Investment Strategy and Fund Manager Performance

Contact Officers	Scott Jamieson David O'Hara, KPMG Nancy Leroux, 01895 250353
Papers with this report	Northern Trust Performance Report Market Background

SUMMARY

This report provides the basis for the investment discussion by Committee on the various issues and proposals worked up by the Investment Strategy group, consisting of Fund Officers and Advisors.

Firstly, there will be a presentation to consider the impact of "Brexit" on the current investment strategy as a result of the June referendum decision to exit the European Union.

As part of the move to greater pooling an option for the move of the Fund's passive mandate is proposed; the manager GMO has been identified as adding little value to the Fund in recent months and a proposal to liquidate this mandate is recommended; the options on how those funds should be reinvested is then presented to committee for consideration; and finally an update is provided on how the property allocation has been rebalanced.

Included with this report is the Northern Trust performance report, a summary of the current market backdrop and in Part II there is an update on each Fund Manager. These papers all form background reading to inform Committee and to aid the discussions.

RECOMMENDATIONS

It is recommended that Pensions Committee:

1. **agree to the change of Fund Manager for its passive equity and bond investments from State Street to Legal and General;**
2. **agree to liquidate the GMO mandate;**
3. **assuming that recommendation 2 is agreed, consider the proposal for the use of those funds and agree to reinvest into a mix of passive funds;**
4. **note the rebalancing of property investments;**
5. **discuss the Fund performance update and agree any required decisions in respect of mandates or Fund Managers;**
6. **delegate the implementation of any decisions to the Officer and Advisor - Investment Strategy Group; and**
7. **agree the proposed changes to the Statement of Investment Principles.**

A. PASSIVE FUND MANAGEMENT

Currently the Fund uses State Street to implement its passive investment market strategies. In response to the formation of the London CIV and the pooling project generally, Legal & General Investment Managers (LGIM) has emerged as the most cost effective provider of passive investment services. This note recommends that the Fund replace State Street with LGIM.

Information

There are several large providers of passive investment funds including State Street, LGIM, Blackrock, UBS. All offer and competently deliver the range of products appropriate to the needs of the Hillingdon Fund.

Passive management fees are both low and trending lower under pressure from investors. To illustrate, currently the Fund pay management fees of 0.06% to State Street across a range of equity funds. Given the low fees passive providers make their money by securing scale.

The advent of Pooling ensures that across the LGPS sector the asset blocks will reduce in number and significantly increase in scale. This development is ideal for the passive managers and a keen pricing ‘war’ developed. A group of LGPS funds in the Midlands were among the first to drive down passive equity management fees to around just 0.01% and this rapidly became the benchmark for the sector.

It is understood that LGIM has reached agreement with the London CIV (and the Welsh block of LGPS among others) on these terms and LGIM has emerged has the dominant and preferred provider of passive services across the LGPS. The fee schedule available from State Street has a floor of 0.04%.

The legal fund structure of the London CIV is currently incompatible with the structures (life funds) used by LGIM (for tax efficiency) and so participating funds in the London CIV are unable to invest in passive funds through CIV. Until this situation changes, LGIM and the London CIV have agreed that the fee schedule will be offered to participating funds even if they invest directly with LGIM. As a result the HPF is able to enjoy the benefit of the London CIV while maintaining a direct relationship with LGIM. The CIV will monitor LGIM’s ongoing operational effectiveness on behalf of the participating funds.

Each passive manager operates slightly differently. While LGIM rebate all stock lending to their funds, State Street return only around 70% of those fees to investors; stock lending can generate up to 0.08% and 0.10% of value per annum. LGIM funds have an additional administration charge (of between 0.005% and 0.01%), State Street funds have no additional admin fees. Although it varies across each particular market, these contrasts tend to balance each other out (or fall marginally in favour of LGIM). Finally it is worth noting that LGIM offer weekly liquidity; State Street funds can be bought or sold on a daily basis. For an investor with the investment horizon of the HPF weekly liquidity is more than adequate.

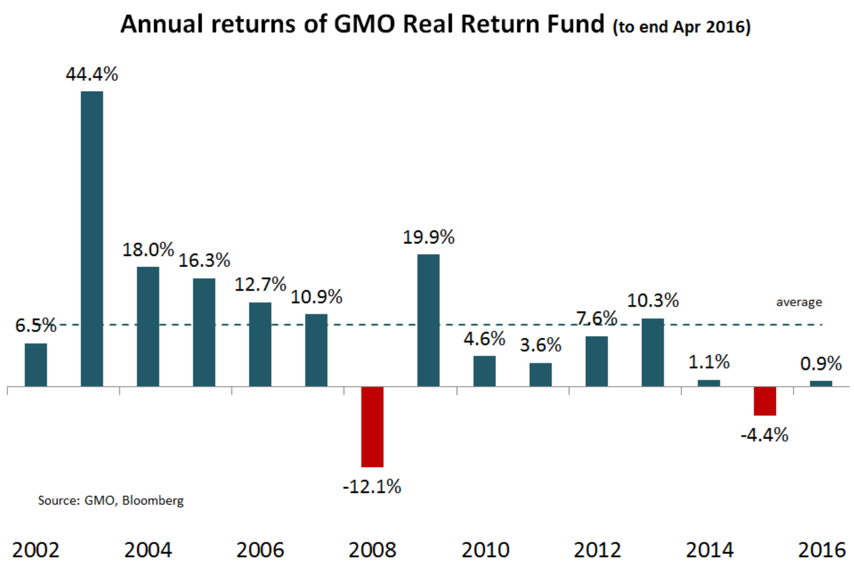
The saving in management fees and overall costs from using LGIM as opposed to State Street, under the London CIV 'umbrella', is considerable without any loss of effectiveness or utility to the Fund. The additional due diligence provided by the London CIV is important.

Transfer of assets and implementation would be conducted in conjunction with the London CIV and, as mentioned, the CIV will continuously monitor LGIM and report accordingly back to the Fund.

B. CURRENT GMO MANDATE

GMO is one of two Diversified Growth Funds (DGFs) held within the Hillingdon Pension Fund (the other is managed by Ruffer) managing approximately 8% of the asset base. DGF managers do not have a market based benchmark. Rather they set out to deliver a positive performance outcome, often expressed as a premium to inflation (CPI) or short term interest rates (LIBOR) irrespective of market conditions. As such the DGF managers are retained to deliver, in part, that which the Fund is trying to achieve as a whole. This provides asset allocation diversification across approximately 20% of the Fund. It is to be expected that a DGF manager will, given their 'closeness' to the markets, be much more adroit than the HPF in responding to events as they unfold.

GMO seeks annualized excess returns of 5% (net of fees) above the (US) Consumer Price Index over a complete market cycle. The average annual return since the beginning of 2002 has been 9.4%. Annualized volatility is expected to lie between 5% and 10% over a full market cycle i.e. not much more than half that of equity markets.

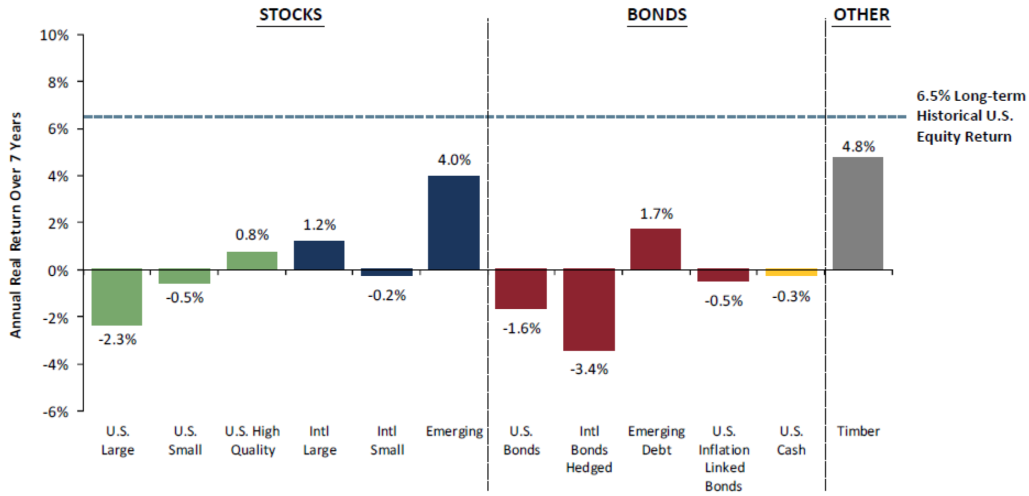


Underscoring everything that GMO believe is the view that markets are grossly inefficient – they see this as creating the most significant opportunity for them to add value. GMO further believe that value is the closest thing to a law of gravity in finance and that overpaying for an asset is the most common mistake investors make[1]. Whilst extrapolation

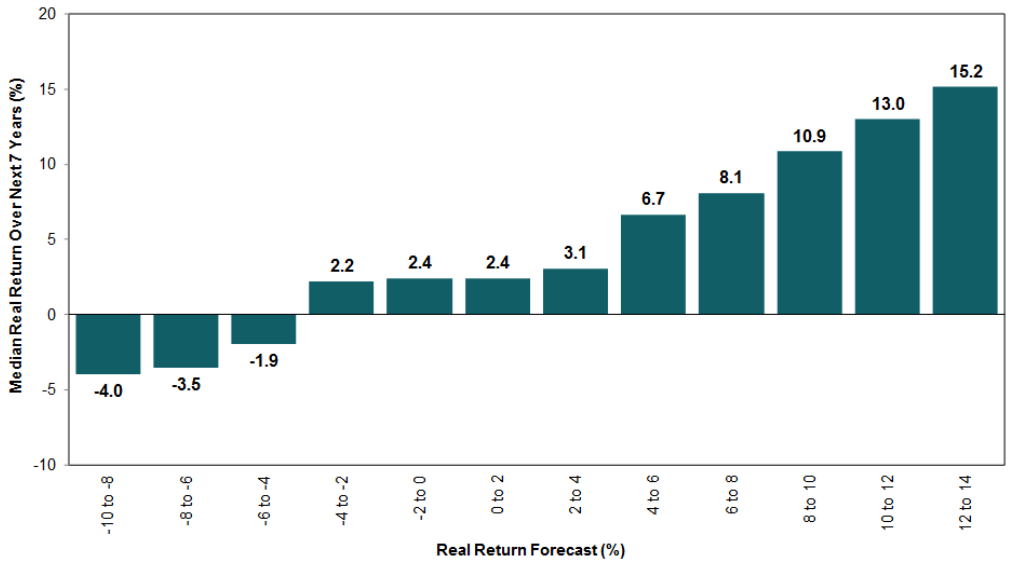
[1] GMO make clear that if they judge any particular market to be expensive then they won't invest in it; GMO are fully prepared to avoid markets on this basis even if that market is significant in a global context.

is a common behaviour, GMO contend that successful exploitation of mean reversion dominates investment returns over the long term. That said, mean reversion can be a slow process, and patience is seen as a true investment virtue and so big 'bets' should be tempered until valuations reach clear extremes – or, as the manager puts it, the successful investor will wait for the 'fat pitch' (when the odds are dramatically in their favour). Finally generating absolute returns is stated as their primary concern; as compounding losses can be 'the road to ruin', they focus on reducing downside risk.

GMO build their portfolios based on a seven year assessment of expected total return. In this approach the key forecast to be made is the valuation of the asset at the seven year horizon. Currently GMO see all developed market equities as standing on a significant premium valuation multiple and so the expected return is very low (or negative). The chart below shows that only emerging market equities and timber are seen as coming close to the historic real return from equities and even they are far from cheap.

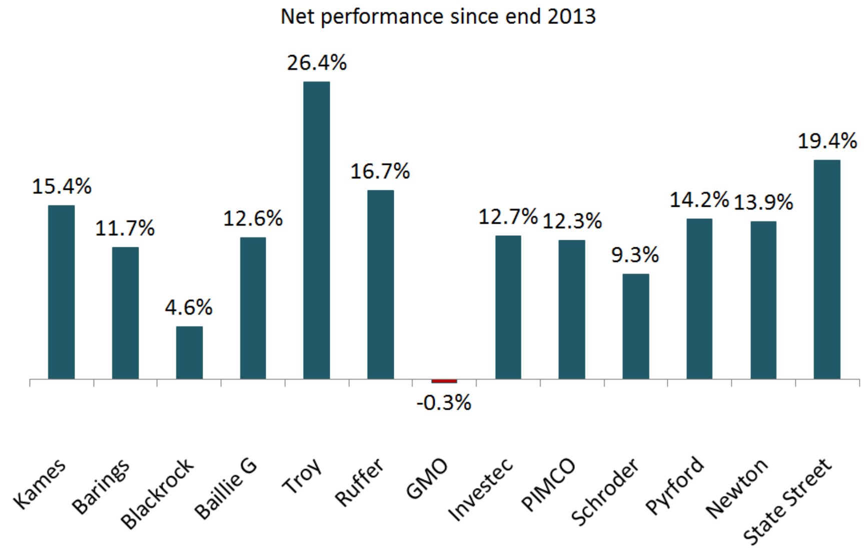


What makes GMO stand out is that they have been producing these seven year return estimates for many years and, as the chart below displays, their forecast record is very strong. Although it should be noted however that this data is dominated by the market conditions prior to the Great Financial Crisis we should not be quick to dismiss their assessment.

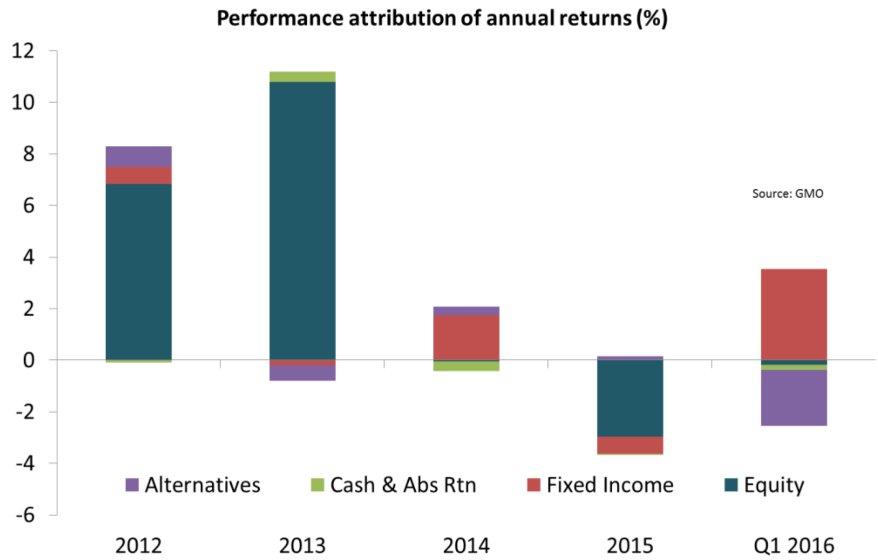


The annual returns chart above for GMO (in common with a number of other DGF managers) highlights a loss of return momentum; in particular, recent years have seen returns considerably less than the historic average. This is not simply due to low cash yields or inflation (both have been low for several years). Rather it captures the impact of lower market returns, diminished risk taking and, at times, erratic market behaviour.

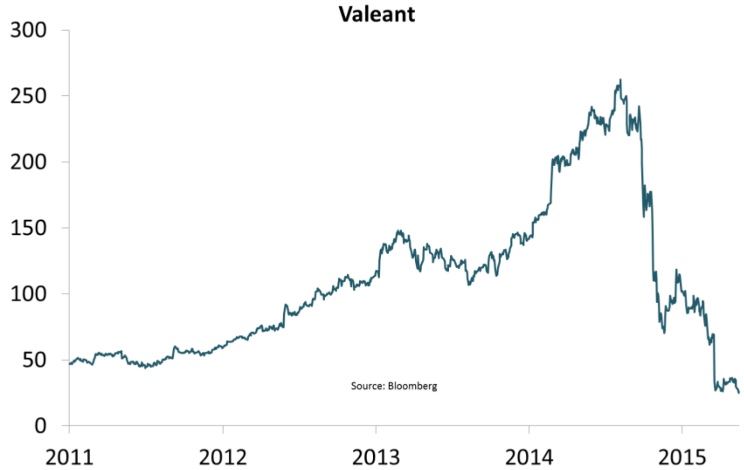
The chart overleaf details the net return from a range of prominent DGF managers since the end of 2013; GMO's returns have been both absolutely and relatively disappointing. [Note that currently it is believed that the London LCIV will maintain a preferred list of DGF managers - Baillie Gifford, Newton, Pyrford and Ruffer.]



The next chart displays the drivers of GMO's performance over the past four years (to end Q1, '16). In 2012/13 (and historically) equity market allocations have completely dominated returns; the performance contribution from equities has evaporated. At the same time the other allocations have not bridged the gap.



As mentioned above, GMO maintain a deep sense of distrust about markets – a concern common across a number of the HPF's managers. The problems start with the sense of significant over-valuation across all asset markets. In recent years this has led them to maintain strong weightings in emerging equity markets and in a small number of significant single stock positions; the narrower the opportunity set, the deeper will be the concentration. This was illustrated recently in the portfolio when nearly 20% of its equity allocation in just three stocks – Alibaba, Amazon and Samsung. Following problems with a strong weighting to Valeant (the now-troubled US company) this approach has now been pared back significantly. The now troubled pharmaceutical company has seen its share price collapse on poor sales results, possible bond defaults and an unexpected change in strategy. Already a material holder, GMO quadrupled its weighting in Q3, 2015; the share price is currently one-tenth of the average during that period.



All managers will, from time to time, own shares that fail. The net effect of such strong idiosyncratic equity risk-taking has neither been particularly positive or negative for GMO but the manager has found that it has completely dominated their day-to-day experience and client contact in particular (“*we spend 95% of our time talking about Valeant”)*. Chastened, high conviction stock picking will no longer materially influence returns at GMO; these will now be determined by broad index-like (i.e. pseudo passive) allocations to equity markets – emerging economy equities in particular.

GMO’s distrust of equity markets is matched by their view that bond yields are far too low. Indeed in their recent newsletter they state that ‘t*o achieve a return of 7.7% for the index over the next seven years* [their target], [US Government bond*] yields would have to fall to approximately negative 17% at the end of the period’*; this is not something they judge as credible. While the Manager maintains an allocation to bond markets, the associated risk commitment is very low; current bond allocations are not going to drive returns or offset any equity losses. Finally GMO currently hold a lot of cash – for which the manager earns his fee of 75-80bps per annum.

Group Exposures [4]

EQUITY	**42.5%**
US Quality	4.9%
US Opportunistic Value	6.7%
Europe Value	9.0%
Japan	3.8%
Other Int'l Opportunistic Value	2.2%
Emerging Markets	16.0%
ALTERNATIVE STRATEGIES	**15.1%**
Merger Arbitrage	5.2%
Systematic Global Macro	5.4%
Relative Value Interest Rates & FX	4.6%
FIXED INCOME	**21.9%**
High Yield/Distressed	4.1%
ABS/Structured Products	4.3%
U.S. TIPS	13.5%
CASH/CASH PLUS	**20.5%**
Cash & Cash Equiv.	20.5%

Discussion

The corollary of nearly a decade of near zero interest rates is that all investment returns will appear low in an historical context (and lower than the returns presumed to support myriad established business models – a feature). Until recent years market returns have been relatively strong – an outcome driven in part by a strong re-rating of financial assets (consistent with very low long term discount rates). GMO judge that this process has gone too far. Indeed even the sharp declines in equity markets seen in Q1 – when, across the world, share prices fell by 12% in just six weeks - were not sufficient to restore value in GMO's judgment. **In GMO's view, a near 50% decline is needed before developed market equities can be safely purchased.** Again this is a judgment shared, in direction at least, by other retained managers (i.e. Newton, Ruffer). While other DGF managers have been able to sustain returns from maintaining more effective bond weightings GMO have not seen bonds as having any attractions – this has been a costly position to adopt and differentiates them from their peers. The alternative performance support has come from nuanced equity implementation; GMO have now abandoned this approach. As a result they have accepted, potentially for an extended period that they will not match their return target and certainly not the historic averages. By operating a portfolio based around EM equities and significant proportions of cash/pseudo-cash investments they hope to outperform on the way down and to be well positioned to exploit the severe market correction that they expect. It should be understood that 'out perform on the way down' means lose less.

Against this backdrop the HPF has the following choices:

1. maintain the current position (in respect of GMO), taking the long-view - as befits a fund of the HPF's nature;
2. find an alternative manager for GMO's allocation (an alternative DGF manager or otherwise), or
3. with GMO's asset allocation expected to remain relatively static, to replicate GMO's programme with a mix of much lower cost passive funds and save more than 60bps of management fee.

Consideration of the above is complicated by the development of the London CIV (LCIV). At this time there is no indication that GMO will feature in the LCIV's list of preferred DGF managers. In the light of the information summarised in this note it is not obvious that the LCIV would grant GMO preferred provider status. As a result at some stage – relatively soon[2] - the GMO mandate will have to be terminated for reinvestment into the LCIV programme. Even ignoring the unattractive returns suggested by the Manager, the LCIV would effectively eliminate option 1 but would also have an influence over option 2.

The Fund historically had a single DGF manager – Ruffer. A second DGF manager was appointed to lessen the potential impact of having such a concentrated exposure (c 20%) with one manager; the recent experience with GMO (and previous experience with Barings) demonstrates the associated risks clearly. In applying option 2, moving back to Ruffer in full, would rebuild the risk that the HPF was trying to reduce.

Officers and Advisors would recommend adopting the third option now – of AA replication using passive funds – could become a permanent change provided that the switch utilised the LCIV's passive fund choices and that those choices included an EM equity programme; doing so would reduce costs and, arguably, simplify the Scheme's asset

[2] The Ruffer programme moved into the LCIV on June 21st, 2016.

allocation. It should be appreciated however that this increases the asset allocation burden on Officers and Members to implement any changes in response to a material change in market opportunities (as GMO expect). Finally, GMO have been expecting markets to slump for some time and it could easily be some years before such a development occurs[3]; each year that it doesn't happen would see option the Fund save c.70bps in management fees[4] if option 3 was chosen.

Resolving the appropriate course of action depends on a range of factors (led by those mentioned above). On balance replacing GMO with a suite of passive funds, managed appropriately, is preferred and discussed elsewhere. Cost reduction is a strong goal (this underpins much of what the LCIV is trying to achieve) and this option maximises the possible fee saving.

C. REINVESTING MONIES RELEASED FROM GMO

Assuming that the recommendation to liquidate the GMO investment is approved, this discussion makes the case for reinvestment of the proceeds across a mix of passive funds available to the Hillingdon Pension Fund. It further suggests how that mix might evolve over time.

The GMO programme is representative of a number of diversified growth (or balanced) funds (DGFs). DGF managers seek to reward investors with equity-like returns (real 4-5% p.a.) over time while delivering much lower volatility (typically 50-75% of equity volatility). They set out to achieve their objectives by investing across a full range of assets e.g. equities, bonds – government and corporate, property, commodities - typically gold; diversification lowers risk. They will endeavour to enhance returns through discretionary rebalancing and, often, by operating nuanced 'bottom-up' stock portfolios. The spectrum of DGF managers spans those that invest in a very large number of distinct sub-programmes e.g. Baillie Gifford to those that profess strong asset-allocation skills (to avoid falling and exploit rising markets) e.g. Pictet.

DGFs are a popular choice for smaller investors that don't have the scale or resources to exploit the full spread of market opportunities on an individual basis; the HPF is not such an investor. Many LGPS invest in DGFs to gain access to managers that can more plausibly harvest market changes i.e. engage in market timing with a speed and efficiency that is often unavailable to a LGPS. It is with this objective that the Fund invests in two DGFs – Ruffer and GMO. Ruffer has been a success for the Fund; GMO – as discussed elsewhere – has not.

The current GMO fund can be summarised as just two investments: pseudo-passive emerging market equities and a large allocation to cash. The Manager expects this balance of investments to persist for the foreseeable future. As a result, the GMO programme can be replicated using a passive emerging market equity fund and a money-market or shorter-dated credit fund saving virtually the entire GMO fee (0.8% per annum).

[3] Consideration of the possible timetable and catalysts behind any such adjustment is the subject of a full note itself.
[4] Transition costs are likely to equate to 3-6 months of fee savings.

As mentioned, most DGFs invest across many more markets (*betas*) and the decomposition of GMO into passive funds can be made more representative of a typical DGF by increasing the opportunity set to span passive longer duration government bonds, corporate bonds and index-linked together with UK and global equity programmes and, for completeness Gold. Property is represented with a listed REIT fund. This is the spread of investments likely at any mother DGFs including Ruffer. Accordingly the first proposal for the GMO monies would be to invest across an equal mix of such mainstream passive funds:

Long IL Gilts	Long UK corporate bonds	UK equities	Global equities	EM equities	UK REITs (property)	Gold

This would generate an attractive diversification and exposure to all the major investment *betas*. Denying cash as an investment option avoids a zero-yielding asset, unattractive to a long-term investor such as the Hillingdon Fund. Had the Fund operated this since the start of 2010 the annualised return generated would have been 8.8%. Implementation costs through the passive manager are minimal.

An evolution of this proposal would be to skew the balance of the components in a preferred direction; this is what DGF managers do on a continuous basis. One tilt appropriate to the Fund and respecting to low risk objective of DGF managers would be that of *minimum risk.* This approach sets out to optimise the balance of investments that would have delivered the lowest level asset volatility of the previous period. One of the greatest challenges in optimisers is that the user can, by biasing the input data (typically on return estimates), achieve the result they wanted initially. *Minimum risk* requires no data beyond the actual historic price performance of each asset. The only influence that the user can exert is on the choice of components and the imposition of any minimum and maximum allocations. That said setting the opportunity will be crucial to the programme's success.

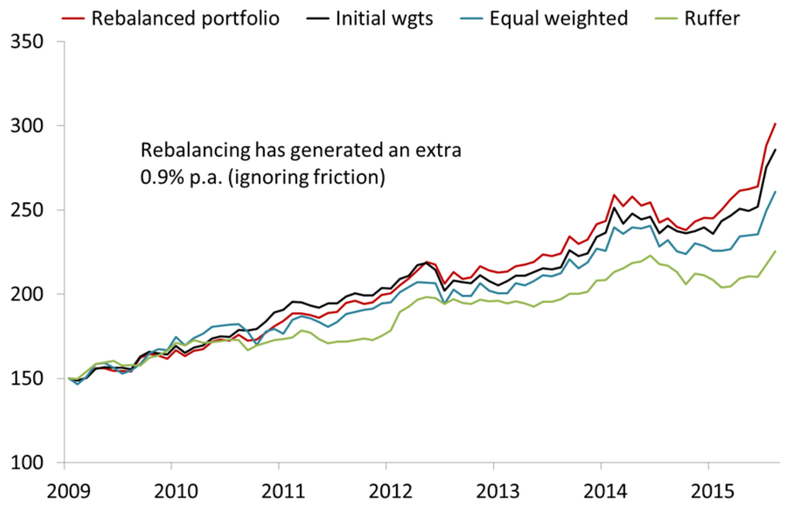
Based on the components listed above and subject to a maximum of 40% in any single component, the *minimum risk* weights appropriate at end 2009 would have been:

Long IL Gilts	Long UK corporate bonds	UK equities	Global equities	EM equities	UK REITs (property)	Gold
38%	29%	12%	11%	0%	0%	11%

If implemented from the end of 2009 the annualised return would have been 10.3%.

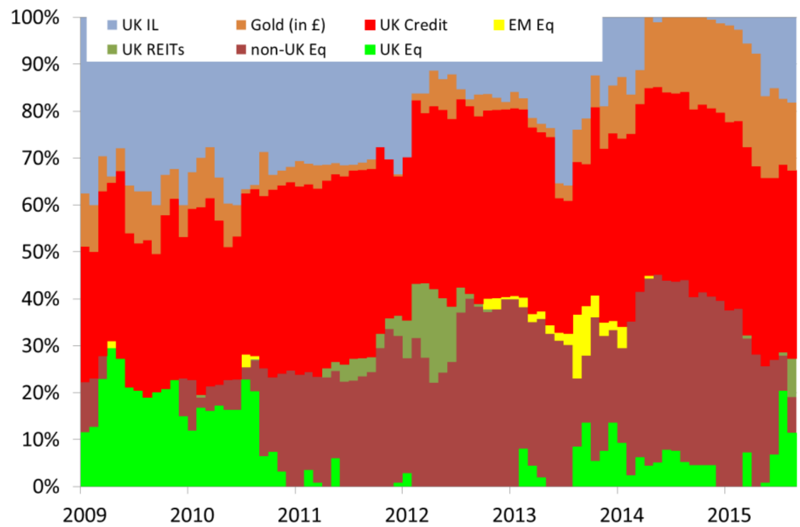
The logical extension of the above is to regularly rebalance the weightings. The arithmetic in re-optimising the weights naturally forces the programme to add exposure to betas that have been weak at the expense of exposures that have performed strongly. If rebalancing had been applied monthly, then the annualised return achieved, gross of costs, would have increased to 11.2%.

The chart below compares the various suggestions against Ruffer (note that Ruffer's data is net of fees).



The *minimum risk* approach – statically or dynamically applied - has proved successful over the period examined. One reason for this has that the programme has been forced to invest in something – cash was not allowed (at a time when cash was being undermined by central bank policies e.g. QE. This contrasts with many DGF managers which have, in recent years and increasingly, become wary of the market outlook – whether bonds or equities; GMO being perhaps the most extreme in this regard. As such, a non-cash DGF (as suggested above) complements both the other discretionary DGF (Ruffer) and other cautious, managers retained by the Fund e.g. Newton.

The chart below shows how the asset allocation of the monthly rebalanced programme has evolved over time.



The programme has expressed a strong preference for international equities and UK corporate bonds (credit) and, recently, Gold and index-linked.

Notes:

1. The seven components used represent a broad selection of possible market exposures. Other attractive components may emerge and warrant inclusion; equally some of the seven may lose strategic attractiveness.

2. The operation of a 40% maximum weighting forces diversification while the setting of a zero floor allows the system to disregard exposures which offer nothing distinct.
3. The spread of components and choice of maximums and minimums can be evolved by Officers and Advisors as required and reported to Members. Changes are expected to be very infrequent.
4. As the system is built out of passive funds, costs are low.
5. The *minimum risk* approach may be superceded by an alternative metric; once again this would be discussed with Members.
6. The arithmetic behind the process is straightforward and requires no discretionary input

For the foreseeable future a *minimum risk* approach will be adopted. Members will be consulted ahead of any change.

D. REBALANCING OF UK PROPERTY INVESTMENT ALLOCATION - information

Rebalancing the asset allocation of a fund such as the Hillingdon Pension Fund is good discipline to ensure the investment portfolio remains in line with the asset allocation agreed by Pensions committee through the Funds investment strategy. Recent market movements have seen the weighting in the Fund to UK secondary property fall relative to that of equity markets, global equities in particular. Allied to changed conditions the opportunity was taken to rebalance the Fund and exploit unexpected price changes.

The Fund invests in higher yielding UK property through the AEW Core UK Property fund. This is a well-diversified (65 properties) portfolio of commercial properties located almost exclusively out-with central London. The manager favours smaller properties and an active management style (refurbishing etc) and has been a source of strong returns for the Fund.

The Fund also invests in the Newton Global Equity Income fund which pursues high companies that are able to deliver a premium and resilient dividend yield. Shares held are predominately listed in overseas markets.

The UK Referendum result has impacted markets mostly significant in two ways: the £ value of overseas investments has risen sharply (in line with the weakness of £) and in a sharp markdown in the price of UK commercial property – especially that in the London area.

The AEW programme is subject to some modest redemption requests (2% of client assets) and has compounded the property value mark down by implementing a bid price basis to the units – this has seen the unit price fall by 8% (bringing the total post-Brexit adjustment to around minus 15%).

The Manager of the Newton equity fund has – correctly – been extremely cautious about the outlook for the world economy and has expected markets to favour those companies with the most resilient dividend yield. This has seen the Newton programme outperform its benchmark by around 18% in the year to end June 16.

The price declines in the AEW fund equate to around £8m (paper) loss in value of the Fund's exposure. Coincidentally the seller of units in the AEW fund is looking to realise £7.5m. Funded by locking in some of the exceptional gains seen from the Newton programme, the Fund has acted to purchase these AEW units being sold and restore the previous weighting to UK property (AEW).

Under delegated powers, the transaction was conducted in the secondary property market on 15th August using CBRE. The fund were not able to directly execute the purchase through AEW itself due to normal month-end liquidity point which would have jeopardised the ‘bid price’ basis that helped increase the attractiveness of the rebalancing. CBRE are a recognised agent for this type of activity and charge a fee to the Fund of 0.1% for their services in line with market practice.

E. STATEMENT OF INVESTMENT PRINCIPLES

As members are aware, we have a responsibility to maintain the Statement of Investment Principles (SIP) to ensure that it accurately reflects the arrangements within Hillingdon and matches the Investment Strategy. The SIP has been updated to reflect the change to the governance arrangement with the creation of the LPB and the cessation of the Investment Sub Committee. The updated SIP is attached with the changes highlighted in yellow.