EXAMINATIONS

April 2003

Subject 401 — UK Fellowship Investment

Paper Two

EXAMINERS' REPORT

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Overall the standard of answers was reasonable in both Papers. Although no candidates scored outstandingly well on both papers, there were some good papers in each. The examiners were concerned that there was a tendency for candidates to address other issues rather than the investment ones, which were the subject of the questions.

1 (i)

- The main objective would be to match the liabilities as closely as possible at the lowest cost possible.
- Bonds are a relatively close match to deferred pensioner and pensioner liabilities, and relatively close cashflow matching may be possible for the pensioner liabilities.
- Passive funds are likely to lead to lower expenses, in terms of investment expenses, management involvement and the costs of external advisers.
- A combination of Index linked bonds and corporate bonds is a good match for LPI liabilities.
- With IL the risk is that inflation is <0% i.e. deflation.
- With corp bonds (or conventional gilts) an assumed rate of inflation needs to be set. The risk is that actual inflation turns out to be greater than the assumed rate.
- The Trustees and Company have decided not to mismatch their liabilities by investing in equities to the extent that many other pension funds have because they are risk-averse.
- The plan may have a low funding level so is not able to mismatch its liabilities.
- The Company's covenant is not sufficiently strong to justify mismatching liabilities for a fund this size.
- The Company may be concerned about ensuring that the pension asset or liability shown in its FRS17 disclosures is not excessively volatile.
- The fund could have considered winding-up, so adopting a matched investment strategy would reduce the uncertainty of the cost of a buy out in the future.
- The trustees decided to review their investment policy in light of the plan's liabilities following the Myners' report.
- The investment benchmark reflects the investment policy, and a peer group benchmark or some other measure is unlikely to be relevant/appropriate.

(ii)

- The main objective is to transfer the assets into the larger fund as quickly and efficiently as possible.
- The seg fund's investment policy may be distorted a little for a period of time after the transfer due to the increased allocation to bonds. However size of new assets is small.
- This may be resolved either by a switch in investments, or by investing new contributions from the open plan in equities and other non-bond asset classes.
- Need to decide on whether cash or in-specie transfer is appropriate

- For a transfer of this size it may be possible to arrange an in-specie transfer to the seg fund.
- A transfer of a few selected equities may be possible in respect of the £3m of UK equities.
- This will avoid buying and selling costs.
- Stamp Duty Reserve Tax (0.5%) will be incurred if any new holdings of UK equities are purchased (but not UK bonds or cash, or non-UK assets).
- If cash is transferred need to consider fully the risk of being out of the various markets.
- The exact time of realisation of cash out of the pooled funds and settlement periods needs to be established.
- Consider buying futures ahead of receiving assets in order to maintain exposure or run down cash in the main seg fund.
- An alternative to an asset transfer may be to transfer the pooled fund holdings from the plan into the seg fund without transferring stocks or cash; realisation can be done at a later date.

(iii)

- Need to discuss what is risk in the fund.
- Risk is not poor returns per se.
- Risk is that the fund cannot meet its liabilities as they fall due.
- Investing heavily in hedge funds, private equity and property may not reduce this risk. In fact relative to the liabilities risk may actually be increased by this strategy.
- Current asset allocation is done in relation to peer group — i.e. other unconstrained funds; prob CAPS or WM universes would be used.
- This could be, but more likely is not, appropriate to the liability profile of the fund.
- Need to get an ALM study done to establish the nature of the liabs and then set an appropriate diversified investment strategy which could involve a certain proportion in these three asset classes.
- All three have less correlation with conventional equity and bond asset classes and therefore can help in building a more efficient portfolio.
- However it is unlikely that the recommended proportion will be as high as that suggested by the finance director.
- Property in particular has strong income characteristics which can be useful in liability matching strategies.
- Timing issues are important – seeling equities when low, buying property at higher prices.

Points to be made re hedge funds and private equity funds

Process

- Understand how returns are to be achieved is vital to deciding whether to invest in hedge funds and private equity vehicles.
- Will direct investment be carried out or will fund of funds vehicles be used

- If the investment process cannot be clearly explained or demonstrated by the manager, then there is a risk that the manager cannot replicate past successes.
- Understand how liquidity risks are managed.

In the case of hedge funds in particular:

- Are pair trades carried out?
- …Or does the fund remain exposed to relative performance of different sectors?
- To what extent does the manager aim to maintain market neutrality?
- Understand the risks being taken by the hedge fund manager.
- Hedge funds can be very highly leveraged, so it is important to understand how highly leveraged the fund is.
- Understand how credit risks are managed.
- This is a key part of the process as the fund is short selling.
- Understand the correlations between past performance and index returns.

People

- Returns often depend on certain key employees to a much greater extent than in a traditional asset classes.
- Fewer people are likely to be involved in operating a hedge funds and private equity vehicles than a large equity fund.
- The quality of the people is therefore key…
- …As measured by their experience/credentials/past decisions.
- Ensure there is sufficient resource to cover holidays/sickness/etc.

Business issues

- Need to ensure that the funds are well managed.
- Look at level of automation/IT systems.
- Backup systems/disaster recovery strategies.
- Find out who the prime broker/custodians are.
- Look at recent accounts, find out strength of parent organisation (if any).
- How are risk levels monitored (e.g. VaR, exposure size)?
- How frequently are risk levels monitored?

Charging structure

- Private equity vehicles and hedge funds typically charge higher fees.
- Hedge funds often charge a percentage of fund, plus a performance fee. This performance fee will normally apply on excess returns above a "high water mark".
- Are the fees competitive?
- Can the fees be varied?

Specific issues

- How large are the funds being considered?
- Is it possible to take references from other clients?
- How long has each fund been in existence?
- Find out how often you will receive reports about holdings

- [Information may not be available for short sales.]
- Obtain information about risk-adjusted performance covering the full history of the fund.
- How has they varied over time, and with market conditions?
- Do the funds have a minimum term (lockup period)?
- Do withdrawals need to be notified in advance?

In the case of property:

- Probably best to consider indirect holdings > £100m needed to gain sufficient diversification via direct holdings.
- Therefore look at pooled funds or possibly a fund of funds manager.

Issues are once again:

- Quality of house
- Track record
- Resources and investment process
- Level of fees
- Size of fund
- Liquidity
- Income units or accumulation only?

Part (i) was done reasonably well.

Part (ii) saw the tendency referred to above with a lack of focus on the important investment issues whilst part (iii) was not well answered with candidates failing to concentrate their answer on the question posed.

2 (i) Treynor $T = \dfrac{R_P - r}{\beta_p}$ Sharpe $S = \dfrac{R_P - r}{\sigma_p}$

where R_p is the return on the portfolio
r is the risk free rate of return
β_p is the systematic risk of the portfolio
σ_p is the standard deviation of the return on the total portfolio

(ii) The Treynor ratio adjusts return based on the manager's systematic risk so it is relevant for performance measurement.

In contrast, the Sharpe ratio adjusts return for total portfolio risk, so it is not appropriate for comparing two managers with different levels of systematic risk within a single portfolio.

(iii)

	Treynor	
	2002 Q1	2002 Q2
Manager A — Domestic	0.50	1.56
Manager B — Domestic	–0.09	2.89
Domestic index return	0.00	0.00
Manager A — Overseas	0.71	–1.60
Manager B — Overseas	–0.33	0.77
Overseas index return	0.00	0.00

(iv)

- Breakdown of assets by asset class.
- Average turnover rates in each asset class.
- Approximate average commission rates in each asset class.
- Details of any transaction taxes incurred in each asset class e.g. Stamp duty in the case of UK equities.
- Custody charges — both transaction charges and safe keeping charges.

(v) Candidates should make reasonable estimates of each of the above items in each asset class. (Some equity classes may be lumped together.)

It would be expected that the large house would have lower costs than the small boutique.

It would be expected that the large house would have lower turnover than the small more aggressive boutique.

Hence the overall cost of the fund run by manager B should be less than that of A.

(vi) All-inclusive fee

- Appears attractive to the co sponsor and the trustees since the costs are known in advance and are capped.

- May not be so attractive to the fund managers since profitability of the client may be compromised.

- Small fund management house may be particularly hard hit due to higher costs and higher turnover in funds.

- Fees need to reflect likely turnover.

- What happens during the year if assumed turnover level is reached before year end — dealing will be curtailed or even stopped since then it will be coming directly out of the fund managers margin Potentially profitable trades will not be entered into i.e. interests of the fund managers and the clients may not always be aligned.

- May need to have contingency agreements in place to cover such situations.

- Clients will not be affected by changes in transaction taxes — managers will.

Performance related fees

- May be attractive to co sponsor since level of fees related to success.

- Also may be attractive to trustees for same reason but probably less so — if performance is good then it may just result in lower contributions for the co sponsor rather than increased benefits for members.

- However they may feel it could encourage more risk to be taken by fund manager.

- However co sponsor may not feel quite so good when paying out higher fees in falling markets.

- May be attractive to the fund managers — however increases the gearing of the revenue stream; success means higher fees but poor returns may result in lower fees as well as loss of clients.

- Need to ensure a lower limit is in place on the level of fees so as to ensure fixed costs are covered; particularly important for the smaller house.

- Trustees and co sponsor would probably prefer to see the an upper limit in place; a limit consistent with the overall return objectives of the fund. This would ensure that excessive risks are not taken by the managers in the pursuit of higher fees.

- They would also probably prefer to see that the upper and lower limits are symmetrical about some appropriate central point.

- Alternatively an amount consistent with passive fees might be agreed for performance in line with the benchmark. Performance in excess of benchmark would attract extra fees at an agreed rate subject to an appropriate cap.

There were no specific issues arising from this question with candidates scoring reasonably in all parts.