EXAMINATIONS

September 2002

Subject 401 — UK Fellowship Investment

Paper One

EXAMINERS' REPORT

In the main candidates made reasonable attempts at all questions. As usual bookwork was done better than knowledge which in turn was better than application. There was some evidence of candidates not reading questions through in their entirety and consequently not using all the information available to them to answer the question.

1 (i) Bonds issued in sterling in the traditional UK bond market by non-UK borrowers.

(ii) A traditional bulldog has very similar investment characteristics to a conventional gilt with interest being paid twice a year and redemption at par.

A key difference is security. A bulldog may be issued by a wide range of entities with differing credit worthiness. The range of borrowers can vary from very well rated governments to corporations in politically and economically unstable countries.

Another key difference is marketability. Issues tend to be smaller than gilt issues and much less frequently traded.

(iii) The foreign borrower may be seeking to leverage UK revenues directly rather than borrowing in the domestic markets and accepting the currency risk or swapping it away.

The foreign borrower may be able to borrow comparatively cheaply in the UK market. The borrower may issue the bulldog as a part of a swap with another party who is able to borrow comparatively cheaply in the borrower's preferred currency and terms.

This question was well answered although marks were often missed in (ii) for not mentioning similarities.

2

High yield non-investment grade bonds are corporate bonds that have quality ratings below investment grade (i.e. Ba1 or lower).
High yield non-investment grade bonds have higher yields than investment grade bonds.
High yield non-investment grade bonds can be either "fallen angels," which are corporate bonds that have been downgraded from investment grade (i.e. Baa3 or higher),
Or high yield bonds can be created by "original issuance,"
Which are new issues underwritten by investment banks.
"Original issuance" high yield bonds typically carry more protective covenants than investment grade bonds
limiting the corporation from incurring additional debt.

High yield non-investment grade bonds can be thought of as a distinct, separate asset class.

A separate asset class can be defined as one that has an expected return and volatility that cannot be replicated by a combination of other asset classes.

A high yield non-investment grade bond has the characteristics of both fixed income by making coupon payments
And equity by having price appreciation.

There are two main potential benefits of the high yield non-investment grade bond:

(1) Diversification from its low correlation to both the bond and equity markets.
The low correlation to other asset classes provides a diversification opportunity to add high yield non-investment grade bonds into either a fixed income or equity portfolio,
Thus increasing the total portfolio's risk/return characteristics.

(2) Attractive risk-adjusted returns.
A high yield non-investment grade bond provides a rate of return to the investor through its high coupon payment
And potential price appreciation if the credit quality improves.
The high coupon can provide a cushion against volatility in the bond's price.

The great potential disadvantage of high yield non-investment grade bonds is the higher probability of default.

Answers to this question were mixed and it served to differentiate good from poor candidates. Whilst obvious characteristics were covered many important points were missed.

3 The key points to consider are

- the inherent quality of the process
- the quality of the people working on the process
- the quality of the business management which acts to support or improve the process

To assess the quality of the process we need to establish what is the methodology of the investment decisions, how research is used(internal/external), whether it is credible and the effectiveness of the implementation process. The timescale over which the process has been applied would be relevant and the adjustments/changes made over that time.

The CV's of the team members applying the process would be studied and the stability of the team would be important. Also, the quality of the senior management leading the fund management business would be considered; have they demonstrated

the ability to attract the right people (remuneration, staff turnover) to successfully run and develop the process, utilising technological developments and other resources to best effect? The context of the fund management business unit would be considered, both its position in the market place and its financial standing. Has it already achieved critical mass in the relevant product area so there is a reasonable degree of confidence it is committed to these products. Where is the business going (growth/consolidation) and is it clear where the resources are coming from to achieve the plan. Is the business plan appropriate and credible? A change of ownership would be destabilising and could have an adverse effect on clients.

This was bookwork and hence scored well although some candidates wasted time by making performance related comments.

4 (i) [401:14] New fund, so need alternative performance and organisational data to assess capabilities and skills of manager. Could look at house's experience of running similar funds and/or individual manager's past record. Attribution analysis would highlight ability to add alpha. Would need to investigate market to see whether returns are feasible given manager's style and what level of risk would be required to satisfy expectations. Would need to assess inherent quality of process, the people working on it and the business supporting it. Given the higher risk involved, you would want details of risk controls to prevent excessive risk being taken. Details of charging and compensation structure would be useful to assess value. You could consider alternative providers of similar funds. From the company's perspective you would need to understand their realistic time horizons and maximum risk budget — how much could they afford to lose in the short term before the consequences would be damaging for both company and scheme/members' benefits.

(ii) [301:15 relevant items from list in 15:2 as applied to this situation.] Past performance is no guide and expectation of outperformance could translate into underperformance and increase deficit in the short term — this could be critical for company if a short term cash injection is required. Liability costs are usually assessed with reference to bond yields — although equities are expected to outperform, particularly over the longer term, this is not guaranteed. One would need to consider the relative levels of bond and equity markets and so the short term expectations for gain and risk [301:9:5].

Investment needs driven by nature, term and liquidity requirement of the liabilities [401:11:4] Trustees are responsible for the governance (who does what) and the stewardship of the fund.

The trustees are responsible for setting investment objectives and strategic asset allocation — trustees are also responsible for implementation, monitoring and reporting as reflected in Statement of Investment Principles.

Factors to consider are expected returns, funding and solvency levels, market volatility, currency exposure and implementation/dealing costs for the proposal and any alternative strategies — this is a tactical view [301:15:3].

Decision will be affected by risk appetite — influenced by relationship with/characteristics/relative size of sponsor and future prospects (growth or decline) — and size of fund.

There may be short term constraints e.g. Minimum Funding Requirement in UK.

Also stock and sector concentration, correlation of asset classes/diversification opportunities.

Style of implementation will affect level of risk taken within asset allocation.

Other trustees may not share these two's views.

Particularly over longer term.

Short-term funding shortfall could lead to cash flow risk.

Answers to this question were rather disappointing although some candidates did show a good level of understanding especially in (ii).

5 [Reference 401:3:4, 401:12:2, 301:7]

You understand the tax breaks are generous on VCT, but could be withdrawn. There are other tax-efficient investment vehicles available, including pension schemes [401:12:1].

Venture capital is not the same as private equity.

VCT tend to focus on very small companies and trust may be a significant shareholder.

Companies will fail and investors will probably not get back capital.

Private equity returns have been better than mainstream, and diverse.

Performance distorted by only marking to market when opportune, and there may be pricing anomalies caused by lack of information

Investment is long term and illiquid, with poor marketability and information.

Pension funds use variety of vehicles to get exposure — investment trusts, fund of funds, private equity fund or direct, depending on objectives (return, diversity, size and sophistication)

VCT is like an investment trust but with extra rules and tax advantages.

Must hold investment for three years to benefit.

Potential for increased investment by pension funds is high but may be mitigated by secular trend out of equities.

VCT may have high charging structure due to active management required.

VCT is limited diversification.

Difficult to assess quality and prospects of manager and portfolio.

In general answers lacked the necessary detail for candidates to score well.

6 (i) Passive management can be by full replication, sampling or synthetic methods. In order to replicate, all stocks in the index must be legally and practically be investable by those whom the index is designed for. Information regarding constituent companies should be freely and regularly available and on a consistent basis. For synthetic methods a standardised derivative contract is required. Dealing costs should not be so large that attempts at indexation incur significant tracking errors due to expenses [401:13:2].

(ii) (a) Shares in private equity investments are not freely available for trade and thus the index is not necessarily investable. Price data is difficult to obtain at frequent/regular intervals. Market value of unquoted investment is only known when it is sold. Deals may be treated with a degree of confidentiality. Companies may not have obvious comparators that can used as a proxy. Consequently any estimation of values is subjective and expensive. Private equity investments are unlikely to pay dividends, so any yield on the index will not reflect the universe of companies but the actions of just a few companies.

(b) Private equity does not "match" the liabilities. However, the scheme has surplus that would justify taking a risk in the pursuit of higher expected returns. Private equity investments are often made for long terms and so may not be realisable or provide income to meet pension liabilities in the short to medium term. Such an investment would be "actively managed" and so inconsistent with the style of management adopted by the trustees [401:13:2,3.5]. Private equity is becoming more popular with pension funds, particularly larger ones. However to build up an exposure of 10% would take time — there may not be suitable investments available — and the scheme would need to hold this amount of assets or more in cash or very liquid assets to meet the requirements of the manager. This could hold back returns in the short term. The trustees will need to decide how to invest — directly or through a pooled fund. This will depend on the size of the fund, total equity allocation, its characteristics and expertise. Most schemes will used collective funds or invest in the equity of quoted venture capital managers. It would probably be inappropriate to use the funds offered by the firm that the Chairman is a director of unless they were undoubtedly "best in class" on the basis of a rigorous independent

assessment [401:14:2]. Probably conclude yes, subject to further investigation and discussion of options. Private equity offers diversification into other sectors/industries and returns are lowly correlated with quoted equities.

(i) Answers covered most of the points although detail, such as comments on the investable universe, tended to be missed.

(ii) This was a part where candidates did not read the question carefully enough in particular " 10% of the equity investments". There was a tendency not to provide a balanced view of the proposal.

7 Investment needs are driven by nature, term and cashflow requirements of investor's liabilities.

A common standard may help comparisons but should not unnecessarily constrain investment policy or require significant costs or changes to implement.

Ideal standard should only force changes in poorly managed operations.

Investment in overseas assets not inherently more risky if you hedge currency. Different markets yield at different levels — this is not a consistent measure of value. Style of investment management may mean actual portfolio yield is different to market.

Most markets have different indices (and providers) so basis for comparison may be inconsistent.

Lack of correlation between global markets may distort comparison at a particular date.

Using a single date for asset valuation may be unrepresentative of trend or general market level.

Pension funds invest differently — many countries have unfunded arrangements, other invest predominantly in bonds, have limits on equity or overseas exposure, have greater or lesser exposure to alternative investments or self-investment.

Accounting practice will vary between countries — a single standard may be useful for multi-nationals but onerous for single country operators or unquoted companies.

Answers to this question were poor with many candidates assuming that funds would move to equities to match the new standard.

8 (i) Investment needs driven by nature, term and liquidity requirement of the liabilities [401:11:4][301:15] Trustees are responsible for the governance (who does what) and the stewardship of the fund.

The trustees are responsible for setting investment objectives and strategic asset allocation — trustees are also responsible for implementation, monitoring and reporting as reflected in Statement of Investment Principles

Strategic asset allocation is often set from the results of an asset-liability modelling exercise

Decision is between equity type assets and bonds/cash.

Secondary decisions consider domestic/international allocation, currency hedging, nature of bond investment (fixed/index-linked, sovereign/corporate, credit risk), alternative investments.

Factors to consider are expected returns, funding and solvency levels, market volatility, currency exposure and implementation/dealing costs.

Decision will be affected by risk appetite — influenced by relationship with/characteristics/relative size of sponsor and future prospects (growth or decline) — and size of fund.

Also stock and sector concentration, correlation of asset classes/diversification opportunities.

Style of implementation will affect level of risk taken within asset allocation.

(ii) (a) Strategic reduction in long term expected return (limited scope for active management) — this is a tactical view [301:15:3].

Out of the market — could benefit if market falls, but would miss out if market continued to rise.

Other investors/trustees may not share FD's views.

Particularly over longer term.

Liability led risks — ongoing funding, solvency (and MFR, FRS17).

Short-term funding shortfall could lead to cash flow risk.

Inflation margin growth of liabilities over assets (unless high real interest rate policy pursued) — wage inflation typically higher than prices.

Trustees seen to be failing in fiduciary duties in considering all investment opportunities.

Transfer may be paid in assets not cash and there may be costs in realisation and reorganisation both in transaction cost and in prices achieved on a forced sale.

(b) Pound cost average by investing over time.

[401:5: 2, 301:21:3.1.1] Hedging by selling stock index futures (but may be mismatched against actual holdings).

Bespoke put option, either long term or rolling shorter term — perhaps fund cost with call option cap.

Parts (i) and (ii)(a) were reasonably answered but (ii)(b) was not. Better candidates scored well on all parts with some attaining close to full marks especially on the first two parts.

9 (i) Imputation — A system designed to enable a company's profit to be taxed once rather than twice. A large company pays tax at the rate of 30% on net profits. Dividends paid from taxed profits are paid to shareholders together with a 10% tax credit. The tax credit can be used to reduce or offset the tax due on the net dividend.

(ii) The holding company will have the listed shares and may issue loans to the two subsidiary companies. The subsidiary companies will pay loan interest and dividends to the holding company.

Management must consider personal and corporation tax rates on income and capital gains in both countries.

Management should consider the tax residency of the current shareholders. It may be necessary to favour the largest group.

Management must consider the effect of any existing double tax treaties between the two countries. Ideally one wishes to minimise the tax paid in the subsidiaries or at least ensure that it is likely to be able to be reclaimed at the holding company level. Paying loan interest is generally a pre-tax expense and so can be a useful way of reducing tax.

The UK tax payer is generally able to reclaim foreign tax paid up to the UK corporation tax rate. If the foreign tax rate is higher then the difference will be lost.

Withholding taxes on dividends and interest — Some countries impose a withholding tax on dividends and/or interest. Withholding tax can be offset against UK tax liabilities.

This question was either well or badly answered. Many candidates knew (i) but could not do (ii).

10 Studying charts for trends. The chartist will hope that past trends and patterns will be repeated in the future. For example, the chart might suggest that a given share's price tends to be higher in the winter months.

Define mechanical trading rules based on past observations of trends and patterns. For example, rules might be used to set stop loss trades.

Studying the price performance of a share relative to the market as a whole or its own sub-sector. For example, the chartist might buy when the share price is comparatively low i.e. over sold.

There were very mixed results for this question despite its mainly bookwork nature.

11 Both have intellectual justification and are investible. Both provide transparent and real time independent benchmark. Both would represent a significant shift from an average fund approach so would incur costs to change.

Market index

- represents investment universe and the collective actions of other investors
- dominated now by US (was Japan)
- investors may therefore follow "bubbles" until they burst (e.g. Japan over 1980s)
- impact depends on management style
- sector bias?

Fixed weights

- diversification
- need a process for rebalancing which will encourage taking profits
- choice of weights subjective — how do you allocate within regions such as Pacific Markets

Stronger candidates did well in this question whilst poorer ones tended to miss out on commenting on similarities and focused only on differences.