



## **SECURITIES & INVESTMENT INSTITUTE DIPLOMA**

**SUMMER 2008**

**CHIEF EXAMINER'S REPORT - GLOBAL OPERATIONS MANAGEMENT**

### **GENERAL COMMENTS**

The standard and quality of the scripts produced at this sitting were a great improvement on the Winter 2007 sitting. This is signified by a pass rate of 35%. Scripts were of a more discernible quality, as candidates seemed to be better prepared and demonstrated a greater level knowledge across the subject matters, as set. Well done to those candidates who passed!

The questions in section A always require candidates to provide short answers to general securities industry questions and can act as a barometer as to how the candidate is likely to fare across the paper. It is noticeable that candidates who did well in this section, carried the impetus through into sections B and C. As always, the standard is variable and there were some scripts that this was not true of, and although they gained good marks in section A, poor marks were gained in sections B and C.

As in previous papers, candidates are required to answer two out of the four questions in Section B. In answering the questions in this section candidates do need to demonstrate either a working knowledge / experience, or show they have an understanding of what is required under the given scenario as set out in the question. At this sitting most candidates made an effort when planning and responding to the questions set. This meant that many answers were well constructed and laid out, with a good flow of thought.

Questions 9 and 11 in Section B, were popular with candidates, as it enabled those who were familiar with the subject matter, to demonstrate their level of knowledge and or familiarity with the subject matter. Some candidates however, appeared to struggle. This was apparent by incomplete answers and continual repetition in an effort to fill the page.

Section C is discursive and usually enables candidates to consolidate and improve upon their efforts in Section B, by demonstrating their awareness of the industry, or of economic events that have impacted the market. In section C, some of the candidates appeared to run out of time and this was reflected in the brevity of the answers, which

was a pity. However, attempts were made by candidates to ensure that their rough plans indicated they had an overall knowledge of the subject.

Section B and section C will always continue to act as a barometer and will always set apart the better candidates who either comprehend the nature of the business they are in, or are experienced and have made the effort to prepare for the exam. However, there are always candidates who hit upon a buffer and fail to provide sufficient information in their answers, to demonstrate that they have an understanding of the subject. Whilst there are others who make no real effort and one has to query whether the candidate should be sitting the exam.

Overall this was an improved sitting, with more candidates seemingly aware of what was required to sit this paper and therefore they prepared accordingly.

## SECTION A

1. A subcustodian's role is to provide safekeeping and clearance services in a domestic market on behalf of a global custodian, based overseas. Part of this role will also encompass services to cover corporate / asset changes, income collection, tax changes and tax reclamation.

Fairly well answered. Although surprisingly a few candidates did not seem to be familiar with the terminology.

2. Investors can benefit from double taxation relief when investing in foreign securities by the following means:
  - Relief at source: Reduction of income tax on dividend in the country of origin, by the paying agent.
  - Either partial or full reclamation of amount withheld by completing and lodging the local tax reclaim form with the respective local tax authorities.

Double Taxation Relief (DTR): Under a double taxation treaty, income will be received at a reduced tax rate, instead of the full rate. Negates the need for the investors to make a subsequent tax reclaim.

Variable responses received, as many candidates did not seem to be familiar with the terminology.

3. Definitions were required for the below. Candidates provided good responses, particularly in respect of 'cum-dividend', 'zero coupon bonds' and 'irrevocable payment'. Whilst the terminology 'cross-rate', 'pari-passu' and 'nominal / par value' received variable responses
  - a) Cum dividend relates to shares purchased with the entitlement to the next dividend payment. Shares sold will not be entitled to the next dividend payment. The dividend will already have been declared, but not paid, by the company, so the market knows how much it is worth and the share price will reflect this.
  - b) Zero Coupon Bond pays no interest but instead is sold at a deep discount on its par value. No interest is paid during the life of the bonds
  - c) Cross Rate – An exchange rate between two currencies that does not involve a standard reference currency such as the USD. (e.g. Yen / Stg)
  - d) Nominal or Par Value - the face value of a share as opposed to its market value. Also called the par value. (e.g. 25p shares. 25p is the nominal value of the shares).

- e) Beneficial Owner – The person entitled to the benefits of ownership and considered to be the true owner of shares. The beneficial owner might not be the registered owner (i.e. legal owner).
- f) Irrevocable Payment – a payment instruction that cannot be cancelled or recalled by the sender. Once made, the payment is final. (e.g. true delivery against payment involves irrevocable payments).
- g) Pari-Passu: Equates to ‘equal in all respects’: on par with. This relates to a corporate action whereby new shares are issued by a company and is identical to the existing class of shares, except it may not rank / qualify for the dividend or there may be some other restriction – e.g voting. The shares are regarded as not ranking pari-passu” with the existing class of shares.

Once the new shares qualify for the dividend or qualify for voting, the new shares are said to “rank pari-passu’ with the existing class of shares. They are on par.

4. The main types of Operational Risk are:
- People - human error: a lack of competent and or trained staff
  - Processes – inadequate or ineffectual processes. This could be due to poorly designed processes, a manually intensive process or poor documentation
  - Technology / systems – poorly designed systems. System downtime or ineffective security or data protection.
  - Environmental risks within which the business operates. Or other external activities such as terrorism or the political climate
  - Legal risk is also included, as deemed by the Basel Committee (2004)

Many candidates were familiar with operational risks and good answers were received. A few candidates included market, systems and counterparty risks as operational risk.

5. In basic terms a buy-in is the enforcement of a contract to purchase securities. If the seller fails to deliver within a pre-determined period after the contractual settlement date, the buyer will have the right to purchase the securities elsewhere, at the current market price. It is a mechanism used to remedy the non-delivery of securities by a seller. Where this occurs, the buyer may close out the original deal by buying them from another counterparty. Cost incurred as a result of changes in market price will be for the account of the defaulter.

The market practice / buy-in rules vary by country and allows for a buy-in by either the offended party or by the stock exchange. Where they do exist, the buy-in rules differ and their usage can either be automatic, mandatory, voluntary, sporadic or rare.

Varied responses received as some candidates appeared to confuse a 'buy-in' with a 'buy-back' of securities.

6. Mandatory corporate actions are automatically executed for all holders of the stock (e.g. stock splits, capitalisations, mergers and spin offs). No action has to be taken by the shareholder in order to benefit from the corporate action.

Optional / voluntary corporate actions consists of company events for which exercise can only occur upon a holder's specific instructions (e.g. buying / selling / exercising of rights, exchange offers, exchange warrants and covered warrants, conversion of convertible bonds, tender offer).

Some candidates incorrectly identified a 'voluntary' action as 'mandatory' and vice-versa.

7. A short position is the selling of securities that are not part of the portfolio (i.e. not held). Operationally, this creates a "bear" position on the records and in order to manage this short position it would be necessary to either;

- arrange for the security to be borrowed to meet settlement on the intended settlement date (ISD). Once settlement of the security has taken place, the respective shares would need to be bought in the market to satisfy the stock loan. Or

- arrange to purchase the security to cover the short position. This purchase would need to be settled before the short position could be processed. This means that the short position would need to be reprocessed with an agreed "new" contractual settlement date

Variable answers given as some candidates looked at a short position and its management purely as a trading strategy.

## SECTION B

8. Your institution has sold the following OTC option:

Stock:	ABC plc
Currency:	GBP
Nominal:	200,000
Counterparty:	XYZ Bank
Put/Call:	Call
Strike Price:	12.00
Maturity:	30 Dec 2008
Type:	European
Price:	0.35
Trade Date:	29 May 2008
Settlement Date:	30 May 2008
Delivery:	Cash settled

(a) Calculate the following:

(i) Premium amount to be received from XYZ Bank (2 Marks)

On 30 Sept 2008, ABC will announce a 2:1 stock split on their shares.

(ii) Briefly explain how this will affect your open position and what actions your company should take with regards to communication to XYZ Bank? (4 Marks)

(iii) At maturity, ABC stock is trading at £6.52. What cash settlement should take place, if any? (2 Marks)

(iv) How would settlement at maturity differ, if settlement was a physical delivery rather than cash? (2 Marks)

(b) Your company has only recently started trading OTC options, whereas previously it had traded only exchange traded futures and options. As Operations Manager you have been asked by senior management to produce a report outlining the differences between OTC and exchange traded derivatives. Your report should also highlight the different risks and potential issues for operations. (15 Marks)

This question was well answered by candidates who attempted it as it enabled them to successfully demonstrate their knowledge of options. Set out below, is the information required for parts a & b.

### Part A

(i) The premium amount to be received from XYZ Bank =  
Nominal x price (i.e. 200,000 x .35) = £70,000

- (ii) The strike price will reduce by half (from 12.00 to 6.00) and the nominal will double from 200,000 to 400,000).  
Note: this will have no change on the notional value or settled premium. The institution should reconfirm with counterparty and send a new contract note/confirmation to confirm new details above. No cash should settle.
- (iii) The option is in the money by 52p and option is cash settled. Therefore as your institution was short a call option you should pay XYZ Bank £208,000 (400,000 x 52p)
- (iv) If physical delivery, then 400,000 shares would need to be delivered to XYZ Bank against a cash receipt of £2,400,000 (i.e. 400,000 x 6.00). The cost of purchasing the shares, if not already held would be approx £2,608,000.

## Part B

The differences (set out in table form) between exchange traded & OTC options include. These differences are not intended to be an exhaustive list:

	Exchange Traded	OTC
Contract Sizes	These are fixed by the exchanges. Usually round numbers of shares e.g. 1000	Variable – Agreed by the counterparties
Expiry Dates	Fixed expiry dates by the exchanges, often only go out 6 months ahead	Variable – Agreed by the counterparties
Strike Prices	These are fixed by the exchanges (usually round numbers unless affected by a corporate action)	Variable – Agreed by the counterparties
Trading method	Traded on exchange(s). Can be bought and sold. Profit can be realised by selling the option.	Traded between two counterparties. No market in the options. Profit can only be realised by exercising the option and selling the shares
Counterparty risk	Exchange is counterparty to all transactions therefore virtually eliminating counterparty risk	Settlement is direct with counterparty therefore credit risk
Liquidity	Usually liquid market	Depending upon option / underlying can be less liquid and difficult to trade out.
Regulation	Governed by exchange rules	Less regulated although certain requirements from FSA, FED etc

Margin	Futures & short options require initial margin to be paid to exchange. Majority of positions will be by MTM and variation margin will then be paid/received.	No initial or variation margin required. Although some OTC options can be MTM and P&L settled on agreed dates
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The potential risks and issues for operations in processing OTC options as opposed to exchange traded products include :

- Settlement is direct with counterparty rather than exchange/clearing broker therefore potential credit issues and also potentially more failed cash receipts.
- Settlement Instructions will be required for each deal (Set up Standard Settlement per counterparty/currency) for OTC. Exchange traded all settle via clearing broker or exchange settlement instructions.
- Can be difficult to price. Exchange traded options have a published daily closing price. However, OTC options prices need to be calculated by the counterparties. Although there may be no variation margin, the unrealised gains & losses should still be calculated and accounted for correctly with the company's accounts.
- Confirmation. With exchange traded contracts the confirmation (statement) is received from clearing broker (or reconciled direct to exchange if clearing member of exchange). With OTC products a confirmation needs to be sent out by the counterparties. This should be checked against own records to ensure agreement.
- Corporate Actions. With exchange traded the exchange will advise all members (who should onward advise all clients) of changes to futures & options contracts due to corporate events. The positions will be updated by the exchange and advised. For OTCs this will need to be identified by the counterparties themselves and the correct amendments made and communicated.
- Credit. Need to ensure sufficient credit

9. You are the operations manager for a medium sized private client firm which has outsourced the core operational process to its global custodian. Over the last few months you have noticed a marked increase in the number of new client applications and in the volume of transactions both of which have increased the number of exceptions reported to you on the operational MIS.

You are expecting a regulatory review from the FSA in the coming weeks and the Board has requested that you prepare a short report on the main requirements on anti money laundering, outsourcing and operational risk and to outline the key internal processes to ensure that the firm is in compliance.

Your report should focus on:

- (a) The regulatory requirements for operational risk, outsourcing and money laundering. (15 Marks)
- (b) Internal controls which have been implemented to ensure compliance

with the regulations

(10 Marks)

Another popular question. Those candidates who chose to answer this question made a good attempt – some were more successful than others. The question approaches operational risks from a regulatory framework and marks were awarded for knowledge of the key regulatory areas. These are found in the SYSC (Senior Management, Systems and Controls) section of the FSA Handbook and below are points for consideration.

SYSC 3.2 deals with money laundering and proceeds of crime and has the main requirements that:

- Appoint an Anti Money Laundering Officer (AMLO)
- Appoint senior manager with overall responsibility for ensuring procedures and controls are in place
- Have a separate compliance function in line with size of business
- Comply with obligations under Terrorism Act 2000, Proceeds of Crime Act 2002 and Money Laundering Regulations 2007
- Apply provisions and guidance of Joint Money Laundering Steering Group
- Segregation of duties appropriate to the size of the firm
- Establish and maintain adequate compliance systems and controls:
  - Enable identify, assess, monitor and manage risks
  - Comprehensive and proportionate to business
- Risk procedures to take account of:
  - Customers, products and activities
  - Distribution channels
  - Complexity and Volume of Transactions
  - Processes and Systems
  - Operating environment
- Controls should include:
  - Training for employees
  - Provision of information to senior management
  - At least annual report of AMLO on effectiveness of systems and controls
  - Documentation of policies
  - Day to day operational controls over new products, new clients and business changes
  - Flexibility for clients who cannot reasonably prove their identity.

SYSC 13.7 deals with operational risk and has the main requirements that:

- The firm maintain appropriate systems and controls which should take into account:
  - Importance and complexity of processes in end to end cycles
  - Controls to prevent system and process failures and identify and promptly rectify any failure
  - Compliance with regulatory requirement

- Continuity of operations if a material process or system is unavailable
- Indicators of process and system risk
- Internal documentation of processes and systems is adequate
- External documentation accurately reflect the operation of the firm
- The firm should have systems and controls over the IT systems to include:
  - Adequate senior management and reporting on technology operations
  - Include technology requirements in the business strategy
  - Appropriate development methodologies for IT acquisition or development
  - Appropriate operational processes for IT applications
- The firm should have systems and controls around the processing and storage of data to include:
  - Data should be maintained in a confidential manner and accessed only by appropriate persons
  - Integrity of data and maintaining accuracy and completeness
  - Validation of rights to access to data by persons or systems
  - Accountability that processes on data cannot be denied
  - Adherence to security standards such as ISO 17799
- The firm should have regard to the geographic location of processes and if not in the UK should consider:
  - The business operating environment and political stability
  - Local regulations regarding data protection and transfer
  - Access by UK authorities to ensure adherence to obligations
  - Timeliness of flows to UK head office and levels of delegated powers

SYSC 13.9 deals with outsourcing and has the main requirements that:

- The firm cannot contract out its regulatory obligations
- The firm has appropriate management and notifies the FSA of any material outsourcing
- Before entering an outsourcing arrangement the following actions should be followed:
  - Analysis of fit into organisation regarding reporting, risk management, regulatory obligation and business strategy
  - Analyse how agreement allow monitoring and control of outsourced activity
  - Conduct appropriate due diligence
  - Consider transitional arrangements
  - Consider concentration risk if several firms are using a single provider
- The contract with the outsource provider should cover:
  - Reporting and notification requirements
  - Access by internal and external auditors
  - Information ownership, confidentiality and Chinese walls
  - Adequacy of guarantees and indemnities
  - Compliance with internal policies
  - Business continuity

- Arrangements for changes in the outsourcing agreements
- The outsourcing arrangement should have service level agreements which cover:
  - Qualitative and quantitative performance targets
  - Monitoring and evaluation of performance with regular reviews
  - Escalation and resolution practice for inadequate performance
- The firm should have independent business continuity plans to deal with unexpected disruption to the outsource arrangements

The remainder of the marks are awarded for practical application of operational expertise and the documentation of how in the real world the regulatory background is applied to firms.

This should include an overview of how policies, procedures, systems and people have been used to manage and control the three areas discussed: money laundering, operational risk and outsourcing. This should also include what additional actions may have been prompted from the MIS reporting of increased transactional and client exceptions.

10. Multi-manager firms select “best of breed” investment managers for each asset class, and appoint multiple investment manager firms on a sub-advisory basis.
- (a) Identify the various operational issues that a multi-manager firm would face in managing 10 to 15 sub-investment managers. (15 Marks)
- (b) Suggest effective ways in which the multi-manager firm might manage the various issues you have identified. (10 Marks)

This question was not popular with candidates, and was not particularly well answered. Some candidates provided unnecessary information and did not focus on the required items. This question is not concerned with investment issues – just operational matters. Where candidates strayed from operational matters, marks were not deducted.

In answering the question, candidates should take the below issues into consideration. The below points are not intended to be an exhaustive list and there may be other valid issues that could also be taken into consideration. The issues are generally not very different to an internal operation with one or two exceptions.

(a) Operational issues faced will include:

- Ensuring correct and timely trade reporting to the custodian and fund administrator
- Ensuring correct and timely responses to corporate action notifications
- Cash management – ensuring that the sub-investment managers keep within any agreed cash and overdraft limits

- Correct and timely investment or disinvestment following cashflows
- Correct and timely settlements
- Correct and timely failed trade notifications
- Correct and timely income reinvestment
- Ensuring sufficient and suitably experienced staff are deployed
- Dealing with sub-investment managers in different time zones
- Dealing with 10-15 different fee scales
- Providing adequate regulatory oversight
- Being able to change sub-investment managers when necessary
- Ensuring that only approved brokers are used
- Ensuring that Best Execution is achieved
- Monitoring how each of the sub-investment managers is doing
- Maintenance of adequate insurance cover by each sub-investment manager
- Ensuring that each sub-investment manager has robust and adequate internal control systems.

(b) There are a number of ways in which multi-manager firms will address these issues. These include:

- Legal agreements - the sub-investment management agreement should specify the obligations of the sub-investment manager
- Service level agreements – these should specify the standards to which the sub-investment manager is expected to work, and the reporting requirements back to the multi-manager firm.
- IT systems – multi-manager firms can arrange direct access into custody, fund accounting and the sub-manager’s own systems to keep track of events
- Monitoring teams – ensuring that each aspect of the service level deliverables is met
- On-site reviews and visits – to verify first hand that things are as they should be
- Exception reporting – contractual requirement on each sub-investment manager to notify the multi-manager of exceptions
- Due diligence reviews
- Use of electronic messaging and STP – the use of SWIFT or the proprietary communication systems of the custodian will help greatly in getting the sub-investment managers to achieve required levels of timeliness and accuracy
- Regulation – each sub-investment manager will be regulated in its own jurisdiction, and this should provide separate onus on the sub-investment manager to work to standards

11. You have recently been appointed manager of your firm’s corporate actions department, which has recently undergone its annual internal audit review. The audit report highlighted the following weaknesses:

- The event diary process is largely manual.
- During the peak season too much reliance is placed upon external contractors.
- The overall experience level within the department has been diluted by high staff turnover.
- The quality control process was found to be barely satisfactory.

Your brief from senior management is to ensure that the department receives a clean bill of health from an external audit due in 3 months, within the current department budget and to recommend more strategic solutions for consideration in next year's budget.

Your first week in the role ends with a significant market claim caused by a missed deadline. The event file was discovered on the desk of a member of the staff who had been on sick leave for the past two weeks.

- (a) How would you approach the immediate control breakdown that led to the claim. (5 Marks)
- (b) What action would you take to ensure that you meet the short-term brief from senior management. (12 Marks)
- (c) How would you ensure that the next annual internal audit rating is fully satisfactory. (8 Marks)

Your answer should be in the form of an executive summary for senior Management that clearly states short-term tactical actions you are taking and key recommendations for implementation in the next year.

A very popular question which was well answered. Corporate action type questions either solicit responses from experts or for many candidates it becomes the only other option when faced with a choice of picking two questions. This question on corporate actions provided a scenario that required candidates to have some understanding of the operational aspects associated with such events. The below is indicative of the points which should be taken into consideration. It is not intended to act a model response to the question.

- (a) Review the current control structure and ensure that the following exists. If it does then reinforce the control procedures, if not then implement the procedures.

Create a corporate action event control summary sheet. Establish control procedures such that quality control is the responsibility of a supervisor who would sign off on the creation of an event and the key steps of the event. All of the key dates and actions must be diarised on creation of the event and approved by the signature of an appointed supervisor or department manager. This will provide a central log of all actions for

daily

management

review.

A shared corporate event diary should be established. As an immediate, short term solution this could be created on any shared media such as lotus notes or controlled spreadsheet available on shared network drives or, as a last resort, paper files. This would immediately allow common access to all the required daily actions on an event. This event diary would be quality controlled by a supervisor and available across the department and to management. Longer term, a more automated solution would be required.

Establish central filing of all live events until final closure and a clean desk policy to ensure that event files are not left in or on desks and institute a control process to highlight the files being worked on.

(b)

What action would you take to ensure that you meet the short term brief from senior management.

Continue to refine and improve the procedures described in part one. Discuss the audit findings with the internal audit manager and agree remedial action for each point raised.

### **Event Diary Process**

Agree the actions taken in part one and agree where the new processes could be improved by automation that could be implemented within three months. This would involve the transfer and maintenance of any paper based event diaries and control sheets into electronic form. Event control sheets would form the header to the folder of documentation for each event and would be version controlled. If the technology could provide it, the electronic control sheets would be automatically linked to the event control summary and the event diary.

### **Human Resource Issues**

Review the structure of the department to ensure adequate management, supervisor and staff ratios. Ensure that a 'buddy' system is adopted which ensures that there is shared knowledge and cover on each corporate action event.

Review the work patterns of the team with the aim of smoothing out peaks of work to reduce the need for temporary staff. Where this is impossible to achieve (e.g. seasonal peaks) ensure that the quality of external contractors is high by improving the individual and supplier selection process.

Review the structure of the team to reduce exposure to individuals and external contractors and also to make best use of highly experienced staff. Review the experience and skill levels of the staff at all levels.

Re-structure where necessary to reduce risk and increase supervision where required. Identify how gaps in the proposed structure can be closed by training, re-allocation and recruitment.

Create a team for all mandatory events that account for more than half of the volume but are lower risk. In this way the more junior or less experienced team members can be trained and supervised on the basic event types and less complex procedures. A second team would handle all complex and therefore, high risk events. This team would consist of a higher proportion of supervisors and experienced staff. A small third team would handle all incoming notifications and would sort and distribute them. The team would also be responsible for all filing and general administration tasks. It would also act as a feeder training area for the department. Within this structure, key positions would be held by permanent staff with contractors providing support functions where appropriate and desirable.

### **Quality Control Process**

Review and strengthen quality control processes and institute the principle where all work executed in a business day is subject to quality control procedures on the same business day.

Introduce a formal key performance process into the management reporting packs to highlight areas of stress, volumes, exceptions etc. to help with the dynamic focus and allocation of staff as well as a source of trend analysis to help predict workloads and resource requirements.

Introduce formal key risk indicator reporting in conjunction with performance reporting. Key risk indicators will highlight exceptions, overdue items, aged items analysis etc., as well as risk impact and the type of risk.

(c)

Work closely with the Internal Audit Manager to agree each of the steps above and the plans for replacement of tactical solutions with longer-term strategic solutions. Work with the Information Technology Manager to identify business requirements and costs.

- Develop a one a year and a 3 year development plan for corporate actions processing and the department's operational and organisational model.

- As part of the plan carry out a business projection analysis working with corporate planning and marketing.

- Carry out a staffing review and map experience, skills and resource numbers against business projections.

- Develop a staff development plan including recruitment, training and

individual career planning.

- Review staff salaries and benefits against competitors and industry benchmarks with HR officers.

Present development plan focussing on 1 year plan but projecting over 3 years in order to justify development expenditure on automation and resources including staff planning. Present results of automation study in conjunction with Information Technology to demonstrate efficiency and risk management benefits of developments such as auto messaging via Swift, auto validation and scrubbing of corporate action terms, automatic event creation and diary entries. Similarly the advantages of embedding automatic risk management tools in the form of automated controls and key risk indicator analysis and management reporting.

Agree budgets and establish development project.

Carry out departmental audit three months before next formal audit review to ensure all points addressed and no new issues arising.

## SECTION C

12. You have recently joined a medium sized UK-based hedge fund management firm in a senior operations role, and as a first priority you have been asked by the managing partner to bring the firm's operations up to the standards that both the regulator and large institutional clients increasingly expect.

Write a report to the managing partner setting out what these standards might look like across all relevant operational areas of the firm's business (you should not concern yourself with the current operational status of the firm, as the report is designed to describe the intended future) (25 Marks)

Not a popular question with candidates. Where attempted, the question was not well answered by some candidates, as they failed to address the question fully. Set out below are topics for inclusion in the answer.

Apportionment and oversight, and governance – ensuring that responsibility for senior functions is clearly allocated and key individuals understand their responsibilities; appropriate segregation of duties where possible; procedures for managing conflicts of interest; appropriately robust committee structure (e.g., operational risk committee, broker approval committee, etc.) to implement these standards across the business

- a) Operational processes and procedures – having appropriate documentation in place on key processes and procedures, staff training to support their use, effective change control for updates; periodic external verification of key controls and procedures; summary of major risks and key controls produced for prospective investors; having appropriate trading permissions and credit lines in place (exchange access, ISDAs, other trading agreements) to enable effective and timely trading
- b) Regulation and compliance – having correct and appropriate regulatory permissions; individual personnel registrations where appropriate; having an appropriate and robust compliance and ethics culture in place; performing regular monitoring and testing; having a detailed compliance manual in place to support the operational procedures; rules for personal account dealing and managing conflicts of interest; awareness of market abuse and preventative measures in place; awareness of and compliance with anti-money laundering rules in the UK and elsewhere; awareness of other regulators' "reach" outside of the UK
- c) Human resource processes and procedures – ensuring that appropriate policies existing for the recruitment, training, supervision, development, management, remuneration and retention of staff; having effective succession plans in place for key personnel
- d) Management of operational risk and outsourcing risk – having an effective operational risk management framework in place, with stated risk appetites, risk assessment, risk management / mitigation / avoidance plans, and

ownership of the residual risks; periodic stress testing of the framework and key assumptions; fraud assessment and mitigation

- e) Business continuity planning and disaster recovery arrangements – having effective plans in place which are well understood by all staff and regularly tested; using off-site data back-ups
  - f) Timely reporting of NAV per share and performance – ensuring NAVs are produced in a timely manner, with minimal variance between estimates and finals; ensuring performance numbers are reported regardless of whether performance is good or bad
  - g) Verification of performance – process for valuing hard-to-value assets; independent valuation of assets; use of side pockets; understanding of best practice in valuations and use of approved valuation matrix
  - h) Client reporting – including disclosure of how actual investment process has compared to the stated investment policies; disclosure of fees charged and the calculation basis
  - i) Cash management and liquidity forecasting – having sufficient cash available to meet likely redemptions, margin calls, etc. on an ongoing basis
  - j) Transparency of commercial terms and conditions – ensuring that full disclosure of base fees, performance fees, fee calculation methodologies, exit terms, redemption penalties, notice periods and “lock-in” periods is given to investors, along with full details of any subsequent changes; use of side letters and appropriate disclosure of terms to investors; need to treat all clients fairly across share classes
  - k) Oversight of outsourced service providers – having comprehensive legal agreements and service level agreements in place, conducting appropriate initial and ongoing due diligence, performing adequate risk assessment, assigning responsibility for oversight; regular reviews of performance with clear escalation routes for issues; diversification of risk by appointing more than one prime broker
  - l) Appointment of new counterparties – performing due diligence and risk assessment before appointment, having clear governance over the appointment process for new brokers / counterparties, ongoing assessment of counterparty exposure with pre-set exposure limits
  - m) Candidates should also include mention of the Hedge Fund Working Group (“HFWG”) and the Hedge Fund Standards Board (“HFSB”) as the custodian of the best practice standards arising from the HFWG; may also refer to other industry sound practices for operational processes produced by AIMA, the President’s Working Group or the Managed Futures Association.
13. Financial institutions continue to choose offshoring as a way of reducing operating costs. Views on the benefits and the advantages vary, and the subject still attracts the attention of politicians and journalists.

From an international operations viewpoint discuss:

- (a) The advantages and disadvantages of offshoring. (6 Marks)
- (b) The risk management factors involved in offshoring operations. (10 Marks)
- (c) The criteria for selection of operations that might or might not be suitable for offshore. (9 Marks)

Include in your answer both the use of offshore service providers and the establishment of offshore operations centres.

The few candidates who attempted this question provided good constructed answers. They understood the subject and were able to set out valid points due to continued media information and the direct impact experienced by consumers in the UK. Below are points for consideration, but should not be taken as a model answer.

### **Outsourcing vs. offshoring**

Conventionally, outsourcing is associated with transferring operations and processes to an external service provider. External service providers may or may not operate in offshore locations. Offshoring, therefore, can apply to either a service provider with support activities in offshore locations or an organisation with activities in its own offshore branches or subsidiaries.

#### **(a) The advantages and disadvantages of offshoring**

The primary reason why companies move operations offshore is to reduce cost. Analysts predict average cost savings will increase to 37% by 2010 from 32% today. In the same timescale more than 20% of the financial service industry's global cost base will have moved offshore. Average payback time is one to two years which is expected to reduce as firms build capability and experience.

Initially driven by economic pressure, offshoring momentum is increasing and it is expected to continue to grow regardless of the economic environment.

Firms with offshore operations are also finding that they can hire workers that are more highly skilled than their domestic counterparts thereby adding the advantage of higher quality to lower costs. This is particularly true in India with large numbers of graduates entering the workforce annually.

Outsourcing was the preferred approach to offshoring but more recently large companies are electing to retain control and ownership by establishing wholly owned offshore subsidiaries. These firms are driving change to conventional operating models in order to gain an increasing competitive advantage over their smaller rivals. A hybrid model is also emerging whereby large

companies are initially employing third party service providers in offshore locations and subsequently acquiring those organisations.

It is estimated that 80% of the world's largest financial institutions (market cap. Over \$10bn) are already offshoring compared with 50% of smaller companies. It is only the need for financial institutions to have closer customer contact that is preventing the industry replicating the manufacturing industry which has already offshored manufacturing and assembly. Offshore moves have also created new long-term revenue potential. An example is the trend to move insurance operations to India creating the opportunity to distribute product in the new 'local' market. Given India's potential market for insurance product already exceeds 50million this is another attractive benefit.

Apart from risk issues which are discussed in the next section there are other disadvantages /costs of offshoring:

- Offshoring often means supporting different time-zones which creates its own challenges such as 24 hour operational service times etc.
- It is difficult and expensive to reverse an offshoring decision once executed. It is therefore important to 'get it right' first time.
- Additional operational and technology solutions need to be built to meet senior management reporting requirements to provide adequate control and oversight. With an offshore operation there is a difficult balance to be drawn between central control and local autonomy. That balance changes as more 'core' operations are involved.
- Regulators and rating agencies are starting to examine offshore operations and systems closely. This will become an increasingly important factor as more 'core' operations move offshore.
- Employing a service provider rather than a wholly owned subsidiary potentially adds disadvantages such as contention with other clients, failure to negotiate an acceptable contract, responsiveness to business development etc.

#### **(b) The risk management factors involved in offshore operations**

There are significant risks in moving operations offshore. Offshoring can deliver compelling benefits, but only for financial institutions that expertly manage all aspects of the project. Operational risk can be dramatically increased with operations that are poorly managed or do not have robust operating models supported by good technology. Throwing people and money at a problem works no better offshore than it does onshore.

Offshoring is challenging and requires risk assessment and management processes underpinned by strong governance and control.

Security in the form of physical security, data security, formal procedural controls and business continuity, extremely important in onshore locations, is even more vital offshore. This is particularly relevant in the financial services industry where sensitive financial and personal data is required to support the operation.

As well as operational risk there are other risks that have to be continually assessed and managed:

- The threat of political backlash is high, particularly in the US, driven by concern over domestic job losses.
- Human resource impact on the 'downsized' operation remaining onshore.
- Compliance with local laws, regulatory environment and practices that may adversely affect the business.
- Political risk in the chosen offshore location that can change operating and cost dynamics rapidly.
- Longevity of cost savings as offshore locations grow and demand for skilled resources outstrips supply. Salary inflation in India, for example, is currently running at up to four times the rate in the UK.

Employing a service provider rather than a wholly owned subsidiary potentially adds supplier risks such as dependency risk, supplier financial failure, failure to meet agreed service levels, failure to deliver cost savings etc. Although all of these risks apply to a subsidiary, they should be mitigated by strong governance and control. Often concentration risk is associated only with external service providers. In fact it equally applies to a wholly owned subsidiary.

**(c) The criteria for selection of operations that could, or should not be, offshored.**

Offshoring of operations to low cost centres really started with Y2K. Even now the offshoring of Information Technology dominates. However, financial institutions are increasing the range of services they operate offshore and have moved operations, call centres and customer support, transaction processing and accounting. High profile offshoring, such as banking and insurance client support services, has attracted considerable media attention.

It is vitally important to establish a new operating model which supports distributed operations rather than just take an expensive operation and 'lift and drop'. It is also important to understand fully the interfaces and hand offs between operations functions that will remain onshore and those that will be de-coupled and move offshore. Financial services organisations are very complex. It is very difficult to realise financial benefits if complexity is increased by offshoring.

Assuming an operating model that can support offshoring, selecting candidate operations depends on a number of factors:

- The maturity of offshoring in the company. First steps may well be IT development followed by non-core operations. Once the operation is established more 'core' activities can become more feasible.
- Legal and regulatory issues which may preclude functions being operated offshore in general or in specific locations.
- Customer acceptability of functions being located offshore such as direct customer support activities.
- Large companies are creating offshore 'utilities' that cross business lines. The creation of these functions requires a major change to company operating models and may have to be established and stabilised onshore before transfer.

Functions that should probably not be offshored:

- Corporate functions where adequate oversight and control cannot be exercised offshore. Corporate compliance might be an example.
- Functions with complex day-to-day links with other internal departments and external institutions. Supplier management might be an example.
- Despite the possibility of improving quality as well as reducing cost by offshoring, problem functions should not be moved offshore. The problems will not be solved by relocation.
- Prototype functions, R&D functions and new functions should not be offshored until an offshore location has been established to an extent that only corporate functions that cannot be moved remain at the home location. By that stage offshoring has really become relocation.

14. Continuing market trends have highlighted the importance of understanding and maintaining effective liquidity in all areas. With the sharpened emphasis on managing and accessing cash successfully, discuss the learning experiences of financial institutions in recent environments focusing on:

- a) Recent market history, context, conditions and relevant contributing factors (10 Marks)
- b) Practical strategies for reducing exposure and increasing liquidity at a firm and market level (10 Marks)
- c) Your recommendations for improving your own approach to cash (5 Marks)

This question was attempted by very few candidates, with good results. Below are the points which may be taken into consideration as part of the discussion.

- (a) Recent market history, context, conditions and relevant contributing factors.
- The slowing of global economic growth
  - Credit crunch of past year has not followed the same course of recent economically debilitating episodes which were underlined by a temporary freezing up of liquidity (e.g. 1982, 1989, 1997-98)
  - Financial institutions with portfolios comprising collateralised debt obligations, the structured finance vehicles that lay at the centre of the credit crisis that broke out a year ago.
  - Fears of insolvency. (Northern Rock, Bear Sterns)
  - Defaults in the USA on sub-prime mortgages which had a knock on effect on the wholesale markets in which banks raise short-term finance.
  - Over reliance on wholesale market for short term funding
  - From 1998 onwards, banks enjoyed rising profits and high ratings, as investors were persuaded that the banks had learnt to manage risk.
  - The industry's history of migrating from one business to another, particularly, investment banks, who have shown the ability to reinvent themselves.

- (b) Practical strategies for reducing exposure and increasing liquidity at a firm and market level.
- A sustained level of global equity stock prices will be critical in order for banks to recapitalise.
  - Augmenting capital with higher savings levels. New savings will provide some support
  - Offset derivative and debt claims. Reduce leverage and raise capital reserves.
  - Reassurance by investment banks to investors, that they are financially stable. (Their business model will need to change)
  - Need to have diverse earnings streams, in order that mishaps in one area can be offset elsewhere.
  - Careful assessment of borrowers by banks and credit agencies, on behalf of investors

- (c) Your recommendations for improving your own approach to cash.

Candidates should demonstrate an awareness of their policies and incorporate points as fitting. Legalities and operational matters may need to be considered.

- Is there a need for remedial action? / early identification of issues

- Managed credit lines
- Cash pooling / netting
- Reduce / eliminate leverage
- Management of FX

15. Despite the current economic climate, London as a financial centre continues to hold a pre-eminent position against other global alternatives. Discuss:

(a) The factors which continue to make London a suitable place for basing a financial operation (13 Marks)

(c) Consider how these factors might be affected by changes in the future (12 Marks)

This was an open question which proved to be very popular with candidates. Candidates were expected to recognise the perceived competition, which equates to New York and Frankfurt principally, but with Paris, Hong Kong and Tokyo visible but to a lesser extent.

Candidates should then explore the key areas that impact the decision making process for a business, such as availability of skilled staff, the regulatory environment, access to market counterparties and infrastructure, stability of government, relevant tax regime, relative costs (e.g. set-up, maintenance, labour etc) as well as the less defined factors such as quality of life and a suitable working culture, which are less measurable factors.

The three key pillars on London's competitiveness centres on its:

- Location in time-zones (ability to deal with US and Asian markets at either end of the day).
- Its primary use of the international business language – English, and
- A credible and varied labour pool.

The long tradition of supporting commerce and London's historic legacy should also be recognised as unique selling points as well as the increasing trend with London remaining a cosmopolitan business environment.

Direct measurables such as market capitalisation, trading volumes and financial product diversity should be commented on as well as other factors such as number of languages spoken in a financial centre, transport links and non-business activities that can add to the locations attractiveness. Wider issues such as market transparency, government responsiveness and the "fairness" of the business environment should also be commented on.

As for changes in London's current status candidates should explore the threats that exist to the positives they explored in the first half of the question. To this end these tend to be summarised as falling under the banners of increased competition, political influences, tax and regulatory changes in

addition to more social-economic factors such as the passporting of skills and the fluidity of the labour markets. In this vein, candidates should acknowledge the trend towards overseas outsourcing arrangements (opportunities and threats) that have arisen directly from increased technology capabilities combined with some relaxation in regulatory regimes.

Candidates should recognise the increasing virtuality of the financial markets (in the sense that it is now principally an electronic world) and the continuous trends towards consolidation in areas such as stock exchanges, clearing houses, central securities depositories as well as tie-ups between significant market firms. Additionally there is a significant amount of anecdotal evidence that firms are becoming more nimble in re-locating processing centres or head-offices where it is beneficial.

The key message is that businesses will tend to migrate towards the market they support providing the numbers add up. However, having said that, the critical mass, liquidity and gravitational scale that established financial centres have, take significant time to build up and it would require a wholesale or fundamental sea change in a centre to encourage an exodus in either direction.

Well done to those candidates who passed the exam!