Equity market neutral investing

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Abstract Market neutral investing is a portfolio construction technique designed to remove the inefficiencies inherent in the traditional long-only approach. It involves holding equal-sized, well-diversified long and short portfolios in the same equity market. In removing the market risk and return, this structure creates an absolute return investment offering low or negative correlation with the main asset classes. Market risk and return can be restored via an index future without reintroducing the original inefficiencies. This increased investment efficiency may come at the cost of some increase in administrative complexity.

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Introduction

Market neutral investing, which has been a feature of US institutional markets for some years, is starting to attract more interest both in the UK and in some Continental markets, notably the Netherlands. The term 'market neutral' can mean different things to different people. In this context the definition is a relatively tight one: well diversified, equal-sized long and short equity portfolios in the same market. The objective is to achieve a high absolute return objective, in the region of 5–6 per cent above Treasury Bills. The strategy adds value by buying (long) stocks that are identified as attractive and selling (short) stocks that are considered likely to fall in value, relative to the market.

The market neutral approach is principally a portfolio construction technique, designed to exploit in a more efficient manner any available forecasting

ability for stock returns. It will not and cannot, of itself, improve such forecasting ability. What it can do is reduce significantly the slippage between good stock selection ideas and ex-post realised portfolio performance that often confounds the expectations of long-only active equity programmes.

One result of this approach to portfolio construction is that the market return (and risk) is removed ($1 \times$ long market exposure minus $1 \times$ short market exposure = zero market exposure). At this level, such a structure becomes an absolute return investment vehicle, more naturally benchmarked against cash or Treasury Bills rather than an equity index. Indeed, with directional risk removed, in a very pure sense it can be described as a type of hedge fund, going back to the original conception of that label.

One of the attractions of this approach, as a building block in total

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fund structure, is the flexibility it brings. Market neutral portfolios of this type can be looked on as pure return or 'alpha' generating vehicles, forming part of an allocation to 'alternative' investments. They can also be 'equitised' by overlaying with the appropriate equity index futures contract, thus restoring the market return (and risk), and reclaim a place in the active equity line-up. The restoration of the market risk and return via the futures market can be thought of as completing the re-engineering of the traditional long-only equity investment process. There is now $1 \times$ market exposure as with a traditional long-only portfolio, but importantly, the inefficiencies of the traditional approach have not been reintroduced.

One element of hesitation for fund sponsors in embracing the market neutral concept can reside in the issue of where it belongs. Is it part of the equity portfolio? Does it belong somewhere else? In the case of equitised market neutral, the answer to this is very clear — the package is a long investment and should form part of the equity portfolio. In pure, unequitised form, this may be more of an issue if there is no allocation for absolute return investments. Although benchmarked against cash returns in this form, it is arguably inappropriate to include it under a cash allocation because it does involve active equity risk.

In either format, one thing is very clear: this is an activity requiring equity investment skills and forecasting ability and may involve a higher level of stock specific risk than most long-only portfolios, even if systematic risk has been removed.

Why is the traditional approach inefficient?

There are two key aspects of long-only portfolio construction within an

institutional framework which act as a drag on performance and restrict the ability of forecasting skill to be translated into superior performance. Both are benchmark related. These are described below.

The internal index fund

When an active portfolio is constructed with the objective of outperforming a benchmark index, it will normally be constrained by a tracking error target, which might typically be in a range of 4–5 per cent for core portfolios. In order to comply with this limitation, it is inevitable that a significant proportion of the portfolio must be highly index-related in its market behaviour. The only way in which risk relative to the underlying index can be constrained in a long-only setting is by convergence towards the weightings of the constituents. We would expect to find that as much as two thirds of a typical, conventionally diversified core institutional portfolio is index related in this way, forming a *de facto* internal index fund within the active portfolio. This element, which is effectively an index fund, cannot contribute towards the goal of outperformance and is therefore 'deadweight' for performance purposes. This effect is sometimes also referred to as 'benchmark drag'. A structure which leaves only one third of the capital able to contribute towards the performance objective is far from ideal and certainly not the most efficient.

Unstructured short portfolio

Conceptually, a long-only portfolio can be thought of as consisting of three components: a long portfolio, a short portfolio and a benchmark portfolio. The existence of an implicit short portfolio for the long-only investor can readily be

appreciated if we consider the issue relative to the benchmark. Let us suppose, for instance, that a manager is investing in an active portfolio of 100 names benchmarked against and designed to outperform the Standard & Poor's 500. Clearly there will be many overweight positions relative to benchmark weights and presumably these weightings will have been carefully selected for each one of these positions.

What such investors also own, whether they like it or not, is 400×100 per cent short positions relative to the benchmark, with the crucial difference that the weight of each and every one of those shorts is selected for them by its benchmark weight. This is unlikely to be optimal. In this sense then, the short portfolio has an element of randomness, formed by the happenstance of index weightings, rather than by a careful construction and weighting process. It is probably also a fair observation that the majority of investors still give much more attention to their long selections than to their residual shorts.

Just as there is an inevitable short portfolio, so there will inevitably be an alpha (excess return) associated with those short positions. If the short portfolio has not been carefully engineered, that alpha may be randomly negative and undermine the good work being done on the long selections.

The long-only manager is able to give expression to negative forecasts by underweighting stocks relative to benchmark weight, but limited to a zero holding. As the majority of stocks will have tiny weights, especially given current levels of concentration of weighting among the largest stocks (see later), this is highly constraining and inefficient.

Collectively, these two major shortcomings of long-only investing, hinder and compromise the efficiency of

the conventional equity management approach.

Re-engineering of active investment

By adopting a market neutral stance we can remove the two problems described above at one stroke. First, the issue of 'benchmark drag' simply disappears, because we have removed the benchmark. The long and short portfolios are optimised one against the other simultaneously, in an integrated optimisation, rather than against a benchmark. Second, if the investor has a process which engineers the short portfolio explicitly, constrained only by prudential risk control considerations rather than index weights, that impediment to efficiency can also be removed.

In pure market neutral form the risk and return of the benchmark portfolio, together with the 'deadweight' portion of the portfolio, have been removed. The natural benchmark is then Treasury Bills or equivalent, and what is left is an absolute return vehicle which may be capable of delivering a double digit rate of return with a materially lower level of absolute variability than that of the equity market.

If an investor does want to have market exposure, that can be restored simply by buying the appropriate amount of index futures contracts. This restores the benchmark to being the associated equity index, but without restoring the benchmark drag associated with the conventional long-only portfolio construction technique. At this stage, the re-engineering of the traditional long-only investment approach has been completed. A market neutral portfolio plus the appropriate equity index future represents a very efficient way to invest long.

Diversification

Another important feature of unequitised market neutral portfolios, is that they normally have very low, or negative correlation with both their underlying universe, or index and most other asset classes. A long-only portfolio, because of the substantial index-related component, is likely to have a high correlation with its underlying index. Market neutral portfolios can offer genuine diversification opportunities.

This is an issue of some importance at present. The dramatic bull market in technology related stocks, at the expense of 'old economy' companies, has resulted in narrow leadership of the main equity markets and massive concentration of index weighting in a handful of names. In the UK, if the Glaxo/SKB deal currently under consideration goes through, at current levels the top ten stocks by capitalisation will account for over 53 per cent of the weight of the FTSE 100 index and the top five for 40 per cent. It is germane to ask whether this level of concentration provides an adequate level of diversification for the institutional investor.

In order to comply with typical risk constraints the long-only manager will effectively be compelled to hold close to market weightings in most of those large capitalisation stocks. The market neutral manager labours under no such constraint, is not forced to hold any particular issues and is more or less indifferent to current concentration levels.

Some caveats and some comforts

Market neutral investing does involve active equity risk and if, for a given amount of capital, 100 per cent is invested in long positions and 100 per cent in short positions, there is double

the level of exposure to that active risk. The active risk level can, however, be adjusted to suit the risk appetite of the investor and it is possible to restrict investment to 50 per cent each way.

It does require positive forecasting ability and as, essentially, a portfolio construction technique, it can do nothing to enhance that ability. To succeed in beating the market as a long-only investor, given the inefficiencies noted above, requires a high level of forecasting skill. Success may be possible with a more modest forecasting ability in a market neutral framework with those inefficiencies removed.

Fees are typically higher for market neutral portfolios and may be double those for long-only. It should be remembered in this context that the typical long-only portfolio contains a large index element for which active fees are being paid. Thus even at the higher fee levels, the fees per genuinely active pound or dollar invested may well be lower than with traditional long-only investment.

Some investors are concerned by the theoretically unconstrained losses possible with short positions. A long investment can only fall to zero, but there is no theoretical cap on the amount by which a short position could rise. For practical purposes, adequate diversification with a sufficiently large number of positions both long and short, say 100 each way, will normally suffice to defray this risk. For absolute comfort on this issue, however, a unitised vehicle offers a neat solution. It puts the long-short investment back on all fours with long-only, as in the worst possible circumstances no more than 100 per cent of the investment in units could be lost.

Investment accounting and performance calculation are more onerous than for long-only. The performance can be measured as the

weighted return of all the holdings, longs and shorts, and conceptually can be thought of as the spread between the total long return and the total short return. If administrative simplicity is an important issue for an investor, a pooled vehicle again offers a simplifying solution, reducing the market neutral investment to a single line-item in the investor's portfolio valuation.

The future

Without a doubt, performance shocks in recent years from many of the major active management houses have resulted in both fund sponsors and consultants re-evaluating the traditional 'balanced' model of fund management. One consequence has been a further move into indexation, coupled with a significant increase in the use of specialist active managers. Another result is a

greater willingness to consider new strategies, with some of the more adventurous funds already making modest allocations to alternative investments. As a more efficient and diversifying investment than long-only, market neutral has a role to play either in equitised form as part of the specialist equity line-up, or as an absolute return vehicle, forming part of an allocation to alternative investments.

Further reading

For more on the pros and cons of market neutral investing see:

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