INDEX CONSTRUCTION

The evolution of replication techniques

Elisa Trovato takes a look at recent developments in index construction and examines the benefits and drawbacks of ETF index replication methods

As Exchange Traded Funds (ETFs) are designed to replicate an index, the construction of the index itself and how it is replicated is central for any ETF provider.

As traditional allocation models are typically orientated towards market capitalisation weightings, the overwhelming majority of indices are market cap weighted. This means that larger individual components, in terms of price and number of shares, carry a larger percentage weighting in the index.

Not surprisingly, the most liquid market cap-weighted broad benchmarks that have become standard in the industry - such as S&P 500 for the US, the DowJones Eurostoxx 50 for Europe and the FTSE 100 for the UK - are also the most replicated and have the largest assets under management. Ultimately, an ETF will be as liquid as its underlying index.

At the same time, there is an initial trend in the European market where ETFs have started replicating fundamental indices. These indices are rebuilt by weighing fundamental characteristics of companies, like dividends, cash flow, revenue or book value and in general those characteristics which are not impacted by the share price.

These types of index typically take a style bet, as they typically favour either smaller companies or value. The types of ETFs based on this type of index, which Lyxor has named 'Strategy ETFs', are completely transparent and maintain intraday liquidity.

"FROM THE SALES PERSPECTIVE YOU REALLY HAVE TO HELP INVESTORS TO UNDERSTAND THE RATIONAL BEHIND A STRATEGY ETF"
Dan Draper, Lyxor

They attract the attention of long-term investors willing to take a contrarian view on market cap weighting and who believe that over a long period of time, they can capture some advantage or risk premium by investing in an index that mechanically overweights value and smaller companies, since these are typically less liquid.

Lyxor offers ETFs that replicates the biggest European market- cap weighted indexes, such as the Dow Jones Eurostoxx 50, which is the biggest equity ETF in Europe, the CAC 40 in France, which is the biggest single country ETF in Europe in terms of assets under management, and the FTSE 100 in the UK.

In Europe, the in-house index team at Société Générale has also constructed an ETF, called Wise, which replicates an index reweighted on fundamental factors, which also adds an earnings element."From the sales and marketing perspective you really have to help investors to understand the rational behind a strategy ETF, and in particular the performance attribution," says Dan Draper, global head of Lyxor ETFs, Société Générale Corporate & Investment Banking.

Strategy ETFs can be seen as a first step towards active strategies, which have started very recently to emerge in the US, where a portfolio manager gives his qualitative input to the index construction. These ETF strategies generally face a trade-off between transparency and their ability to attract volume. If the portfolio manager shares with the market their strategy ahead of time, there is the risk that market makers try and profit from it, at the expense of the active manager.

These strategies therefore tend to be less transparent, which means that they attract less trading volume. In truth, they become similar to a traditional fund, traded at daily net asset value.

Beyond any debate on whether one type of replication is superior to another, it is important to emphasise that both the replication methods currently available on the market have pros and cons.

REPLICATION METHODS

ETF physical replication, whereby an asset manager replicates the index through the acquisitions of all securities held in it, is the traditional form of index replication and it is the one favoured by the largest and long-established ETF providers. Optimising techniques have been developed to replicate indexes which are extremely large or when markets are less liquid.

In these cases it becomes very difficult and expensive to own and rebalance every individual security and a sample, the most representative, is used to replicate the index. This can generate a tracking error, generally acceptably low.

The synthetic replication method, pioneered by Lyxor ETFs in 2001, has become the fastest growing method of replication in Europe and it is the one embraced by the vast majority of new entrants. Under Ucits III legislation, it is possible for an asset manager to hold up to a maximum of 10 per cent of the fund in net asset value in non-Ucits assets.

While the sampling technique is still generally applied, this method allows the asset manager to swap with a market counterpart the return of 90 per cent of securities held in the sample for the actual return of the index that the ETF is tracking. The remaining 10 per cent, or less, is the cost of the swap.

This way, the ETF provider is able to pass along the tracking error and the rebalancing risk to a third-party while the ETF generates exactly the performance of the index, explains Mr Draper. This explains why swap-based replication is generally a lower-cost method. Lyxor ETFs is one of the cheapest providers in the industry and their annual management fees range from 0.15 per cent to 0.85 per cent.

> **"EUROPE IS VERY DIFFERENT FROM THE US BECAUSE UCITS III ALLOWS SYNTHETIC, AND IT IS ARGUABLY A MORE COMPETITIVE MARKET PLACE"**
> Dan Draper, Lyxor

There is indeed the potential introduction of counterparty or credit risk. This is in reality less than 10 per cent, as less than 10 per cent of the sample held is generally swapped, says Mr Draper.

Lyxor ETFs employs only the strongest counterparties, states Mr Draper. "We do have competitive bidding for the swaps and we have multiple swap providers," he adds.

Differently to what is generally assumed, physical replication also presents counterparty risks. Indeed, the asset manager can lend up to 80 per cent of its securities held in the ETF to a third-party. Revenues from securities lending generally help offset costs, which are very expensive when it comes to custody fees, transaction costs of rebalancing or tracking error. Securities lending is an extremely large business in most of the traditional index fund management houses.

What is also worth mentioning is that traditional full replication and synthetic replication are not mutually exclusive. In some of Lyxor ETFs full replication is used in combination with synthetic overlay, because that helps eliminate tracking error.

And more importantly, regardless of whether they use traditional or synthetic replication, ETFs are Ucits III funds which have emerged clear winners in the credit crisis, with both types of approaches being rewarded by record inflows.

Lyxor reports that European ETFs assets under management grew by 6.5 per cent in 2008, obviously offsetting the -44 per cent return for the MSCI World Index over the same period.

The possibility of using swaps to replicate an index introduced by Ucits has indeed generated a more competitive and efficient market place. If just traditional replication was allowed, only the largest players would be able to compete on price, as they are able to spread the huge costs over a bigger asset base.

"Europe is very different from the US because Ucits allows synthetic, that's why arguably it is a more competitive market place," says Mr Draper. "You need to have the ability to manage with strong counterparties but also to be able to manage synthetic process. The European market is in some ways more open and that's why different parties have been able to perform very well."

CORPORATE STATEMENT

Contacts: Dan Draper, global head of Lyxor ETFs
Tel.: 44 (0) 20 7762 5581
www.lyxoretf.co.uk

EXCHANGE TRADED FUNDS BY LYXOR
SOCIETE GENERALE GROUP

Lyxor, a wholly-owned subsidiary of Société Générale Group, provides since 1998 the best of financial investment solutions to its clients. Lyxor has established itself as a leading niche player by offering its expertise in three major investment universes: ETFs, structured funds and alternative investment funds. Lyxor gained its prominence with its unique Hedge Fund Platform which provides independent valuation, risk monitoring and weekly liquidity. Lyxor is also one of the top players in the European ETF industry and is regularly awarded for its excellence and innovation in the structured fund market. Lyxor Asset Management has enjoyed a strong and steady growth and currently manages over $77billion in assets for international clients.