

## STRUCTURED PRODUCTS DEFYING LIMITS THROUGH INNOVATION

The complex nature of structured products has led to end investors calling for greater transparency. Keeping track of risk thus aids the selling process

The popularity of structured products is increasing fast. This is because they provide investors with exposure to market performance, coupled with a safety net. They either provide protection on the capital originally invested, or a solid coupon. When interest rates and volatility are favourable enough to allow it, they might even provide both.

They can be used as part of the asset allocation process as a less riskier component of a portfolio. The risk of structured products may be less than the risk of bonds, but with more potential upside.

However, the rising complexity in pay-out arrangements has highlighted some problems with the selling process and with the quality of information delivered to the end investor.

An efficient and cheap way of adding these products to the distribution list, along with a quick route to evaluating a client's suitability for them, have yet to be found.

The information that has to be disclosed when selling structured bonds or funds is detailed and intricate, as it is regulated by market supervisors as well as common law. But the complexity of regulation and the difficulty of understanding the products themselves can arouse the suspicion of retail investors. They tend to believe that such products suffer from mis-selling and often fear they are not getting the full story from their wealth manager.

Numerous letters from consumers have appeared in the international press during recent months demanding more transparency and better assessment of personal risk profiles.

It is essential that the right balance is struck between product innovation and a selling process that maximises placing power, thereby enhancing retail client satisfaction, which is key to long-term success.

### » INNOVATION

Let us first analyse a possible approach to innovation and then look at the selling process.

Product innovation should aim to develop a pay-out that fits best with both market conditions and client needs in terms of duration, compliance with legal and tax constraints and coverage of distribution costs.

In the present market conditions of low interest rates and relatively high volatility, there seems to be little room for capital guarantees on equity exposure. As market sentiment is not leaning towards a rise in the next three to six months, and a substantial drop in volatility remains unlikely over the same period, when planning a new



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**Gian Luigi Pedemonte, TradingLab**

product it is advisable to avoid payments of intermediary coupons. This approach increases the space left to purchase expensive options.

Payment of coupons at maturity would therefore be preferable. This would also make sense from a tax standpoint.

As for the equity pay-outs, Asian-style options have always been the more popular solution when trying to find a balance between performance and protection. This is because an average is taken of the observations of prices of the underlying. This prevents the clients suffering from the consequences of sudden market movements. The only downside is that this also prevents

1

## Two examples

**Reverse Cliquet**

- Medium term maturity (3-5 years).
- Capital guaranteed.
- An annual coupon is guaranteed while upon maturity a coupon with a significantly large rate minus the negative quarterly performances of the the underlying basket is paid out.

**Example coupon:**

- Underlying: basket of funds
- 1 per cent per annum guaranteed annual coupon:
- At maturity, interest will be paid equal to 35 per cent of the nominal amount reduced by the sum of the negative quarterly performances of the underlying basket of funds.

**Increasing Coupon**

- Ideal to benefit from a short term bear market and long-term laterally moving/bullish market with decreasing volatility.
- High fixed initial coupon in a low interest rate context and uncertain outlook (for the first year).
- Capital guaranteed investment in a basket of stocks.

**Example coupon:**

- Underlying: 10 US blue chips
- 3 per cent for the first year, afterwards:
- 7 per cent in case none of the stocks have gone below the barrier level
- If one year the coupon is not paid, the investor will recuperate this return if in the next year the coupon is taken. If during the second and third year the coupon is not realised, and in the fourth year, the coupon is realised, then the investor takes the return for all three years (7 per cent + 7 per cent + 7 per cent).

an opportunity to benefit from the full performance of the underlying.

But using Asian pay-outs proves increasingly difficult in the present market.

Two new types of options are emerging as attractive alternatives – “reverse cliquet” and “increasing coupons”. Respectively, these products respond to a market in lateral movement with diminishing volatility and a bearish context in the short term followed by a rise in the long term (two years from now).

## » REVERSE CLIQUET

Reverse cliquets are options constructed with a medium term maturity of three to five years on low volatility underlyings, generally primary stock-exchange indices. To lower the price of the option the underlying can also be a basket of indices or mutual funds. (See example in Box 1.)

The pay-out is given by a final coupon in the region of 30 per cent to 40 per cent. The coupon is diminished by negative quarterly performances.

Normally the cost of the option is such that it can be easily included in a swap that guarantees both capital and coupons close to money market levels.

Again, the advantages of a reverse cliquet are maximised when the market remains steady or grows moderately and volatility reduces.

As the cost of the option enables principal protection at 100 per cent and even payments of relatively high coupons, the overall risk-profile of the structure is quite low.

## » INCREASING COUPONS

The second innovative structure, the “increasing coupon”, is an option adapted for longer maturities of four to six years and enables payment of high coupons for the first two years. Coupons can some times be higher than government bonds with the same maturities. After three years the coupons become variable and are linked to the performance of an underlying selection of blue-chip stocks. (See example in Box 1.)

Beginning in the third year, the levels of the shares are compared with the initial value as observed at the start date. If none of the shares have dropped below a certain barrier, usually 60 per cent of the initial value, a coupon around double the corresponding government bond is paid – around 8 per cent. If one or more of the shares has touched the barrier, no coupon is paid.

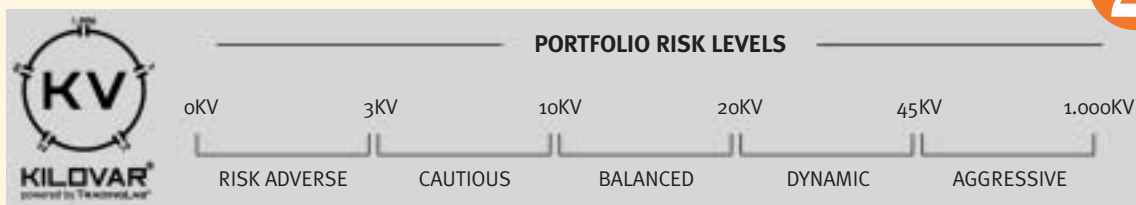
In the fourth year an observation is made of the current level of the shares. If none of the shares has fallen to the barrier level (in our example it was 60 per cent of the initial value of the shares), a coupon is paid. This will be around 8 per cent.

What is interesting here is that if in year four the barrier is not reached, while in year three the same barrier was touched, the structure pays the coupon that was not distributed in the previous year along with the coupon of the current year.

During the fifth year, the process is repeated. If none of the shares have dropped below the barrier a high coupon

2

## KILOVAR: the tool for measuring risk



One way of enhancing the selling process is to construct a risk-measurement tool such as KILOVAR, which is offered by TradingLab. KILOVAR evaluates the risk of any financial asset assuming a value from 0 to 1000.

Following the logic of the speedometer, the higher the risk, the higher the KILOVAR measure. A sample of several thousand clients was used to establish five classes of risk, into which clients can be sorted after answering a questionnaire.

The KILOVAR can be used to communicate both the level of risk of a structured product and to evaluate the clients attitude towards risk. If adding a certain financial asset to the client's account did not change his or her class of risk, the investment could be carried out, otherwise it would be abandoned.

is paid, and if a coupon had not been paid in the previous years, the fact that the barrier is not touched in year five is sufficient to recover all the previously unpaid coupons.

The advantages of an increasing coupon structure are significant. High initial coupons not linked to the market enable investors to receive a safe interest payment, in a scenario where markets are perceived as bearish. Meanwhile, the strike price of the shares is fixed close to the lowest levels reached during the past two years. As a rise is likely in the long term, the chance of seeing the various markets above present levels is high.

On top of this, and here is where the real innovation lies, the system that enables recuperation of floating coupons gives the investor a consistent advantage with respect to all preceding pay-outs already seen on the market.

## SELLING PROCESS

Challenging market conditions and investor needs demand an innovative approach to selling pay-outs.

It is becoming accepted that the information delivered to end investors must be simple and easy to understand and explanations have to be straightforward and clear. But up to this point there has been no innovation in the area of best practice and regulation.

A big step forward would be to establish thorough procedures for assessing a client's risk profile and

### Evaluating risk

Matching a client's class of risk with a product's level of risk entails a three-fold process:

- assessment of the client's risk profile through a list of questions that enables the classification of his/her attitude towards risk;
- turning the qualitative results of the enquiries into an objective measurement. One approach could be to calculate the value at risk (VaR) of the portfolios held by a large sample of clients and then establish broad classes of risk;
- match the VaR of a proposed product for a client's portfolios with the risk profile of the client. Calculation of the VaR of the entire client portfolio will reveal the extent of any diversification benefits, as well as facilitating detailed evaluation of the risks.

attitude, and for matching his or her class of risk with the level of risk involved in the particular product.

A statistical approach backed by value-at-risk methodology that allows risk to be precisely evaluated should go a long way to preventing communication breakdowns with the client and mis-selling. (See Chart 2.)

The key is to transform a VaR approach into an easily understandable mode of communication.

*Gian Luigi Pedemonte, senior vice-president, market management Europe, TradingLab*

## CORPORATE STATEMENT

TradingLab is one of four "founding partners" of the official UK FSA-regulated covered warrant market, which opened for trading on the LSE on October 28, 2002. As the investment bank of UniCredito Italiano (Moody's Aa3, S&P AA-), by far the leading bank in terms of market cap for Italy, TradingLab benefits from the banking group's sound financial backing and full guarantee. TradingLab intermediated over €5.6bn in covered warrants for 2002, ranking as the number two issuer in Europe.

## TRADINGLAB®

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