Core-Satellite Investing

In March 2004, within the context of a study dedicated to the use of EuroMTS trackers in institutional investment, the EDHEC Risk and Asset Management Research Centre began to advocate the core-satellite approach to investment management, by predicting that it would revolutionise asset management, not only in France but also in Europe.

Most of the time, active management is submitted to very restrictive constraints, with managers only allowed to deviate slightly from their benchmark. As a result only a limited part of the portfolio is actively managed, while the essential part of the portfolio passively replicates its benchmark, resulting in an overall portfolio with a low tracking error. For example, an active manager with a 5% tracking error constraint is in fact 95% passive. Meanwhile, high active management fees are paid on the whole portfolio. On the one hand, this approach is not efficient and leads to high management fees. On the other hand, it is not likely to favour outperformance, since managers are prevented from actually using their skills for making active bets. Instead of proceeding in this way, it is possible to associate active management and passive management in an optimal way, in order to get the best of both, using the core-satellite approach.

The core-satellite approach consists in dividing the portfolio into a core component, which is passively managed and which fully replicates the investor’s specifically designed benchmark, and an active component, which is made up of one or several satellites of active managers, who are allowed to have a higher level of tracking error. The core portfolio can be typically made up of a pure index product. However, it is important to note that any long-term allocation between different indices can constitute the benchmark, which is not necessarily limited to market indices. The satellites will be actively managed, and typically will be invested on less efficient markets and will require more specialised managers. The allocation choice between the core and the satellite of the portfolio allows the investor to control a target level of tracking error for the whole portfolio, while authorising a very active management of a limited part of the portfolio. This approach allows for the improvement of investment management efficiency.

The role of the core part of the portfolio is to control manager risk, while limiting management fees, whereas the role of active satellites is to provide investment diversification and to generate outperformance with regard to the benchmark. In other words, the core portfolio is the place where the management of the portfolio’s betas is performed, while satellites are where the management of the portfolio’s alpha is performed. High management fees will therefore be paid only for the part of the portfolio that is truly actively managed, while management fees will be reduced for the core part of the portfolio managed passively. This technique is well suited to pension funds, which are typically active funds with a low tracking error with regard to their benchmark.

The following documents by the EDHEC Risk and Asset Management Research Centre deal with the topic of core-satellite investing:

- **ETFs in Core-Satellite Investing**
  Véronique Le Sourd, Felix Goltz
  October 2007

- **EDHEC European ETF Survey 2006**
  Noël Amenc, Jean-René Giraud, Véronique Le Sourd, Felix Goltz, Lionel Martellini
Xiaoyan Ma  
November 2006

- **The Benefits of Bond ETFs for Institutional Investors - The Natural Vehicle for a Core-Satellite Approach**  
  Noël Amenc, Philippe Malaise, Lionel Martellini, Jean-René Giraud  
  March 2004

- **Revisiting Core-Satellite Investing - A Dynamic Model of Relative Risk Management**  
  Noël Amenc, Philippe Malaise, Lionel Martellini  
  2004

- **Risk Measurement of Investments in the Satellite Ring of a Core-Satellite Portfolio: Traditional versus Alternative Approaches**  
  Hilary Till  
  November 2003

**URL for this document:**  
http://www.edhec-risk.com/multistyle_multiclass/core_satellite/index_html

**Hyperlinks in this document:**