EXAMINATIONS

April 2000

Subject 401 — UK Fellowship Investment

Paper Two

EXAMINERS' REPORT

Comment: Given the time available for two questions, examiners would anticipate relatively well developed solutions. Successful candidates generally produced answers which were more complete (not necessarily longer) and more focused.

1 (a) Describe background to UK pension Regulations. Explain structure of MFR and how the liabilities of active members are real in nature. Active member liabilities best matched by equities Pensioners and those near NRD - Fixed liabilities - i.e. bonds required.

For MFR purposes equities means UK FTAllshare and Bonds means long bonds or perhaps Index Linked if pensions are escalating. No overseas equities, cash or property included in benchmark. Holding other assets provides diversification and may produce better long term returns but any mismatching is likely to result in some degree of volatility in the funding position i.e. the surplus will increase and decrease over time. A fund which is pursuing a completely matched strategy will be immune to this. If the UK stockmarket and bond yields move up and down then the value attributed to the liabilities will move in line with the assets and the funding position will not be disturbed.

Note that the exact degree of matching will still depend on any stock selection risk within the UK equities and bond portions (could use tracker funds to remove this) and on the accuracy of the assumptions used in the calculation of the liabilities i.e. any difference between assumed and actual experience.

If however a fund moves into deficit the regulations oblige the plan sponsor (company) to increase the contribution rate and in severe cases to inject lump sums into the fund to restore the funding position to a minimum level. This would likely to have an effect on the cash flow of the company hence the Finance Directors suggestion. He may be more interested in a stable cash flow position than the pursuit of higher returns.

The funding position is good at present but the scheme is closed and younger members may even transfer out into the DC scheme. Hence the funding position may deteriorate in the future. The finance director may also be concerned about this.

(b) Draft reply should cover the following (Marks given for drafting)

Private Equity

Venture capital, buy outs etc
Unquoted stocks
Would invest via collective vehicles - funds or partnerships - direct only likely to be open to the very largest funds.
More common in US pension fund portfolios than in UK (so far).

Less predictable cash flow requirements - often commitments need to be pledged to the private equity fund managers and they will call upon (or draw down) funds as opportunities become available.
Possibility of high returns but a much less liquid asset class.
Less easy to value accurately. Benchmarks less clear so difficult to monitor.

Hedge funds

There are different types of hedge funds.
Investing in hedge funds is more to do with how you invest than where you invest.
Most invest in mainstream quoted stocks.
Some can be highly geared speculative vehicles
Can produce very high but volatile returns.
An uncorrelated asset - can reduce the overall risk of the fund
Need to ensure that you know how your fund operates
Benchmark can be unclear – hard to monitor.
One particular version is the Market neutral fund

- Start with an indexed portfolio
  identify a relatively small number of stocks on which you have strong ideas.
  Take large positions on these strong ideas - both positively and negatively.
  i.e. big overweight position in 10 strongly favoured stocks e.g. +2% each big underweight position in 10 strongly unfancied stocks e.g. -2% each using short selling where necessary

Multinationals

Markets are increasingly global. Big companies are becoming less dependent on their country of origin or on the country where they are listed. Some industries are far more dependent on global growth or global commodities prices than on conditions in any one country e.g. Technology,Oil, Pharmaceuticals.

A new asset class -not all investment houses have fully developed their processes to operate in this manner i.e. on a global stock picking basis. Need to chose the manager carefully. How do they decide between Banks and Oil stocks on a global basis and just as importantly how do they chose between Japanese banks and US ones or European oil stocks and US ones? This is complicated by accounting differences between sectors and countries - stock broker research on this basis is underdeveloped as yet.

Overall comments to the chairman

Mention MFR - i.e. level of surplus needs to be borne in mind. All three new asset classes offer the prospect of higher returns but at the risk of departing from a matched position.

One suggestion may be to match the MFR liabilities using bonds and UK equities as needed and to put the surplus into these new asset classes in the pursuit of higher returns.
Multinationals is a new asset class - these historically are more volatile in their early years and the relative returns from investment managers can be even more so as they develop their investment processes and learn how to cope with a new area. Hence investing in this asset class on a passive basis to start with may make more sense, The stock selection risk can be introduced gradually as confidence grows.

Index linked - US Vs UK

Need to establish whether UK stocks are held for matching purposes or as a discretionary investment.
From a pure investment point of view yield differentials do look very stretched 2.0 –2.3% in UK – over 4% in the US (4.3% at present). UK yields pushed down by price insensitive MFR driven buying. So the case for not holding UK Index linked stocks is strong. More debatable that they should be switched in US TIPs. Other asset classes may offer better value - e.g. UK equities conventional bonds (incl. corporates) as well as the new asset classes he has suggested above.

If MFR is an issue could investigate switching into US TIPS but need to bear in mind the following.
Whilst the currency risk can be taken out need to constantly review the hedge (delta hedge) to ensure the match remains intact. Also the US TIPs are linked to US inflation and the UK ILs (and the liabs) are linked to UK RPI. Part of this risk is theoretically taken out by the mechanism use in pricing the currency contracts but the risk need to be understood fully before proceeding.

(c)

DB - investment risk belongs to plan sponsors and trustees not to the individual.

Trustees need to act in best financial interests of members - if they exclude stocks and the plan underperforms and benefits suffer legal action may be taken by members or company.

DC - investment risk is the individual's and they can invest as they please. Thus ethical funds are an option.

Government regulations oblige schemes to include a declaration in their Statements of Investment principles (SIPs) re trustees policy on SRI by July 2000. (This needs to include a description as to how both social factors and voting rights are included in investment decisions.)
It could be that they decide to take no account of these factors but the SIP has to state this clearly. However it is more likely that the policy will include ideas like good active corporate governance and intervention policies. Few are likely to resort to a policy of widespread exclusion.

Comment: Marks were generally lost by answers which were too slight. This was particularly true in part (ii) of the question. Part (i) was well-answered. Responses to part (ii) were more variable; higher marks were awarded to those candidates who aligned their answers to the specific nature of the Scheme. In part (iii), many candidates understood the importance of location of risk as a key differentiator between the DB and DC sections. Answers, however, might generally have been fuller, and displayed a greater awareness of the differing objectives of the sponsor, trustees and membership.

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<table>
<tr><th>Comparison Heading</th><th>Exchange Traded Derivatives</th><th>OTC Derivatives</th></tr>
<tr><td>Flexibility</td><td>The parameters of derivative contracts (like contract size, delivery dates, style, range of strike prices, etc.) are specified by the exchange. The customer can 'take it or leave it' in terms of the suitability of the contract for his/her needs.</td><td>The ultimate in flexibility. Derivatives trading operations will tailor the contract specification to meet the needs of the customer. OTC derivatives allow hedges to eliminate timing mismatches between hedge instruments and the underlying asset the price of which is being hedged.</td></tr>
<tr><td colspan="3">FLEX options are an example of exchange traded options were the customer of the exchange can specify a wider range of parameters in relation to the contract. The customer can specify the style (American or European), strike price, maturity and notional principle of the option. This development reduces the level of inflexibility of exchange-traded options.</td></tr>
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Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Liquidity	Most contracts are highly liquid although liquidity tapers off the longer the time to maturity of the contract for any given underlying.	This is perhaps the biggest drawback of OTC contracts.

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Credit Risk	Once a contract is completed between two members of the exchange and registered with the exchange it is changed into two separate contracts. The exchange becomes the buyer to every seller and the seller to every buyer. The parties[1] then have the guarantee of the exchange in relation to contract fulfilment. This is helped by the exchange requiring both sides to put up initial margin and to mark the contract to market each day.	Significant credit risks can arise in the OTC markets especially on long maturity contracts where the underlying variables can move significantly from their initial values thus increasing credit exposure. Credit exposure is further heightened as a counterparty of a derivatives dealer has little or no knowledge of the dealers credit management policy whereas parties to an exchange traded contract know the mechanism used by the exchange to manage credit risk.

[1] Strictly speaking, only general clearing members get the guaranteed of the exchange. Most users of derivatives exchanges are exposed to the credit risk of their futures broker.

The significant credit risks of OTC contracts can be reduced by daily marking to market and the posting of collateral by the relevant party. This however further increases the administration and expense burden of OTC contracts.

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Expenses & Speed of Execution	The standardisation of contracts and the systemisation of trading, settlement and marking-to-market procedures at the exchanges greatly reduce transaction costs and increase the speed with which contracts can be executed.	Each deal is individually negotiated with all the attendant management time, legal and tax consultancy fees attached.
Standardised legal documentation[2] would go along way towards reducing the expenses and increasing the speed of execution of the more standard OTC contracts like, for example, swaps.		

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Types of Contracts Traded	Stock index, commodity, interest rate and to a lesser extent currency futures are dealt in on exchanges. Options on individual equities and stock indices tend to be dealt in on exchanges.	Interest rate swaps, currency swaps and foreign exchange forward contracts tend to be traded in the OTC market.
OTC markets are better for some types of derivative deals while exchange-traded derivatives are better for other types of derivative deals.		

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Price Transparency	The transparency of the price at which deals are done is gives market participants confidence in the system.	There is a fundamental lack of price transparency. It is difficult to have any confidence that the price at which a derivative dealer will close out a contract is a 'fair' price.
The regulatory environment of the FSA goes some way towards raising confidence in the prices quoted by derivative dealers.		

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Confidentiality	Parties to an exchange traded contract don't know the identity of their counterparties apart from the fact that it is the exchange.	The derivatives dealer is fully aware of the exposure of its counterparty to market and other risks.
Many market participants don't want their positions know for fear that someone might take advantage of their position.		

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Competition	There is intense competition among derivative exchanges for business and EMU has increased this	In some OTC contracts there is considerable competition - swaps and foreign exchange derivatives -

[2] This already exists for swaps and other derivative transactions.

	competition. This is driving down transaction costs.	but in others it may be difficult to get two derivatives dealers to quote for an OTC contract.
There will never be much competition for esoteric derivatives deals as there are only a very small number of dealers able to price unusual deals.		

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Access	Screen based trading can give 24 hour access to the market.	OTC deals are usually booked with one branch of a derivatives dealer and are difficult to close out outside normal office hours.

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Taxation	Given the wide spread use of these contracts the tax position of them is much clearer.	Given the tailor made nature of these contracts the tax positions are more complex and would require more specific advice in each case.

Comparison Heading	Exchange Traded Derivatives	OTC Derivatives
Size	The minimum deal size that can be done at reasonable cost is generally lower than on the OTC market.	While low deal sizes can be executed the associated charges tend to be prohibitive. The OTC market handles the larger transactions.

Comment: This question was more poorly answered. Many candidates were unable to report adequately on the key differences between the two categories of options.