Alternative passive equity approaches - implementation

Addressee

This paper is addressed to the Officers and Pensions Committee of Suffolk County Council as administering authority for the Suffolk County Council Pension Fund ("the Fund"). The paper considers options for investing in alternative passive equity approaches which were discussed at the September Committee meeting.

Background

The Fund currently invests in equity markets through a range of active and passively managed equity mandates. At the last meeting we discussed an alternative way of investing in equities through approaches which are commonly known as "smart beta" or alternative indexation. These approaches aim to generate returns from equities through investing in portfolios constructed using alternative means of indexation other than market capitalisation. They aim to capture equity returns efficiently. Efficiency in this instance is defined as an approach which seeks to improve the expected return without increasing the level of risk, or to reduce the risk without a corresponding reduction in expected return. There are a range of smart beta approaches which the Fund might look to invest in which aim to satisfy either of these goals. In this paper we consider the practical options open to the Fund if it were to invest in some form of smart beta strategy.

Criteria for assessing smart beta strategies

In the previous paper which we presented at the Committee Meeting on 26 September 2013, we identified a range of criteria that any passive strategy, whether based on market capitalisation indexation or using alternative forms, needs for it to be considered as a suitable approach. The existing passive approach, based on market capitalisation indices, meets these criteria:

1. There needs to be a clearly defined set of ground rules for how the index operates. This must be in the public domain and the index must be capable of being replicated by other parties independent from the index provider (e.g. managers offering products).
    a. The ground rules need to cover information about the constituency (inclusion, and rules and price basis used for entry and exit) and categorisations (e.g. sector allocation, geography, penetration by size, etc.).
    b. Re-balancing rules need to be well documented.
    c. There needs to be some form of valid index oversight.
2. Investors need to be comfortable that there is sufficient capacity in the approach for a sustainable period of time, so that index management costs do not erode all of the benefit inherent in the approach. It would also be helpful if there is manager choice.
3. Investors need to understand how the approach will deliver returns, and believe in the investment premise.
4. Investors need to believe that there are advantages in the approach. It may be that index diversification is a sufficient advantage, rather than requiring any expectation of superior return.

Transition process, transition cost and running costs

Any change to the Fund's structure gives rise to transition costs which need to be met out of assets and so depress returns. It is important, therefore, that these costs can be contained so that the impact on returns can be minimised. It is also important that ongoing costs of managing the new arrangement are considered. It will clearly be helpful if these ongoing costs, either arising from manager or license fees or from other aspects such as re-balancing costs, are kept as low as practicable.

Keeping these parameters in mind, we believe the following aspects are important:

- This should be an essentially “passive” approach, so we would look to a passive manager to implement;
- There would need to be a good reason not to use the Fund’s existing passive manager, Legal & General (L&G), e.g. if L&G were not able to offer the index approach the Fund wished to implement.

In point of fact, L&G is likely to be able to offer an appropriate choice, although this is likely to be a specific fundamental index offering (see below).

Current equity structure

The current equity structure of the fund based on benchmark data as at 30 September 2013 is set out in the table below.

Manager	L&G	Newton	BlackRock	Bernstein	Total
Value of equity mandate (£m)	376	258	172	144	950
% of total fund	21.5	13.5	9.5	7.5	52.0
Regional allocation					
UK		7.9	100	100	34.7
North America (unhedged)	31.7	51.8			26.6
Europe (unhedged)		15.7			
Europe (hedged)	31.7				17.1
Japan (hedged)	2.0				5.9
Japan (unhedged)	6.9	8.5			
Asia Pacific ex Japan	12.9	6.6			7.1
Emerging markets	14.8	9.5			8.6

The L&G mandate is passively managed against a mix of regional market cap weighted indices. There are a mix of currency hedged and non-hedged regional funds - all the European allocation is currently hedged to £ Sterling (this is to protect against a Euro breakup) and a large part of the Japan allocation is currently hedged to £ Sterling (although this is subject to review). The three other mandates are all actively managed according to the manager’s stated investment philosophy or style.

Smart beta options – which manager?

If allocating to a smart beta strategy, our preference would be to do so in a way that results in minimum complexity, is low cost and is easy to implement. As a result our preference would be to focus initially on the options offered by the Fund’s incumbent passive manager (L&G). Newton and Alliance Bernstein are both active managers and do not have credible passive options either in terms of traditional market cap approaches or newer smart beta strategies. Although BlackRock has significant presence as a passive manager, the mandate which BlackRock provides to the Fund is in active UK equities.

BlackRock and L&G both offer an extensive range of index tracking funds. In relation to smart beta, the managers currently offer the same types of options, and L&G’s range is wider and has greater capacity. Consequently, we would recommend using L&G to implement any smart beta strategy.

Allocating to one of L&G's alternative passive approaches would be relatively straightforward. It is effectively another pooled passive fund option, so allocating to one of these strategies could simply be a change in their benchmark, requiring relatively minor documentation changes. It would be straightforward, simple and easy to implement. Nevertheless, it would require L&G to reorganise the underlying portfolio, principally by adjusting the weighting of securities. That will involve some transition cost although we expect this to be modest.

L&G smart beta options – which strategy?

L&G are one of the world's leading providers of passive investment strategies including newer smart beta indexed funds. As at end June 2013 they managed £6.8bn in alternative beta strategies. In terms of capacity, i.e. the value of assets managed in the strategy, one particular index strategy is dominant. This is the series of fundamental indices created by Research Associates, known as Research Associates Fundamental Indices (RAFI). The RAFI strategies comprise around £6bn of the £6.8bn that is invested in the alternative beta strategies offered by L&G, with assets under management having grown dramatically over the last two years.

L&G also offer alternative beta strategies based on other index strategies but many of these have struggled to gain investor support and in some instances have seen client money move out of them in favour of RAFI. Research Associates are also developing some new low volatility based versions of RAFI indices. Our preference would therefore be to consider investing in L&G's RAFI indexed funds.

So what are the RAFI indices and do they meet the above criteria?

Fundamental indices – RAFI

What is a fundamental index?

In a market capitalisation weighted index (e.g. the FTSE All Share index in the UK) the weighting of each constituent company is determined by taking its overall value as its share price multiplied by the number of shares in issue. In episodes of excess speculation, famously the late 1990's "dotcom" bubble, businesses which have generated very little, if any, profits commanded a high index weighting due to their overvalued share prices. There are many more frequent, though less extreme, examples. In a fundamentally weighted index (e.g. the FTSE RAFI 3000 [global] Index) the value of each stock is determined by reference to directly observable, historic accounting valuation measures (or combination of measures). For example, for a given universe, company A's share of total dividend pay-out together with its share of total book value, etc.

We have provided additional information on RAFI indices in Appendix 1 with performance details in Appendix 2.

Other alternative beta strategies

We would acknowledge that the L&G RAFI indices are only one of a number of alternative beta strategies. While we believe this option meets the requirements of minimum complexity, low cost and easy implementation, the Committee may wish to look at alternative options. These options might be other fundamental indices or index providers or even a wider consideration of smart beta strategies. The Committee could potentially consider the following:

- Conducting a full OJEU based procurement search for a smart beta provider
- Conducting a full OJEU based procurement search for the fundamental indexation provider
- Carrying out a short list selection process of a sub set of providers or smart beta products on the basis of a pooled fund investment which would not require a full OJEU

We would be happy to discuss any of these options with the Committee as required.

Practical implementation

If the Committee does decide to make an allocation to L&G's RAFI funds, we need to agree how this would be implemented. In particular we would need to agree the suitable source of funds, what proportion of the Fund's assets are to be invested in the approach and which specific L&G RAFI funds to invest in.

Source of funds

Our recommended source of funds for any allocation to alternative indexation would be the existing passive equity mandate with L&G. L&G currently manages 42.5% of the Fund's total assets of which 21.5% is invested in passive market cap equity strategies. This is just over 40% of the Fund's equity allocation. Although the size of the exposure to L&G is not a major concern, we would prefer not to increase this further. In addition, part of the rationale for allocating to a smart beta strategy is to provide some diversification within equities away from market cap strategies. We therefore believe that the L&G market cap allocation is the most appropriate source of funds.

Size of allocation

Any allocation needs to be of sufficient size to provide the level of diversification across the different equity strategies we are investing in. We would recommend allocating around half of L&G's existing equity allocation (10% of total fund assets) to a new RAFI approach. We believe that this would result in a more balanced split across the different market cap based active, passive and alternative beta equity approaches.

Choice of RAFI funds

L&G's current equity mandate is split across a range of hedged and unhedged regional funds. L&G's RAFI offering and the assets under management within each of the pooled funds are set out below.

Fund	Assets under management (£m)
FTSE RAFI 3000 Equity Fund	5,040
FTSE RAFI 3000 Equity Fund – Hedged	509
FTSE RAFI 1000 Developed Equity Fund	917
FTSE RAFI Emerging Markets Equity Fund	802
FTSE RAFI 3000 North America Equity Fund	137
FTSE RAFI 3000 Europe Equity Fund	91

The main 3000 index is the flagship strategy which is comparable with a FTSE All Countries World index in terms of coverage and number of constituents. This is offered on a hedged or unhedged basis. L&G also offer a developed only index (the 1000 index) and an emerging markets index. They also offer regional funds in North America and Europe ex UK, which were created for another UK council's fund. L&G has offered to launch further regional funds depending on there being sufficient investor demand.

In our view, there are two main options open to the Fund.

Option 1: This would involve moving a pro rata slice of the existing L&G equity allocation to the RAFI 3000 Equity Fund. This could include the option of having part of this hedged. Points to note on this approach are:

- This gets the broadest possible exposure to the RAFI strategy
- The approach results in rebalancing across regions, as well as at sector and stock levels
- While there is a choice of hedged or unhedged funds, it is not possible to tailor the hedging across individual regions.

Adopting the RAFI 3000 index would mean that the overall regional equity weightings would change to reflect the underlying weightings in the global index (e.g. introducing a UK equity allocation, a higher allocation to North America and a lower allocation to Europe).

Option 2: This would involve constructing a directly comparable investment approach using the range of regional RAFI funds. Points to note on this approach are:

- It provides access to the RAFI approach with flexibility over regional weights and greater ability to tailor the strategy
- It allows the existing regional weights to be maintained
- Not all the regional funds are currently funded and L&G's willingness to launch these will depend on minimum invest sizes
- L&G are still considering whether to offer hedged versions of the regional funds.

While there are advantages and disadvantages to both approaches, our preference would be for the Fund to invest in the RAFI 3000 Equity Fund. This offers a straightforward solution and the fund already has critical mass. This is a strategy and fund that is likely to have longevity, whereas demand for the regional funds is much more uncertain. We are not unduly concerned over the impact on the regional weights or hedging and the remaining market cap assets could be restructured to compensate for some of these changes if required.

Summary and conclusions

We believe that smart beta strategies can be an attractive alternative to traditional market cap based equity approaches. If the Committee wishes to allocate to a smart beta strategy our preference would be to do so in a way that results in minimum complexity, is low cost and is easy to implement. We would therefore recommend considering one of the smart beta strategies offered by the incumbent passive manager L&G.

Of the smart beta strategies offered by L&G our preferred choice for the Fund would be the fundamental smart beta strategy known as the RAFI indices. We believe these fulfil the criteria we require when assessing different smart beta strategies and the strategy is becoming a core part of many pension funds equity allocations. If allocating to one of these strategies our preference would be to invest around 10% of fund assets in the FTSE RAFI 3000 Equity Fund with the assets being sourced from the existing market cap assets managed by L&G.

Next steps

Smart beta is still a fairly new concept. While we have outlined our views in this paper, the Committee may wish to consider the different options in more detail. As a first step the Committee may wish to have L&G present on their credentials as a provider of the RAFI index tracking funds or alternatively meet with the company that designed the indices, Research Affiliates, to gain further understanding of the strategy. We would be happy to facilitate this as required.

Disclaimer

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For and on behalf of Hymans Robertson LLP

Risk warning
Please note the value of investments, and income from them, may fall as well as rise. This includes equities, government or corporate bonds, and property, whether held directly or in a pooled or collective investment vehicle. Further, investments in developing or emerging markets may be more volatile and less marketable than in mature markets. Exchange rates may also affect the value of an overseas investment. As a result, an investor may not get back the amount originally invested. Past performance is not necessarily a guide to future performance.

Appendix 1 – Research Affiliates Fundament Indices (RAFI)

The RAFI approach

Research Affiliates, founded by Rob Arnott in 2002, produces the most commonly tracked fundamental index series. The RAFI indices use a liquidity screened universe of listed stocks reweighted according to their proportionate share of an aggregate of:

- Sales: total company sales averaged over the preceding 5 years
- Cash flow: total company cash flow averaged over the prior 5 years
- Book value: total company book value at the review date
- Dividend: total dividend distributions, averaged over the last 5 years.

A key characteristic of the index is that its construction methodology breaks the link between a stock's price and its weighting within an index. The intention is to remove the influence of investors' future expectations by taking price out of the weighting calculation. A company's index weighting will then be more representative of its economic footprint. Clearly, however, there will still be a relationship between a company's size and these fundamental characteristics (larger companies tend to have higher book value, pay more dividends etc.). Importantly, however, the fundamental characteristics are all backward looking and thus reflective of the intrinsic "worth" of the company.

There is some differentiation in the composition and time frame over which fundamental index providers assemble their value setting data. Nevertheless, the common feature is that these indices anchor on, and rebalance back to, a more stable weighting regime than with a cap weighted index.

Characteristics of fundamentally weighted indices

Is the index Active or passive?

For fundamental indices, performance comparisons will be drawn with market cap weighted indices, the tracking of which currently provides the most liquid, lowest cost, direct access to equity returns. Against a cap weighted benchmark the fundamental index will show a tracking error over time not dissimilar to an active equity manager (i.e. 4% – 6%). In this sense the allocation to a fundamental index is an 'active decision' in terms of the decision to track a fundamental index; thereafter, we would expect the index rules to remain constant and the governance of the mandate to be broadly similar to that of a passive cap weighted index mandate.

Volatility

Long run back-tested performance data suggests the volatility of fundamental indices is broadly comparable with market cap weighted indices. The objective of a fundamentally weighted index is not to reduce the risk associated with equity investment. Nevertheless, by implicitly reducing exposure to the more speculatively driven extremes of market cap index valuation, some offset to shorter term volatility might be expected, particularly around phases of excess speculation.

Value style bias

A fundamentally weighted index will tend to carry a higher exposure to businesses with established cash flows, earning, dividends etc and as such will have an underlying bias towards value type businesses. We would not see this style bias as a weakness per se, but it should be taken into account in any allocation decision. It can be argued that a market cap weighted index itself carries a growth bias given investors' pre-disposition to favour high growth businesses.

Valuation measures

There is some debate around the need to refine the accounting valuation measures used in fundamental indexation methodology (e.g. filtering out heavily indebted businesses). Some methodology providers argue that the key added value for fundamental indices is to break the price link and rebalance to fundamental value measures, it believes further refinement delivers little extra gain and the focus should instead be on cheap and efficient delivery. We have sympathy with that view.

Re-balancing

Market cap weighted indices are 'self-rebalancing', i.e. as share prices move, the valuation and index weighting of each security adjusts automatically and this is mirrored in the (market cap) index tracking portfolio. In a fundamental index, constituent weights are set according to fundamental measures; as the share prices move, the weighting does not adjust so fundamental tracking portfolios need to be rebalanced back to the fundamental weights periodically. This does add some extra transaction costs for a fundamental index tracking portfolio. However, the rebalancing will tend to reduce the weight of stocks which have been re-rated upwards (relative to fundamental metrics) and increase the weight of stocks that have been de-rated (relative to fundamental metrics). [This does not occur in the market cap weighted approach.] This not only helps deflate the impact of price driven speculation on investor portfolios but we believe this disciplined, contrarian rebalancing is a key component in fundamental indices' potential to add value over their market cap weighted equivalents. The extra transaction costs associated with annual portfolio turnover of c.15% p.a. for a fundamental index compares with less than 5% for a cap weighted index (which is due to corporate activity and companies entering or leaving the index). The performance drag resulting from the additional turnover amounts to approximately 6-8bps p.a.

For the RAFI series, fundamental weights are calculated annually with the rebalancing implementation spread over 4 quarters, in order to reduce the impact of any disruption cause by re-balancing. RAFI are testing whether they can extend the implementation of re-balancing to six quarters.Whilst it is difficult to provide supporting attribution, RAFI believes that the "contrarian rebalancing" aspect of fundamental indexation has been a significant contributor to the excess return observed from fundamental indices. We concur with this view and we believe it is an aspect that is often overlooked when observers characterise fundamental indices as being solely about exploiting the "value premium".

Our view of L&G's RAFI index funds

Fundamental equity indices are transparent, relatively low cost and have been shown to provide the potential for superior returns to equivalent capitalisation weighted equity indices at similar, long run, volatility. The tilt of the indices towards "value type" stocks is important, but we believe their key attribute is the discipline to rebalance index constituents to a stable weighting regime that is not led by price speculation. As such, the choice of fundamental valuation measures is not overly critical and the issues of access, operational simplicity and costs should be to the fore.

While L&G do more than one set of fundamental index tracking strategies, we believe the RAFI methodology meets all the required criteria set out earlier in the paper. It follows a clear set of rules to construct the index. Despite recent inflows to the strategy there remains sufficient capacity for a sustainable period of time. There are a number of providers offering RAFI index funds so the Fund would not be tied to L&G should it choose to change provider at some point in the future. We believe there are merits both in terms of the value bias that underlying the fundamental approach but also the rebalancing process which is a key part of the strategy which we believe will be a key driver of the returns.

There is also a modest size bias away from large cap. This means that this type of index tends to perform well, relative to market cap, when the value style is in favour, and does less well when price momentum is the main return driver for equities.

License fees

Fees for RAFI tracking funds are generally comparable with the market cap equivalents. However, all RAFI funds incur an index licensing cost of circa 0.06% p.a. although there is the potential for this to reduce over time if the indices' use becomes more widespread.

Appendix 2: Performance

In the table below we show the performance of some of the RAFI indices for the period to 30 September 2013 and the comparable market cap based indices in each instance.

Index	12 months (%)	3 years (% p.a.)	5 years (% p.a.)	10 years (% p.a.)
FTSE RAFI All World 3000	23.6	10.6	9.9	10.9
MSCI All Country World	18.4	10.8	8.3	8.4
FTSE RAFI 1000	25.4	17.2	13.2	9.7
Russell 1000	20.9	16.6	10.5	8.0
FTSE RAFI Emerging Markets	-2.5	-1.5	7.1	16.9
MSCI Emerging Markets	1.3	0.0	7.6	13.2
FTSE RAFI UK	20.1	11.2	8.3	8.8
MSCI UK	17.1	10.2	7.7	8.2
FTSE RAFI US 1500	34.2	19.1	15.8	12.7
Russell 2000	30.1	18.3	11.2	9.6
FTSE RAFI Europe	28.7	7.3	6.3	9.7
MSCI Europe	25.0	94	6.7	9.1
FTSE RAFI Japan	37.3	8.6	6.2	6.2
MSCI Japan	31.7	9.1	5.3	5.0

While we would not recommend basing decisions on past performance we would note that long term numbers for the RAFI indices are ahead of the comparable market cap indices. However, we would still expect periods where one index out or underperforms the other.