



GLOBAL OPERATIONS MANAGEMENT

DIPLOMA WINTER 2008

CHIEF EXAMINER'S REPORT

GENERAL COMMENTS

This is the first sitting of the revamped paper which now has one mandatory question in section B and a choice of two questions from section C. The marks have been reallocated accordingly.

It would seem that overall and from the way the questions were answered, candidates found the new structure of the paper satisfactory. The pass rate of 13% is disappointing. Many of the candidates who did not pass seem to hit a buffer they were unable to navigate and provide good enough responses that may have enabled them to gain better marks. Congratulations to those candidates who passed!

The questions in section A have maintained the same structure of requiring candidates to provide short answers to general securities industry questions. It continues to act as a barometer of how the candidate is likely to fare across the paper. As always, the standard is variable and there were some scripts that this was not true of, and although some candidates gained good marks in section A, poor marks were gained in sections B and C.

The new section B consists of one mandatory question, carrying 35% of the marks. Although this question elicited good responses to the case study, as mentioned earlier, some candidates seemed unable to draw out the required information and construct meaningful answers. This could be due to a lack of knowledge.

The new section C now requires that candidates answer two out of the four questions set. Each question now carries 20 marks and is either of a discursive nature or required the candidate to demonstrate their knowledge and or experience. Many candidates set out 'rough plans' and as a result provided well-constructed and laid out scripts. Some candidates however, still struggled.

Better candidates will continue to do well in both sections B and C and this may be due to either their knowledge and experience of the industry, or being well prepared.

Section A

1. Candidates were required to calculate the theoretical ex rights price of a company whose share price is trading at 500p when it announces a 1 for 3 rights issue at 400p. (2 Marks)

The majority of candidates calculated correctly, as set out below.

3 existing shares = $3 \times 500p = 1500p$

1 rights share = 400p

4 new shares = $1500 + 400 = 1900p$

Ex rights price = 475p

2. Required candidates to describe four main operational differences between over the counter options and exchange-traded options. (4 Marks)

In the main this was well answered by candidates. Below are the main differences.

- OTC - tailored terms and cashflows vs exchange standard terms and settlement dates
 - OTC - long form documentation vs exchange standardised contracts
 - OTC - direct counterparty margin vs exchange central margin netting
 - OTC - manual mark to market vs exchange traded price mark to market
 - OTC - ease of transacting vs exchange trading and clearing broker accounts set up
3. Candidates were asked - what are an ISIN and an IBAN and to describe two similarities and two differences between them. (4 Marks)

This question was well answered with most candidates correctly identifying the acronyms, the similarities and the differences as required. Only a few identified an IBAN incorrectly.

ISIN stands for International Security Identification Number. Whilst IBAN stands for International Bank Account Number. Similarities are:

- Both are alpha-numeric codes
- Both are unique identifiers
- Both are ISO standards
- Both use ISO two character country code

Differences are:

- ISIN identifies a security. It is the uniform identification of a security at trading and settlement. An IBAN identifies a bank account. An IBAN's primary purpose is to facilitate routing and avoid routing errors
- An ISIN code has a standard length of 12 alpha-numerical characters, whilst an IBAN is fixed by each country and can be up to 34 characters in length
- ISIN has 1 check digit, whereas an IBAN has two check digits
- ISIN has a local exchange security identifier number (NSIN) embedded whereas an IBAN has a bank account embedded.

4. Candidates had to identify the FSA requirements for reconciling the following: (3 Marks)

- Client money deposited with a firm
- Clients securities held in a depository account
- Client securities deposited with the firm

Interesting responses received from various candidates. However, some candidates provided too much information for the allotted 3 marks.

- Previously client money should be reconciled at least once in any 25 business day period. Also client money should be reconciled within 10 business days of last movement.
- Previously client securities should be reconciled to the depository at least once in any 25 business day period
- Previously client securities with the firm should be reconciled twice in any 12 month period and at least 5 months apart.

Now, reconciliations must be carried out as regularly as is necessary and as soon as possible after the date to which the reconciliation relates.

5. This question required candidates to briefly define the following market terms. Only a few candidates overall, fared badly on this question. (7 Marks)

- a) DRIPS - Dividend Reinvestment Plans: Offered by the underlying company to investors. The investor does not receive quarterly dividends directly as cash. Instead the cash dividend is directly reinvested in the underlying equity. Investors must still pay tax on the dividend income. Usually any fractions of a share are carried forward to the next dividend payment for reinvestment.

Many did not grasp the concept of the cash dividend being reinvested in the underlying shares. Some equated DRIPs to stock options.

- b) Kangaroo Bond: A bond issued in Australian Dollars by non-Australian borrowers to raise capital in the Australian market. Also known as a 'Matilda Bond'.

There was slight confusion by some candidates who identified this as bonds raised by Australian issuers.

- c) NAV - Net Asset Value: Value of the underlying shares held in the portfolio based on the quoted mid-market prices, together with other assets, (value of assets) less liabilities. NAV is quoted in pence per share. It is the book value.

Some candidates assumed this value only related to assets.

- d) CFDs – Contract for Difference: Contract designed to make a profit or avoid a loss by reference to movements in the price of an item. The underlying item cannot change hands. A contract between two parties stipulating that the seller will pay to the buyer, the difference between the current value of an asset and its value at contract time. Trades are conducted on leveraged basis with margins.

Correctly identified by the majority of candidates.

- e) FRNs – Floating Rate Notes: Sometimes known as variable rate notes. Bond with a rate of interest that varies from coupon period to coupon period. The rate is usually established as a margin over LIBOR. Debt instrument with a maturity of 3 / 5 years.

Most candidates were familiar with FRNs. Only a few incorrect answers received.

- f) OEICs – Open-Ended Investment Companies: Introduced in 1997 in the UK. It is a form of collective investment vehicle. Its share capital can expand or contract. Most OEICs have only 1 unit price and the initial charge is added as an extra.
- g) Scheme of Arrangement – A company effects a restructuring of its capital base and ultimately the par value of the shares. A scheme of arrangement consists of a stock split and a consolidation of the shares. (e.g. the consolidation of the 25p shares into £1.00 shares and then a stock split into 10p shares)

Some candidates rightly identified this as a corporate action, whilst the majority of candidates made reference to loans and other type of arrangements.

6. By what other more common name is the Federal National Mortgage Association known and what is its role?

FNMA - Fannie Mae. US agency obligations issued through political subdivisions of the US Government. They account for about 25% of the US market. Mortgages are bought on the secondary market, pooled and sold as mortgage-backed securities to investors on the open market. Monthly principal and interest payments guaranteed by FNMA.

Some candidates confused this with Freddie Mac, the Federal Home Loan Mortgage Corporation.

7. Briefly set out three of the main characteristics of a unit trust.

- **Trustees:** The assets of the trusts are held by Trustees and invested by **managers**
- **Units:** Investors buy units, each of which represents a specified fraction of the Trust. (An open-ended investment)
- **Portfolio:** The trust holds a portfolio of securities. Investors are not shareholders.
- **Annual management charges** and also an **initial charge:** incurred by the investor.

N.B: An authorised unit trust must be constituted by a trust deed, between the manager and trustee.

Many candidates made reference to 'bid' and offers'.

Section B

8. This was a mandatory question, introduced for the first time at this sitting. Very good attempts were made. But in the main poor marks were received by many candidates as they failed to address the challenges faced as a result of the respective risk profiles for each year.

You are the operations manager for a medium sized institutional asset management company. The following table shows the percentage of assets under management by product for your firm as it has grown considerably over the past five years:

| Percentage of Turnover | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|-------------------------|--------|--------|--------|--------|--------|
| Cash Deposits | 20% | 10% | 7% | 3% | 2% |
| Money Market Funds | 0% | 10% | 8% | 5% | 3% |
| Gilts | 30% | 20% | 15% | 12% | 10% |
| International Bonds | 0% | 10% | 15% | 15% | 10% |
| UK Equities | 50% | 40% | 25% | 20% | 15% |
| International Equities | 0% | 10% | 10% | 20% | 15% |
| Emerging Markets | 0% | 0% | 10% | 10% | 10% |
| ETFs | 0% | 0% | 10% | 5% | 5% |
| Hedge Fund of Funds | 0% | 0% | 0% | 5% | 5% |
| Hedge Funds | 0% | 0% | 0% | 0% | 5% |
| Private Equity | 0% | 0% | 0% | 5% | 10% |
| On Exchange Derivatives | 0% | 0% | 0% | 0% | 5% |
| OTC Derivatives | 0% | 0% | 0% | 0% | 5% |
| Total | 100% | 100% | 100% | 100% | 100% |

Outline the main developments which have occurred over the period. For each of the four years describe the changes in the operational risk profile for the firm and the new challenges which each year has brought.

(20 Marks)

For the past five years you have decided to address the increased demands by recruiting new staff, and by developing new systems and processes. However you have recently noticed increased reconciliation problems and a deterioration of quality in the process. Describe the key steps you would take in identifying areas which could be outsourced and how you would approach the outsourcing exercise.

(15 Marks)

The first part attracted 5 marks for each of the years and type of information for inclusion is as below.

Year 2 – Candidates should focus on the changes through the introduction of money market funds, international equities and international bonds.

On money market funds the operational risk profile changes slightly with the need to deal, settle and price fund instruments. Challenges here would include recruiting skilled fund operations staff and adapting systems to accommodate fund specific issues. These could include:

- Dealing and confirmation with fund manager
- Constant NAV funds with regular distributions
- Custody and settlement for fund products – possible extension of existing UK platform
- Pricing and accounting for accumulating funds

However on the international bonds and equities the firm is now exposed to different time zones, languages, dealing and settlement practices. Challenges here focus on building an international operations team and an appropriate network of local agents – or global custodian – to handle the new international operations. Systems and procedures need amending to cope with the different international characteristics. These could include:

- Local regulations and broker arrangements
- Local exchange practices, settlement periods and cut off times
- Corporate actions processing
- Tax withholding and reclamation

Year 3 – Changes here include extending international operations to include emerging markets and products to cover exchange traded funds.

For exchange-traded funds this should be an extension of the fund capabilities established for money market funds. New issues to be accommodated could include:

- Intraday pricing
- New brokers and dealing arrangements
- New fund markets and international settlement and custody

For the emerging markets this would be an extension of the international operations platform, though in emerging markets there is often a less developed infrastructure. New issues in the international arena could include:

- Local regulations and compliance with restrictions
- Operational risk through longer settlement periods, lack of centralised clearing and possibly no DVP processes.
- Operational risk through certificated securities
- Increased counterparty risk with less developed custodian, broker and legal framework

Year 4 - Changes here include moving into fund of hedge funds and private equity investments.

For fund of hedge funds this is again an extension of the fund platform, though Hedge Funds bring added complexity to the process which may

require specialist recruitment and systems and process upgrades. Issues to be considered include:

- Complex subscription and redemption process and documentation
- Notice periods and settlement for subscriptions and redemptions
- Due diligence, corporate actions and documentation monitoring
- Irregular pricing and intra month valuation

For private equity most of the complexities arising from fund of hedge funds also apply but with additional record keeping issues which could include:

- Accounting and monitoring commitments against drawdowns
- Cashflow management of drawdowns and distributions
- Accounting of distributions as income or capital
- Valuation of capital at work with irregular accounting information

Year 5 – Changes in the final year include moving into individual hedge funds and derivatives through both on and off exchange transactions.

For individual hedge funds this is an extension of the fund of fund operations and the same issues continue to apply. In addition new issues would include:

- More complex due diligence process
- Different fund series and equalisation methodologies
- Specialist fund administration and custody needs

For derivatives again this is a major move into a new area and would require specialist staffing and systems and process upgrades. The main issues on exchange would include:

- Establishing broker and exchange arrangements
- Trading and position management
- Pricing and margin process, initial and variation
- Reconciliation

For the OTC derivatives issues would include:

- ISDA documentation negotiation and monitoring
- Monitoring settlement and reset dates
- Pricing and margin arrangements
- Possible physical settlement arrangements

For the second part of the question, many candidates lost out on marks as they did not address the question fully.

Candidates should look at the fact that the operations department at the asset management company will now be quite complex at the end of the period having grown from a standard UK centric base. The additional complexity is causing issues in the processes which are manifesting themselves as reconciliation problems and a deterioration of service quality.

The approach to resolving these would fall into three phases:

- Identification of detailed issues and problem areas
- Modelling of different operational solutions
- Choice of solution and selection of outsource partner

The first phase is largely internal and would involve the management team assessing the strengths and weaknesses of the current operational platform. Consultants may also be called in and potential outsource partners may also be involved at this stage. The main operational areas have evolved over the period and these could be reviewed individually and would include:

- UK securities
- International securities
- Funds
- Derivatives

Each area will have its own unique characteristics and the problems may be seen to be concentrated in specific areas which can be ring fenced and dealt with directly.

Similarly the main functions will be spread across each operational area. These include:

- Trading and deal capture
- Confirmation and position management
- Settlement
- Reconciliation
- Corporate actions and taxes

Again these should be reviewed and volumes and types of transactions analysed. Again there may be a specific function such as reconciliation which is falling down in an otherwise sound environment which can be isolated and dealt with.

At the end of this phase a clear model of the existing platform should exist which will contain transactional and process details and an assessment of the strengths and weaknesses in the operating model.

For phase two alternative models should be explored. If the in house team is not sufficiently skilled then consultant help could be acquired.

The models available would fall into three main categories:

- Full outsource where the partner takes over the asset management company's staff and migrates all processing onto its platform
- Functional outsourcing where the partner takes on the processing of one or more functions in the process chain

- Product based outsourcing where the company maintains responsibility for consolidating the firm's data but one or more products, for example hedge funds, are outsourced to product specialists.

The analysis of the models should map back to the analysis in the first phase to provide an overall solution with detailed metrics for each operational activity.

The third phase involves the selection of an outsource partner which is usually achieved using a 'request for proposal' and having several candidates bid for the services.

The request for proposal should build on the previous two phases and detail the requirements of the functions or products to be outsourced. Care should be taken when compiling the Request for Proposal (RFP) as this will be the cornerstone for any future relationships. The RFP documents should include and ask for:

- Background to the asset management company including main asset categories which it is invested in and volumes.
- Detail on the services for the outsourcing proposal.
- Background on the provider including experience in the chosen areas and main client relationships
- CVs and detail on the key employees who will deliver the services and maintain the relationship
- Detail on systems used and key functionality
- Detailed transaction processes including methods of delivery and cut off times
- Samples of key reports and internet/ system accessed data
- Detailed service levels and relationship and escalation process.
- Fee proposal
- Migration planning

Once the RFP stage is reached the project should be formalised with a project plan and ownership assigned to a project manager to co ordinate the internal team, any consultants and the potential providers.

The selection process is typically aided by a beauty parade where potential partners are asked to present their proposals to the key operational management and answer any questions. This is likely to be followed up by several detailed workshops with the short listed candidate where all aspects of the operational process are tested and service levels and fees further negotiated.

Section C

9. This question was chosen by only a few candidates and was not particularly well answered. It would appear that candidates who choose to answer this question, had a limited knowledge of cash products and the respective requirements.

Your firm is seeing very high levels of liquid assets and you have been asked by your Board to outline the main cash or near cash products which are available to invest in.

- a) Outline the main products available and the key aspects of operational due diligence you would need to undertake before investing in these. (10 Marks)
- b) Identify the key operational and infrastructure requirements which would be required to enable the firm to efficiently trade and settle within each product groupings. (10 Marks)

The below is not a model answer, but candidates should include the following in their responses

a) The management of liquidity has undergone a revolution in recent years with many liquid products emerging from the growth of securitisation. These have complemented bank deposits and traditional bills of exchange and provide a rated diversified pool of assets. Thus an evolution of the main products available for liquidity management could include:

- Government bonds and treasury bills
- Bank deposits and call accounts
- Bank certificates of deposit
- Asset backed commercial paper
- Money market funds
- Funds of asset backed securities

As the investor increases the sophistication of the cash management product then also the due diligence increases.

For government debt an analysis of the country at risk is a main starting point. This should also include the nature of the issuer if a quasi government entity and the government guarantees attached.

For direct bank placement the investor would normally have a credit scoring system which assesses the strength of each counterparty bank and allocated a maximum amount of deposit risk that can be taken by each bank. The entity to which the deposit is being placed should be known and checked that it is the parent bank or a full branch and not an un-guaranteed subsidiary.

Bank certificates should be analysed to check the status of the issuing bank and the ratings attached to the certificates.

Commercial paper is unsecured short-term debt issued directly by a borrowing company and should be analysed more deeply than bank certificates. Both the company and the paper should be rated and up to date information maintained on the company's credit status. As it is unsecured it is issued only by the highest quality companies.

Commercial paper can also be issued as an asset backed instrument and is collateralised with a specific collateral pool. Here a full understanding of the nature of the underlying collateral is vital.

Money market funds vary from very stable sovereign debt funds to higher risk securitisation vehicles. The prospectus should be fully understood and the nature of the investment restrictions analysed. These should include ratings of underlying investments, split by geography, split by government bank and commercial paper, duration of the fund, historic track record and fees.

High yielding funds which are invested solely in securitised paper are the highest risk and require a solid understanding of the internal operations. This includes the exposure of the underlying assets within the various asset pools – mortgage loans and quality of mortgage, car loans, student loans, credit card receivables, other receivables – and the appetite to invest in these risky assets. The funds will normally be rated, though this has not proved an accurate assessment of the risk in the recent past.

b) The second part looks at the operational infrastructures needed for each of these products. Again as one increases the sophistication also increases the operational and infrastructure burden.

For government debt instruments the ability to trade, settle and maintain securities through a custodian or depository is required. Internal systems will need to monitor cash flow through maturities and coupon payments.

For bank deposits relationships with the various banks or brokers will be needed to check liquidity needs and prices. Internal treasury systems will be needed to monitor counterparty exposures against limits and to review cashflows and maturities.

Similarly for bank and corporate paper these will need to be settled as securities yet also monitored on the internal treasury systems for counterparty exposures. Additional systems to monitor the credit status of particular investments or issuers should also be contemplated.

Funds may settle in traditional depositories such as Euroclear, or may be a manual process with the fund administrator. In either case an internal due diligence of the terms of the fund and the investment restrictions will be required. This should also include redemption terms and the possibility

for the manager to suspend or delay settlement. The more sophisticated the funds the more rigorous the due diligence needs to be.

10. In answering this question, many candidates did not attract good marks as they failed to consider what was required of them for part (c). Not particularly well answered with some candidates focusing on minutiae.

You are the manager of the equities operations stream of an integration project which has been formed, following your Bank taking over a similar sized organisation.

- a) Identify the main process areas which you will focus on when tackling the integration of the two entities. (6 Marks)
- b) For each process area identify the main tasks which will need to be covered within the integration plan (6 Marks)
- c) Outline the key steps you would take to deliver the successful integration of the two equity operation units (8 Marks)

Candidates should cover the following in their answers to each section:

a: Identify the main process areas, which you will focus on when tackling the integration of the two main entities:

- Processing and settlement of trades
- Static data management
- Monitoring and controlling risk
- Complying with regulatory and legal framework
- Operational processes and procedures
- Client relations – internal and external
- Human resources
- BCP

b: For each process area, identify the main tasks, which will need to be covered within the integration plan:

Processing and settlement of trades:

Once the systems to be used have been identified for each step of the trade lifecycle ensure procedures and training are planned for those members of the team not familiar with the systems.

Ensure integration plan covers testing of: trade capture, confirmation matching and reconciliations, all settlement processes (internal and external central depositories / clearing houses etc).

Ensure integration plan covers the cancellation of trades from one platform to the other, avoiding duplication of confirmations where appropriate (as agreed with legal etc)

Period of dual-running on both systems / platforms to compare results, before outgoing system is retired.

Contingency planning and fallback options during the conversion.

Integration plan must include all UAT prior to going live

Static Data Management:

Conduct thorough analysis of the data requirements of both organizations, and define the new target data structure.

Plan the migration of existing data to the new structure, allowing for de-duplication and data cleansing in your planning.

Monitoring and controlling risk:

Ensure clearly defined responsibilities are in place prior to go live. Ensure risk framework is implemented to cover all aspects – procedures, process flows, key risk indicators, measurement and escalation of issues etc. Ensure risk management cycle is known and mitigation is in place for each step of the cycle.

Ensure the new organisation has a robust control environment in place covering corporate governance, documented procedures, training and supervision etc

Complying with regulatory and legal framework:

Ensure the legal company set up is fully briefed to all staff, where changes in regulatory and supervisory bodies have occurred all staff must be fully au-fait with the new regulatory requirements (where appropriate). Ensure where international regulations overlap that all possible implications / jurisdictions are identified and communicated.

Operational processes and procedures:

Ensure all processes and control points for the new process flows are documented and available to all staff. Ensure procedures are amended and documented to reflect the new process flows (where appropriate)

Client Relations:

Internal – Liaising with IT, Compliance, Internal Audit, Sales and Trading, Treasury. Engage all relevant parties early in the integration plan, ensure all sign off on key steps and key decisions.

External – Liaising with agents & counterparties, exchanges, clearing houses (as appropriate), regulatory bodies, custodians and all institutional clients.

Ensure external counterparties (eg SWIFT), agents, exchanges and clearing houses are fully communicated to in regards to new legal entities, go live dates, connections are tested etc

Ensure ongoing communication with external institutional clients takes place, new contacts and go live/ cut over dates communicated and where appropriate testing is carried out with critical clients and their applications. (Especially where proprietary systems are involved.)

Human resources

Whilst HR will be responsible for the legal contracts for impacted employees, a step for the integration plan should be to ensure this is being done. Specific issues relating to areas such as working time directive, flexible working etc are highlighted and addressed

BCP

A critical step in the integration plan is around BCP. Ensure a new integrated BCP plan is devised, documented and tested. Ensure it meets all regulatory related requirements.

C: Outline the key steps you would take to deliver the successful integration of the two equity operations units

At the outset, a thorough assessment of the risks of the integration should be conducted, and actions identified to manage, eliminate, avoid or mitigate each of the identified risks.

Accountability should be clarified, so that the person with overall responsibility for the integration is clear about his or her responsibilities.

Critical step is to have a project plan in place covering all aspects of the integration as outlined above. The project plan should have the components of any successful project plan :

- Define the project
- Define the deliverables & timelines
- Identify constraints
- Identify stakeholders
- Manage risks
- Identify contingency options
- Planning & Resourcing
- Launching
- Executing
- Measurement of success post implementation

In addition to the above the project plan must include key milestones throughout, measurements of success at each step, a communication plan both for the key stakeholders and all staff involved. Additionally, the budget must be known up front.

Taking the project framework each group / area should devise their own unique section of the broader integration plane ensuring all unique aspects are identified upfront.

Each section must also include the following:

Communication – internal and external
UAT
Training
Measurement of success

11. This question was well answered with good references from candidates to support the points made as many were fully conversant with the subject matter. The question is as set out below and following directly, points for inclusion in an answer.

Many factors have contributed to the global financial crisis of 2008. Using corporate governance best practice as your yardstick, discuss the impact that institutional shareholders have had on this, focusing both on their positive (mitigating) impact and their negative (contributory) impact. (10 Marks)

In what ways might shareholders act differently in the future to help prevent such a crisis from happening again? (10 Marks)

Candidates should start by briefly describing the global financial crisis, including in their answers some of the causal factors, including

-
- US sub-prime lending (and alleged political pressure from the Clinton administration to grant home loans to underprivileged sections of the community)
 - Packaging of debt into complex and little-understood instruments
 - The underperformance of so-called super-senior AAA tranches of debt
 - Off balance sheet investments and SIVs
 - Highly-g geared balance sheets
 - Accounting standards requiring mark-downs in financial statements
 - Dramatic and sudden loss of investor confidence
 - Shorting by hedge funds and others
 - Lack of general liquidity and specifically interbank lending
 - Focus on short-term results actively promoted by the bonus culture
 - A failure to fully understand risk.

Candidates should also briefly describe some of the major consequences to date, including:

- The collapse of Lehman Brothers

- The nationalisation (or part-nationalisation) of Northern Rock, Fannie Mae, Freddie Mac, AIG, Glitnir, Kaupthing, Landisbanki, Fortis, etc.
- The sudden acquisition (or proposed acquisition) of Bear Stearns, Merrill Lynch, Wachovia, HBOS, Alliance & Leicester, Bradford & Bingley, Washington Mutual, etc., often with normal competition restrictions waived
- Goldman Sachs and Morgan Stanley converting to federal banks
- The acquisition by foreign sovereign wealth funds of significant stakes in UBS, Morgan Stanley and Citigroup
- The government-backed bank bailout schemes being developed in the US, Europe and elsewhere
- The near collapse of the Icelandic economy.

Candidates should then go on to describe the relevant main principles of corporate governance best practice:

- Strong non-executive representation on the board
- Effective risk management culture in place
- Effective audit and remuneration committee structures to ensure pay and bonuses are aligned to shareholders' interests.

Institutional shareholders may have actively contributed to the global crisis by placing unsustainable demands on firms for ever-increasing operating income and dividends, and in doing so implicitly encouraged active risk-taking without a full understanding of the potential consequences. They may have also played a passive role by being undemanding:

- (a) in not insisting on effective and strong non-executive challenge to the business direction
- (b) in not identifying that senior management did not fully understand the business risks being taken
- (c) in not insisting that businesses were sufficiently well-capitalised to withstand sudden and severe shocks to the economic model, and
- (d) in not effectively aligning pay (and therefore behaviour) to shareholder interests.

On the other hand, shareholders in other institutions may have actively encouraged management to divest of business interests in areas of the market seen as overheating, to develop a strong risk management culture, to maintain a strong balance sheet, to not pursue business opportunities without a true understanding of the risks involved, etc. Shareholders may have supported the election of a strong non-executive element to the board, charged with providing a constructive challenge to executive management. Shareholders may also help to encourage boards not to always follow the herd.

For many large institutions, the presence of new major shareholders is already a reality. These might take the form of the relevant government now owning a stake in the business, or possibly a sovereign wealth fund or other major investor. In some cases, these

new investors already have a seat on the board and are starting to make their presence felt.

Actions available to shareholders to help prevent a future recurrence of such a crisis might include:

- Supporting the adoption of effective risk management cultures in firms, with a clearly stated risk appetite and supported by the 'tone from the top'
- Insisting on the adoption of effective internal control frameworks, to ensure that risks taken are within the stated appetite and provide adequate early warning where risk limits look to be breached
- Voting for the removal of senior executives who seek to depart from the agreed policies
- Insisting on effective and robust non-executive representation on boards
- Insisting on full assessment of the risks of any new business opportunities before they are pursued – "if you don't understand it, don't do it"
- Insisting on more robust stress testing of capital adequacy and risk scenarios
- Insisting that pay and bonuses are long term in nature and better aligned to the interests of shareholders (e.g. bonuses only paid in shares, some form of clawback in place, etc.)
- Supporting the sale of non-core businesses to raise capital for balance sheet repair
- Accepting the loss of certain short-term boosts to operating income in favour of greater long-term sustainability.

This should not be seen as a sign that firms should become more risk averse, and indeed with the right risk management and governance policies in place firms may be better placed to take on more risk but from a position of knowledge rather than ignorance.

12. A popular question with candidates, with a few providing good well constructed answers, demonstrating they fully understood the subject matter. The question was:

Target 2 – Securities (T2S) is going ahead, for implementation in 2013, and will give easier access to stock exchanges and aid self-clearing. In the interim, there is the rise of the Multilateral Trading Facilities (MTFs) in direct competition to the stock exchanges.

(a) In what ways will the smaller stock exchanges be put under pressure, by the rise of the MTFs? (15 Marks)

(b) How will the worldwide interests in dark pools affect trading on the stock exchanges and their ability to continue in their present role? (15 Marks)

In answering, candidates should take into consideration the below:

a) What has occurred to cause the established stock exchanges to be put under pressure?

- Reference should be made to the Markets in Financial Instruments Directive (MiFID) and the new rules enacted which liberalized security trading.
- Removal of the concentration rules
- Creation of the trading platforms / alternative trading venues and reasons for their emergence.
- MTFs – Turquoise (backed by 9 of the largest investment banks); Chi-X; BATS Trading; Nasdaq OMX Europe; Equiduct
- Dissatisfaction with the pricing power of the stock exchanges as part of their monopoly

How have the exchanges been put under pressure?

- Chi-X has captured a market shares in FTSE 100 shares, less than 18 months after its launch
- Turquoise went live in August 2008, across 13 European markets
- Introduction of cheaper fees / lower transaction costs
- Launch of Nasdaq OMX and BATS Trading who has an impressive record in the USA.
- Faster trading using algorithmic trading. (trading using complex mathematical formulae to respond to minute shifts in data or economics news)
- Ultra fast trading measured in milli-seconds
- Banks and their brokerage arms are becoming more 'exchange-like'
- Pan-European share trading by MTFs

Effect?

- European exchanges have been cutting fees. (LSE has introduced a new tariff structure which includes incentives for algorithmic traders. Deutsche Borse has had three fee cuts since 2005).
- A shift by exchanges to take into account the growth of 'algorithmic' traders
- Large trades / liquidity will be lost by the exchanges
- Upgraded by LSE of its TradElect, electronic trading system to achieve a speed closer to that offered by MTFs

What are 'dark pools' and how it does affect trading on the stock exchanges?

- Often formed from brokers' order books and other off-market liquidity
- Execution of large block trades anonymously. Publish details post trade
- Use of dark pools to match orders (e.g use by investments banks to match client orders, before sending those orders out to other venues)

- Offers institutional investors many of the same benefits associated with trading on the stock exchanges public limit order books, without affecting publicly quoted prices
- Price and volumes concealed.

Effect on Stock Exchanges?

- Change - transfer of trade volumes to dark pools. Virtual exchanges?
- Could this change become permanent? The possible impact of loss of liquidity.
- Competition and pursuance of efficiencies and flexibility
- Encroachment by the investment banks. Will stock exchanges survive in their present form?
- LSE collaboration with Lehman Brothers of Baikal, named after the world's deepest lake. (Post Lehman – what?)
- Launch of Euronext's own dark pool
- Threat of competition has affected the stock exchanges' share prices. Forced to cut prices and invest in technology

13. Another popular question with candidates, although not always well answered by all who attempted it, as it would appear they had insufficient knowledge and became repetitive. A few, however, focused on a default situation. There were a few candidates who provided some good, well set out answers and identified the risks and associated reasons.

You are the Operations manager of ABC Bank, and have heard market rumours that one of your main counterparty is experiencing difficulties in meeting its obligations in the market. At present your bank has outstanding security settlements and varying short-term money market transactions with the counterparty.

(a) Identify what the associated risks are in respect of the open transactions (8 Marks)

(b) What steps you would take to mitigate these risks and to prevent new transactions and trades from taking place? (20 Marks)

In responding, candidates should consider the below points for inclusion and bear I mind the question references that the main counterparty is experiencing difficulties in meeting its obligations in the market. It does not state that they have defaulted.

a) The main associated risks in respect of the open transactions are:

- Counterparty risks – a risk of default on the trades due for settlement. This could result in a loss to the firm if the

counterparty is unable to meet its obligation and either deliver the shares or make payment of the proceeds.

- Market risks – if the market becomes volatile and the price of the shares is adversely affected, losses could occur and be greater than that of the original transaction.
- If sales are involved and the stock is illiquid, the firm may experience difficulty in reselling.
- Currency risks – there is the potential for currency losses if FXs have been effected and adverse movements occur.
- Settlement risks – fails might occur if other transactions are dependent upon settlement of the open trades from the counterparty. This may lead to fines, overdrafts or market claims, thereby affecting ABC Bank's reputation.
- There could also be opportunity costs in not being able to re-invest as a result of the failed transactions.

b) Steps to mitigate risks once a list of the open transactions have been identified:

- Check report to ascertain the status of the open transactions. If there are failed transactions, identify exposure, reason(s) for failure and the action required. Effect fails management process, with emphasis on early resolution.
- If transactions are due for settlement and have not been effected using a CCP, identify if trades might be netted to reduce or negate any exposure.
- If transactions effected using a CCP, the risk moves from the firm.
- If FX transactions have been effected on the back of the trades, employ the use of forwards.
- Employ the use of possible hedging to reduce pricing / market risks.
- Communicate internally and place counterparty on a 'watch list' and move to red on RAG system. Compliance and Risks departments should ensure that ABC Bank is not exposed or in contravention of any regulatory or compliance requirements.
- Restrict trading with the counterparty.
- Identify short-term money transactions and recall. There could be possible loss of interest.

