

## **Target-volatility strategies, a response to current investment dilemma**

Insurance companies and pension funds have traditionally played an important role as providers of long-term risk capital and, in a world of deleveraging credit institutions, are crucially needed to finance economic development.

However, recent and forthcoming changes in accounting and prudential standards encourage long-term institutional investors to invest in low risk assets that are highly correlated with liabilities. Meanwhile, in the current low interest rate environment, institutional investors cannot meet their future obligations<sup>i</sup> out of the yields on these instruments. At the same time, risk-based capital charges and financial reporting standards penalise assets that offer high risk premia and make it expensive for long-term investors to directly hold volatile assets.<sup>ii</sup>

In a new study entitled “Structured Equity Investment Strategies for Long-Term Asian Investors” conducted with the support of Société Générale Corporate & Investment Banking, Stoyan Stoyanov, Head of Research at EDHEC Risk Institute–Asia and Professor of Finance at EDHEC Business School, examines the dilemma of how to extract risk premia while limiting exposure to downside risks.

The study looks at the control of volatility as an objective<sup>iii</sup> and assesses various strategies to pursue this goal: a fixed mix of equity and risk-free assets, dynamic allocation between these assets targeting a fixed volatility, traditional portfolio insurance implementing a capital guarantee, and a target volatility strategy overlaid with a capital guarantee. The empirical focus on Asian equity markets is justified not only by the region’s importance in the shifting balance of economic power but also by the higher volatility of these markets and the difficulty of hedging in the absence of local volatility derivatives.

Research results show that a target-volatility strategy allows for effective management of volatility and that it both significantly reduces the downside risks and improves the upside potential compared to a fixed-mix strategy. It also augments investors’ access to the upside potential when a capital guarantee overlay is applied. Furthermore, the explicit management of volatility is found to reduce the cost of capital protection. The study also documents utility gains for risk-averse investors regardless of the presence of a capital guarantee overlay and argues that significant allocations should be made to structured equity investment strategies with volatility targeting.

The study has important practical implications for long-term investors. Though evidence is taken from examining Asian equity markets, the results are applicable in other regions and for asset classes that exhibit similar characteristics.

A copy of the study can be found here:

[Structured Equity Investment Strategies for Long-Term Asian Investors](#)

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EDHEC-Risk Institute is part of EDHEC Business School, one of Europe's leading business schools and a member of the select group of academic institutions worldwide to have earned the triple crown of international accreditations (AACSB, EQUIS, Association of MBAs). Established in 2001, EDHEC-Risk Institute has become the premier European centre for financial research and its applications to the industry. In partnership with large financial institutions, its team of 66 permanent professors, engineers and support staff implements six research programmes and eleven research chairs focusing on asset allocation and risk management in the traditional and alternative investment universes. The results of the research programmes and chairs are disseminated through the three EDHEC-Risk Institute locations in London, Nice and Singapore.

EDHEC-Risk Institute validates the academic quality of its output through publications in leading scholarly journals, implements a multifaceted communications policy to inform investors and asset managers on state-of-the-art concepts and techniques, and forms business partnerships to launch innovative products. Its executive education arm helps professionals to upgrade their skills with advanced risk and investment management seminars and degree courses, including the EDHEC-Risk Institute PhD in Finance.

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Its 157,000 employees\* based in 85 countries accompany more than 33 million clients throughout the world on a daily basis. Société Générale' teams offer advice and services to individual, corporate and institutional customers in three core businesses:

- Retail banking in France with the Societe Generale branch network, Credit du Nord and Boursorama
- International retail banking, with a presence in Central and Eastern Europe and Russia, in the Mediterranean basin, in Sub-Saharan Africa, in Asia and in the French Overseas Territories
- Corporate and investment banking with a global expertise in investment banking, financing and global markets.

Societe Generale is also a significant player in specialised financing and insurance, private banking, asset management and securities services.

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<sup>i</sup> One medium-term option is to alter the nature of the obligations by passing more of the risk to policy holders and future pensioners, e.g. by moving away from guaranteed return products and defined benefit pension plans. This is ongoing and will have important social and economic consequences. Another possibility is to make a more astute use of financial techniques to transfer risk to the markets and thus reduce the cost of regulatory changes. This is the approach we are exploring.

<sup>ii</sup> Interestingly, sovereign bonds receive favourable capital treatment.

<sup>iii</sup> From a theoretical standpoint, a constant volatility portfolio is a key building block for asset allocation in a dynamic setting with stochastic volatility. Such a portfolio can also be used to efficiently deal with the problem of extreme risk arising from stochastic volatility. From a practical standpoint, there is increased demand for volatility targeting in the wake of recent market disorders as investors recognise that diversification is not a tool for downside risk control and that traditional portfolio insurance strategies do not explicitly aim at volatility control and, as such, may be sub-optimal tools for reducing regulatory capital consumption for market risk.