

Monetary Authority of Singapore

INTERNAL CONTROLS

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1 INTRODUCTION

1.1 Overview

- 1.1.1 A system of effective internal controls is fundamental to the safe and sound management of institutions. Effective internal controls help an institution protect and enhance shareholders' value and reduce the possibility of unexpected losses or damage to its reputation.
- 1.1.2 Internal controls are the policies, procedures and processes established by the Board of Directors (Board) and senior management to provide reasonable assurance on the safety, effectiveness and efficiency of the institution's operations, the reliability of financial and managerial reporting and compliance with regulatory requirements.

1.2 Application of Guidelines

- 1.2.1 This chapter provides guidance on sound and prudent internal controls. The guidelines are not intended to be exhaustive nor do they prescribe a uniform set of requirements on internal controls for all institutions. The extent and degree to which an institution adopts these guidelines should be commensurate with the institution's risk and business profile.
- 1.2.2 This chapter is divided into two sections: control environment and business process controls. The first section outlines the key elements of the control environment which set the tone for the control culture of an institution and influence the control consciousness of its staff. The second section focuses on the internal controls in specific areas or activities within an institution.

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¹ Institutions should also take into account applicable industry standards such as the Basel Committee on Banking Supervision "The Internal Audit Function in Banks" (June 2012) and "Implementation of the Compliance Principles" (August 2008), where appropriate, and subsequent or other relevant publications that may be issued from time to time.

2 CONTROL ENVIRONMENT

2.1 Policies and Procedures

- 2.1.1 An institution should institute adequate internal control systems and reporting to assist its Board, or its delegated authority, in the fulfilment of its responsibilities for oversight over the institution's risk management framework. The authority and responsibilities of each control function should be properly documented. The head of each control function should periodically review such document and submit suggestions for any changes to senior management and the Board for approval.
- 2.1.2 An institution should have comprehensive and sound policies approved by the Board for prudent management of significant risks arising from its business activities and operations. The approved policies should be consistent with the nature, complexity and materiality of the institution's activities. There should be a clear delineation of roles, responsibilities and accountability for the implementation of consistent policies across the institution.
- 2.1.3 An institution should establish appropriate procedures and processes to implement its policies. These should be documented in procedural manuals. The manuals should be periodically reviewed to ensure that they reflect current practices. There should also be adequate systems to monitor compliance with established policies and procedures. Deviations from such policies and procedures should be independently investigated, reported and addressed by the relevant parties.

2.2 Code of Conduct

- 2.2.1 It is in the interest of an institution to conduct its activities with prudence and integrity. In this regard, the institution should establish a code of conduct that is commensurate with its structure and complexity of operations.
- 2.2.2 The code of conduct should state the ethical values of the institution and prescribe guidelines for employees to observe when discharging their duties. The code should cover areas such as acceptance of gifts and entertainment, conflicts of interest, safeguarding of confidentiality of information, and disclosure of and restrictions on personal investments.
- 2.2.3 In addition to general guidelines, an institution should prescribe specific guidelines for operations in functional areas such as investment banking, private banking and treasury. For instance, with regard to treasury and financial derivatives activities, institution should take into consideration the

good market practices outlined in "The Singapore Guide to Conduct and Market Practices for Treasury Activities" when coming up with specific guidelines for this area. Additionally, there should be independent and close supervision over the conduct of dealers and their relationship with brokers. The institution should monitor the reason for using particular brokers and ensure that trades are only conducted with approved brokers. There should be clear guidelines on the acceptance of entertainment and gifts from brokers. Broker statements should be reviewed by staff independent of the trading function and proper records should be maintained on benefits received from brokers. Unusual trends in benefits or consideration received from brokers should be highlighted. The guidelines should also apply to dealings with customers who have frequent and sizeable transactions with the institution.

- 2.2.4 An institution should have adequate policies, procedures and controls to address conflict of interest situations. It should require employees to disclose such conflicts on a timely basis. These cases should be escalated to either the Board or senior management, and disclosed to customers where relevant. Dealers should not be trading for their personal accounts.
- 2.2.5 An institution should ensure that all personnel understand and adhere to the code of conduct. The code should come under the purview of a senior staff or an appropriate unit. Employees should be required to acknowledge in writing that they have read, understood and will observe the code. Disciplinary actions should be taken against those who breach the requirements.
- 2.2.6 The Board or senior management should periodically review the code of conduct in the light of changes in the internal and external environment.

2.3 Delegation of Authority

- 2.3.1 An institution should clearly define the responsibilities and levels of authority required for the various types of activities and exposures. Approving limits assigned to personnel should be commensurate with their seniority and responsibilities.
- 2.3.2 Any delegation of authority should be clearly documented and should specify, among other things, the exact authority being delegated, the authority of recipients to further delegate authority and the restrictions placed on the exercise of delegated authority. The institution should also have adequate monitoring systems to ensure that activities are properly authorised.

Departures from the approval limit structure should be promptly reported to the Board and senior management.

2.4 Segregation of Duties

- 2.4.1 An institution should ensure that there is adequate segregation of duties to guard against the risk of unauthorised transactions, fraudulent activities and manipulation of data for personal gain or for concealment of irregularities or financial losses. It should have processes that restrict any one staff from being able to handle an entire transactional flow.
- 2.4.2 A control function should be sufficiently independent from senior management and other functions to ensure proper checks and balances, provide an objective perspective on strategies, issues and potential violations related to their areas of responsibility, as well as implement or oversee the implementation of corrective measures where necessary.
- 2.4.3 An institution should conduct periodic reviews of the responsibilities of key personnel to minimise areas of potential conflict of interest and ensure that there are independent checks for proper segregation of duties. Inadequate segregation of duties could occur in, but are not limited to, the following instances where an individual has responsibility for:
 - (a) front office and risk management functions (e.g. credit marketing and credit administration);
 - (b) trade execution and operations functions (e.g. trade confirmation, trade settlement, reconciliation of front office and back office data on trades, reconciliation and accounting);
 - (c) approval for funds disbursement and the actual disbursement; and
 - (d) initiating and releasing payment instructions.

2.5 Competency and Resources

An institution should ensure that there is an appropriate balance in the skills and resources of the back office, control functions and operational management relative to the business origination units. Staff of back office and control functions should have sufficient expertise and authority within the organisation (and where appropriate, in the case of control functions, sufficient access to the institution's Board or senior management) to provide an effective check and balance to the business origination units.

2.6 Audit

- 2.6.1 An institution should have in place an adequately staffed, independent and permanent internal audit function responsible for assessing whether existing policies, processes and internal controls (including risk management, compliance and corporate governance processes) are independent, effective, appropriate, and remain sufficient for the institution's business.
- 2.6.2 The institution should appoint senior personnel who are fit and proper to oversee the internal audit function. The internal audit function should also have appropriate independence with reporting lines to the institution's Board or to an audit committee of the Board (the "Audit Committee"). The Board should ensure that the members of the Audit Committee are suitably qualified to discharge their responsibilities. The terms of reference, composition, quorum and frequency of meeting of the Audit Committee should also be formalised and clearly documented.
- 2.6.3 The Audit Committee should carry out its duties in an objective and impartial manner. It should be empowered to review internal audit plans, evaluate the performance of auditors, decide on remuneration of auditors and assess whether senior management has promptly rectified audit findings. The Audit Committee should also ensure that auditors possess the necessary experience and expertise and are competent and independent of the areas under review.
- 2.6.4 The internal audit function should have sufficient stature within the institution to ensure that senior management reacts to and acts upon its recommendations. Internal auditors should be empowered to initiate a review of any area or any function consistent with its terms of reference. The internal auditor function should be suitably trained and have relevant experience to understand and evaluate the business they are auditing.
- 2.6.5 The internal audit function should employ a methodology that identifies the material risks run by the institution. In addition, the internal audit function should prepare an audit plan which is reviewed regularly based on its own risk assessment, and allocate audit resources accordingly. Internal auditors should vary the audit frequency according to the level of risk. The scope and frequency of internal audits should be increased if significant weaknesses are found or if there are significant changes to the risk oversight

process, product lines, modelling methodologies, internal controls or risk profile. To facilitate the development of sound controls, auditors should be allowed to comment on the product and system development process at an early stage, though the level of their involvement should not compromise their independence or their ability to objectively review the new product or system subsequently.

- 2.6.6 The internal audit function should be kept informed in a timely manner of any material changes made to the institution's risk management strategy, policies or processes. They should also have full access to and communication with any member of staff as well as full access to records, files or data of the institution and its affiliates, whenever relevant to the performance of their duties. Internal auditors should also have the authority to assess any outsourced functions.
- 2.6.7 Internal auditors are expected to ensure that policies and processes are complied with. This includes assessing compliance with risk limits and the reliability and timeliness of reports submitted to the Board and senior management. In addition, the internal auditors should check for proper and adequate segregation of duties and reporting lines for front office and risk management personnel, and whether there is adequate oversight by competent managers.
- 2.6.8 Internal audit reports should be timely and distributed to senior management who have the responsibility and authority to implement corrective measures. Internal auditors of an institution with its head office located overseas should report their findings directly to the head office. Internal auditors should perform follow-up activities to ensure that findings have been satisfactorily addressed. The Audit Committee should receive reports of material audit findings. It should monitor and track the actions taken to address audit findings and ensure effective and timely response by senior management.
- 2.6.9 Internal auditors should be empowered to decline doing an audit or review, or taking on any other responsibilities requested by management, if this is believed to be inconsistent with their terms of reference or with the strategy and audit plan approved by the Board. In any case, they should inform the Board and seek its guidance.

2.7 Compliance

2.7.1 An institution should have in place an adequately staffed, permanent and independent compliance function to assist senior management in managing effectively the compliance risks faced by the

institution. The head of the compliance function should be fit and proper. The compliance function should have access to, and report to the Board or its delegated authority on matters such as:

- (a) an assessment of the key compliance risks the institution faces and the steps being taken to address them;
- (b) an assessment of how the various parts of the institution are performing against compliance standards and goals; and
- (c) any compliance issues involving management or persons in positions of major responsibility within the institution and the status of any associated investigations or other actions being taken; material compliance violations or concerns involving any other person or unit of the institution and the status of any associated investigations or other actions being taken.
- 2.7.2 The Compliance officers should be suitably trained, equipped with the relevant experience and vested with sufficient authority within the institution to perform their role effectively. They should also have the authority to communicate directly with any personnel and have unrestricted access to such information as they need to carry out their responsibilities.
- 2.7.3 The compliance function should address compliance shortcomings and violations, including ensuring that adequate disciplinary actions are taken where appropriate and requisite reports are promptly made to the institution's supervisor or other authorities. The Compliance function should also provide advice and training on regulatory requirements and standards of professional conduct to staff, conduct periodic reviews to assess compliance with policies, procedures and regulatory requirements, and facilitate a whistle-blowing process.
- 2.7.4 The Head of Compliance should have the authority and obligation to promptly inform the Chair of the Board directly in the event of any major non-compliance by a member of management or a material non-compliance by the institution with an external obligation if in either case he or she believes that senior management or other persons in authority at the institution are not taking the necessary corrective actions and a delay would be detrimental to the institution or its stakeholders.

2.8 Mandatory Leave

- 2.8.1 An institution should have personnel policies requiring staff in risk-taking, risk management and risk control positions to take mandatory block leave of at least 5 consecutive business days each year. Departures from this policy should be allowed only under exceptional circumstances and should be formally approved.
- 2.8.2 Staff on mandatory leave should not be allowed to transact, execute instructions or perform their assigned duties during their leave of absence. Supervisors on such leave should refrain from giving operational instructions to their staff during this period. The duties, responsibilities and the corresponding authority of the staff should be fully delegated to a covering officer during his or her absence.

2.9 Handling of Complaints

- 2.9.1 A high frequency of complaints can be symptomatic of inadequate controls or non-compliance with existing procedures. Hence, an institution should have adequate procedures for recording, investigating and monitoring complaints from customers. Steps should be taken to ensure that complaints are handled fairly, consistently and promptly. Staff responsible for dealing with complaints should be independent of the subjects of the complaints. The institution should also take prompt action to rectify system and control weaknesses highlighted by the complaints.
- 2.9.2 Senior management should ensure that customer complaints are adequately addressed. In this regard, periodic reports on complaints should be submitted to senior management. Reports could include information such as the source of complaints, volume and type of complaints, how complaints were addressed, and whether disciplinary action was taken against staff who breached internal guidelines or failed to uphold the requisite standard of professionalism in discharging their duties.
- 2.9.3 The Board or an appropriate Board committee should receive periodic summary reports on complaints and complaint handling.

2.10 Staff Compensation

An institution should ensure that its compensation policies can attract and retain competent and experienced personnel but do not inadvertently provide incentives for inappropriate activities. Compensation policies for risk management, control and valuation functions should be sufficiently independent of the performance of trading activities or sales and revenue targets. This is to avoid providing incentives for such staff to condone excessive risk-taking in the institution. Even in deciding on compensation for its revenue generating and management positions, the institution should take into account the individual's consistency of performance, adherence to the code of conduct, internal guidelines and regulatory requirements and longer term performance measures, rather than just short-term results. An institution should maintain proper documentation of staff appraisals for future reference.

2.11 Recruitment

An institution should ensure that individuals considered for employment are adequately screened for experience, professional capabilities, honesty and integrity. Screening should include background employment checks to assess character, integrity and track record.

2.12 Staff Training and Education

- 2.12.1 An institution should ensure that its staff are equipped with knowledge of new products as well as changes in legislation and regulations, and adequately trained to enhance their efficiency and effectiveness. It should identify skill gaps and assess training needs regularly. Training records should be maintained. Training should be regular and appropriately structured to enable staff to understand and manage the complexities of the functional areas concerned.
- 2.12.2 An institution should, where practicable and appropriate, implement periodic job rotation to help staff broaden their skill sets. This may assist in providing continuity in areas affected by staff turnover. The institution should also be conscious that high staff turnover can undermine the effectiveness of its internal control systems. This could be mitigated to some extent by ensuring that every staff within the function is familiar with the institution's policies, procedures and processes.

3 Business Process Controls

3.1 Dealings with Customers

- 3.1.1 An institution should have clear written policies, approved by the Board or senior management, on issues relating to dealings with customers and risk disclosures. Such policies are aimed at reducing the risk of misunderstandings and contractual disputes with customers.
- 3.1.2 Dealings with customers should be conducted in good faith and in a manner that promotes public confidence in the integrity of the market. In this regard, an institution should provide proper training and closely supervise staff who deal with customers in more complex products such as structured investment products, financial derivatives and treasury instruments. The institution should also periodically review written agreements and other documents for such transactions to incorporate changes in market practices and laws.
- 3.1.3 An institution should implement procedures to assess the financial sophistication, risk tolerance and needs of its customers. Where appropriate, the institution should provide risk disclosure information, taking into account the sophistication of the customer and complexity of the transaction. This will enable the customer to better understand the risks as well as the nature and material terms and conditions of the transaction.
- 3.1.4 When an institution is instructed by a customer to proceed with a transaction against its advice, the decision should be documented together with the institution's analysis and risk disclosure information provided to the customer. This will safeguard the institution's interest if the customer were to file a claim against the institution for losses incurred. In addition, such transactions should be reviewed by an appropriately independent and competent department or personnel and brought to the attention of senior management of the institution.
- 3.1.5 An institution should clarify with customers the nature of its relationship with them to minimise the possibility of customers incorrectly presuming that the institution has acted in an advisory or similar role in the transaction.
- 3.1.6 An institution should promptly resolve disputed transactions with customers. It should maintain records of telephone calls of trades and discussions with customers on proposed transactions to facilitate expeditious resolution of discrepancies and disputes. The institution should prohibit the use of mobile phones or phones outside the trading room for trading except in

exceptional circumstances and only where adequate mitigating controls are in place (See paragraph 3.7 on "Off-Premises and After Hours Trading").

3.1.7 Disputes with customers should be independently investigated. The investigations should be properly documented. Reports on disputes should be submitted to management for review. While it attempts to resolve the dispute, the institution should consider the appropriateness of taking measures to mitigate further losses arising from the disputed transaction. Significant disputes with customers should also be escalated to the Board and senior management.

3.2 Customer Due Diligence²

- 3.2.1 Sound customer due diligence (CDD) policies and procedures will reduce the risk of an institution being used as an intermediary for money laundering or other illegal activities. Therefore, CDD policies and procedures should be reviewed and updated periodically. Customer identification is an integral part of the CDD process. An institution should thus obtain satisfactory evidence of the identity and legal existence of potential customers before establishing a business relationship with them. The institution should not open accounts or conduct business with customers who insist on anonymity or use fictitious names. It should apply enhanced due diligence for higher risk customers.
- 3.2.2 An institution should verify the identity of customers through inspection of passports, identity cards or other official documents. It should also ensure that they have up-to-date customer profiles.
- 3.2.3 An institution should establish policies on the minimum information required for different types of account holders (e.g. personal, corporate, beneficial, trustee, nominee and intermediary) to guide staff during the account opening process. Outstanding account opening documents should be monitored by staff independent of those with front-line responsibilities. Exception reports on long outstanding account opening documents should be generated for periodic review by management.
- 3.2.4 An institution should be cognisant of risks associated with inactive and dormant accounts and ensure that there are appropriate controls in place. These could include, among others, policies on the definition of inactive and dormant accounts, periodic review of such accounts and conditions under which a dormant account could be reinstated. In addition, the institution should

² This section should be read in conjunction with MAS Notices and Guidelines on Prevention of Money Laundering & Countering the Financing of Terrorism.

have appropriate procedures for reactivating accounts, including authenticating the identity of the customer that is reactivating the account.

3.2.5 An institution should have controls in place to ensure that opening and closure of accounts are properly authorised, with the basis and approval clearly documented.

3.3 Legal Documentation

An institution should have written agreements with customers and counterparties, where appropriate and in line with market practice, specifying the duties and responsibilities of each party. It should have clear guidelines and policies to ensure that a counterparty has proper authority to enter into a transaction. The institution should verify that contracts or agreements governing transactions are legally sound and enforceable in all relevant jurisdictions. It should also institute proper controls to ensure that legal documentation is properly executed, confirmed, maintained and safeguarded.

3.4 Accounting and Record Keeping

- 3.4.1 An institution should maintain adequate controls over its accounting and other record-keeping processes for all business activities. The accounting and financial reporting systems should be able to produce timely and accurate data on an institution's financial condition, performance and risks, on demand and at regular intervals, for effective management and control of all its operations as well as for financial and regulatory reporting.
- 3.4.2 An effective accounting system has to, among other things, be able to identify and record all valid transactions and describe the transactions in sufficient detail to permit proper classification of transactions for financial and regulatory reporting. There should also be adequate documentation and records of transactions for audit trail purposes.
- 3.4.3 An institution should also ensure that staff responsible for accounting and record-keeping functions are independent of front office activities.
- 3.4.4 An institution should also establish the minimum retention period for taped telephone conversations and documents, taking into account the relevant laws, rules and regulations. Financial transaction documents may be retained as originals, copies, on microfilm or in electronic form, taking into account whether such forms are admissible in court or in compliance with

regulatory requirements. Such records should be properly kept and stored in a manner that is reasonably practicable to retrieve.

3.5 Management Information Systems

- 3.5.1 An institution should have adequate management information systems (MIS) for effective management and control of all aspects of its operations. The sophistication of the MIS should be commensurate with the complexity and diversity of the institution's operations. The institution should consider key elements such as timeliness, accuracy, consistency, completeness and relevance when developing its MIS. The MIS should also be sufficiently flexible to cope with various contingencies and have the capability to monitor compliance with the institution's established policies, procedures and limits.
- 3.5.2 An accurate, informative and timely MIS is essential to an institution's risk management process. The institution's risk exposures should be reported to the Board and senior management using a common framework for measuring and limiting risks. Exposures and profit and loss positions for trading positions should be reported at least daily to managers who supervise but do not themselves engage in position-taking activities, and to risk managers who report independently and regularly to the Board and senior management on the risk-taking activities of the institution. When market conditions dictate, more frequent reports should be made to update the Board and senior management on the changes in the institution's risk profile. It is essential that the Board and senior management are promptly informed of progressively deteriorating positions or unanticipated changes, significant issues arising from the institution's positions, even when limits are not exceeded. Additionally, management reports should be prepared by a party independent of the position-taking units.
- 3.5.3 An institution using different information systems for various transactions entered into by customers should ensure that all transactions of an individual customer are captured and consolidated in the MIS reports. Processes should be in place to ensure data integrity, especially if the reports generated are based on information from different source systems.
- 3.5.4 An institution should ensure that systems support and operational capabilities can accommodate the various treasury and financial derivatives activities the institution engages in. These capabilities should enable the institution to process and settle transactions efficiently, accurately monitor risks on a timely basis and provide a snapshot of the risks inherent in all on-and off-balance sheet activities. Where an institution engages in leveraged treasury or

financial derivatives transactions, its systems should be able to reliably track collateral values.

- 3.5.5 An institution should deploy the necessary resources to develop and maintain the operations and systems supporting its activities. Operations personnel should be knowledgeable, competent and experienced in the activities the institution engages in. The sophistication of the systems support and the operational capacity should be commensurate with the size and complexity of these operations.
- 3.5.6 An effective MIS should facilitate an institution's monitoring of compliance with internal controls and regulatory requirements, and provide reasonable assurance that these are being complied with. For instance, an institution could use its MIS to establish profiles on the expected type and volume of transactions of its customers. Transactions that are inconsistent with a customer's profile should be investigated.
- 3.5.7 Reports on transactions should be sent to management with oversight responsibility of business and operations. The frequency and the amount of detail in these reports should be varied according to the level of senior management reviewing the reports. Follow-up actions should be properly documented and reported to senior management, and suspicious transactions reported to the relevant authorities.

3.6 Physical Controls

- 3.6.1 An institution should ensure that there is adequate physical security for its place of business and cash-in-transit. Access to sensitive areas such as the dealing room, computer room and funds transfer area should also be granted strictly on a need-to basis to minimise the risk of unauthorised transactions, fraud or disruption to operations.
- 3.6.2 Items such as test keys, master IDs for SWIFT, cash and securities, should be subject to dual control. Their access should be restricted to authorised personnel and recorded for proper accountability. Fireproof safes and safe deposit vaults should be used for the storage and safe custody of assets such as cash and securities.

3.7 Off-Premises and After Hours Trading

An institution should state in its policies and procedures whether offpremises and after hours trading are permissible. If such transactions are allowed, adequate controls should be in place to ensure that transactions are executed by authorised personnel and within the approved limits. These transactions must be captured in the institution's systems for processing and reporting as soon as they are executed. Confirmations must be sent to customers within a reasonable period of time.

3.8 New Products/Business Lines/Activities

- 3.8.1 An institution should have a new product policy to ensure that the risks inherent in new business lines or activities are properly assessed. Proposals on new products, business lines or activities should be accompanied, where appropriate, by a product programme document that includes:
 - (a) an analysis of legal and regulatory requirements and whether the activities are permissible;
 - (b) a description of the relevant financial product and markets and the underlying objectives of the transactions (e.g. customer service, risk management or trading);
 - (c) an analysis of the risks that may arise from these activities and details of any risk management procedures and systems established, including procedures for identifying, measuring, monitoring and controlling risks;
 - (d) an evaluation of the impact of the proposed activities on the institution's overall financial condition and capital level, where applicable;
 - (e) a description of the relevant accounting guidelines and tax treatment; and
 - (f) a recommendation on the appropriate structure and staffing for trading and the key risk control functions.
- 3.8.2 The new product policy should contain a definition of the term "new product", and provide for the proper review and authorisation of variations to existing products. The policy may require such variations to be approved by

the Board or appropriate level of management. The policy should be updated when market conditions warrant it, when major assumptions have changed, or when there are regulatory changes.

- 3.8.3 As new products frequently require different pricing, processing, accounting and risk measurement systems, an institution should ensure that it has the necessary resources to support these activities. The new product approval process should include a sign-off by all relevant authorised personnel in areas such as risk control, operations, accounting, legal and compliance, and by senior management.
- 3.8.4 Depending on the nature and complexity of a new product, a post-implementation review of the new product should also be conducted at an appropriate period after its introduction, accompanied by proper documentation of the issues raised. Such a review will enable all the parties concerned to discuss the issues encountered during implementation and to ensure that no risk remains unidentified.

3.9 Valuation of Assets

- 3.9.1 There should be clear policies and procedures for independent, fair and proper valuation of assets. Prices, interest rates, exchange rates and volatility factors used in the revaluation process for the financial accounting of treasury and financial derivatives transactions should be obtained from independent sources or be independently verified. They should not be decided by the institution's dealers. If the institution uses live data feeds from vendors, it should exercise proper care and control to ensure the usefulness, quality and integrity of the data.
- 3.9.2 An institution should have policies and controls to manage the risks arising from illiquid positions. These should address the methodologies used for valuing illiquid positions, identification and reporting of illiquid positions to the Board and senior management and audit frequency.
- 3.9.3 The prices and valuation methodologies used should be documented for audit trail purposes. Periodic reports on the valuation of assets should be submitted to the Board and senior management for review.

3.10 Verification and Reconciliation

3.10.1 An institution should have verification and reconciliation procedures for ascertaining the accuracy of transaction details and activities. Staff performing verification should be independent of those responsible for originating the transaction or preparing the data. For instance, reconciliation of

front office and back office data should be performed by staff independent of the dealing function. Reconciliation should be performed regularly, even daily, for an institution active in dealing. The reconciliation should be reviewed to verify the institution's exposures, profit and loss positions and transaction details. Discrepancies should be promptly investigated and rectified, with established procedures in place for reporting them to the Board and senior management. Examples of reconciliation to be performed include:

- (a) subsidiary ledgers to general ledger;
- (b) trade details against confirmations received from counterparties;
- (c) records to tangible assets and key documents;
- (d) securities holdings to custodian statements; and
- (e) nostro reconciliation.
- 3.10.2 An institution should, as far as possible, require customers to indemnify it against losses for accepting instructions given verbally, via facsimile or via electronic mail. Where practicable, all telephone conversations relating to transaction-related instructions should be tape recorded.
- 3.10.3 An institution should have policies to control the creation of accounts in the general and subsidiary ledgers to minimise the risk of fictitious accounts being set up. It should also ensure that all customer transactions are processed through the customers' own accounts with the institution, and not through other accounts such as suspense or sundry accounts, without proper authorisation.
- 3.10.4 Passing of entries through suspense and sundry accounts should be properly authorised and monitored to detect unusual transactions. In this regard, an institution should establish policies and procedures for areas such as the purpose of suspense accounts, controls over posting entries, length of time that an item has remained outstanding, frequency of reconciliation and follow-up actions required. It should also ensure that suspense items are cleared promptly. Reports on outstanding suspense items should also be periodically reviewed by senior management.

3.11 Confirmation

- 3.11.1 An institution should have in place processes and procedures to ensure prompt confirmation of transactions to facilitate deal authentication and timely detection of transaction errors or unauthorised transactions.
- 3.11.2 Customer orders should be promptly processed in accordance with instructions given and on the best available terms. An institution should have in place controls to ensure that trade matching and confirmations are performed as soon as possible after execution. This will facilitate early detection of errors in recording trades and unauthorised transactions, both of which could result in increased risks and costs.
- 3.11.3 Where documented confirmations are required for trades done, an institution should send these to customers promptly. The institution is also encouraged to have a two-way confirmation process. Controls should be in place to prevent unauthorised amendments to the confirmation documents. Where possible, the confirmation process should be automated. Where there exists an automated process, manual preparation of confirmation documents should only be permitted on an exceptional basis. All manual confirmation processes should be subject to stringent controls.
- 3.11.4 Confirmation of trades with customers should be performed independently of the dealing function. Incoming confirmation slips should be received by a department that is independent of the dealing function, and disputes or unconfirmed trades immediately investigated. Where a customer is not an individual, outgoing confirmations should be sent to the appropriate group that is independent of trading. Interim updates or ad hoc statements requested by customers should also be checked and properly authorised before transmission to customers.
- 3.11.5 Where an institution keeps statements and records of customers' holdings and transactions under safe custody or hold mail facility, it should have procedures for independent verification of customer activities. The institution should also ensure that only customers or authorised persons collect such statements and records. Proper acknowledgement and confirmation of receipt of these statements or records should be obtained.
- 3.11.6 An institution should, as far as possible, discourage the practice of handing customer statements and records to staff holding front-line responsibilities, e.g. relationship managers, for onward transmission to customers. If this is not practicable, controls should be implemented to mitigate the risk of staff impropriety.

3.12 Settlement

- 3.12.1 An institution should establish standard settlement instructions in its systems. Changes to these instructions should be reviewed to ensure that they have been properly authorised by the customers or counterparties. Procedures should also be in place for validating funds transfer requests, which could include, among other things, telex testing, call-back and signature verification. Third party payments should be discouraged or, if allowed, be subject to more stringent controls.
- 3.12.2 An institution should perform periodic reconciliation of funds transfer records to correspondent banks' statements and ensure that any outstanding items are promptly investigated and reviewed. Non-receipt or non-payment of funds should also be identified and rectified within a reasonable period of time.

Appendix

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CHECKLIST OF SOUND PRACTICES TO ADOPT

[The checklist summarises the key practices only and is not meant to be exhaustive. For details, institutions should refer to the guidelines.]

Ref	Sound Practice	Yes/No
А	Control Environment	
1	Policies and Procedures	
	Is there a set of comprehensive policies, approved by the Board for prudent management of significant risks arising from the institution's activities and operations?	
	Are there appropriate procedures and processes to implement the policies? Are the procedural manuals reviewed and updated regularly?	
2	Code of Conduct	
	Is there a comprehensive code of conduct for staff and is the code periodically reviewed in light of changes in the internal and external environment?	
3	Delegation of Authority	
	Are the responsibilities and levels of authority required in relation to various types of activities and exposures clearly defined?	
	Are there adequate monitoring systems to ensure that activities are properly authorised and that departures from the approved limit structure are promptly reported to the Board and senior management?	

Ref	Sound Practice	Yes/No
4	Segregation of Duties	
	Is there proper and adequate segregation of duties?	
	Is the control function sufficiently independent from senior management and other functions?	
5	Internal Audit	
	Does the internal audit function:	
	 have sufficient resources that are suitably trained and have relevant experience to understand and evaluate the business they are auditing? have appropriate independence with reporting lines to the institution's Board or to an audit committee of the Board, and has status within the institution to ensure that senior management reacts to and acts upon its recommendations? have full access to and communication with any member of staff as well as full access to records, files or data of the institution and its affiliates, whenever relevant to the performance of its duties? employ a methodology that identifies the material risks run by the institution? prepare an audit plan, which is reviewed regularly, based on its own assessment and allocates its resources accordingly? have the authority to access any outsourced function? have the power to initiate a review of any area or any function consistent with its terms of reference? Are the internal auditors kept informed in a timely manner of any material change made to the institution's risk management strategy, policies or processes? Are audit reports timely and distributed to the appropriate senior management? 	

Ref	Sound Practice	Yes/No
	Do the internal auditors perform follow-up activities to ensure that findings have been satisfactorily addressed?	
	Does the Audit Committee monitor and track the actions taken to address audit findings, and ensure effective and timely response by senior management?	
	Are the internal auditors empowered to decline doing an audit or review if this is believed to be inconsistent with its terms of reference or with the strategy and audit plan approved by the Board?	
6	Compliance	
	Is there a senior person or an appropriate unit appointed to oversee compliance issues?	
	Are compliance shortcomings and violations addressed accordingly?	
	Are compliance officers suitably trained, equipped with the relevant experience and vested with sufficient authority within the institution to perform their role effectively?	
	Does the Board or its delegated authority exercise oversight of the management of the compliance function?	
	Are compliance officers empowered to communicate directly with any personnel and have access to all information necessary to discharge their responsibilities?	
	Does the compliance function have access to the Board?	
7	Mandatory Leave	
	Are there policies on mandatory leave for staff in risk-taking, risk management and risk control positions?	

Ref	Sound Practice	Yes/No
8	Handling of Complaints	
	Are there adequate procedures for recording, investigating, monitoring and reporting complaints from customers?	
9	Staff Compensation	
	Are reward and compensation policies, especially for the risk management, control and senior management functions, sufficiently independent of the performance of trading activities or revenue targets?	
10	Recruitment	
	Is an adequate screening process in place for recruiting staff with the necessary experience and professional capabilities?	
11	Staff Training and Education	
	Are staff provided with adequate training and do they possess the necessary experience and expertise?	
В	Business Process Controls	
1	Dealing with Customers	
	Are there policies on suitability and risk disclosure of products to customers?	
2	Customer Due Diligence	
	Are there sound customer due diligence policies and procedures?	
	Are there appropriate controls for inactive and dormant accounts, opening and closure of accounts?	

Ref	Sound Practice	Yes/No
3	Legal Documentation	
	Have the Board and senior management instituted policies and proper and adequate controls to ensure that transaction documentation is properly executed, confirmed, maintained and safeguarded?	
4	Accounting and Record Keeping	
	Are there adequate controls over the accounting and record-keeping process?	
	Are the staffs responsible for accounting and record-keeping functions independent of front-office activities?	
5	Management Information Systems	
	Is an adequate management information system in place for effective management and control of all aspects of operations, including monitoring of compliance with internal controls and regulatory requirements, and providing reasonable assurance that these are being complied with?	
	Have the Board and senior management ensured that systems support and operational capacity are adequate to accommodate the different types of activities the institution engages in?	
	Are risk exposures independently and regularly reported to the Board and senior management? Is there a process to promptly inform the Board and senior management of unanticipated changes, progressively deteriorating positions or other significant positions arising from the institution's positions, even when limits are not exceeded?	
6	Physical Controls	
	Is access to sensitive areas such as the dealing room, computer room and funds transfer area strictly granted on a	

Ref	Sound Practice	Yes/No
	need-to basis?	
	Are items such as test keys, master IDs for SWIFT, cash and securities subjected to dual control and their access restricted to authorised personnel and recorded for proper accountability?	
7	Off-Premises and After Hours Trading	
	Are adequate controls in place for off-premises and after hours trading?	
8	New Products/ Business Lines/ Activities	
	Is there a new product policy to ensure that risks inherent in new business lines or activities are properly assessed?	
	Is there a process for the proper review and authorisation of variations to existing products?	
	Are the parameters used to govern products kept updated?	
9	Valuation of Assets	
	Are prices, interest rates, exchange rates and volatility factors used in revaluation obtained from independent sources or independently verified?	
	Are compensating policies and controls in place for managing the risks arising from illiquid positions?	
10	Verification and Reconciliation	
	Are verification and reconciliation processes for ascertaining the accuracy of transaction details and activities adequate?	

Ref	Sound Practice	Yes/No
11	Confirmation	
	Is confirmation of trades with customers performed independently of the dealing function and as soon as possible after trade execution?	
	Are enhanced verification procedures established and applied to those statements and records of customers' holdings and transactions held under safe custody or hold mail facility?	
12	Settlement	
	Are there procedures for validating funds transfer requests?	
	Is periodic reconciliation of funds transfer records to correspondent banks' statements performed and are outstanding items promptly investigated and reviewed?	