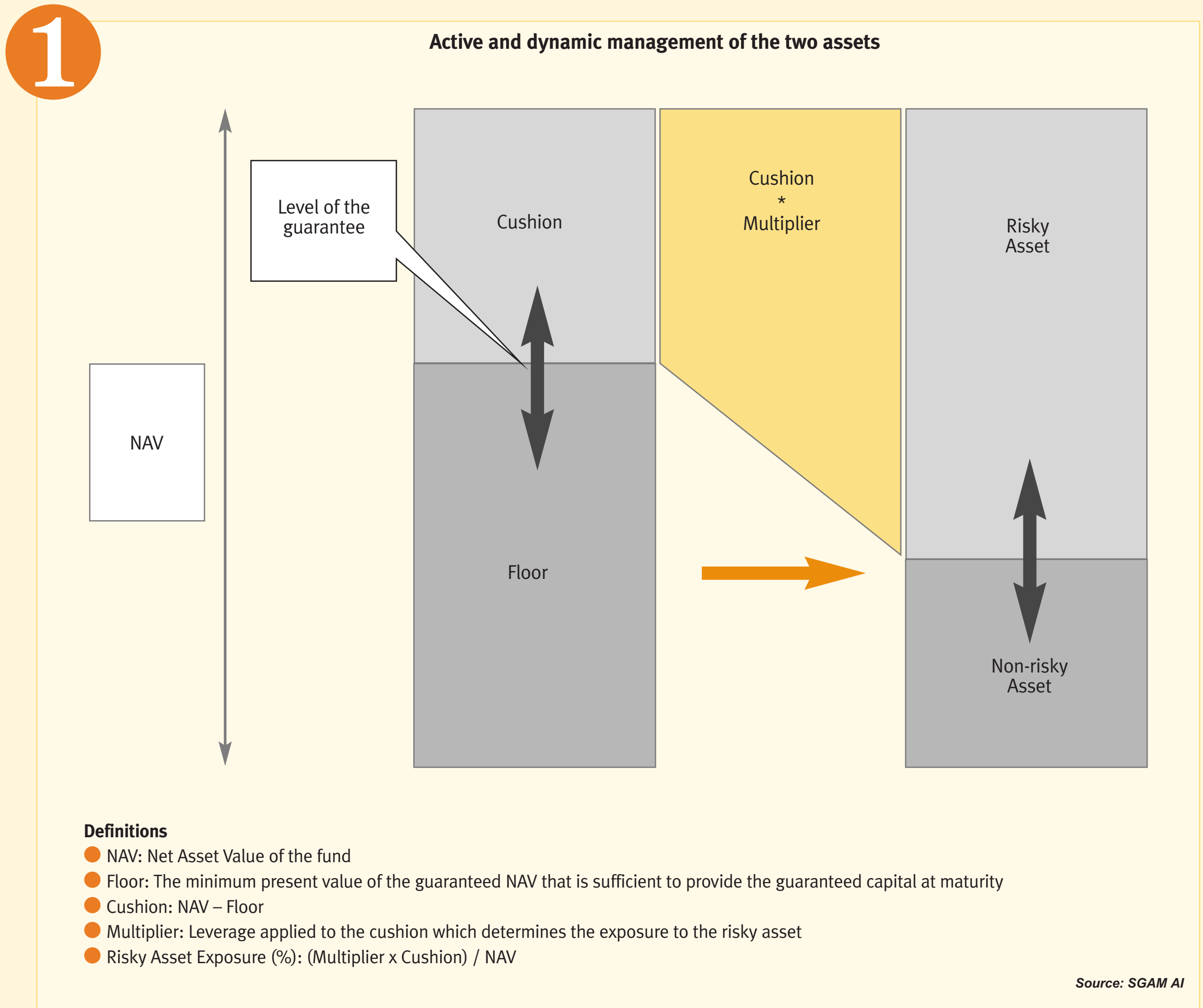
The allocation between the two asset classes (risky and non-risky) is actively and dynamically managed in order to maximise the expected return of the fund within the constraints imposed by the guarantee. As such, exposure to the risky asset is increased on the upside and reduced on the downside, making way for an increase in investment of the non-risky asset.

VARIABLE FACTOR

What is the difference between a DPI and a constant proportion portfolio protection insurance (CPPI)?

While the multiplier is fixed under a CPPI, it is variable for a DPI. A CPPI strategy is based on fixed parameters flowing from market conditions at its launch date and relies on them throughout its life. These parameters, which are aggregated in the multiplier, are variable for a DPI, following the evolution of market conditions: both quantitative and qualitative filters are used to determine the multiplier.

Quantitative filters are mainly composed of tailor-made volatility monitoring tools, including implicit and historical volatility, and the determination of adequate ranges of adjustment of the multiplier in order to reduce



structuring costs. Qualitative filters include the manager's and economic research team forecast on risk/return profile of the risky asset, which determines the optimal multiplier, and is backed up by a management committee for each underlying asset. See Chart 1.

MULTIPLIER

A high multiplier enables the investor to benefit from market growth but its adjustment remains expensive. A low multiplier will induce the opposite effects. The multiplier determination policy consists of under-weighting it during high volatility periods and vice versa.

Various volatility-related variables are used to adjust the multiplier such as current, implicit, and historical volatility. The conclusions reached following the analysis of volatility can be amplified or minimised depending on macro-economic conditions.

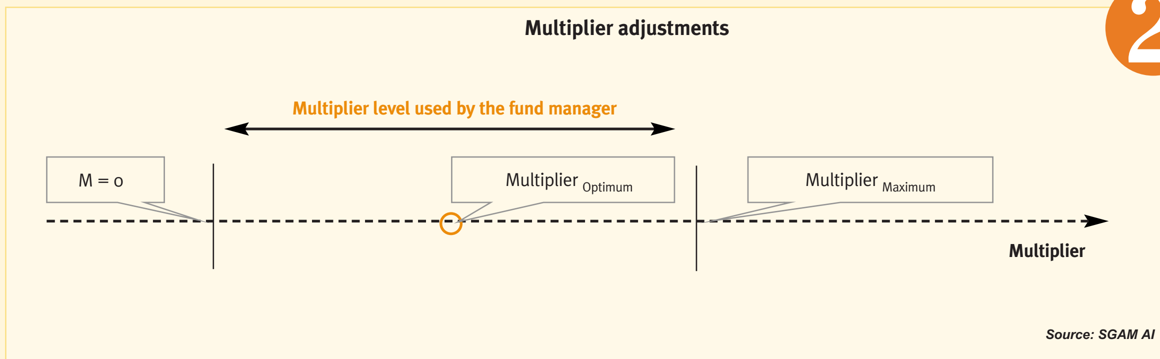
SGAM AI, for example, determines the maximum multiplier by the results of the stress test performed on the risky asset. The optimum multiplier depends on return and the volatility of the risky asset and also on the interest rate level. The adjustment of this multiplier depends on the risk aversion bound to the profile of the guaranteed product. See Chart 2.

The products structured under the DPI process are not restricted to a specific type of client. Financial institutions, such as insurance companies, banks (for their proprietary accounts or their retail network), corporates, pension funds, or private individuals via their private bankers increasingly invest in these type of strategies. The DPI technique offers a great opportunity to diversify the investor's asset investment allocation. The rationale behind these capital protected and leveraged strategies is to offer these various types of clients several advantages such as:

- The safety and security of a fixed-income instrument while achieving exposure to a wide range of markets.

The Dynamic Portfolio Insurance is a flexible technique specifically designed to offer tailor-made solutions

2



- The capacity to eliminate all currency risks normally associated with investing in overseas markets.
- The ability to participate in the upside potential of a diversified portfolio of investments.
- The flexibility to take tactical views in volatile markets with limited or known capital risk.

INNOVATION

To manufacture a successful product, a fund house needs to build a platform gathering the talents of multi-asset class fund managers, financial engineers and a worldwide commercial team to expand and tailor the array of investments solutions offered to its clientele (and more particularly its high net worth clients).

With this strategic synergy, a manufacturer can achieve the challenge of offering access to a large array of structured products linked to all types of well-performing underlyings, either through a leveraged version or a capital guarantee version.

The secret of the performance of structured products certainly lies in the quality of both the structuring and the underlying investments.

To answer these challenges, product manufacturers need to strengthen both their due diligence and financial engineering teams.

The search for selective absolute return in 2004 has led to selections both from the Asian and the Eastern European equity market along with the hedge funds universe. The appetite for the hedge funds industry has still experienced an increasing growth mainly due to its attractive returns.

SGAM AI Structured products range “China+”, “India+” and “Eastern+” have been structured to benefit from the dynamism of emerging markets while providing total security. These 100 per cent guaranteed products were constructed as an opportunity to participate in the upside potential of a high economy growth via an optimal fund selection.

While hedge funds might suffer from a negative image of a highly volatile asset class, the DPI technique helps remove this natural fear that investor may have. This technology allows investors to capture the maximum performance of these specific underlyings while optimising the risk taken and avoiding any sharp losses thanks to an active management of the exposure on the underlying.

For example, in 2004 SGAM AI launched a range of leveraged products on the specific hedge funds asset class for several risk/return profile (SGAM AI Platinum series).

Products like SGAM Platinum 300 and SGAM Platinum 500 have had a performance of respectively 11.50 per cent and 14.50 per cent whereas the underlying had a return close to 6 per cent (SGAM AI ADF).

GUARANTEED

A second way to optimise return is to guarantee either capital or a minimum yield or both. A wide range of innovative savings products can be built, linked to equity and/or hedge funds which allows investors to subscribe on a daily basis on protected products. For example, SGAM Moorea, an equity linked product launched in 2003, had the same return as the Eurostoxx while offering an explicit capital guarantee (90 per cent capital guarantee).

The strong appetite for structured products has pushed manufacturers to pursue the development and the enhancement of management and structuring techniques, as a strategic orientation.

Olivier Nolland, Director, Head of Sales, SGAM AI

CORPORATE STATEMENT

SG Asset Management is the asset management subsidiary of Société Générale Group. SGAM manages €264 bn in the US, Continental Europe, UK and Asia and employs 1900 specialists worldwide. Products include 900 investment funds, covering all equity, fixed income and alternative investment strategies. The alternative investments activity is grouped in a wholly-owned subsidiary, SG AM Alternative Investments, which manages €20bn in structured management, private equity, hedge funds and real estate. All figures as at 30 September, 2004.

ASSET MANAGEMENT

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