



## **VOLATILITY STRATEGIES**

# DISCOVER THE POSITIVE SIDE TO FICKLE-NATURED PRODUCTS

Investors who put their faith in volatility need the backing of professionally constructed strategies

ith the longer-term yield prospects for traditional forms of investment such as cash, bonds and equities somewhat dented, innovative investment strategies are increasingly moving centre stage. There is now growing demand for alternative product concepts that are largely uncorrelated, offer low price volatility and aim to achieve fairly calculable "absolute" returns. Well-crafted mutual funds, launched in a timely fashion, can exploit gyrations on the stock markets and movements in the international foreignexchange markets.



## **ADJUSTMENTS**

Investors will probably have to slash yield expectations for the next few years. With current money market returns under 2 per cent, yields of 3 per cent on medium-term euro bonds, and European equities likely to yield mediumterm returns of only 7 to 9 per cent annually, it is only a matter of time before investors adjust their behaviour

This is particularly likely if we assume pronounced market uncertainty and severe price volatility is likely to persist for some time.

Following the three-year bear market, investors are becoming less satisfied with any outperformance achieved by products measured in relative terms against an index. These returns are often clearly negative in absolute terms - European equities, for example, have tumbled over 40 per cent in three years. Instead of benchmarking approaches, investors are therefore looking for investments offering stable, calculable performance over time, with limited downside risk.

Investment strategies that focus on capital preservation and yet aim to achieve medium to long-term absolute returns of 5 to 7 per cent per annum – which, given the very difficult market conditions, would at least outperform money market instruments – are all the rage in the current economic climate.

In view of the aforementioned modest longer-term outlook for investments in the money, bond and equity markets and growing volatility levels, products in traditional markets are unable, on their own, to fully meet these new demands. This is why alternative solutions must be pursued, with ground-breaking products designed to pursue an alternative investment approach.

These profit from stock market and forex fluctuations,



# 'Products in traditional markets are unable, on their own, to fully meet new demands'

**Gerhard Koch, DWS Investments** 

and are only moderately correlated with conventional investments. Volatility and forex have therefore been defined as separate asset classes and made available in the form of regulated mutual funds. To implement these strategies, it is necessary to combine traditional forms of investment with customised derivative instruments (options and currency forwards), managing them dynamically as part of its portfolio mix.

## **PREDICTIONS**

It is difficult to say with any certainty whether we have already witnessed a turnaround in equity markets and can expect share prices to rise again. It is far easier to predict that investors' nervousness in the international markets is likely to persist and, consequently, market volatility will remain high.

Sharp market price movements are usually regarded as negative by traditional investors, who generally profit







from rising share prices because, after all, they make it more difficult for them to decide when to enter the market. Volatility is also viewed negatively, as it is used as a risk measure.

However, volatility offers interesting opportunities for investment strategies based on absolute returns, which operate largely independently of actual market trends.

The use of call and put options, which factor in current and anticipated market volatility, makes the rise and fall of indices and share prices into a tradable commodity. This makes it possible to speculate on the extent of price volatility rather than on the direction of share price movements.

Given the right strategy and execution, investors can earn attractive absolute returns not only during bull markets but, especially, in adverse or flat markets.

This is precisely the objective of managed volatility concepts: unlike conventional products, they aim to profit from sharp stock-price fluctuations, largely independently of future market performance.

## UPSIDE POTENTIAL

Investing directly in the instruments needed for "volatility strategies" requires extensive knowledge of how they work and, owing to the margin requirements, incurs considerable administrative and other costs.

On the other hand, managed investment products – based on an actively managed portfolio mix of moneymarket-linked securities, bonds, and equities - offer professional and inexpensive access to the use of customised derivatives. Flexible, and aligned with prevailing market conditions and expectations, a number of diverse volatility strategies (such as long and short straddles, covered call writing and short puts) on stock indices and selected equities can be implemented and dynamically managed on the basis of stringent risk control principles.

One yardstick for the price fluctuations anticipated by the market is provided by volatility indices such as the

German stock market's V-DAX, which has performed as shown above since the end of 1997. See Chart 1.

This index has tended to spike up temporarily in times of crisis and fallen back again to a "normal" level or bottom line. High index levels signal that the market is particularly sensitive and reacts dramatically – both positively and negatively – to political and financial news.

The premiums that can be earned on volatility instruments (such as short straddles and strangles) when, as expected, the market at least temporarily calms down again are correspondingly high.

When the index is low, option premiums are relatively cheap. If the forthcoming publication of new financial or corporate data suddenly triggers expectations of sharp price swings, the right volatility instruments (such as long straddles or strangles) can be used to generate a profit.

In future we are likely to continue seeing regularly alternating periods of minor and major price gyrations, and this should present interesting medium and longterm upside potential in the form of market and shareprice volatility. Given the right risk management strategy, this should generate attractive absolute annual returns of some 5 to 7 per cent.

In addition to equity volatility-based concepts, investment strategies that deliberately speculate on movements in international foreign-exchange markets offer the prospect of attractive, uncorrelated returns and provide investors with access to currencies as a separate asset class.

A substantial portion of returns earned on international bond portfolios usually comes from foreign exchange, which often accounts for 50 per cent or more of returns.

However, the extent to which managers of traditional bond funds can decide for or against a currency is normally limited: all they can do is buy bonds denominated in a foreign currency on which they take a positive view, then sell as soon as their opinion switches to negative.

If a foreign-currency position is not expected to generate further returns, it is either hedged or reallocated into securities denominated in the fund's currency.

The basic principle is that currencies offer upside potential only if the fund's currency tends to be weak. As far as euro-denominated bond funds are concerned, the persistent weakness of the US dollar and the yen since the beginning of 2002 has offered virtually no profit potential.

Alternative forex investment strategies offer more lucrative opportunities by exploiting temporary currency trends and severe exchange-rate fluctuations.

They can use more flexible currency exposures that enable them to profit from both positive and negative exchange-rate trends. To do so they use currency forwards consisting of long positions as well as short and cross-currency deals.

These enable investors to earn additional returns even if currencies fall and to exploit exchange-rate movements against currencies other than just the fund's currency (for example, movements in the yen-dollar exchange rate in a euro-denominated fund).

These concepts are usually fully invested in a balanced portfolio of money market instruments or short-dated bonds, which generates a reliable return.

On top of these, they use the above-mentioned currency forwards, whose long and short positions cancel each other out exactly so that no additional capital is required. Exposures in investing currencies (longs) are financed 1:1 by funding currencies (shorts).

By diversifying the currencies used in the portfolio as widely as possible, fund managers substantially mitigate the price risk inherent in each currency. Provided their strategy and currency forecasts are right, combined long and short positions can generate attractive returns if they are flexibly aligned with prevailing exchange-rate trends.

## MANAGEMENT

If, under a multi-manager model, the asset allocation for the currency portfolio is based on various currency analysis and forecasting styles, managers can combine both quantitative and qualitative as well as fundamental and tactical factors in their currency assessment. Furthermore, if the forex teams monitor various currencies or make currency forecasts for varying periods, the recommendations they give for a relative long and short foreign-exchange position and the potential performance of the team-specific portfolios are not usually highly correlated with each other.

If the input of the various foreign-exchange teams is quantitatively analysed and combined into an optimised

### **Features of volatility instruments**

#### LONG STRADDLE:

- Investor thinks that the market will be very volatile in the short-term.
- Call option and put option are bought with the same strike price.
- Unlimited upside potential should the market fall or rise greatly.
- Downside risk limited to the two premiums paid.

#### **SHORT STRADDLE:**

- Investor is certain that the market will not be very volatile or calm down.
- Call option and a put option are sold with the same strike price.
- Limited upside potential to the two premiums. Will be realised if market at expiry is exactly at the strike price level.
- Unlimited downside risk: should the market fall or rise greatly.

#### LONG/SHORT STRANGLE:

- Similar to the long/short straddle but the premium paid/received here is less.
- Call option and put option are bought (long strangle) or sold (short strangle) with different strike prices.
- Unlimited upside potential for long strangle should the market fall or rise greatly. Limited to the two premiums received for short strangle.
- Limited downside risk to the two premiums paid for long strangle. Unlimited for short strangle should the market fall or rise greatly.

### **COVERED CALL:**

- Investor holds stock but does not think the stock will rise in the short term, or that the stock will be neutral, income can be gained by selling call options against the stock holding.
- Call options are sold. The number of call options sold will be determined by the investor's market view and the size of the stock holding.
- Limited upside potential: by selling calls, the investor is writing off the potential profit of the stock position.
   Maximum profit is the strike minus the market price plus the premium received.
- Downside risk similar to that incurred with ordinary stock ownership but partially off-set by the (fixed) option premium received. Main loss could be the opportunity loss if the market rises strongly.

portfolio, its returns and stability can be considerably increased. In order to achieve the most attractive absolute returns, the final (long and short) weightings of each currency are always chosen with the aim of generating the highest-possible risk-adjusted returns.

Provided the portfolio is sufficiently flexibly managed and exchange rates remain very stable, returns of at least 200 to 250 basis points over the money market can be earned in the medium term.

Gerhard Koch, product management director,

DWS Investments

## **))** CORPORATE STATEMENT

DWS is the leading German mutual fund manager with a market share of 25 per cent. Managing assets of €118bn in more than 300 mutual funds, DWS-Group is also the leading European mutual fund company. DWS has received numerous awards by independent experts for its superior performance record. Among these is the prestigious Standard & Poor's Fund Award as best mutual fund company in Austria, France, Germany, Spain and Switzerland.



#### Contact:

Gerhard Koch, DWS Investment GmbH
 Tel: +49 69 71909 4185 Email: gerhard.koch@dws.com