

# RISK MANAGEMENT MANUAL

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Submitted to the Social Housing Finance Corporation  
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## RISK STRATEGY OF SOCIAL HOUSING FINANCE CORPORATION

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### OVERALL

- The Company should always be economically viable and meet its vision of providing organized, homeless, and low income families with Fair, Affordable, Innovative, and Responsive (FAIR) shelter solutions to their housing needs.

### HOUSING LOANS

- The housing loan program of Company shall address its development mandate and shall offer reasonable products to organized, homeless, and low income families while maintaining acceptable quality and risk standards for its loan portfolio.

## Chapter 1: INTRODUCTION

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- 1.1** In the past, the financial industry and huge transnational corporations have seen remarkable losses. A variety of factors could be cited as possible causes of these events. They include inadequate supervision and the weakness of the control culture, shortcomings in economic policies, absence of functional segregation between trading and settlement, poor risk management by the market players themselves, lack of, or the failure of internal control systems, over-leverage, and bad market call, among others.
- 1.2** Beyond these, the basic issue is the financial system's vulnerability to unforeseen events. We all learned from these unfortunate experiences, but we are living in a changing world. These changes may be good or bad for those affected by them. Change can lead to risk, the prospect of gain or loss, and the risk of loss is something we should all be aware of. To be aware of risks does not mean eliminating them from our lives which is impossible. Risks are warranted when they are understandable, measurable, controllable, and within the company's capacity to withstand adverse events and developments.
- 1.3** **Risk** is defined as the possibility of a loss; as any uncertainty about a future event that threatens our company's ability to accomplish its goals and mission. Specifically, from our point of view and from a supervisory perspective, risk is the potential that events, expected or unanticipated, may have an adverse impact on the company's capital or earnings.
- 1.4** **Risk management** is the establishment of controls to minimize the possibility of a loss. It is a discipline for dealing with the possibility that some future event will cause harm. It provides strategies, techniques and an approach to recognizing and confronting any threat faced by us in fulfilling our goals and objectives. Although a risk management system may differ from one financial institution to another, or from one company to another, sound risk systems are anchored on some common fundamentals. For example, risk management systems and activities are independent of risk taking activities. Regardless of the risk management program design, each program should include:
- ✚ **Risk Identification:** Proper risk identification focuses on recognizing and understanding existing risk or risks that may arise from new business initiatives. Risk identification should be a continuing process, and should occur at both the transaction and portfolio levels.

- ✚ **Risk measurement:** A critical component of effective risk management systems is the accurate and timely measurement of risks. A firm that does not have a risk measurement system has limited ability to control or monitor risk levels. In addition, the sophistication of the risk measurement tools should reflect the complexity and levels of the risk assumed. We should periodically test to validate the integrity of the measurement tools used for risk management. They should be able to assess both individual transactions and portfolios.
- ✚ **Risk Control:** Firms should establish and communicate limits through policies, standards, and procedures that define responsibility and authority. These control limits should be meaningful management tools that can be adjusted if conditions or risk tolerances change. They should have a process to authorize exceptions or changes to risk limits when warranted.
- ✚ **Risk Monitoring:** Institutions should monitor risk levels to ensure timely review of risk positions and exemptions. Monitoring reports should be frequent, timely, accurate, and informative, and should be distributed to appropriate individuals to ensure action, when needed.

**1.5** Effective risk management systems help in ensuring that the company will comply with laws and regulations as well as policies, plans, internal rules and procedures; and decrease the risk of unexpected losses or damage of the firm's reputation. Risk management systems must consider the financial institution's policies, processes, personnel, and control systems, among others.

- ✚ **Policies** reflect the firm's intent and commitment to pursuing desired results. They reflect standards and courses of action to pursue, implement, or enforce specific objectives. Good policies are tied to, and reflect an institution's underlying mission, values and principles. They also clarify the tolerance for risk. Mechanisms should be in place to trigger a review of policies in the event that activities or tolerances change.
- ✚ **Processes** are the procedures, programs, and practices that govern how an institution will pursue its objectives. Processes define how daily activities are carried out. Good processes are consistent with the underlying policies, are efficient, and include checks and balances.
- ✚ **Personnel** are the officers and associates that execute or oversee performance of the processes. Good officers and associates are qualified, competent, and perform as expected. They understand the firm's mission, values, philosophies, policies, and processes.
- ✚ **Control systems** are tools and information systems used to measure performance, make decisions, and assess the effectiveness of existing processes. These feedback devices must be timely, accurate, and informative. They measure performance and assist in decision making.

**1.6** Full enterprise risk management entails bringing the discipline of financial risk management to the entire institution. This calls for a strong human element. The understanding of risk management can be widened so that all associates take into account risk management or mitigation in their day-to-day operations and help improve the overall health of the organization. Capable management and appropriate staffing are critical to effective risk management. Management is responsible for the implementation, integrity, and maintenance of risk management systems or programs.

**1.7** The firm's risk initiatives will cover the following:

**1.7.1** Education and familiarization of risk and risk management across the institution

**1.7.2** Defined role of the Risk Management Committee (RMC)

**1.7.3** Creation of a Risk Management Unit (RMU) to oversee the risks assumed by the institution

**1.7.4** Emphasis of Risk Control and Compliance (RCC) functions to ensure that all controls and limits are complied with

**1.7.5** Applications of Value-at-Risk (VaR) as a central tool for risk measurement and limit setting; estimating and expressing risks in monetary terms and directly relating these to the Company's expected returns and impact on earnings

**1.7.6** Formulation of risk-oriented Audit procedures

**1.7.7** Full implementation of the Risk Management Manual as a core and essential document at all organizational levels.

**1.8** The **Risk Management Manual** will serve as a core document providing the institution – with wide functional framework to impose a disciplined approach to risk in accordance with SHFC's business objectives. The objective of this manual is to serve as a basis and reference for consistent Risk Management, applicable to all associates, all levels of management, and affiliates of SHFC. It is aimed to create a culture of risk awareness, not risk-aversion based on the prudential framework recommended by the Bank for International Settlements <sup>1</sup>(BIS). It provides a general set of risk principles to be delegated to each banking group through its reporting and approval procedures. Any deviations should be approved prior to closing of the deal or booking of the transaction.

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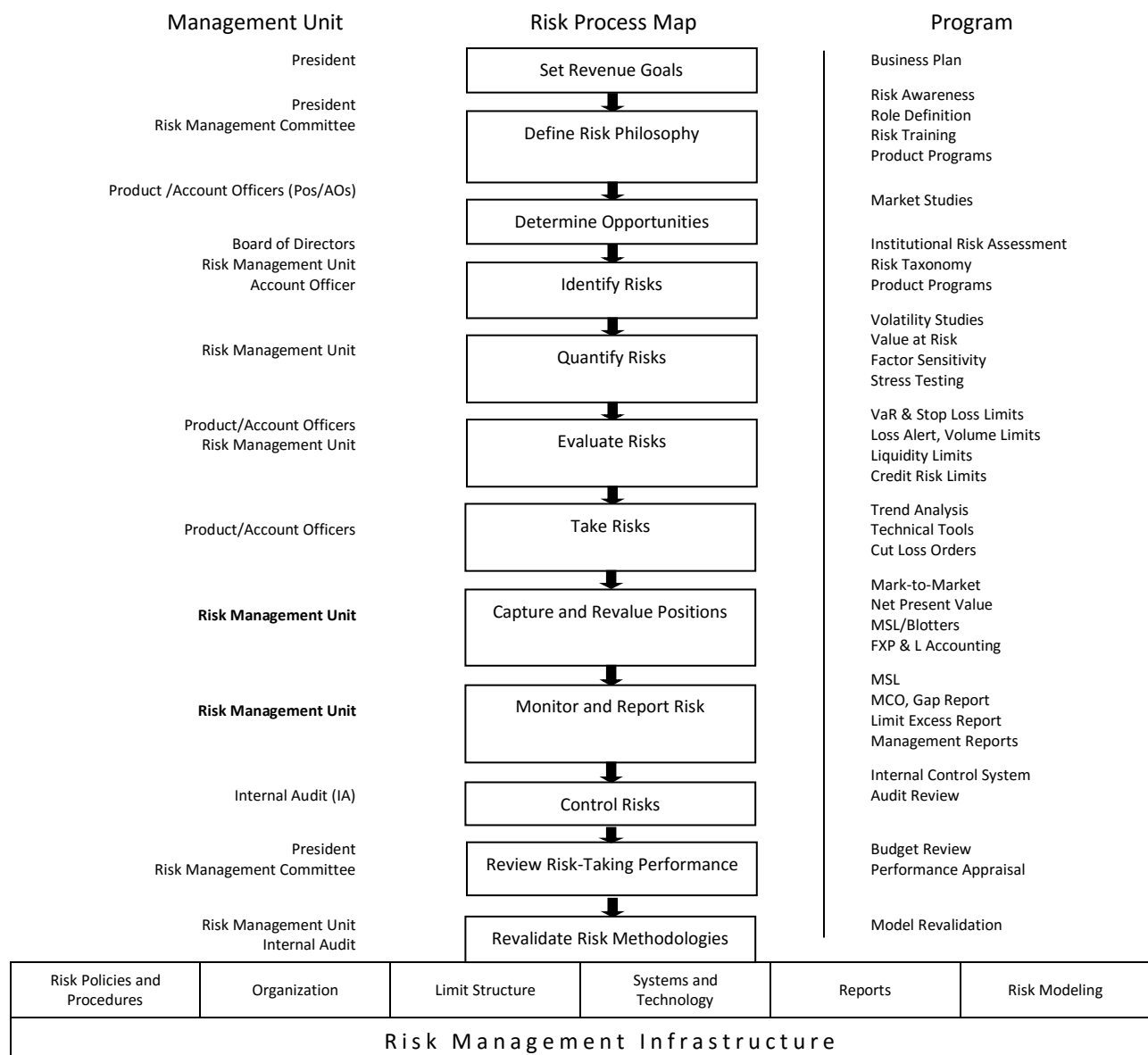
<sup>1</sup> The mission of the BIS is to serve central banks in their pursuit of monetary and financial stability, to foster international cooperation in those areas and to act as a bank for central banks.

- 1.9** Risk management has emerged as a key function within financial institutions (FIs). Being at the core of all our activities, we recognize that Risk Management is an activities critical to the Company's success and that the responsibility for managing SHFC's risk is spread across all business groups and functions. The Risk Process is part of internal control, which itself is a *process* effected by the Board of Directors, senior management and all levels of personnel. These are not solely a set of procedures or policies performed at a certain point in time but rather continually operating at all levels within the organization. The Board of Directors and senior management are responsible for establishing and communicating, in writing and in action, the appropriate culture to facilitate an effective risk process and for monitoring its effectiveness on an ongoing basis. HOWEVER, each individual within the organization must participate in the process.
- 1.10** The policies contained in this manual are intended to ensure that SHFC applies prudence and accountability in its risk-taking activities while retaining distinguishable and competitive flexibility. As SHFC expands into business activities more complex and demanding of risk management, procedures shall evolved through constant interaction among the functions of the Group Heads (GH), Risk Management Unit (RMU), and the guidance of the Risk Management Committee (RMC) and Board of Directors to remain responsive to overall institutional requirements.

## Chapter 2: THE RISK PROCESS

- 2.1** Risk Management should not just be seen as a collection of individual processes: risk and financial control; independent risk management; assets and liability management; and, capital allocation. Risk management should be seen as a seamless process that will allow the institution to meet its goals and objectives while eliminating or mitigating risks. It is both top-down as well as a bottom-up process. The Risk Process Map illustrates a risk management plan that is performed at three different levels: the strategic level, the transaction level and the portfolio level.

### The Risk Process





- 2.2** For a financial institution like SHFC, it is necessary to have an on-going process of systematically improving the knowledge of management and associates on the various types of risks inherent in conducting its business, and how those risks can be managed. The primary focus of this educational effort is to facilitate the internalization of the capability to make and implement risk management decisions in a consistent and disciplined manner on an on-going basis.
- 2.3** The driving force of any effort to manage risk is the conscious decision by management to either accept or modify the risk exposure quantified as being inherent in the underlying balance sheet or portfolio. Needless to say, this type of decision needs to be made within the context of the goals and objectives that make up SHFC's business plan and its risk philosophy. This level provides a macro perspective. The evaluation of the risks, costs, and benefits during the budget process is related to the amount of risks to be taken to achieve the desired revenue goals.
- 2.4** From a macro perspective level, the second (transaction) level and the third (portfolio) level look at the specifics – the Risk concepts, analytical models, statistical methodologies, historical studies and market analysis which are requisites of a coherent risk management system.
- 2.5** These stages encompass the Risk Process. It involves establishing core competencies of the institution in identifying, quantifying, measuring, evaluating, limiting, accepting, assuming, managing, controlling, reporting, monitoring and reviewing risks. Through all these, the risk-taking activities will be assessed to serve as rational basis for the future business plans.
- 2.6** To manage risks effectively, specific tools and techniques are needed. Management reports should be generated to provide senior management a snapshot of the overall risk positions of the company and the financial results if risk/reward exposures were to be realized at prevailing or at simulated market rates.
- 2.7** The investigation, analysis, and evaluation performed by the Risk-taking Group (Product Officers/Account Officers or collectively referred to as frontroom) and the Risk Management Unit (RMU) constitute the essential day-to-day activities of risk management:
- ✚ Business/Profit Opportunity Determination
  - ✚ Risk Identification
  - ✚ Risk Measurement
  - ✚ Position/Portfolio Capture and Valuation
  - ✚ Risk Evaluation, Reporting and Control
  - ✚ Risk-Taking Performance Review
  - ✚ Risk Process Revalidation

## Chapter 3: RISK ORGANIZATION STRUCTURE

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- 3.1** Risk management is a top-down process in SHFC's organization that starts with the Board of Directors. Through the Risk Management Committee (RMC), senior management is actively involved in planning, approving, reviewing, and assessing all risks involved.
- 3.2** To get risk assessed and various risk limits approved, two primary functions are directly involved in Risk Process: the Product Officers (POs)/Account Officers (AOs) or the Frontroom associates and the Risk Management Unit (RMU) function.
- 3.3** Product Officers/Account Officers initiate and are directly accountable for all risks taken; risks that are duly and appropriately authorized by the Risk Management Committee after approval from EXCOM.
- 3.4** The RMU function performs the important day-to-day oversight of actual risks against approved limits and reporting these to management.
- 3.5** The Risk Management Committee (RMC)

The risk management government structure at SHFC begins with broad oversight by the Risk Management Committee (RMC). RMC is responsible for establishing and maintaining a sound risk management system and is ultimately accountable for risks taken within the institution. The Board shall approve and periodically review the overall institutional tolerance for risk as well as the business strategies, policies and risk philosophy of the institution. The Board shall establish a policy ensuring that ensures a process for booking, accounting and documenting all of SHFC's products and transactions. Moreover, the process shall ensure the proper assessment and disclosure of all types of risks.

- 3.5.1** RMC is tasked with understanding the major risks faced by the company and setting the firm-wide risk limits. The Board will have final approval for all limit allocations, additional approvals and other recommendations of the Risk Management Committee.
- 3.5.2** RMC will approve the organizational structure and ensure that the institution's senior managers (eg. CEO, CFO and CRO) are monitoring the effectiveness of the risk control and overall internal control system.
- 3.5.3** RMC is responsible for implementing the strategies approved by the board, maintaining an organization structure that clearly states responsibility, authority and reporting relationships of each unit.

- 3.5.4** RMC is responsible for promoting the highest standards of ethics and integrity in words and action. This involves establishing a culture that emphasizes and demonstrates to all personnel the importance of the risk process and the general system of internal controls.
- 3.5.5** RMC must lead in disseminating the institutions risk philosophy and control culture throughout the organization. This involves making all associates aware of their role in both the risk and internal control process, recognizing the need to act responsibly and report problems in operations, policy violations, illegal actions and non-compliance with regulations or codes of conduct.
- 3.5.6** RMC must also avoid policies and practices that generate incentives or temptations for inappropriate actions. These include but are not limited to, overemphasis on short-term performance results that ignore long-term risks, ineffective segregation of duties that allow for misuse of resources or concealment of poor results and insignificant penalties for improper activity.
- 3.5.7** RMC shall approve the strategy and significant policies related to the management of liquidity. The Board should also ensure that senior management takes the steps necessary to monitor and control liquidity risk. The Board should be informed regularly of the liquidity situation of the institution and immediately if there are any material changes in its current or prospective liquidity position.
- 3.5.8** RMC has the responsibility for approving and periodically reviewing the credit risk strategy and significant credit risk policies of SHFC. The strategy should reflect the firm's tolerance for risk and the level of profitability it expects to achieve for incurring various credit risks.
- 3.5.9** RMC should ensure that senior management is fully capable of managing the credit activities conducted by the company and these activities are done within the risk strategy, policies and tolerances approved by the Board. The Board should also regularly (ie, at least annually), either within the credit risk strategy or within a statement of credit policy, approve SHFC's credit granting criteria (including terms and conditions). In addition, it should approve the manner in which SHFC will organize its credit-granting functions, including independent review of the credit function and the overall portfolio.

### 3.6 Risk Management Unit (RMU)

**3.6.1** As part of the Market Risk Function, a Risk Manager is responsible for setting uniform standards of risk assessment and measurement; providing senior management with periodic risk simulation and evaluation; coordinating technical review for assessment of products and activities.

**3.6.2 Credit Risk Function** – Market and Liquidity Risks are not isolated from other risks. The Risk Manager are responsible to: define, establish and communicate credit risk measurements and methodologies to management and the frontroom; provide analysis of risk exposures and consolidate credit exposures.

The Risk Management Unit is an independent business function within SHFC that has the responsibility to:

**3.6.3** Identify, analyze and measure risks from SHFC's position-taking, lending, borrowing, and other transactional activities.

**3.6.4** Conduct stress tests on the company's portfolios to assess risks not captured by purely quantitative models; these are to be documented and reported to Risk Management Committee.

**3.6.5** Assist the frontroom in development of risk reduction strategies.

**3.6.6** Analyze exposures and recommend limits to the Risk Management Committee.

**3.6.7** Establish standards to monitor and report compliance with limits.

**3.6.8** Communicate all of the above to the frontroom and management.

**3.6.9** To ensure that all market and liquidity risks for all of SHFC's operations are identified, reported, and operate under limits, the Risk Manager shall:

**3.6.9.1** Build risk identification reports and value-at-risk calculators for each risk-taking business.

**3.6.9.2** Perform the Value-at-Risk (VaR) calculations for SHFC's risk positions using independent data sources, and compare these positions and risk measures to limits.

**3.6.9.3** Perform scenario analysis ("stress testing") on strategic portfolios – analyses that examine the risk posture of the business given dynamic or extreme market

environments; communicate results to the Risk Management Committee, management and the frontroom.

**3.6.9.4** Review and document each model used by the front and back offices for valuation and hedging, including making recommendations for enhancements.

**3.6.9.5** Oversee the collection and construction of historical databases (eg., rates, actual positions) required for the risk analysis and measurement methodology.

### **3.7 Legal Group**

SHFC requires either internal or external legal opinions to ensure that all documentation related to transactions entered into are binding, enforceable and compliant with pertinent rules and regulations. Specifically, the Legal function has the responsibility to:

**3.7.1** Review all documents for completeness and enforceability under respective legal jurisdictions.

**3.7.2** Ensure contracting entities have legal capacity or are duly empowered to contract with SHFC.

**3.7.3** Review and render opinions on tax and other regulatory (eg, BSP or SEC) implications of transactions.

**3.7.4** Establish procedures for safeguarding of original documentation.

**3.7.5** Review contracts periodically for continued statutory validity or need for modification.

**3.7.6** Advise on the: (1) legal constitution of enforceable commitment during negotiations process; (2) appropriate governing law and jurisdiction for agreements; (3) development and documentation of terms for transactions involving collateral, guarantees, syndication, multi-office transactions, and any third party support; and (4) documentation of waivers and amendments to the original documents.

**3.7.7** Review and approve standard form letters used by the institution.

### **3.8 Compliance Unit**

The Compliance Unit has the primary duties of identification, monitoring and controlling compliance (or regulatory) risks. The Compliance Officer who shall have the minimum seniority level mandated by the BSP shall oversee and coordinate the implementation of the compliance program. To be effective this program must:

- 3.8.1** Identify all relevant laws and regulations of the country or jurisdictions where SHFC has activities.
- 3.8.2** Analyze the risks of non-compliance, prioritize these risks (eg, low, medium, high) and address all compliance matters.
- 3.8.3** Establish a clear communication process to inform all affected business and operating units on any and all regulatory changes in a timely manner.
- 3.8.4** Establish and maintain a constructive working relationship with all regulatory agencies, for the prime purposes of seeking clarification on laws and regulations for discussing compliance findings with the authorities.
- 3.8.5** Establish and maintain a regular schedule of compliance testing of all SHFC's activities and products with applicable legal and regulatory requirements. The Frequency of these tests must be commensurate to the identified risk levels (ie, most frequent testing for high risk issues).
- 3.8.6** Report all compliance findings noted to the Risk management Committee and if warranted (at the RMCs opinion) to the Board of Directors.

### **3.9 Internal Audit**

The Internal Audit Department is an essential part of the risk management system that takes the lead in the ongoing monitoring of the internal control process and providing an independent assessment of system integrity. It reports to the Audit Committee. The internal audit functions include the following:

- 3.9.1** Review institutional compliance to pertinent rules and regulations.
- 3.9.2** Review and ensure compliance of the frontroom with trading policies and procedures regularly or periodically through spot checks.
- 3.9.3** Scan for internal control deficiencies or ineffectively controlled risks and report these in a timely manner to the Audit Committee.
- 3.9.4** Conduct follow-up review and immediately report to the Audit Committee for identified deficiencies that remain uncorrected.
- 3.9.5** Review and ensure that existing policies and procedures remain relevant and adequate for the institution's activities.
- 3.9.6** Review the Compliance Function periodically to assess its effectiveness.

## Chapter 4: CLASSIFICATION OF BUSINESS RISKS

**4.1** As part of the identification of risk objective in the Risk Process, the following classifies the major risks that SHFC faces and needs to manage in the course of its business.

QUANTIFIABLE RISKS	NON-QUANTIFIABLE RISKS
<b>Market</b> <ul style="list-style-type: none"><li>Interest Rate</li></ul>	<b>Legal</b> <ul style="list-style-type: none"><li>Documentation/Enforceability</li><li>Capacity</li><li>Suitability</li></ul>
<b>Liquidity</b> <ul style="list-style-type: none"><li>Funding</li><li>Structural</li></ul>	<b>Regulatory</b> <ul style="list-style-type: none"><li>Monetary Authorities</li><li>Tax</li><li>Regulatory Bodies</li><li>Changing Policies</li></ul>
<b>Credit</b> <ul style="list-style-type: none"><li>Contingent</li><li>Custody</li><li>Counterparty</li><li>Issuer</li><li>Concentration</li></ul>	<b>Operations</b> <ul style="list-style-type: none"><li>Position Valuation/Reporting</li><li>P&amp;L Accounting</li><li>P&amp;L Reporting</li><li>Systems &amp; Technology</li><li>Personnel Risk<ul style="list-style-type: none"><li>Expertise</li><li>Fraud</li><li>Authorization</li></ul></li></ul>

**4.2** Quantifiable risks are subject to numerical measurement (through validated methodologies) and thus importantly are the risks that the firm shall manage and control by means of a structure of general and specific limits (expressed in monetary units). The general categories of quantifiable risks are Market risks, Liquidity risks, and Credit risks.

**4.3** Non-quantifiable risks are not subject to numerical measurement but are just as significant and require similar management attention. These risks are invariably managed by development of both a strong “control culture”, and an effective internal control system that constantly monitors and updates operational policies and procedures of SHFC’s activities and transactions.

## Chapter 5: MARKET RISK

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### 5.1 Market Risk

Market risk is the risk of loss arising from adverse changes in the value of financial instruments, products and transactions included in the overall portfolio (including off-balance sheet positions) of an institution. The market risk that the firm is exposed to mainly from its loan portfolio.

Markets risk is classified into three types:

**5.1.1 Price Risk.** Changes in the price level of loans could bring profits or losses to an institution.

**5.1.2 Interest Rate Risk.** The risk of loss arising from changes in the interest rate is termed interest rate risk. Specifically, this is the possibility that changes in the rates will increase or decrease the cost of borrowings or return on investments. In a loan, for instance, the price and interest rate move in the opposite directions, that is, when the interest rate decreases, the price of the loan rises and vice versa.

Interest rate risk is different for each instrument/transaction but for SHFC's loans, interest rate risk arises from movements in the yield curve.

**Yield Curve risk** – Disparity in repricing could lead to changes in the slope and shape of the yield curve thereby affecting income or the economic value of the firm.

### 5.2 Quantifying Market Risk

There are two specific ways to quantify the risk of changes in the value of the portfolio brought about by changes in the risk factors. These are:

- ✚ Factor Volatility or the maximum expected change in the risk factor
- ✚ Value-at-Risk, which is the maximum possible loss on a portfolio or position over a specified period of time, given a confidence interval under normal market conditions due to changes in the market place.



### 5.2.1 Factor Volatility

Volatility of a market risk factor is the deviation of the risk factor from its average movements. In the case of SHFC, the method of computing volatility is through using historical yield/s prices or by simply adopting volatility figures supplied by Bloomberg.

In the event that the required volatility figure for a certain instrument is not readily available, we compute using the yield or prices taken from Bloomberg<sup>2</sup> or our database. The formula is as follows:

$$\text{Daily Volatility} = \sqrt{\sum \frac{(x - \mu)^2}{(n-1)}}$$

where:  $x$  is the return

$\mu$  is the average return

$n$  is the number of observations/returns

Below are the steps in the computation of the volatility of prices:

Step 1	Get the natural logarithm of the prices to normalize (avoid bias) the information since we are assuming a normal market scenario
Step 2	Get the difference of the prices' natural logarithm (present less the previous). The resulting figure is the daily change in the prices otherwise known as the return.
Step 3	Get the average daily change.
Step 4	Take the difference between the daily return and the mean. Take the square of the resulting figure then proceed to calculate the sum.
Step 5	Divide the resulting figure by $n-1$ ( $n$ being the sample size)
Step 6	Take the square root to arrive at the daily volatility.

The volatility depends on the information being used. If daily samples were used, this would translate to a daily volatility figure. In the same light, weekly figures would result in a weekly volatility figure and so on. However, a shorter way to translate volatility figures into a different period of time is this:

- 1) Converting daily volatility to weekly, monthly and annual

$$\text{Weekly Volatility} = \text{Daily Volatility} * \sqrt{5}$$

$$\text{Monthly Volatility} = \text{Daily Volatility} * \sqrt{52}$$

$$\text{Annual Volatility} = \text{Daily Volatility} * \sqrt{252}$$

- 2) Converting annual volatility to daily, weekly and monthly

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<sup>2</sup> Bloomberg is a globally acknowledged data provider and will be the source for market and economic data/info.

$$\begin{aligned}\text{Daily Volatility} &= \frac{\text{Annual Volatility}}{\sqrt{252}} \\ \text{Weekly Volatility} &= \frac{\text{Annual Volatility}}{\sqrt{52}} \\ \text{Monthly Volatility} &= \frac{\text{Annual Volatility}}{\sqrt{12}}\end{aligned}$$

## 5.2.2 Value-at-Risk

Value-at-Risk (VaR) is defined as the anticipated maximum amount of loss given a confidence level over a specified period of time (eg., one day). Calculation is normally on a month time horizon (holding period). The significance of this measure is it informs management about the risk-taking activities of the institution as well as alert management when such activities have exceeded prudent levels. Therefore, it enables the institution to react quickly to market conditions and to act on strategies in accordance to the philosophies and risk appetite of the management.

### 5.2.2.1 VaR Methodology

There are three main methodologies to calculate for the VaR. The first is the **parametric** (also known as variance-covariance) **method**, which uses parameters such as volatility, correlation, delta and gamma. This is accurate for traditional assets and linear derivatives, but less accurate for nonlinear instruments. Another is the **Historical simulation**, which uses historical rates to revalue the positions. The third is the **Monte Carlo simulation** that computes for the VaR through generating scenarios and revaluing positions in the portfolio using the said scenarios. The latter two models are appropriate for both linear and nonlinear instruments.

SHFC should chose to use the parametric model because of the ease and practicality of the computation. More importantly, since the market for nonlinear instruments is not fully developed in the country, the use of parametric will be sufficient to capture the risk in linear instruments (traditional bonds, stocks, swaps, forwards and futures) though improvements would eventually lead to the adoption of the Monte Carlo approach as the BSP increasingly mandates adherence to the BIS standards.

Management is recommended to adopt a 99% confidence level, the standard recommendation by the BIS. The holding period is just one month since loan data is refreshed in this period.

### Calculation

Following are the detailed approach for each instrument:

<b>Government Securities</b>	The returns for each duration buckets are correlated to calculate for the GS volatility, afterwhich, the VaR for the loan-portfolio is computed using the aforementioned formula.
<b>Entire Portfolio</b>	The portfolio volatility is first determined before proceeding to calculate the entire portfolio VaR.

### 5.3 Managing Market Risks

The risk taking activities of SHFC are governed by limits that serve as guide to management and the responsible frontroom and backroom associates on the risk tolerance of the organization. The RMC decides on the amount of each specific limit.

The risk taking activities of SHFC are bounded by limits.

Risk limits are set and reviewed annually based on:

- ✚ the risk appetite of the company;
- ✚ the budgeted profits for the year;

Summarized below are the tools for managing market risk:

Tool	Purpose
VaR Limit/ Stress Test	Management tolerance for potential loss in a given time period Impact of extreme market conditions on SHFC's earnings

#### 5.3.1 Value-at-Risk Limits

The VaR limit is the monetary amount of potential loss that management can tolerate. The monthly calculated VaR is to be compared with the VaR limits. If the monthly VaR exceeds the VaR limit management must be alerted.

#### 5.3.2 Stress Test

While VaR analysis estimates possible losses on a day to day basis, Stress testing involves quantifying risk in abnormal markets. Exploring the effects of a range of low probability events combined with VaR gives a more comprehensive picture of Risk.

There are two ways to approach stress testing. One is viewed from the top down wherein senior management asks how much the firm could lose in the occurrences of a stress scenario. The second is a bottom-up approach where scenarios, which could possibly allow the firm to lose more than a specified threshold amount are enumerated.

### **5.3.3 Risk Reports**

The Risk Management Unit prepares a monthly VaR. This report comes with a written commentary emphasizing notable market developments and risk positions.

To complement VaR analysis, Stress Test reports are also produced depending on the frequency of stress testing. This kind of report shows the potential present value impact of pre-specified scenarios or extreme market movements. Also, these are used to better capture event risk.

Reporting of breach of limits must be a joint effort of the Compliance Officer and the RMU. Reports on the breach of limits should be addressed to the RMC.

It is important that the creation of report templates, particularly those updated periodically, must involve the users of the information. This is to ensure that the reports properly convey the appropriate information in a manner that can be easily understood by the users.

## Chapter 6: CREDIT RISK

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### 6.1 Credit Risks

Credit risk is the risk of loss arising from the failure of a borrower to make a contractual payment. This risk has three key components: credit exposure, probability of default and recovery rate.

- ✚ **Credit exposure** is the amount SHFC stands to lose in case of default by the borrower.
- ✚ **Probability of default** is the percentage probability that the borrower will be unable or unwilling to pay its obligations
- ✚ **Recovery rate** is the percentage of SHFC's claim that it recovers in the event of default by the borrower.

The institution initially reduces its credit risk through portfolio diversification or management of concentration risk, wherein loans are granted across many areas and borrowers, enabling it to ride through business cycles while considering asset quality management.

### 6.2. Measurement of Credit Risk

SHFC has a system to ensure that, in addition to the on-going monitoring of the performance of credits, periodic credit reviews of individual accounts or accounts managed on a portfolio basis are carried out

- ✚ Ascertain changes in the credit quality of existing borrowers or the counterparties as well as the overall portfolio and detect unusual developments;
- ✚ Review whether changes to the classification of loans are necessary and provisions are adequate;
- ✚ Identify opportunities and threats through the new information collected and the changes to the quality of the portfolio;
- ✚ Trigger remedial actions to protect the interests of SHFC, if appropriate (e.g. in relation to deteriorated credits)

The results of credit reviews should be properly documented and reported to the appropriate level of management. Where deterioration is detected, the review report should be submitted to the Risk Management Committee to effect proper action.

There should be a system to schedule and bring up accounts due for review. Overdue credits should be identified and reported in time to the appropriate level of management.

### 6.3 Credit Risk Process

There are two types of company reports for credit purposes: an initial credit report and an updating credit report. An **initial credit report** is processed for a potential or new borrower with which SHFC does not have any historical credit dealings. An updating credit report, on the other hand, is done for either an active or inactive borrower of SHFC or other companies with initial credit reports. Updating credit reports on active accounts where SHFC has current exposures and credit facilities are given top priorities.

A credit analyst is assigned to process the company report, and updates it regularly outside of critical events. He coordinates and works closely with the Account Officer handling the borrower. The Account Officers working within SHFC's policies and limits are primarily responsible for managing credit risks in their dealings/transactions. With them at the front-end of risk management, they have first-hand knowledge of changes and developments in their clients. The Account Officers are expected to be fully aware of developments affecting their respective accounts to be able to monitor the accounts efficiently and objectively.

### 6.4 Stress Testing the Credit Portfolio

SHFC assesses potential changes in economic conditions when assessing individual credits and its own credit portfolios. Inputs from Senior Management are taken into consideration in generating scenarios for stress testing.

Extreme scenario analysis and simulation exercises on the credit portfolio are needed, which can be partially addressed through downgrading and assignment of lower loss reserves to specific borrowers. Three areas of focus for stressful scenarios are economic downturns, market-risk events, and liquidity conditions

Stress-test analyses shall include contingency plans regarding actions management might take given certain scenarios. For SHFC, these usually include hedging and reducing the size of the exposure.

# Chapter 7: LIQUIDITY RISK

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## 7.1 Liquidity Risks

Liquidity is the ability of the institution to fund any increases in its assets and to meet obligations to clients and counterparties as they come due. Liquidity risk is the risk that the institution will be unable to meet its maturing obligations on time. The mere measurement of liquidity will not be sufficient to protect the institution from potential illiquid positions therefore it is of general significance that the funding requirements be examined both in normal and adverse market conditions.

## 7.2 Quantifying Liquidity Risks

Measuring liquidity entails assessing the inflows against the outflows to determine possible shortfalls. The Maximum Cumulative Outflow (MCO) is the measurement that captures the funding requirements at future dates in a normal market scenario through quantifying the liquidity gap of maturing assets and liabilities. The MCO captures liquidity risks in the same light that VaR captures market risks.

In assessing the cash flows, qualitative appraisal is equally necessary to determine the ability of the institution to access funds for maturities.


The liquidity of the institution depends on:


- 1) The institution's short-term need for cash
- 2) The liquidity of the institution's assets
- 3) Cash on hand
- 4) The institution's line with counterparties (the willingness of the counterparties to lend as well as to transact with the institution)


SHFC measures the MCO on a daily basis and makes sure that it stays within the set limits. Forward reports provided by the MIS department are used to compute for the MCO.

To get a conservative estimate, cash inflows and outflows in the succeeding months are mapped against the cash position of the company. Amount of maturities each day are also calculated to make sure that they stay within the specified maximum level.

Aside from the MCO that captures the daily liquidity gap, there are other risk measures that should be practiced to enhance the liquidity management system:

 **Contingency Funding Plan** – this requires scenario analysis and planning

 **Liquid Assets Analysis/Cover** – this is to ensure adequacy of liquidity to cover any shortfall in cashflow

 **Large Fund Providers** – this measures the concentration of funding sources

### **7.3 Managing Liquidity Risks**

Similar to market risk, liquidity risk control will involve the setting of limits that will serve as the first line of defense against possible illiquid positions. MCO limits are recommended by the RMU to RMC after careful consideration of the same aspects enumerated in the market risk control section.



## Chapter 8: NON-QUANTIFIABLE RISKS

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Non-quantifiable risks are those risks that are not subject to numerical measurement but are just as significant and require similar management attention. These risks are invariably managed by development of both a strong “control culture” and an effective internal control system that constantly monitors and updates operational policies and procedures of the institution’s activities and transactions. These major non-quantifiable risks are legal risk, compliance risk, operations risk, reputation risk and strategic risk.

### 8.1 Legal Risk

Legal risk is the risk that contracts may not be enforceable or documented correctly. It covers the potential for the institution to suffer a financial loss due to non-existent, incomplete, incorrect and unenforceable documentation used by the institution to protect and enforce its rights under contracts and obligations. The risk is closely related to credit risk as it most often involves legal problems with borrower’s transactions.

The primary control mechanism for legal risk is a legal review process which is a part of the product program. Aside from validating the existence, propriety and enforceability of documents, the legal review also aims to verify the capacity and authority of counterparties and clients to enter into business transactions. For the purpose, the following guidelines are hereby set to facilitate the process.

### 8.2 Compliance Risk

Compliance risk is the current and prospective risk to earnings or capital arising from violations of, or nonconformance with, laws, rules, regulations, prescribed practices, internal policies and procedures, or ethical standards. Compliance risk also arises in situations where the laws or rules governing products or activities of clients may be ambiguous or untested. This risk exposes the institution to fines, payment of damages, and the voiding of contracts. Compliance risk can lead to diminished reputation, reduced institutional value, limited business opportunities, reduced expansion potential, and lack of contract enforceability. It is also an important qualitative risk which should be monitored, managed and controlled, as regulatory sanctions from non-compliance may involve not only financial penalties, but may be a revocation of the quasi-banking license.

The primary control process for compliance risk issues is the implementation of the established compliance program of the institution which is overseen by the compliance officer.

### **8.3 Strategic Risk**

Strategic risk is the current and prospective impact on earnings or capital arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes. This risk is a function of the compatibility of an institution's strategic goals, the business strategies developed to achieve those goals, the resources deployed against these goals, and the quality of implementation. The resources needed to carry out business strategies are both tangible and intangible. They include communication channels, operating systems, delivery networks, and managerial capacities and capabilities. The institution's internal characteristics must be evaluated against the impact of economic, technological, competitive, regulatory and other environmental changes.

### **8.4 Reputation Risk**

Reputation risk is the current and prospective impact on earnings or capital arising from negative public opinion. This affects the institution's ability to establish new relationships or services or continue servicing existing relationships. This risk may expose the institution to litigation, financial loss, or a decline in its client base. In extreme cases, an institution that loses its reputation may suffer a drain in its business. Reputation risk exposure is present throughout the organization and requires the responsibility to exercise extreme caution in dealing with customers and the community.






## Chapter 9: OPERATIONS RISK

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Operations risk is the risk that an institution will suffer an unexpected loss due to deficiencies in information systems, inadequate internal controls or systems failure within the organization's operations functions.

### 9.1 Identification of Operations Risk

**9.1.1** The following issues and concerns are commonly associated with operations risk:







-  The risk of loss arising from various types of human or technical error
-  The risk of settlement or payment failures
-  The risk of business interruption
-  Administrative and legal risks
-  Failure of information systems and technology

To minimize and control operations risk, there should be an effective system of internal controls.


### 9.1.2 Internal Control Policies



The management of the institution ensures to provide for the timely identification of internal control weaknesses and systems deficiencies. Proper mechanisms are established to effectively safeguard capital, promote accountability and due diligence in the financial and legal aspects of its business activities.

The general policy set by senior management on internal controls provides for:

-  Clear definition and delineation of authority
-  Adequate systems and procedures
-  Approved and specific risk limits
-  Independent risk management functions
-  Effective internal controls, and
-  Regular and comprehensive risk reporting

**9.1.3** Internal control is defined as a process effected by the Board of Directors, the Executive Committee, Accounting and Operations designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

-  Effectiveness and Efficiency of Operations  
This addresses the institution's basic business objectives, including performance and profitability goals and safeguarding of resources.

-  **Reliability of Financial Reporting**  
This relates to the preparation of reliable published financial statements and other reports submitted to regulatory agencies and the management.
-  **Compliance with Laws and Regulations**  
This deals with complying with laws and regulations to which the company is subject, e.g. BSP, SEC, etc.

#### **9.1.4 Components of Internal Control**

There are five interrelated components that are derived from the way management runs the business. These are integrated into the management process, and they build on one another to form an integrated framework that reacts to changing conditions, both internal and external to the organization. These components may take different forms as a result of a company's size, industry and operating style, but to create a truly effective system of internal control and for the institution to achieve its goals and to maintain its financial viability, all five must be present. These are:

##### **Control Environment**

The control environment sets the tone of the organization, and is the foundation for all other components of internal control. It focuses on the ethics, integrity and competence of the company's personnel; the management philosophy and operating style; the way management assigns the authority and responsibility; and the board of directors' attention and direction to the activities of the organization.

##### **Risk Assessment**

Risk assessment addresses the establishment of objectives and assessment of risks, both internal and external, that might prevent achievement of those objectives. It addresses how relevant risks should be managed and the establishment of mechanisms to address changing risk.

##### **Common Control Activities**

Control activities are those policies and procedures by which an entity ensures that it carries out management directives aimed at the identified risks. This component requires action at all levels of an organization and includes activities such as approvals, reconciliations, reviews, security of assets and segregation of duties. To have a proper internal control system, control activities must be seen as an integral part of daily activities of the institution, and not as additional chores separate from normal operations. Two aspects of control activities are (1) the creation of control policies and procedures and (2) verification that these control policies and procedures are followed.

## 9.2 Management of Operations Risk

Operations risk can be controlled through established institutional policies, systems and procedures.

### 9.2.1 Operational Control Frameworks

The following factors must be considered in establishing, maintaining and reviewing the control framework for operational risks:

#### 1) Organizational Structure

- ✚ Appropriate organizational structure and the ability of each operating group to provide necessary information to manage its activities.
- ✚ A sufficiently high level of knowledge and experience of all personnel in light of the defined duties and responsibilities.

#### 2) Human Resources

- ✚ Formal job descriptions of all positions and clear objectives including clear conflict of interest policies should exist for each associate.
- ✚ Implementation of a code of conduct and other policies regarding acceptable practices, conflicts of interest or expected standards of ethical behavior, including manner of reporting conflicts that arise with such code of conduct.
- ✚ Analysis of the knowledge and skill level needed to adequately perform job responsibilities of all personnel.

#### 3) Documentation of Products and Procedures

- ✚ An Operations Manual must be maintained and updated periodically.
- ✚ Authority and responsibility should be clearly delegated in writing.
- ✚ A Product Manual covering the description and related transaction flow of the product, including its operating procedures/processes must be prepared and updated regularly to serve as basis for marketing and operations.

#### **4) Business Continuity**

- ✚ A Business Continuity Plan (BCP) must be maintained and tested at least annually and updated for any major changes in systems or procedures.
  
- ✚ The institution has formulated a Business Continuity Plan based on the institution's operations policy manual of procedures and took into account the various products and the corresponding transaction flow. The continuity plan contains the present system of processing transactions and the appropriate contingency procedure that enumerates the respective internal and external documents and reports that will have to be processed manually (if, as a worst scenario, hardwares and softwares will not work). Manual processing of transactions of each product done through simulations and walk throughs of each stage of the process includes such activities as manual preparation of the trading sheets, computations, cash positioning, indication of accounting entries, costings, recording in the securities and clients' subsidiary ledgers and processing of documents.

#### **5) Service Quality**

The goal of the institution is to provide excellent service "customer satisfaction". Thus, a quality circle group has to be formed to address and monitor customer complaints and provide quality service.

## **APPENDIX**

### ***Analysis of Operational Risks***

Operational risk can be viewed in terms of losses involved and frequency. The most common operation risk combinations seen in businesses are high frequency low severity (HFLS; examples include accounting entry errors and collection inefficiencies) and low frequency high severity (LFHS; examples include earthquakes and terrorist attacks). To frame these operational risks, we can use the following framework to assess if the risk falls under HFLS or LFHS:

- a. Probability – What is the likelihood that the risk event occurs?
- b. Time - What is the time-interval that we observe the risk event?
- c. Amount – What is the monetary loss of the risk event?

Treatment of operational risks usually revolves around the reduction of at least one of the factors, probability, time or amount.

### ***Creation of a Risk Register***

The risk register starts, of course, with a risk management plan. The risk officer must seek input from stakeholders and end users. The risk register or risk log becomes essential as it records identified risks, their severity, and the actions steps to be taken.

Managers should view the risk register as a management tool through a review and updating process that identifies, assesses, and manages risks down to acceptable levels. The register provides a framework in which problems that threaten the delivery of the anticipated benefits are captured. Actions are then initiated to reduce the probability and the potential impact of specific risks.

### ***Components of a Risk Register***

- Dates
- Description of the Risk
- Risk Type
- Likelihood of Occurrence
- Severity of Effect: Provides an assessment of the impact that the occurrence of this risk would have on the project.
- Countermeasures: Actions to be taken to prevent, reduce, or transfer the risk. This may include development of contingency plans.
- Owner: The individual responsible for ensuring that risks are appropriately engaged with countermeasures undertaken.
- Status

### **1. Case Study 1 – Collection**

#### ***Background:***

The collection of loans and receivables of SHFC forms part of Credit Risk. In particular, credit risk is the risk of loss arising from the failure of a borrower to make a contractual payment.

Although many housing finance corporations analyze credit risk by a expected loss framework, this framework may not work for SHFC. Historically because of its mandate and borrower's demographics, SHFC does not foreclose on defaulting accounts of borrowers. Hence credit risk is higher. This can be seen by expounding on credit exposure or expected losses, which has three key components: credit exposure, probability of default and recovery rate.

**Credit exposure** is the amount SHFC stands to lose in case of default by the borrower.

**Probability of default** is the percentage probability that the borrower will be unable or unwilling to pay its obligations

**Recovery rate** is the percentage of SHFC's claim that it recovers in the event of default by the borrower.

From which we have  $\text{Credit Exposure} = \text{Probability of Default} \times (1 - \text{Recovery Rate})$

#### ***Reduction in Credit Risk:***

Since by practice SHFC has not foreclosed on its loans, to reduce Credit Exposure, SHFC must lower the probability of default or work on improving the recovery of its assets without the use of foreclosure. Some suggestions include:

- a. More accurate credit scoring models (lowers probability of default)
- b. Community based collection (lowers probability of default)
- c. Voluntary surrender of property (increases recovery rate)

## **2. Case Study 2 – IT**

### ***Background:***

A fully functioning and accurate IT system is a requirement for any organization. This is especially true for a financial institution such as SHFC which deals in tens of thousands of borrowers. For this reason, it is prudent to assess the operation risks faced by SHFC vis-à-vis its IT systems.

In particular, we need to identify vulnerabilities and threats to the information resources used by SHFC in achieving business objectives, and deciding what countermeasures, if any, to take in reducing risk to an acceptable level, based on the value of the information resource to the organization. **For SHFC, it has been frequently commented by its employees that its database is not unified and organized.** This leads to numerous operation risks such as:

- a. The risk of loss arising from various types of human or technical error
- b. The risk of settlement or payment failures
- c. The risk of business interruption
- d. Administrative and legal risks



This IT failure leads to operational risk type losses which are high frequency / low severity (HFLS) to low frequency / high severity (LFHS).

### ***Reduction in Operations Risk:***

The IT operations risk can be addressed with the following steps:

1. Clean up of databases and procuring of the necessary IT infrastructure
2. **Task segregation** - Effective segregation of tasks and duties reduces internal theft and risks related to fraud. This prevents one individual from taking advantage of the numerous aspects of transactions and business processes or practices.
3. **Curtailing complexities in business processes** -Reducing complexity in different business processes radically mitigates operational risks. Organizations can achieve that by curtailing manual activities and the number of people and exceptions that rise during the implementation of business processes.
4. **Reinforcing organizational ethics** - Creating a strong ethical compass within the organization is highly effective in mitigating operations risk management. Organizational ethics can be reinforced by combining personal values and principles of the workforce with the ideology of the organization.
5. **The right people for the right job** - Having the right people in the right jobs can reduce issues pertaining to business process execution and skill and technology usage. This also results in appropriate workforce utilization, adherence to timelines, enhanced quality, and fewer errors and process breakdowns.
6. **Monitoring and evaluations at regular intervals** - Business processes are more effective with well-designed performance indicators in place. Key Performance Indicators (KPIs) are critical for timely detection and mitigation of risks, provided they are continuously monitored and reviewed. This helps to identify discrepancies proactively and manage them accordingly.
7. Update and reconcile records with other housing agencies.

### **3. Case Study 3 – Wholesale Lending**

#### ***Background:***

To increase its lending capacity and achieve its mandate, SHFC may engage in wholesale lending. Among others, wholesale lending for SHFC may include:

- a. Downloading of funds to sub-lenders for relending to end-users or retail borrowers;
- b. Discounting of eligible loans (new or existing) extended to end-users by institutional lenders;
- c. Granting of commitment lines to partners, particularly to LGUs; and
- d. Establishing of Pari passu arrangements with large institutional lenders to share risks and encourage more lending

Since there is an added layer between SHFC and the end user of the loan, there are additional risks that go beyond the normal risks of lending to retail borrowers. The following risks must be monitored in wholesale lending:

1. Credit – The primary originator of the housing loan must always be monitored for its financial solvency and well being
2. Legal and compliance – Due to the aggregation of several loans, the documentation and legal compliance of all underlying loans must be ensured.
3. Reputational – partner lenders may harm the reputation of SHFC should the partner lender commit undesirable actions in its operations.

#### ***Reduction in Operations Risk:***

Although monitoring wholesale pricing can be complicated, costs money and can potentially adversely affect the wholesales on whom SHFC relies for business, the benefits will in most cases offset the challenges. If structured and implemented properly, a monitoring program can help to materially reduce the very serious risks associated enumerated above. Further, lenders that implement monitoring programs can enhance their reputational standing with regulators, enforcement authorities and other parties by showing that they are committed to expend the resources needed to monitor.

### **Case Study 4 – Mortgage Backed Securities**

#### ***Background:***

Mortgage Backed Securities (or “Notes”) are a type of asset-backed security that is secured by a mortgage or collection of mortgages. These securities usually pay periodic payments that are similar to coupon payments for bonds.

The assets underlying the Notes could be made up of long-term mortgages or residential loans from SHFC’s housing portfolio. Some points of consideration for the assets to be considered include:

1. Original principal balance
2. Recourse basis of the assets (with recourse to SHFC or without recourse)
3. Tranches in the notes (with Senior, Junior and subordinated Notes)
4. The issue price of both the Senior, Junior and Subordinated Notes
5. Maturity from issue date

The desirability of these notes depend on the management of liquidity and credit risks. If the assets prove difficult to collect, then the Note holders will not have the confidence that they will get repaid. Some ways to reduce liquidity and credit risks include:

### ***Liquidity and Credit enhancements:***

- a. Liquidity Enhancements
  - i. Commingled Reserve Account. This account is put upfront at Closing, in the amount equal to expected cash collections for X months, purposely to cover any lag time between collection period and reporting period.
  - ii. Liquidity Reserve Account. This account is put up to cover any shortfall, meet tax, expenses and coupon and principal payments on the Senior Notes arising from time lag between the start of delinquency of a current account until the receipt of cash flow from the HGC Guaranty (discussed below). The required balance of the Liquidity Reserve will, on any date be an amount representing X months coverage for tax, expenses and coupon and principal payments on the Notes.
  - iii. Excess from the required balance of Commingled Reserve and Liquidity Reserve Accounts are accumulated in the Principal Account to fund principal repayments.
- b. Credit Enhancements
  - i. Excess Spread. As first loss protection, excess available income (net of expenses) in any interest period is applied to cover credit losses in that interest period;
  - ii. Guaranty by HGC. HGC will guarantee cash flow for each residential loan sold by SHFC, covering the full outstanding principal amount of defaulted residential loans, and up to X% interest rate.

### **Case 5 – Operational Risks: Multi-Tasking**

#### ***Background:***

Several SHFC employees are performing multiple tasks which are not necessarily in their core expertise. Because of this job outcome is affected.

#### ***Reduction of Operation Risks:***

1. **Task segregation** - Effective segregation of tasks and duties reduces internal theft and risks related to fraud. This prevents one individual from taking advantage of the numerous aspects of transactions and business processes or practices.
2. **Curtailling complexities in business processes** -Reducing complexity in different business processes radically mitigates operational risks. Organizations can achieve that by curtailing manual activities and the number of people and exceptions that rise during the implementation of business processes.
3. **The right people for the right job** - Having the right people in the right jobs can reduce issues pertaining to business process execution and skill and technology usage. This also results in appropriate workforce utilization, adherence to timelines, enhanced quality, and fewer errors and process breakdowns.

## **Case 6 – Other Risks: Physical**

### ***Background:***

SHFC works with depressed communities. In certain areas, SHFC employees cannot predict the nature and disposition of the people living in these communities. In certain situations, SHFC employees have encountered hostile and even violent communities to the point that SHFC employees fear for their safety.

Physical risk involves work environments, equipment and practices which may expose participants to potential hazards.

### ***Reduction in Physical Risk (Some Suggestions):***

1. SHFC must ensure that there is a means of communication available which will enable the employee to call for help in the event of an emergency and arrangements made to ensure regular contact.
2. A minimum of two persons must be present to ensure that appropriate action and support is provided in the event of an incident or injury. The second person must be competent to obtain any assistance required and to make the area safe.
3. Consider having security guards for some site visits.

## **Case 7 – Other Risks: Documentation of Board Instructions**

### ***Background:***

The Corporation conducts Board meetings every month. Key instructions and directions are given by the Board for the Management to carry out. However, the documentation of these board instructions are sometimes not reflected properly and leads to corrections on the part of the secretariat.

### ***Reduction in Risk (Some Suggestions):***

1. Have a dedicated secretariat that will concentrate on documenting board matters solely.
2. Remind Board members to use the microphone so that there will always be an audio recording of the Board meeting for reference of the secretariat.
3. Have the Corporate Secretary/Assistant Corporate Secretary reiterate the Board Resolution so as to avoid misunderstandings.