



**GLOBAL OPERATIONS MANAGEMENT  
SUMMER 2009  
CHIEF EXAMINER'S REPORT**

**GENERAL COMMENTS**

It would seem from the way the questions were answered, candidates found the paper challenging and this is reflected in the pass rate of 26%. Congratulations to those candidates who passed! As with the previous sitting, many of the candidates who did not pass, seem to hit a buffer and were not able to provide sufficiently good responses to enabled them to gain better marks.

The short questions in section A continue to act as a barometer of how the candidate is likely to fare across the paper. Although on this occasion, there were exceptions where a few candidates gained above average marks in this section, but received less than average marks in sections B and C. This may be due to poor preparation and bad time management. As always, the standard of the scripts was variable.

The mandatory question in Section B, allows candidates to show their knowledge and understanding of the information contained in the case study. Most candidates were able to draw out the required issues and form the appropriate conclusions, whilst others just lifted the data without any interpretation. This could be due to a lack of knowledge, as some candidates struggled, despite the 'rough plans' drawn up.

Section C required candidates to answer two out of the five questions set and to demonstrate their knowledge and or experience. Questions 10 and 11 were the popular questions with many candidates either failing to read the questions fully, or they did not understand what was really required. Candidates should be aware of the business aspects where relevant, of some of the questions in this section. Here again in section C, some candidates struggled and their attempts attracted poor marks.

As always, the better candidates who are well prepared for the exam, will continue to do well in both sections B and C and in this sitting there were 4 good scripts, with well constructed answers. However, it should be noted that although marks are not deducted for poor handwriting, some scripts required a great deal of ciphering.

## SECTION A

1. Candidates were required to calculate the theoretical ex rights price of a company whose share price is trading at 300p when it announces a 1 for 4 rights issue at 250p. (2 marks)

Only a few candidates' calculations were incorrect. The correct calculation is as below.

$$\begin{aligned} 4 \text{ existing shares} &= 4 \times 300\text{p} = 1200\text{p} \\ 1 \text{ rights share} &= 250\text{p} \end{aligned}$$

$$5 \text{ new shares} = 1200 + 250 = 1450\text{p}$$

$$\text{Ex rights price} = 290\text{p}$$

2. This question required candidates to identify two of the three elements contained in the European Code of Conduct for Clearing and Settlement. (4 marks)

Only a few candidates provided a reasonable response to this question and in the main, most made reference to the G30 recommendations and settlements. The required answer was:

Price transparency - The Code requires that the signatories provide full transparency of their relevant tariffs and discounts from 1 January 2007.

Access and interoperability - The Code requires that the signatories allow for access and interoperability as defined in the Code from 1 July 2007.

Unbundling and accounting separation - The Code also requires that the signatories make certain services available on an unbundled basis and to implement accounting separation from 1 January 2008.

3. The Financial Services Authority (FSA) is the regulator for the industry in the UK. (4 marks)

a) What are its principal obligations? These are:

- Maintaining confidence in the financial system
- Promoting public understanding
- Protecting consumers
- Reduction of financial crime

b) Name four other equivalent bodies and their jurisdiction

- Securities and Exchange Commission, USA
- Irish Financial Services Regulatory Authority, Northern Ireland
- BAFIN, Germany
- Autorite des Marches Financiers, France
- CSSF, Luxembourg

- Securities and Exchange Board of India (SEBI), India

Only 2 candidates gained full marks. Where some candidates struggled was in the naming of four other equivalent bodies and their jurisdiction.

4. This question required candidates to briefly define the following market terms:  
(7 marks)

- a) REIT - A Real Estate Investment Trust is an investment vehicle which owns and manages commercial and residential property on behalf of its shareholders to avoid double taxation.

A few candidates incorrectly associated this with securities settlement.

- b) Turquoise – Multi-Lateral Trading Facility (MTF) created by 9 major investment banks. Dealing services are offered at a discount to the traditional exchanges.

The majority of candidates answered this correctly.

- c) Deferred Shares – a class of shares where the holder is only entitled to receive a dividend if the ordinary shareholders have been paid a specified minimum dividend.

Quite a few candidates were confused as to whether these shares qualified for a dividend.

- d) JASDEC – Japan Securities Depository Centre. The central depository in Japan for equities and convertible bonds.

Some candidates erroneously thought JASDEC was the Japanese Stock Exchange.

- e) Time Deposits – A cash deposit with a bank, for a fixed term at a specified rate. Good for very short deposits of 2 weeks or less. The deposits are not securitised and therefore cannot be sold. Punitive charge if the funds are required back early.

Some candidates did not attempt this. Some thought it was a cash vehicle.

- f) Warrants – A warrant is issued by a company and gives the right, but not the obligation to buy the underlying equity at a predetermined price on specified dates, or at any times, up to the end of a predetermined time period.

Quite a few candidates confused warrants with options.

- g) Forward Rate – The rate at which a foreign exchange contract is struck today for settlement at a specified future date. A compilation of the spot rate, plus or minus the forwards (either at a premium or a discount to the spot rate).

Only a few candidates provided the correct answer.

5. Candidates were asked - What does the term 'Insider Dealing' mean and under which Act is it classed as a criminal offence? *(2 marks)*

A crime committed when an individual in possession of unpublished price sensitive information and knowingly communicates with another, who then attempts to deal in its shares. Or when the information is communicated to a third party in the expectation it will be acted upon.

It is an offence under The Criminal Justice Act 1993

Only a few candidates gained full marks, by setting out an appropriate definition of 'insider dealing' correctly or they failed to correctly identify the Act under which it was classed as a criminal offence.

6. Why does the writer of an option carry an unlimited risk if they are not in possession of the underlying asset? *(2 marks)*

Unlimited risks are carried by the Writer, because there is the duty to deliver the asset at a fixed price irrespective of the prevailing asset price. As the stock corresponding to the call option is not held by the Writer, the stock must be bought to meet the delivery obligations. Sometimes called 'naked call writing' – leaves you feeling exposed.

Varying responses received, but in the main the question was well answered.

7. This question required candidates to clearly set out the four main categories of risks identifiable to Operational Risk. *(4 marks)*

The four main categories are:

- Human / People error
- Inadequate Procedures and Controls
- Systems Failure
- External Risks

Many candidates set out other types of risks outside of the four main categories.

**SECTION B****TOTAL 35 MARKS**

Answer ALL parts of the question in this section.

8. This is the mandatory question and now on its second outing.

You have been asked by the director of operations to review the reconciliation and control of clients' cash and stock within the firm. You have reviewed the three months of reconciliation up to end March and your findings are summarised in the table below:

	Jan	Feb	March
<b>Firm Cash Account</b>	£'000	£'000	£'000
Cash Balance on Bank Statement	750	1100	900
Firm Money Ledger Account	500	450	500
Date of Last Reconciliation	7 Oct	8 Nov	12 Dec
Number of reconciling items	15	18	25
Cash to be Transferred to Client Account	200	600	300
<b>Client Money Accounts</b>	£'000	£'000	£'000
Cash Balance on Bank Statement	250	300	400
Client Money Ledger Account	500	1000	900
Date of Last Movement	29 August	30 Sept	15 Oct
Date of Last Reconciliation	7 Sept	10 Oct	Unreconciled
<b>Stock Accounts</b>	Holding	Holding	Holding
Custodian Statement Stock A	500	550	400
Client Ledger Stock A	480	430	400
Date of Last Reconciliation	15 Sep	15 Sep	5 Dec
Vault Count Stock B	200	200	250
Client Ledger Stock B	190	200	200
Date of Last Reconciliation	20 April	20 April	20 April

- a) Summarise the main FSA regulatory requirements for reconciliations. (4 marks)
- b) Identify the main regulatory issues faced by the bank and the actions which should be taken immediately. (10 marks)

- c) In light of your analysis, your director has asked that you prepare a report to the Board outlining the key operational issues and also an analysis of the main outsourcing opportunities and the pros and cons of outsourcing versus in house processing. (21 marks)

Mandatory questions always solicit varying responses and this question was no different. It should have been well answered given the issues, but some candidates sought to repeat verbatim, the information set out in the table rather than interpret and draw conclusions, as is required. The better candidates however, drew sound conclusions from the data and set out their responses in a logical manner. The below should not be construed as a model answer.

a) The requirements for reconciliation and control over client assets are to be found in the Client Assets Section (CASS) of the FSA Handbook . The main requirements are:

Records should be maintained and kept for 5 years which distinguish one client's Safe Custody assets from those held for other clients. These should be reconciled as often as is necessary and as soon as is practicable after the date to which the reconciliation relates. This applies regardless of whether the assets are held with an independent custodian.

Where there is a shortfall of Safe Custody assets in a reconciliation the firm should make good the shortfall for which there are reasonable grounds for concluding that the firm is responsible.

The firm should inform the FSA in writing without delay if it has not complied with these two requirements.

A firm should maintain appropriate records and accounts to enable it at any time and without delay to distinguish Client Money held for one client from client money held for another client and also from the firm's money. These should be reconciled as often as is necessary and as soon as is practicable after the date to which the reconciliation relates.

The firm can adopt a standard method of internal client money reconciliation or opt for an alternative approach. Both require that on each business day the amount of money in the bank accounts is greater than the balance on the client ledger accounts.

Any unreconciled shortfall in Client Money Bank account should be made good using the firm's own money on the day the reconciliation is performed.

Any breach of these requirements should be reported to the FSA in writing.

The CASS section of the FSA Handbook has been extensively rewritten as part of the MIFID implementation and these risk based rules replace the previous prescriptive rules which had set timeframes for reconciling various accounts.

b) The regulatory issues include:

For the client monies accounts:

- Large balances of client money are held un transferred in the firm's account
- The account is currently unreconciled and could be construed to be in breach of the requirements
- The firm should place £ 500,000 into the bank account to avoid being in breach of the shortfall requirements.
- The compliance department should be made aware of these breaches which should be reported to the FSA.

For the client stock accounts:

- The accounts are reconciled but not in a timely manner
- The reconciling differences do not cause any shortfalls
- The compliance departments should be made aware of the lateness of the stock reconciliations which may require reported to the FSA.

c) There are also operational issues which include:

- Increases in transactional values not being adequately processed
- Lack of focus on irregular tasks such as vault reconciliation and August custodian reconciliation.
- Controls over the firm's cash and the interaction with the client money account

The report should include remedial action to rectify the situation. This could include:

- Increase staffing to resolve backlog
- Review and change management and escalation process
- Increased compliance monitoring
- Review of procedures and systems with possible inclusion of alerts near critical deadlines
- Review of reconciliation periods
- Review of training and competences of staff involved.

The repost should also include an analysis of the pros and cons of outsourcing. This should include:

- The financial analysis of the business case for outsourcing which could be more costly than the internal solution
- The impact on the business operating model and quality control
- The availability of cutting edge technologies from the outsourcing partner
- The freeing of resources to focus on core competences or the impact of redundancies or staff transfers
- The adoption of tried and tested standard operating processes
- The possible needs for customisation and work rounds

- The implementation programme and change management required
- The service level management and monitoring needs
- Escalation and issue resolution procedures

In all cases an outsourcing opportunity should only be considered once the reconciliation process is in control and on top of any breaches. The fixing of the reconciliation issues should come first before any plans to outsource.

Outsourcing alone will not fix the problem.

## SECTION C

### 9.

You are the operations manager in a small asset management firm dealing with an expanding range of asset types, a growing number of counterparties and escalating transaction volumes. Your Board are concerned with the increased risk and compliance burden and you have been requested to investigate the use of SWIFT within the firm. You have been asked to prepare a short briefing paper which:

- a) Outlines the services available to the fund management community by SWIFT (15 marks)
- b) The main requirements to connect to SWIFT (5 marks)

This was not a popular question with candidates and where chosen, the answers were weak and low marks were received. There was a tendency to focus too much on SWIFT message formats. The below is not a model answer, but has points for consideration.

The Society of Worldwide Interbank Financial Telecommunications is a secure message transfer platform which is owned by the banking sector. It has expanded message types to include an extensive range of securities transactions and has developed software to provide value added services.

SWIFT provides a single, low cost way of communicating with all your counterparties — including broker/dealers, custodians and fund distributors — in an automated way, and supports a large range of asset classes across the equity, fixed income and alternative spaces. SWIFT enables you to eliminate costly and error-prone manual processes and multiple communications protocols, and to increase your international reach.

As new regulation such as MiFID and Basel II impacts your operating and investment practices, SWIFT's solutions for collateral and risk exposure management and standards for transaction reporting can help you cope with regulatory and compliance demands in a cost-effective way.

Value added services include:

- Payments exceptions and Investigations
- Accord, real-time matching and exception handling for foreign exchange, money market and derivative confirmations
- Affirmations, providing a cost-effective way of enhancing STP across the treasury and derivative markets.
- SWIFT's CLS Third Party Service, providing a global FX settlement solution for non-CLS members
- FIX over SWIFT, pre trade SWIFT access to UL NET
- FpML, enabling automation for OTC derivatives transactions
- Collateral Management
- Corporate Actions, enabling and improving event communications between public companies and their stakeholders

- Data Distribution, standardising your communication flows from market data providers and market infrastructures
- Proxy Voting, entire meeting and proxy voting process.
- Funds, automation of investment funds distribution
- MiFID transaction reporting

To connect to SWIFT for smaller and in particular non-banking users SWIFT have developed internet based connections alongside the traditional dedicated secure telephone connections. They have also developed three levels of access - Alliance Connect – Gold Silver and Bronze depending on the size of the institution and likely volume of transactions.

For Alliance Bronze set up costs are low with the required hardware costing just over £ 1,000 and SWIFT have an experienced training team to assist with the implementation and conversion with a wide range of classroom courses, on-site training and e-learning products.

## 10.

Your company has requested that you implement an operational due diligence framework for hedge funds selection in light of the failings which are becoming apparent in the Madoff case.

- a) Identify the main operational factors which differentiate hedge funds and the risks which these bring (10 marks)
- b) Describe the operational due diligence process and the main steps you would take in implementing this as part of the hedge fund selection process (10 marks)

This question was very popular with candidates but good marks were not gained by all who chose to answer it, as some give sufficient consideration to the due diligence process. They focussed on the RFP process.

a) Issues from an investor's perspective which should be brought out include:

- Regulatory and legal framework
- Management and control, specialty in a start up situation
- Trading in illiquid instruments – execution and valuation issues
- Leverage
- High volume of transactions
- Lack of transparency to underlying positions
- Irregular dealing and liquidity restrictions,

Aside from the specific risks the combination of these factors make it difficult to predict fund performance based on underlying market movements. This can result in bad news arising out of the blue. Recent examples where include LTCM, Amaranth, Bristol where investors lost heavily and unexpectedly.

b) The Due Diligence should focus on both the quantitative management of operational risk and the qualitative aspects.

The quantitative aspects are well documented in various texts and template questionnaires such as the Alternative Investment Management Association (AIMA) due diligence questionnaire are ideal bases from which to start.

Areas to be covered include:

- Legal framework and constituent documentation
- Regulatory framework and compliance procedures
- Administrator, prime broker and custodian relationships
- Staffing and segregation of trading and control functions
- Risk management practice and risk overview
- Operational control and 4 eye principle
- Independent price checks and monitoring of liquidity

The qualitative aspects include using eyes and ears and using one's market connections. A visit to the manager's office is key and often tells a lot more than a questionnaire. Is the COO really independent and knowledgeable, are the offices set up to allow independent control, is the compliance manual in evidence. Also visits to the administrator or prime broker can be revealing in getting feedback on the fund relative to its peers.

## 11.

Your Board has appointed you responsible for business continuity within a small asset management company which is relocating to rural Somerset.

- a) Outline the main risk areas which you would incorporate into your business continuity plan (10 marks)
- b) Outline the immediate actions you would put in place for start of business in the new location (10 marks)

Although this was the most popular question with candidates, once again good marks were not achieved as candidates did not read the question and thought the site was to be used in the event of disaster. In providing information, the following may be taken into consideration.

### a) Main risk areas:

- The deliverables and timelines need to be defined and any constraints should be identified
- Stakeholders should be identified and kept informed, whilst managing and controlling risks.
- Identify the contingencies that should be put in place (i.e. systems, technology, transport links and costs, communication in the event of disasters)

- Costs – will business be affected during relocation, particularly if the firm is not up and running on the first day once relocated.
- Visibility – will the firm continue to attract new clients and retain business
- Staff – possible loss of skilled and experienced staff.
- Employment of new staff – what is the skills set and knowledge in area?
- Location – accessibility for staff and visitors
- System / Technology failure
- Failure to communicate to providers / clients and other third parties

**b) Immediate actions** (this is not intended to be an exhaustive list)

- Recovery plan / BCP for emergency (to include access to back-up premises)
- Documentation of processes and procedures
- Staff training - orientation / familiarisation of building, systems etc.
- Risk management procedure to people, processes and systems
- A call tree to ensure communication in the event of a disaster or unforeseen event
- Back up and links to service providers / clients

As a small company there will be a dependency upon key members of staff. Therefore cross training, knowledge sharing and a plan of action is necessary if certain staff member are not available. There must be access to people and systems.

**12.**

You are the COO of MNO, a European multinational organisation headquartered in the UK. One of your main responsibilities is to oversee the global pension's portfolio. The total of the pension fund assets amounts to over £1.5bn and these defined benefit schemes are located in Ireland, Germany, France and the UK, with UK and Germany holding 80% of the assets. The assets are split between 60% in global equities and 40% in fixed income with each jurisdiction holding direct investments. Each jurisdiction independently contracts with asset managers, custodians/administrator, legal and tax advisers.

You have been asked by the group board to examine asset pooling for the pensions funds in particular considering tax transparent pooling and to present a report which covers the following subjects:

- a) the benefits of asset pooling (6 marks)
- b) the challenges of asset pooling (6 marks)
- c) provide a diagram and description of how you would propose the asset pooling operating model would be established. (8 marks)

This question was not popular with candidates and was not particularly well answered. There was a tendency to approach it from a settlement perspective. The following are points for inclusion in an answer.

## **a) Benefits**

- Larger asset pools likely to command lower single asset management fees, legal, operating fees and trading costs
- Larger asset pools of assets improves buying power and thus allows for best of breed managers
- Smaller plans (in this case Ireland & France) have access to investment strategies they wouldn't be able to get given their smaller size;
- Single service providers potentially improves rate cards;
- Better governance and improved decision making (all plans benefit from centrally made decisions – i.e. best advice/approach can easily be applied to all plans);
- Standardised reporting from single administrator/custodian to HQ thus improving oversight;
- Improved spread of investment risk through pooling (particularly beneficial for smaller plans) – improved risk profile for all pension plans.
- Potential improved tax relief on investments through a transparent asset pool. This could be in the form of an Irish Common Contractual Fund (CCF) or a Luxembourg Fonds commun de placement (FCP)

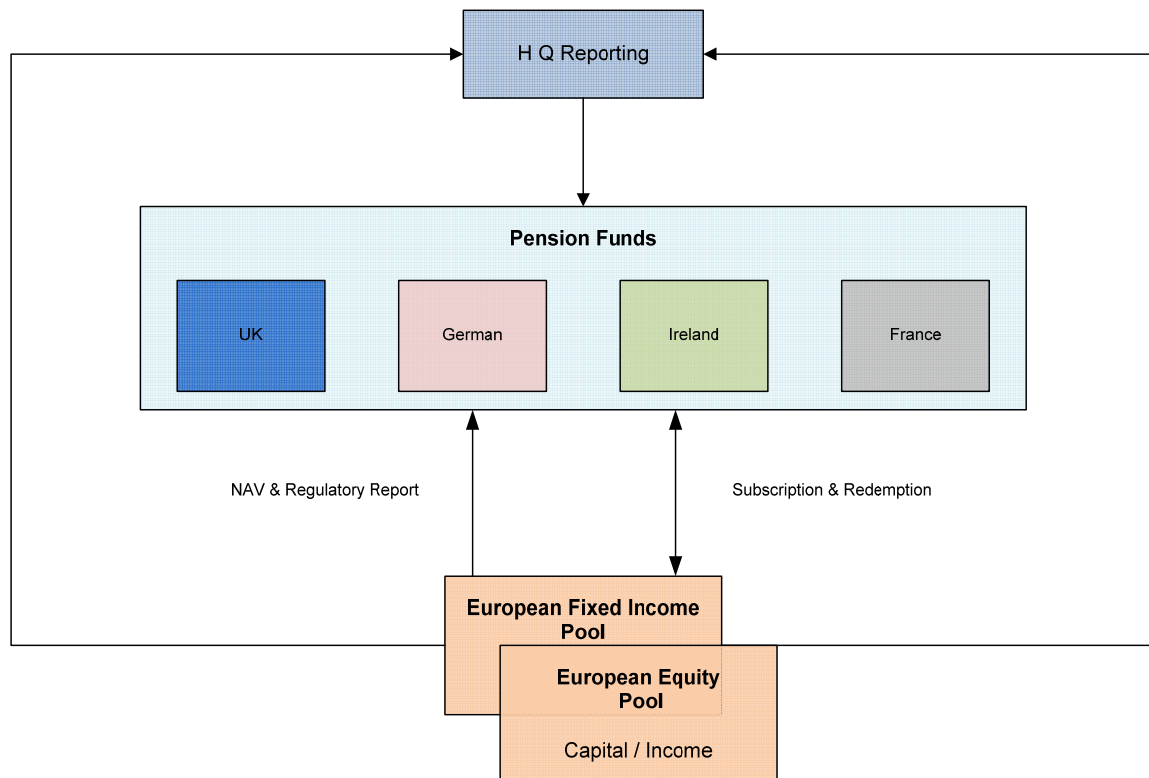
## **b) Challenges**

- Consideration should be given to regulations particularly around whether pools should be UCITs compliant – each jurisdiction may require this type of regulatory framework
- Establishing the most appropriate legal vehicle for desired outcome – approval from local regulatory authorities (e.g. Lux CSSF) and tax jurisdictions;
- Treatment of different security types (fixed income vs global equity): benefits of using tax transparent funds (e.g CCF/FCP) for fixed income securities might be non-existent so possibly more cost effective to use an opaque fund instead (e.g. SICAV/VCC)
- Reporting requirements may be specific for each country, which may require adoption of central HQ reporting;
- Conflict between trustees/pension boards in each jurisdiction wanted to be independent of central HQ control;
- Education of pensions on the nature of pooling, explaining the different types of pools structures;
- Tax Rulings/opinions to be obtained for each jurisdiction of participant and investment country to confirm tax transparency of the vehicle

## **c) Operating Model**

Below is a pictorial example of how the operations could potentially work. The model should include details of pension funds by jurisdictions, demonstration of understanding regarding HQ reporting and multi pools (ideally by asset type or jurisdiction). The explanation of the model should include consideration of the following functions:

- Subscriptions and redemptions – likely to occur monthly given nature of investors, therefore need to consider peaks and troughs of operational activity
- NAV production for the pool – should include details on valuation of assets
- Income & Capital split - particularly important if want to achieve tax transparency
- Reporting – this should include reporting of NAV's and any specific regulatory reports for each of the pension plans as well as an HQ reporting that would be needed for oversight purposes



### 13.

As an operations manager you have been tasked with introducing a stock lending program for a leading pension fund with significant global assets. Whilst the firm remains cautious, you are required to prepare a summary business proposal on the challenges and practicalities involved, covering the following:

- Broadly confirm the key functions and benefits of entering this space, both to the market and your firm. (5 marks)
- Outline the key areas of risk that would apply across this activity and detail your plans for managing any operational exposures. (10 marks)

- c) Confirm and outline your recommendations for implementation on your core proposal and an additional viable alternative. (5 marks)

This question was fairly well answered, although there were a couple of candidates who had limited knowledge of the subject and should not have attempted the question. There were those candidates, however who were conversant with stock lending and produced good scripts.

There is a demand to borrow securities not just for shorting, but also for position taking and fails coverage. It affords tangible income to the lender.

**a) Key Functions and Benefits to Market and Firm are:**

- The firm may earn income on idle assets in portfolio by way of a stocklending fee from the borrower.
- Receiving collateral from borrower, in return for lending stock. to a market participant such as brokers and hedge funds. Collateral can be in the form of cash, which can then be invested to produce further income for the firm.
- Reduced custody charges to the firm, as result of a percentage of the stock being out on loan.
- Afore results in an increased return on the portfolio, to the firm.
- Benefits within the market would be reduced fails, availability of stock(s) and increased liquidity. There would then be reduced costs associated with fails, fines and interest payments.

**b) Key Areas of Risk and Plans for Managing Operational Exposure**

Below are some of the risks.

- Counterparty / Credit Risks
- Collateral Investment Risks
- Regulatory / Tax Risks
- Operational Risks

Managing Operational Exposure

**Counterparty Risks** - exists in most market transactions. Can be managed by:

- Ensure care when selecting
- Consider credit rating
- Setting credit limits
- Quality of collateral received

**Collateral Investment Risks** – investment in a depreciating asset. Can be managed by:

- Investing collateral in near-cash instruments (e.g. Treasury Bills, Gilts, CDs, Commercial Paper)
- Delivery by Value (basket of stocks)
- Robust systems and processes

**Regulatory / Tax Risks** – can be managed by:

- An understanding of market rules and tax implications to ensure that collateral not affected and no breaches occur.
- Choice of agency

**Operational Risks** – associated with inadequate systems and processes which could lead to breaches in credit limits and breaches in the authorised limit of the percentage of stock which might be lent. Poor processes around the management and investment of collateral. Can be managed by:

- Robust systems and processes
- Experienced / well trained staff
- Good MIS

### c) Recommendations for Implementation

Option of:

- An In-house programme,
- Global custodian programme
- ICSD's programme

For an in-house programme some of the considerations would be:

- The level of investment likely to be undertaken if programme launched.
- Income likely to be earned from programme
- Resourcing (trained staff / recruitment / systems / collateral management)
- The appetite for risk

If an agent is chosen (global custodian or ICSD), some of the considerations would be;

- Type of stock lending programme
- Fees
- Agreement(s) / legalities
- Credit standing
- Reporting
- Quality of staff

### Implementation

- Dependant upon option chosen, conduct due diligence with counterparty, prime broker, global custodian or ICSD.
- Engage Legal, Risks and Compliance in implementation
- Ensure trained staff familiar with the stock lending process, both internally and also in respect of global custodian / ICSD systems. Or recruit experienced staff.
- Ensure robust process and procedures are in place which reflect the option chosen.

Well done to those candidates who passed the exam.