Bath & North East Somerset Council		
MEETING:	**AVON PENSION FUND INVESTMENT PANEL**	
MEETING DATE:	**16 SEPTEMBER 2010**	**AGENDA ITEM NUMBER**
TITLE:	**PASSIVE INVESTING**	
WARD:	ALL	
AN OPEN PUBLIC ITEM		
List of Attachments: Appendix 1 – Performance of passive portfolio Appendix 2 - Concentration within main Equity Indices		

1 THE ISSUE

1.1 The Panel's meetings with the investment managers and the decline in the value of BP have raised the following issues/risks for the Panel to consider:

(1) The size of the allocation to any single passive manager

(2) The impact of concentration within an index on the performance of a passively managed portfolio.

1.2 This report addresses the issues and puts forward possible approaches for managing these risks in the future. The Panel are asked to consider whether any recommendations should be made to the Committee or whether any further work is required.

2 RECOMMENDATION

That the Investment Panel agrees the recommendations to be made to the Committee as follows:

2.1 **Whether to make changes to the current passive management structure**

2.2 **Whether the current allocation to passively managed UK equities should be reduced, and if so how this should be implemented**

3 FINANCIAL IMPLICATIONS

3.1 The allocation between passive and active mandates determines the investment management fees charged to the Fund. Passive management incurs significantly lower fees than active management due to the lower level of resource required to manage the portfolios.

4 CONTEXT: STRATEGIC INVESTMENT POLICY

4.1 The strategic investment policy targets a risk adjusted investment return over a long time horizon. The policy is then implemented via a number of investment management mandates which enables the Fund to diversify both its investment and manager risk. This means that the Fund has a “risk budget” which needs to be allocated between the various asset classes and managers. In 2007, when the current strategy was established, the Fund adopted a more aggressive approach to active investing by allocating to less constrained active mandates with higher volatility levels compared to the underlying index they were benchmarked against. As a result, in order to meet the Fund’s “risk budget” the assets allocated to active investing were reduced and the allocation to passively managed investments was increased from c. 38% to the current core allocation of 46% (see below for explanation of core allocation).

4.2 In addition, under the current strategy, 10% of total assets are managed on an enhanced indexation basis (these are overseas equities). This is a form of low risk active management which utilises quantitative models with the objective of generating excess returns in region of 0.5% p.a. on a consistent basis, without significantly increasing the risk profile compared to passive investing. This is achieved by the managers taking numerous small positions away from the underlying index, but as a result the portfolio overall will closely mirror the index. Therefore the allocation to passive and very low risk active mandates is c. 56% of total assets.

4.3 Altering the allocation between passive and active equities will marginally affect the overall risk return profile of the Fund. Active investing assumes higher expected returns (compared to the index). However, volatility will also increase due to stock selection risk and, for overseas equity portfolios, currency exposure risk (however the Fund will be hedging currency exposure in the future). To put this into context, for every 10% switched from a passive UK to an active UK equity mandate (with an index +2% performance target), the increased return at the overall Fund level would be +0.2% and the expected increase in volatility at the overall Fund level would be 0.1% (the volatility of the overall Fund is currently c.11%).

5 CONTEXT: CURRENT PASSIVE PORTFOLIOS

5.1 The Fund currently has two passive investment portfolios both managed by BlackRock. The “main fund” is the core allocation to passive investing and is a multi-asset portfolio. The “property account” was created in 2007 and is a passively managed portfolio of the assets earmarked for investing in property. The property fund is therefore not a core allocation to passive investments but a temporary and cheaper option for managing the assets in the interim. The two passive portfolios are as follows:

	Asset Value	% of total Fund assets
Main Fund	£1,181m	51.4%
Property Account	£120m	5.2%
Total	£1,302m	56.6%

5.2 The main fund includes allocations to UK equities, overseas equities, UK gilts and index-linked bonds. The allocation to government bonds is managed on a passive basis given the limited opportunities for active managers to outperform the government bond indices net of fees. In the 2007 strategic review, the decision was taken to manage the corporate bond portfolio on an active basis. This is because there is more scope to outperform the corporate bond index and avoid default risk if such assets are managed on an active basis.

5.3 In December 2009 the Committee agreed to increase the allocation to overseas equities from 40% to 55% of the equity assets. This was implemented by reducing the allocation to passively managed UK equities and investing £130m (6% of total assets) in a passively managed global equity fund and £25m (c.1% of total assets) with the Fund's active emerging market equity manager, Genesis. The allocation to the passive global equity fund was an interim investment until the Fund appointed an active global equity manager to manage the assets (expected implementation 1Q11).

5.4 **Therefore the long term "core" allocation to passive investments, excluding the allocations to both the property account and the global equity fund, is £1,052m or 46% of the Fund's assets.**

5.5 The asset allocation of this "core" passive portfolio is set out in the table below. This demonstrates that the passively managed investments are across a diverse range of assets, both UK and overseas.

Asset class	Allocation within Main Fund	% of Main Fund	% of Total Avon assets
UK Equities	£401m	38.0%	17%
Overseas Equities (1)	£274m	26.0%	12%
UK Gilts	£144m	14.0%	6%
Index Linked Bonds	£152m	14.5%	7%
Overseas Bonds	£74m	7.0%	3%
Corporate Bonds (2)	£4m	0.5%	0%

(1) Overseas equities excludes allocation to Global Equity Fund and comprises of 5 regional funds

(2) Corporate Bonds – bonds set aside to match liabilities where employers have the liabilities and contribution rate calculated on the corporate bond basis.

5.6 The table in Appendix 1 shows the investment returns of the passive portfolio managed by BlackRock and the underlying indices. There is little difference between the index and passive fund returns which shows that a passive

approach generates minimal additional risk in terms of investment returns, over and above that associated with market returns. Differences over one year in the bond portfolio are due to timing and cost of large transactions (implementation of tactical bond position).

5.7 In addition analysis of LGPS fund returns over last 10 years by WM Company concludes that the passive portfolios within major equity markets have closely tracked their chosen indices within acceptable limits.

5.8 WM provides some data on the allocation between actively and passively mandates within LGPS funds. The data shows that c. 20% of total assets are managed passively by external managers. It also suggests that up to c. 42% of total assets may be passively managed (internal and external mandates). This is approximate as it assumes that internally managed assets (22% of total assets) are all managed on a passive basis. Within the south west LGPS funds passively managed assets range between 3-37% of total assets with an average of 22% (excluding Avon).

6 ISSUE: ALLOCATION TO ONE PASSIVE MANAGER

6.1 The issue raised by the Panel was whether the allocation to a single passive manager was too high. The main advantage of passive investing is that it reduces manager risk with regard to achieving the investment return target. A passive manager merely replicates the relevant index; there are no stock selection decisions. Therefore a passive portfolio is fully exposed to the market risk of the underlying index and any differences between different passively managed portfolios will be determined by the quantitative model utilised to replicate the underlying index. However, these differences in risk and return are negligible compared to market risk.

6.2 The other key manager risk is the safety of the assets they manage on our behalf. However, all client assets, whether they are passively or actively managed by an investment manager, are ring-fenced and therefore if the manager were to become insolvent, creditors have no claim on the client assets. Segregated assets are held in safe-keeping by the Fund's custodian and pooled assets have independent custodians. Therefore appointing an additional passive manager will not reduce such risks.

6.3 However, the Fund is exposed to the corporate and operational risk of all managers including passive managers. Corporate risk includes changes in the corporate entity/ownership which could lead to key personnel changes or alter its commitment to passive investing as a business unit. Changes in key personnel for a passive manager are less immediately negative compared to an active manager as the success of passive investing depends on the replication model which is dependent on a team of technically skilled staff, rather than the stock picking skills of individuals. In this respect there is less "key man" risk in passive managers. Operational risks arise from the firm's custody arrangements and trading processes - these risks are not dissimilar whether an active or passive manager.

6.4 Operational risks are assessed annually as part of the Fund's review of the passive manager's internal control report. BlackRock's independently audited Internal Control Report does not highlight any areas of concern.

6.5 Officers are satisfied with the service received from BlackRock. The team is sufficiently resourced, and the depth and breadth of expertise is appropriate. They have consistently achieved the required performance, indicating that the model used to replicate the indices is efficient (see Appendix 1). BlackRock has a comprehensive engagement and voting programme with investee companies, although it should be noted that the structure of our pooled investments preclude the Fund from any bespoke direction of this activity.

6.6 The acquisition of BGI by BlackRock in 2009 and the resulting integration of the operations has had no negative effect to date on the service provided. However, the officers are monitoring the transition closely as the systems are migrated on to one platform.

6.7 There would also be cost implications of appointing a second passive manager. As the allocation to each manager will be smaller the Fund could incur higher passive fees overall as economies of scale are diluted.

6.8 In addition the multi-asset passive portfolio managed by BlackRock is currently used as the "swing fund" for rebalancing. Therefore the Fund would need to retain a multi-asset passive portfolio to ensure efficient and cost effective rebalancing but having two multi-asset passive portfolios may not be optimum from a cost or monitoring perspective.

7 ISSUE: PASSIVE MANAGEMENT & INDEX CONCENTRATION

7.1 In their review of the Investment Strategy in 2009, JLT set out the advantages and disadvantages of passive and active investment approaches. These are summarized in the following table:

	Advantages	**Disadvantages**
Passive	• Reduced manager risk • Lower governance costs • Lower management costs	• Market weighted indices • No discretion over investment holdings
Active	• Potential for outperformance of index benchmark • Portfolios reflects manager's views • Greater control over portfolio constraints • Greater ability to over-ride/instruct manager on specific issues	• Views relative to benchmark restricted by risk tolerance set by Fund • Higher fees • Higher governance costs • Risk of losing relative value to index benchmark

7.2 On the positive side, passive investing provides lower management fees, lower monitoring costs and reduced investment manager risk (as discussed previously). The main disadvantage of is that market weighted indices are generally used as the basis for replicating the index. This means that passive portfolios own more of what has already increased in value (and vice versa) as the process mechanically increases the weights attributed to stocks that have risen in price relative to the rest. This process of replicating based on the weight of each stock within the index (known as "cap weighted"), gives rise to the effect

of “concentration”. In this context concentration means the degree to which the weights of stocks in the index are “skewed” towards larger stocks.

7.3 Concentration is a particular issue within the UK index (FTSE All Share) which is used as the index for most UK equity portfolios. As Appendix 2 shows, the top ten holdings in the FTSE All Share equate to c. 38% of the capitalisation of the index (at 30 June 2010). In comparison, the top ten holdings in the European, US and Global indices are 23%, 19% and 9% respectively.

7.4 The Fund is exposed to concentration risk due to its high allocation to passively managed UK equities. This has been highlighted recently by the sharp fall in the price of BP relative to the UK index. Within the UK equity allocation, 67% is managed passively (17% of total assets) and 33% is managed actively (8.5% of total Fund assets).

7.5 The situation regarding BP is relatively unique in that instances such as this are not a regular occurrence but it raises the issue of how such risks can be managed. One possible approach would be to impose constraints on the managers. However with passive investing there is no discretion over the holdings in the portfolio as they are determined by the underlying index. Any investment decision to move away from the index would undermine a passive approach as it would involve a qualitative judgement and therefore the risk return profile would deviate from that of the underlying index. Specifically for the Fund, the passive equity investments are managed through pooled funds so there is no scope for the Fund to impose discretionary constraints within the current arrangements. Any action would require the Fund to manage its passive investments on a segregated basis or use alternative underlying indices, both of which will increase costs.

7.6 To put BP into the context of the Fund, at the aggregate Fund level, the Fund was under weight BP against the UK index. The passive UK equity portfolio had a full market weight but the other two UK portfolios were underweight. TT International subsequently increased its weight but remained slightly underweight. However, because of the large allocation to passively managed UK equities the unrealised monetary loss on BP shares is c £18.5m as at 2 September 2010.

8 OPTIONS FOR CONSIDERATION

8.1 There are a number of options the Panel could consider for reducing the risk these issues pose to the Fund.

Allocation to passive manager

8.2 If the Panel considers that the risk to the Fund arising from the current allocation to a single passive manager is too high, the Fund could explore the option of appointing a second passive manager. However, as discussed earlier, as there would be no change in the risk return profile of the passively managed assets or the safe-keeping risks, the Panel would need to be satisfied that appointing a second manager would reduce other manager related risks.

8.3 There would also be cost implications of appointing a second passive manager. As the allocation to each manager will be smaller the Fund could incur higher passive fees overall as economies of scale are diluted.

8.4 In addition the multi-asset passive portfolio managed by BlackRock is currently used as the “swing fund” for rebalancing. Therefore the Fund would need to retain a multi-asset passive portfolio to ensure efficient and cost effective rebalancing but having two multi-asset passive portfolios may not be optimum from a cost or monitoring perspective.

Reducing the impact of concentration within the Fund

8.5 Assuming that the Fund wishes to retain the current allocation between passively and actively managed assets, there are a number of options for the Panel to consider:

(1) **Reduce the strategic allocation to the regional/country indices in favour of less concentrated global indices**. This would be in line with the recent decision to reduce the UK equity allocation in favour of a global equity allocation. At 31 March 2010 the average WM LA Fund allocated 44% to UK equities and 56% overseas equities which is very similar to the Fund’s current allocation of 45%/55%. It could be implemented within the passive portfolio in a cost effective way.

In their paper of February 2010, JLT provided the following risk and return analysis if the UK equity exposure is reduced in favour of overseas/global equities managed on a passive basis:

UK:Overseas allocation	Expected Market Return	Absolute Volatility
45:55 (i.e. current allocation)	8.5%	16.0%
30:70	8.5%	16.2%

The increase in volatility as the allocation to overseas equities increases is due to the impact of foreign exchange on the investment return. However, foreign exchange risk will be reduced by the active foreign exchange hedge that the Fund will implement in the next few months.

Currently the Fund has 27% of the Fund invested in UK equities (c. 17% passively managed) and 33% in overseas equities. Moving towards a 30:70 allocation would reduce the UK equity allocation to 18% (c. 8% managed passively) and increase the overseas equities allocation to 42% (c. 21% managed passively).

(2) **Explore the use of alternative indices as the benchmark for a passive portfolio**. It may be possible to use benchmarks for passive portfolios that are not cap weighted. For example, there are “fundamentally” based indices which use economic or financial measures rather than market capitalisation to weight stocks within an index. This key point is that these indices will still reflect all the stocks in the underlying index – their weight within the index will reflect a different parameter rather than the market cap. Therefore the risk adjusted return should not differ that significantly from the standard cap weighted index. However, such alternative indices are not widely used or established and therefore there is not a large selection of pooled funds to invest in. Therefore this option may require the passive assets to be managed on a segregated basis which would increase the management fee.

Such an index may also incur higher costs of maintaining the indexation replication model. If the Panel wish to consider this further, a full analysis on the options available would need to be undertaken.

(3) **The other alternative would be to increase the allocation to active management in the markets where concentration is an issue, such as the UK.** However this may alter the overall risk adjusted return target of the overall Fund as discussed in paragraph 4. This option would increase the expected volatility and return compared to a passively managed portfolio (assuming the manager achieves their return target). Active mandates provide the opportunity for client imposed constraints such as, a maximum holding weight or to adopt an approach that excludes certain stocks/sectors. However, active managers are ultimately selected on the basis that their stock picking skills will add value in excess of their benchmark and any constraints should not restrict their ability to deploy that skill.

8.6 These options are summarised in the table below.

Summary of Options to Reduce Impact of Concentration in Passive Portfolio

Option	Advantages	Disadvantages
i) Reduce regional/country allocation in favour of global indices *Reduces concentration risk by increasing allocation to less concentrated global indices*		
	- Retains strategic allocation to passively managed assets	- Small increase in absolute volatility due to effect of foreign currency (will be mitigated by active currency hedging)
	- Can be implemented within passive portfolio in a cost effective way	
	- In line with previous move in equity portfolio from UK to Overseas	
ii) Use alternative indices *Avoids concentration issues by weighting stocks using measures other than market capitalisation*		
	- Retains strategic allocation to passively managed assets	- Not widely used and therefore less choice
	- Retains diversification benefits as still reflects all stocks in an index	- More costly to implement
iii) Increase allocation to active management *Reduces concentration risk by reducing amount of assets managed on a passive basis*		
	- Provides the opportunity for client imposed constraints (although restrictions hamper ability of manger to deploy skill for which they have been selected)	- Alters overall risk adjusted return, increasing volatility and returns
		- Increases cost of management

8.7 The Panel needs to consider whether any recommendations regarding the options set out in section 8 need to be made to the Committee or not.

9 RISK MANAGEMENT

9.1 The Avon Pension Fund Committee is the formal decision-making body for the Fund. As such it has responsibility to ensure adequate risk management processes are in place. It discharges this responsibility by ensuring the Fund has an appropriate investment strategy and investment management structure in place that is regularly monitored. The creation of an Investment Panel further strengthens the governance of investment matters and contributes to reduced risk in these areas.

10 EQUALITIES

10.1 An equalities impact assessment is not necessary.

11 CONSULTATION

11.1 N/a

12 ISSUES TO CONSIDER IN REACHING THE DECISION

12.1 No decisions are being made. The issues being considered to make a recommendation to the committee are contained in the report and comments are sought in the report.

13 ADVICE SOUGHT

13.1 The Council's Monitoring Officer (Council Solicitor) and Section 151 Officer (Divisional Director - Finance) have had the opportunity to input to this report and have cleared it for publication.

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Background papers	
Please contact the report author if you need to access this report in an alternative format	