# This time it's different

## Reshaping the way we look at risk

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Risk selection is the backbone of any search for growth in the context of long-term de-risking. By hedging some of the embedded risks, investors can free up space to invest in return engines

### De-risking—a long term structural shift

The past year has seen growing signs of economic recovery and optimism, with a consequent rally in global equity markets and rise in bond yields. Such market moves have helped to improve the solvency of pension funds and most insurance companies; higher equity prices boost assets, while higher bond yields reduce the present value of liabilities.

This has raised questions about whether de-risking will come to an end, and whether the 'great rotation' will take hold.

Institutions are benefiting from some tailwinds, with economic growth assets firmer and signs that the euro crisis may be behind us. In addition, the Fed has hinted that it may delay tapering quantitative easing (QE) until March 2014, which may also delay interest rate rises, thus further benefiting risk assets.

While base rates remain anchored at historical lows, government bond yields have risen, easing pressure on the liabilities side of the balance sheet. But, despite the above-mentioned tailwinds, there has, so far, been little evidence of any significant re-risking as investors also grapple with structural headwinds:

1. **Financial and economic uncertainty remains:** Since the start of the crisis, macro and political factors have played a huge role in setting market directions (risk-on/risk-off trade), with a focus on short-term events translating into higher volatility.

   While QE and liquidity injections have suppressed equity market volatility over more recent years, this trend is expected to 'revert' in a post-QE world. On the other side of the equation, the injection of so much liquidity into the market has suppressed bond yields with the result that 20-year euro swap rates touched historical lows in May 2012.

It is thought that interest rates have structurally bottomed out. But there is considerable uncertainty as to whether they will remain low for much longer or whether official rate rises will come sooner than expected.

While there have been signs of improvement, a sustained recovery is not assured, and nor is the direction or timing of policy decisions. On top of this, global markets are more interconnected than ever before, with any policy decisions on one side of the world driving markets on the other, as we have seen with the impact of the mere talk of the Fed tapering across the globe.

On both sides of the risk-on/risk-off (equity/bond) equation, investors are looking to find smarter ways to access higher yielding assets while managing volatility. All investors (institutional and retail) remain acutely aware of the volatility that can be experienced during times of stress.

2. Diminished appetite for risk:
   European pension funds and insurance companies are on a long term de-risking journey that started well before the global crisis struck in 2008. Institutional investors had already embarked on a de-risking trend reflecting the introduction of risk-based regulations (e.g: FtK in the Netherlands) and of mark-to-market accounting standards (IFRS). Pension funds and insurance companies, which account for around 60% of institutional assets globally, had already started to reduce their equity allocations in favour of 'liability-matching' assets, typically bonds.

In addition, macro-prudential measures and regulatory changes adopted post- crisis generally favour fixed income investments. Risk-based regulation such as Solvency II and Basel III penalise equity-like investments relative to other asset classes, requiring institutions to hold more capital due to higher potential drawdowns.

The crisis accelerated this de-risking trend, causing both a fall in equities and a sharp decline in bond yields, and consequently a dramatic worsening in the solvency positions of long-term investors. This squeeze on solvency ratios highlighted the need to manage both asset and liability risks more effectively.

In addition to market risks, demographic pressures and ageing populations in many economies weigh further on pension fund liabilities, meaning that there is an increasing focus on regular income and capital preservation, as well as on lower volatility of returns.

### The future—using the full spectrum of solutions

So far, therefore, although investors might ordinarily be tempted to try to benefit from improved economic growth by 're-risking', policy uncertainty and regulatory constraints, combined with long-term liabilities and increased longevity, are holding them back. Today, investors are faced with a dilemma: they need growth to recover but cannot afford to take much more risk.

While there has really only been talk of a 'great rotation' into equities to date, we have already seen a rotation within the fixed income universe as retail and institutional investors search for yield. Allocations to non-traditional and/or alternative fixed income assets, and strategies such as high-yield bonds or loans, insurance-linked bonds, real estate loans and alternative fixed income/ credit strategies have been on the rise over the last three years. This is because investors are looking for higher yields but with lower volatility. Alternative investments have this winning combination, as well as appealing correlation features. Re-risking no longer means simply selling out of bonds for equities. In the search for growth with an increased focus on risk management, the investment management industry has developed other solutions that allow our clients the ability to invest in risky assets, but put risk management at the heart of portfolio construction.

First, the industry has improved the identification and measurement of risk in investors' portfolios, second, there are a wide array of tools to mitigate risks that are unrewarded or represent a relatively high opportunity cost for our clients, and third, active management to continually monitor portfolios against long-term objectives, risk budgets and the economic environment will be key.

> While the risk budget and consequently the solution is not the same for all investors, one thing is universally true- risks need to be managed over time

## Measuring risk

To position investment portfolios more effectively, investors need to have a better understanding of the type of risks they take on board, by using in-depth risk factor analysis, rather than purely viewing traditional asset class risks.

Each asset class can carry a number of different embedded risks, which explain the majority of their risk and return characteristics. Credit reflects sovereign/corporate default risk and the direction of interest rates. Equities are not just about pure equity risk but also reflect embedded inflation, commodity and interest rate behaviour.

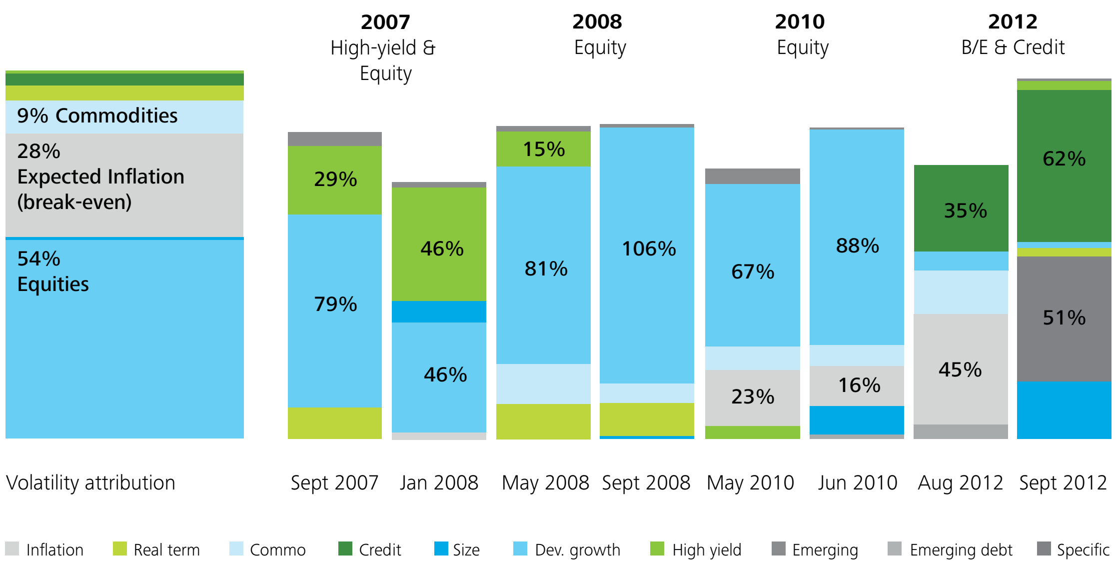
Moreover, this asset's risk typology evolves over time. Diverse asset classes can therefore have unexpectedly high correlations, a result of underlying common risk factor exposures, and need to be continually monitored and assessed as this will change over time.

For example, a UK DB pension fund may allocate, say, 50% of assets into equities and 50% into fixed income, and perceive its risks to be equally split. While on average, around 50% of the portfolio's volatility is represented by equity risk, with the rest coming from inflation, commodity and credit risk, the rolling picture may change significantly, as shown in Figure 1 below. In 2008, for instance, the picture was very different at the start of the year compared to the end of that year.

Therefore, looking beyond the traditional asset class view of risk to the actual risk factors that are driving volatility and returns, provides a more granular view, whether in an asset-only environment or looking at both assets and liabilities.

Raising this awareness enables investors to define what risks they are comfortable with and what risks they want to remove, in order to generate growth within a tight risk budget context.

Figure 1: Risk driven by evolving exposures risk factors




*Source: Datastream, AXA IM, proprietary Risk Factors methodology*

## Managing risk to generate growth

Risk selection is the backbone of any search for growth in the context of long-term de-risking. By hedging some of the embedded risks, investors can free up space to invest in return engines. Once selection is done, investors have a full spectrum of investment tools to properly and efficiently implement the decisions. We can draw on two main categories—those oriented to hedge or mitigate risks (risk focus only), and those that focus on risk management and return generation.

> For most long-term institutional investors, liability risk remains significant and needs to be addressed

1. **Risk mitigation: the use of derivative instruments in overlay management**
   For most long-term institutional investors, liability risk remains significant and needs to be addressed. Overlay management strategies can be used to tackle liability risks more efficiently, but can also be used for hedging specific asset risks, market volatility and tail risk. At its simplest, using derivatives to mitigate liability risk allows for a more capital-efficient way for institutions to manage their portfolios—they can do more for less—hedging their unrewarded liability risks while freeing up capital to be invested in growth assets. Rising inflation, potential equity drawdowns and interest rate moves are examples of risks that could be hedged in a portfolio to free up space for returns.

| Risk factor | Investors | Impact | | | | Solution |
|---|---|---|---|---|---|---|
| Rising rates | DB funds | + | ↓↓ Liability | ↓ Asset | ↑ Solvency | Trigger policy to gradually close duration gap |
| | P&C insurer | | ↓ Liability | ↓↓ Asset | ↓ Solvency | Dynamic hedging to mitigate impact on rise |
| | Life insurer | | | | ↑ Lapse | Get exposure (Cap CMS) to enhance yield |
| Inflation ↑ | DB funds | − | ↓ Liability | | ↓ Solvency | Inflation hedging |
| FX ↑↓ | All | | | ↓ Asset | ↓ Solvency | FX hedging |
| Equity ↓ | | | | ↓ Asset | ↓ Solvency | Dynamic hedging to mitigate market shocks |

*Source: AXA IM, for illustrative purposes only. DB funds = Defined Benefit pension funds, P&C insurer = Property & Casualty insurance companies.*

2. **Risk-managed growth engines**
   Given continued economic and policy uncertainties, as well as the impact of an exit from QE, volatility is expected to return. Access to lower volatility growth strategies or strategies that can manage volatility is vital for investors who are trying to stabilise their balance sheets.

   There are various ways to invest in equity or equity-like assets while also mitigating volatility (and often any associated regulatory impact). In the toolbox are smart beta strategies, risk-driven portfolio construction and rebalancing techniques, along with derivatives strategies that can reduce volatility and, in some instances, provide regulatory relief.

- ***Smart beta or efficient beta strategies:*** these strategies offer a new approach to market exposures where the central feature is a reduction in concentration risk. The risks of simply investing statically by blindly following market capitalisation indices were made clear during the crisis. Even when investors did not think they were running a risk, they later realised that they had been exposed in terms of concentration risk—for example, many bond investors had large and inadvertent exposure to financials. Smart beta strategies can help overcome these inefficiencies
- ***Risk mitigation strategies (VolCap, Vol Target)—dynamic rebalancing to manage volatility.*** As detailed above, long-term investors are increasingly concerned by the degree of volatility in their portfolios. In order to stabilise their funding/solvency ratios, asset managers have been working with clients on volatility-managed strategies that dynamically manage the allocation to a particular asset class to benefit from its growth but limit its volatility. Such strategies allow investors to 'target' the level of volatility they can afford to take within a certain asset class by either rebalancing when volatility is too high or increasing allocations when volatility is too low or moves away from the target. Strategies can also be designed to manage the maximum loss experienced by a given asset class

All of these solutions are built primarily according to risk considerations, where the principal goal is risk efficiency rather than a targeted return objective. These solutions can be implemented at a single asset class level or in a multi-asset class approach.

## Putting it all together

The crisis reshaped the investment world. This process is not yet finished, as the implications of unwinding unprecedented levels of liquidity and QE are far from certain. Investors are looking to the investment management world to provide solutions to manage this uncertainty. Improvements in regulations, technology and risk management are enabling portfolio risks to be defined, measured and mitigated more effectively.

**There is no single solution that fits all investors:** Individuals near or at retirement may be looking for capital preservation and income—the risk of losing capital or not attaining the required replacement ratio on retirement. Long-term institutional investors look at risk versus their liabilities—even UK and Dutch funds may differ in terms of their risk appetite. Sovereign wealth funds are less encumbered by regulatory or liability constraints and therefore generally have higher allocations to alternative and illiquid assets, but may have other considerations in terms of ethical investments etc. Any solution will also necessarily reflect the size, agility and governance of the investor.

**All solutions should be managed dynamically:** While the risk budget and consequently the solution is not the same for all investors, one thing is universally true—risks need to be managed over time. Active management has never been more important than it is today.

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To the **point**:

- Despite signs of a modest recovery, institutional investors are still on a long-term de-risking journey
- Recent equity market rallies have aided investors on that journey, but there is little evidence at this juncture of any long-term 'great rotation' towards typical risk or growth assets (equities)
- As the financial system adapts to the new reality of increased regulation and (potentially) a world without QE, volatility is likely to increase, further limiting investors' risk appetites
- A deep understanding of an institution's prudential and investment framework allied with skilled, active asset allocation is necessary to navigate this new world
- De-risking no longer means simply selling out of equities; re-risking no longer means simply selling out of bonds
- Investors need to access the full toolkit to access growth while managing volatility