Dynamic Strategic Asset Allocation
A case of the Social Security Capitalization Funds Management Institute
Summary

Given the nature of the objectives of the Social Security Reserve Fund (Fundo de estabilização Financeira da Segurança Social (FEFSS)) (as a social security buffer fund) and restrictions - allocation heavily skewed towards debt, e.g. a minimum of 50 per cent of the portfolio must be held in Portuguese Government Debt, and a risk budget identical to the volatility of this asset class - a case can be made for considering Portuguese Government Debt as a proxy liability for the FEFSS.

Additionally, as the available risk budget is limited, a predominantly passive approach is preferred and IGFCSS tries to, strategically, add value to the fund via a core (liability hedging portfolio)/satellite (performance seeking portfolio) approach (this is done on a quarterly basis). Implementation of the core/satellite is dynamic, i.e., we try to constantly guarantee a minimal funding ratio through allocation changes.

In a way this is reminiscent of Constant proportion portfolio insurance (CPPI) strategies, although on a relative (vs. liability) basis.

On a tactical level (once every two weeks) additional alpha potential is exploited through geographical, FX or duration exposures.

CRITERIA 1:

What was the issue/problem/challenge addressed by your good practice?

FEFSS is a social security buffer fund. While trying out to perform its liability consideration must be made of the fact that there is a limited risk budget and a low tolerance for underperformance. It was, therefore, important to implement procedures that made it possible to, within the investment process, address this necessity.

CRITERIA 2:

What were the main objectives and the expected outcomes?

The main objective was to provide us with the necessary tools to systematically address the need to, while striving for outperformance, take into consideration a minimum liability funding ratio.

The expectation was to further focus our asset management expertise on the most relevant performance indicator: the liability funding ratio.

Given the fact that there are no explicit liabilities (the fund is intended to accommodate any future shortfalls that the social security budget might run into), we considered beating the performance of a portfolio of Portuguese Government Debt as the strategic goal of FEFSS. In other words, return on assets should be, over the long run, higher than the cost of debt. This is
why we considered the performance of Portuguese Government Debt as the fund’s liability (strategic benchmark).

**CRITERIA 3:**

**What is the innovative approach/strategy followed to achieve the objectives?**

We believe that the dynamic strategic asset allocation process we’ve implemented is an innovative way of targeting outperformance while limiting downside potential vs. the fund’s liability (Constant Proportion Portfolio Insurance (CPPI) strategy on a relative basis).

Basically, we defined a Dynamic Core-Satellite approach to the definition of our strategic benchmark. Core being a liability hedging portfolio (LHP), made up of asset classes highly correlated with Portuguese government debt, and satellite being a performance seeking portfolio (PSP) made up of return enhancing asset classes. The proportions allocated to each one of these two portfolios, LHP and PSP, are computed on a quarterly basis and are a function of the actual funding ratio (asset performance vs. liability performance), vis à vis the desired minimum, as well as of assumptions made regarding asset returns, risk and correlations.

**CRITERIA 4:**

**Have the resources and inputs been used in an optimal way to implement the practice?**

The necessity was identified in the year 2008. Work on theoretical alternatives and its back testing was finished by the end of Q1 2009. Q2 2009 was used to implement the operational adjustments deemed necessary to accommodate this different approach.

**CRITERIA 5:**

**What impact/results have been achieved so far?**

The new procedures have only recently been implemented (there was a transitional period from late May 09 until 24 July, and we are now fully operational).

Any way we believe that the desired management focus on performance vs. liability (funding) has already been achieved.

As for specific results, two months into the implementation the funding ratio is 100.41 per cent.

**CRITERIA 6:**
What lessons have been learned from the introduction of this good practice?

Adjustments to strategic asset allocations must be made in order to accommodate the client’s "softer" objectives and concerns. Consideration and solutions to shifting risk aversion and minimum performance thresholds is of the essence when managing funds like FEFSS.

CRITERIA 7:

To what extent would your good practice be appropriate for replication by other social security institutions?

We believe this approach is very flexible. It allows the manager to take into consideration a liability benchmark and add value to it in a controlled environment. It can be managed in a multi layer perspective, i.e, you can separate the strategic decisions from the tactical ones using an integrated model.