

National Bank of Ethiopia
Risk Management Guideline
for insurance Companies in Ethiopia

1. Introduction

With the aim of achieving radical and fundamental changes in all areas of its operation (core and support), the National Bank of Ethiopia has carried out Business Process Reengineering (BPR) studies and currently its implementations have been well in progress. With respect to insurance supervision, the move from compliance based to risk based supervision (RBS) is among the major initiatives taken up by the BPR study. To carry on RBS, building up its infrastructures is essential, which in turn calls for the direct involvement, participation and collaboration of all stakeholders.

In view of the foregoing, Insurance Supervision Directorate (ISD) has compiled the first draft of the risk management guideline for eight commonly identified and known as inherent and significant risks of insurers. In the process of these risks management, the role to be played by the board of directors, management, internal control system and other concerned parties are clearly addressed. The need to formulate risk management philosophy, strategies, policies and procedures have also been given due coverage.

This guideline, first be delivered to all insurance companies for comments. Secondly, after incorporating valid comments of insurers on the guideline, the final draft will be issued for all insurance companies to be used as a basis for developing their own inherent and significant risks management programs (RMPs), which again will be approved by the Bank. All insurance companies are expected to design their RMPs in such a way that it serves as a sufficient standard to gauge and rate their risk management practices which basically focusing on inherent and significant risks.

In brief, risks inherent in their nature and significant in their impact are always prevalent in one form or another in insurance operations. How effectively an insurance company alleviates these risks would bring the level of risk exposure down from high category to moderate or from moderate to low. On the contrary, poor management of low inherent risks would push the risk level up to the moderate risk category or from moderate to high-risk category. In this way ISD and insurance companies can manage “net risks” in line with commonly agreed risk measure standards embedded in the RMPs.

To sum up, risk management is not a one go affair and hence need to be carried out on going basis. The whole aim of this document is, therefore, directed towards ensuring the safety and soundness of the insurance companies on going basis, focusing on the management of inherent and significant risks, which obviously enable the sector to continue to play its role in supporting the economic development of the country.

2. General

2.1. The Application

This guideline applies to all insurance companies.

2.2. The Objective

- This guideline provides the minimum practical guidance to insurers with regard to the **significant and inherent** risk areas that they should address by way of formal policies/programs.
- Depending on the nature of an insurer's business and other factors, however, it may be appropriate and prudent for the board to establish formal policies with respect to additional risk areas.
- This guideline is not specifying the details of the policies that should be put in place for any particular risk area as such matters are the sole responsibility of the board of each company and will be a function of the unique risk characteristics of the insurer.
- If ISD is of the view that additional policies are required or that certain policies as approved by the board do not adequately address important areas of risk, ISD will request the board to make improvements.
- The effectiveness of an insurer's risk management program will be an important determinant in the ISD risk based assessment for each company.

2.3. Role of Board of Directors

The board of directors of an insurance company:

- is ultimately responsible for the company's risk management policies and practices.
- is usually charges management with developing and implementing risk management programs
- is responsible for ensuring that risk management programs remain adequate, comprehensive and prudent, subject to board oversight.
- is responsible for, at a minimum, putting in use a risk management program for inherent and significant risks.
- needs to have a means of ensuring that material risks are being appropriately managed. This is normally done through periodic reporting by management and an audit function. The reports should provide sufficient information to satisfy the board of directors that the company is complying with its management policies, including the risks covered by this guideline.

- reviews the content and frequency of management's reports to the board or to its committee;
- reviews with management the quality and competency of management appointed to administer the risk management policies; and
- ensures that the audit function regularly reviews operations to assess whether or not the company's risk management policies and procedures are being adhered to and confirms that adequate risk management processes are in place;
- reviews and approve management's risk philosophy and the risk management policies recommended by the company's management;
- reviews periodically, but at least annually, management reports demonstrating compliance with the risk management policies.

2.4. Role of Management

Specific management responsibilities will vary from one company to another. However, where appropriate, management at each company is responsible for:

- developing and recommending risk management philosophy and policies for approval by the board of directors;
- establishing procedures adequate to the operation and monitoring of the management program;
- implementing the risk management program;
- ensuring that risk is managed and controlled within the relevant management program;
- ensuring the development and implementation of appropriate reporting systems to permit the effective analysis and the sound and prudent management and control of existing and potential risk exposure;
- ensuring that an audit function will review regularly the operation of the risk management program;
- developing lines of communication to ensure the timely dissemination of management policies and procedures and other management information to all individuals involved in the process; and
- reporting to the board, or to a committee thereof, on the management program as comprehensively and frequently as required by the board of directors.

2.5. Inherent and significant risks - Definition

Each insurer is unique in terms of size, complexity and risk characteristics. The actual policies and procedures adopted by boards of directors will reflect these differences. Specific minimum standards for inherent and significant risks have been prepared by ISD, which comprises:

- a) **Credit risk:**
Includes bonds and others fixed income default risk, derivatives counter party, loans and insured debts, and trade debtors are among others.
- b) **Market risk:**
Stocks and others variable income investments price volatility risk, real state, changes in interest rates and reinvestment risk.
- c) **Liquidity risk:**
Volatility and mismatch between the current resources and current obligation of the company.
- d) **Underwriting risk:**
Under priced products risk or insufficient premium and weakness in subscription process (risk acceptance). The development of new products is considered an increasing factor of this risk, but not a risk itself.
- e) **Technical Reserves risk:**
Risk of holding of insufficient technical reserves by the company such as unearned premium provision, outstanding claims etc.
- f) **Operational and Technological risk:**
Risk of loss as a result of problems in systems, operational process and company management. It includes IT system risks.
- g) **Contagion and Related Party Risk:**
Risk of loss from contagion (group's problems) or transactions with related parties.
- h) **Reinsurance risk:**
Insurers, especially general insurers, often rely heavily on their reinsurers for claim reimbursement. Among others, the credit risk arising in the reinsurance area can be very significant, making it critically important for insurers to establish formal policies with regard to the selection of reinsurers. the use of reinsurance in capital management, the timing of payments of reinsurance premiums and claims in liquidity management the relationship between the reinsurance program and pricing and underwriting management, are among the factor to be considered in the reinsurance risk management process.

3. Risk Management Guideline

3.1. Credit Risk

3.1.1. Introduction

- Credit risk is the risk of financial loss, despite realization of collateral security or property, resulting from the failure of a debtor to honor its obligations to the company.
- Credit risk management is the process of controlling the impact of credit risk-related events on the company. This management involves identification, understanding, and quantification of the degree of risk of loss and the consequent taking of appropriate measures.
- The area of credit risk includes default risks related to an insurer's portfolio of bonds (credit through investment) and other fixed income investments, counter party risk on derivative contracts and the risk of default on loans or insured debts and trade debtors.
- International experience has shown that adherence to sound credit granting policies and procedures go hand in hand with financial soundness. Failure to adhere to these policies and procedures is often a source of weakness in any financial institution.
- The major risk that arises from a weakening of the credit portfolio is the impairment of capital or liquidity. For most companies, extending credit through investment and lending activities comprises an important portion of their business. Therefore, the quality of an institution's credit portfolio contributes to the risks borne by policyholders (liquidity) and shareholders (capital impairment).
- Credit risk management should be conducted within the context of a comprehensive business plan and should not be managed in isolation from other considerations, such as asset/liability management.

3.1.2. Typical areas of concentration for credit risk:

- a) **Investing/lending activities:**
Where credit is extended, almost always with collateral (e.g. Bond). Of course when making investments in any bonds, debentures or other evidences of indebtedness, the insurer is taking on a credit risk. Clearly, such investment area is a major source of credit risk for insurers.
- b) **Trade debtors/Financing of premiums:**
There is the credit risk arising from the fact that policyholders may not remit premiums on a timely basis, whether or not there is a premium-financing program in place and whether or not the business is written through an intermediary.

c) **Reinsurance:**

Insurers, especially general insurers, often rely heavily on their reinsurers for claim reimbursement. The credit risk arising in the reinsurance area can be very significant, making it critically important for insurers to establish formal policies with regard to the selection of reinsurers.

3.1.3.Credit Risk Management Program

Managing credit risk is a fundamental component in the safe and sound management of companies. Sound credit risk management involves establishing a credit:

a) **Risk philosophy**

- ✓ Policies and procedures for prudently managing the risk/reward relationship across a variety of dimensions, such as quality, concentration, currency, maturity, collateral security or property and type of credit facility.
- ✓ Although credit risk management will differ among companies, a comprehensive credit risk management program requires:

- Identifying existing or potential credit risks to which the company is exposed, on or off balance sheet, in conducting its investment and lending activities and developing and implementing sound and prudent credit policies to effectively manage and control these risks;
- Developing and implementing effective credit granting, documentation and collection procedures;
- Developing and implementing procedures to effectively monitor and control the nature, characteristics, and quality of the credit portfolio; and
- Developing processes for managing problem accounts.

b) **Credit Risk Philosophy**

- ✓ The foundation of an effective credit risk management program is the establishment of a credit risk philosophy. A credit risk philosophy is a statement of principles and objectives that outlines:
 - A company's tolerance of credit risk and will vary with the nature and complexity of its business,

- The extent of other risks assumed, its ability to absorb losses and the minimum expected return acceptable for a specific level of risk.

c) Credit Risk Management Policies

- ✓ An effective credit risk management program requires:
 - The identification and quantification of the risks inherent in a company's investment and lending activities, the development and implementation of clearly defined policies.
 - These policies should be formally established in writing and set out the parameters under which credit risk is to be controlled.

d) Credit Risk Measurement

- ✓ Measuring the risks attached to each credit activity permits the determination of aggregate exposures to counter parties for control and reporting purposes, concentration limits and risk/reward returns.
- ✓ The establishment of a system for the rating of credit forms a fundamental part of the measurement process.
- ✓ In developing a credit risk management program:
 - The company should consider the extent to which credit risk in any part of a company's operations could impact the company as a whole.
 - Credit policies establish the framework for the making of investment and lending decisions and reflect a company's tolerance for credit risk.
 - To be effective, policies (as revised from time to time in light of changing circumstances) should be communicated in a timely fashion, and should be implemented through all levels of the organization by appropriate procedures.

e) Credit Policies Need to Contain:

- ✓ a description of general areas of credit-related activities;
- ✓ clearly defined and appropriate levels of delegation of decision-making approval authority and

- ✓ portfolio concentration limits.

These policies need to be developed and implemented within the context of credit risk management procedures that ensure all credit dealings are conducted in accordance with prudent business practices.

3.1.4.General Areas of Credit

- The general areas of credit in which a company is prepared to engage usually specify:
 - ✓ The type of credit activity,
 - ✓ Type of collateral security or property,
 - ✓ Geographic sectors on which a company may focus.

3.1.5.Approval Authorities

- Clearly defined and appropriate levels of authorities for approval help ensure that:
 - ✓ credit decisions are prudent,
 - ✓ That the integrity and credibility of the credit process is maintained,
 - ✓ That the risk is acceptable given the expected return.
- The degree of delegation of authority will depend on a number of variables, including the:
 - ✓ company's risk philosophy;
 - ✓ qualifications of lending officers;
 - ✓ quality of the credit portfolio;
 - ✓ types of risks being assessed; and
 - ✓ timeliness of market responsiveness required.
- Authorities may be absolute, incremental or a combination thereof and may also be individual, pooled, or shared within a committee. The delegation of authority needs to be clearly documented, and should include:
 - ✓ the absolute and/or incremental approval authority being delegated;
 - ✓ the officers, positions or committees to whom authority is being delegated;
 - ✓ the ability of recipients to further delegate risk approval; and
 - ✓ the restrictions, if any, placed on the use of delegated risk-approval.
- Approval limits should relate to some combination of:
 - ✓ type of credit activity;
 - ✓ credit rating;
 - ✓ size;

- ✓ credit concentration;
- ✓ type of collateral security or property;
- ✓ liquidity of investment; and
- ✓ quality of the covenant package.

3.1.6.Portfolio Concentration Limits

- Credit concentration may occur when a company's portfolio contains an exposure to, amongst other things:
 - ✓ a single counter party or associated counter parties;
 - ✓ an industry;
 - ✓ type of collateral security or property; or
 - ✓ a geographic region.

- Excessive credit concentration is contrary to sound principles as it exposes a company to adverse changes in the area in which the credit is concentrated, and to collateral security or property impairment.

- Sound and prudent portfolio management and control involve the management of concentration risk by developing and implementing policies and procedures to ensure the diversification of the credit portfolio. Credit exposure limits should:
 - ✓ be stated clearly;
 - ✓ include goals for portfolio mix; and
 - ✓ place exposure limits on single counter parties and associated counter parties, key industries or economic sectors, geographic regions, etc.
 - ✓ Determination of whether or not concentration is excessive is a matter of judgment. In circumstances where a company's investment or loan portfolio is excessively concentrated, a company should take steps to diversify its credit portfolio.
 - ✓ Single counterparty and associated counterparty groupings need to be reviewed regularly.

3.1.7.Credit Granting, Documentation and Collection Process

- Credit risk is the risk of financial loss, despite realization of collateral security or property, resulting from the failure of a debtor to honor its obligations to the company.

- To minimize its exposure to loss through default or failure to obtain adequate collateral security or property,

- Each company should give proper consideration to, and conduct an assessment of, each credit prior to the approval or the disbursement of funds,

- Ensure that credits are appropriately documented,
- These procedures to evaluate and document each credit proposal need to be accompanied by clearly defined procedures for collection and regular monitoring.

a) Evaluating Credit Proposals

- To develop and maintain a sound credit portfolio, each company should have a prudent and effective formal evaluation process that provides for an independent and objective assessment of credit proposals.
- Sufficient analysis should be made to properly assess the borrower's ongoing financial viability and willingness to repay, and, where applicable, the adequacy and liquidity of collateral security or property pledged.
- A sound credit process is an effective means of ensuring that credit risks are appropriately analyzed and reviewed, and is within the parameters of the company's credit policies. The details of the analysis, however, will vary with the type of credit activity the company engages in.

b) Credit Documentation

- To assist a company in conducting credit evaluations and reviews and ensuring that assets are soundly and appropriately valued, each company should maintain credit files. Each credit file should contain:
 - ✓ Identity and assessment of the borrower,
 - ✓ a signed authorization and the rationale for granting the credit;
 - ✓ up-to-date financial statements, as may be appropriate,
 - ✓ evidence for condition and ability to repay;
 - ✓ the terms and conditions of the credit, including the use of proceeds;
 - ✓ a description and evaluation of the collateral;
 - ✓ the history of the credit; and
 - ✓ evidence as to the method of pricing of the credit.

c) Legal Documentation

- In developing and maintaining a sound credit portfolio, the terms of each credit should be adequately and accurately documented. Inadequate, incomplete, or unenforceable legal documentation

could lead to non-recovery of funds. Enforceability documents should conform to the credit authorized and should include, where appropriate, such legal documents as:

- ✓ Memorandum and articles of Association,
- ✓ Prospectuses,
- ✓ instruments evidencing indebtedness;
- ✓ collateral security or property registration documents; and
- ✓ opinions on enforceability,
- ✓ any other relevant documents.

d) Credit Collection Process

- Companies should establish procedures governing the collection of principal, interest and fees to ensure that such payments are received on a timely basis, in accordance with the terms of repayment, and are appropriately recorded.

e) Arrears Management

- Although most credits are ultimately repaid in full, it is recognized that companies are exposed to risk of default and, therefore, some credit losses may be expected.
- A reduction in credit quality needs to be recognized at an early stage when there are still a number of strategic options open to the company in managing its default risks.
- These options may include renegotiation of the terms of the credit, reorganization or liquidation of the borrower, or realization of collateral security or property, in order to minimize potential loss to the company.
- Recovery efforts require a well-conceived strategy and timetable.
- Each company should establish appropriate procedures that are not under the sole control of the credit-granting function for recognition of income and impairment and to ensure that the credit portfolio is properly valued and probable losses are adequately accounted for.

3.1.8.Credit Portfolio Monitoring and Control

- Failure to establish adequate procedures to effectively monitor and control the credit function within established guidelines can result in significant other costs, in addition to credit losses.

- Compromising credit policies and procedures is another major cause of servicing costs and credit losses.
- Accordingly, each company needs to develop and implement procedures to identify, monitor and control the characteristics and quality of its credit portfolio.
- These procedures need to define prudent criteria for identifying and reporting potential problem credit exposures to ensure that they are identified for more frequent review, followed up with appropriate corrective action, classified as below standard where appropriate, and that provisions are made where necessary.

3.1.9.Credit Categorization

- Categorization of the credit portfolio by type of credit activity, credit rating, regular review of individual and groups of credits within the portfolio, and internal credit audits are integral elements of effective and prudent portfolio monitoring and control and should include current relevant information about all debtors.
- Regular review of ratings provides an effective tool for monitoring the level and trends in the quality of individual credits and the credit portfolio by highlighting credits or segments of the portfolio that warrant special attention.

a) Portfolio Characteristics

In order to track portfolio diversification characteristics, each company needs to have a system to enable credits to be grouped by characteristics such as type of credit activity, ranking by size of counterparty credit exposures, credit ratings, type of collateral security or property, type of industry, and geographic regions.

b) Credit Rating Systems

Credit ratings provide an effective tool for pricing risk and return, monitoring overall portfolio creditworthiness, determining minimum credit standards, and determining conformity with minimum company credit standards.

Each company needs to have a credit rating system that uses objective measures and rates credits accordingly. Each credit exposure should have a credit rating attached at the time the credit is granted. All credit ratings should be reviewed systematically and changed when appropriate. Internal credit rating systems should be based on best industry practice and should be broadly consistent with public rating systems.

The credit rating system will enable the company to classify each credit exposure as follows:

- ✓ satisfactory;
- ✓ especially mentioned;
- ✓ below standard; and
- ✓ loss, or such other classification systems as may be prescribed from time to time by ISD.

3.1.10. Credit Review and Reclassification

- Companies need to regularly monitor the status of borrowers and re-evaluate individual credits and commitments, and their credit ratings.
- Failure to do so can result in an undetected deterioration of the credit portfolio.
- Accordingly, the credit risk management program of each company should include procedures governing the regular formal review and, where applicable, the re-rating of credits.
- Credit review systems should ensure that credit quality and, where applicable, underlying collateral security or property is being monitored on an on-going basis.
- The nature, complexity and degree of analysis and the quantity of credits re-evaluated under a credit review process will vary with the type of credits in the portfolio.
- Each credit should be reviewed regularly, with the frequency of review reflecting the perceived risk.
- Common objectives of effective credit review systems include:
 - ✓ ensuring that the company is aware of debtors current financial condition;
 - ✓ ensuring that collateral security or property is adequate and enforceable relative to debtors current circumstances;
 - ✓ ensuring that credits are in compliance with their margins;
 - ✓ providing early identification and classification of potential problem credits; and
 - ✓ providing current information regarding the quality of the credit portfolio.

3.1.11. Credit Audits

- Credit audits should be conducted to review the company's compliance with credit risk management policies and procedures. Assessments should randomly test all aspects of credit risk management in order to determine that:

- ✓ credit activities are in compliance with the company's credit and accounting policies and procedures;
- ✓ credits exist, are duly authorized, and are accurately recorded on the books of the company;
- ✓ credits are rated in accordance with the company's policies;
- ✓ credit files are complete;
- ✓ potential problem accounts are being identified on a timely basis; and
- ✓ credit risk management information reports are adequate and accurate.
- ✓ Assessments of the credit risk management activities should be presented to the company's board of directors on a timely basis for review.

3.1.12. Conflict of Interest, Self-Dealing and Confidentiality

- Each company needs to have in place procedures to address conflicts of interest and self-dealing and to preserve the confidentiality of its clients.

3.2. Market Risk

3.2.1. Definition

- Market risk is the exposure of a company to the effect of price changes on the market value of those elements of the company's portfolio of investments, both on- and off-balance sheet, Price changes may occur because of a number of factors, such as those solely related to specific investment or to the portfolio of investments in general,
- The effect of the price change is a function of the size of the investments position, and the degree of price movement between the purchase date and the date of subsequent re-evaluation or sale, as the case may be.

3.2.2. Investments Portfolio Management Program

- Managing the investment portfolio is a fundamental component in the safe and sound management of a company,
- Sound investment portfolio management involves prudently managing the risk/reward relationship and controlling investment portfolio risks across a variety of dimensions, such as quality, portfolio concentration/diversification, maturity, volatility, marketability, type of and the need to maintain adequate liquidity,
- Although the particulars of investment portfolio management will differ among companies depending upon the nature and complexity of their investments activities, a comprehensive investment portfolio management program requires:
 - ✓ establishing and implementing sound and prudent policies to effectively manage the investments portfolio, investments activities and position risk;
 - ✓ developing and implementing effective investments portfolio management processes governing investments investment decision-making and authority; and
 - ✓ developing and implementing comprehensive procedures to effectively monitor and control the nature, characteristics, and quality of the investment portfolio and the extent of position risk assumed.

3.2.3. Investment Portfolio Management Policies

- The foundation of an effective investment portfolio management program is the development and implementation of clearly defined policies, formally established in writing, that set out the investment portfolio management objectives of the company and the parameters under which investment activities are to be undertaken and controlled.

- Each company needs to establish explicit and prudent investment portfolio management objectives governing:
 - ✓ the extent to which the company is willing to assume position risk;
 - ✓ general areas of investment activities in which the company is prepared to engage or is restricted from engaging, including the company's policy with respect to acquiring securities of related parties;
 - ✓ minimum quality and rate of return expectations for the securities portfolio;
 - ✓ the selection of investment dealers and other counterparties with whom the company is authorized to deal or is restricted from dealing with; and
 - ✓ Investments portfolio concentration and exposure limits,
 - ✓ Investments portfolio management objectives reflect a company's risk philosophy, codify investment criteria, establish the foundation for the development of investments portfolio management strategies, and provide the basis for monitoring portfolio characteristics and measuring portfolio performance. Investment portfolio objectives provide overall parameters governing investment decisions by describing the broad purpose and goals of investments,
 - ✓ Investments portfolio objectives assist in ensuring that investments are sound, prudent, and that the investments portfolio risk is acceptable given the expected return.

3.2.4. Investment Portfolio Management Philosophy

- The investment portfolio management philosophy is a statement about the willingness of a company to engage in investment activities and to assume position risk. The investment portfolio management philosophy will vary:
 - ✓ with the nature and complexity of a company's business activities,
 - ✓ liquidity management needs,
 - ✓ the extent of other risks assumed and,
 - ✓ its ability to absorb potential losses.

3.2.5. General Areas of investment Activities

- A statement of the general areas of investment activities in which a company is prepared to engage usually specifies types of investment, industry or geographic sectors in which a company may focus its investment activities, or may establish constraints on company's investment activities. This statement should include the company's policy with respect to acquiring investment from, and of, related

parties, and in situations of potential conflict of interest. To assist in ensuring that specific investments are within permitted areas of investment activities, and meet the company's investment portfolio management objectives, a company should consider maintaining a list of investment categories that the company is authorized, or alternatively not permitted, to engage in (or with).

3.2.6. Investment Portfolio Quality and Return Objectives

- Objectives governing the quality of investment that may be held in investment portfolio are usually stated in terms of minimum acceptable investment rating (such as those established in-house or by independent rating agencies. Objectives respecting the acceptable return for a portfolio of investment are usually stated in terms of return on investment and should consider the company's cost of funds and effective after-tax return on investment.
- Individual investment selection should be made taking into consideration the overall quality and return objectives established for the portfolio. In this context, although there may be certain investment that do not by themselves meet the portfolio risk/return criteria, they may still yield an appropriate overall return when combined with other investments.

3.2.7. Selection of Investment Dealers and Other Counterparties

- It is important that companies have sufficient confidence in the ability of the investment dealers and other counterparties with whom they are dealing with to fulfill their commitments. Moreover, some companies may rely on the expertise and advice of an investment dealer for recommendations about proposed alternatives and portfolio strategies and for the timing and pricing of investment transactions. In this context, except in situations in which a company settles securities transactions with counterparties on a value for value basis, each company needs to:
 - ✓ establish in writing sound and prudent selection and retention criteria for investment dealers and other counterparties;
 - ✓ maintain a list of investment dealers and other counterparties with whom they are authorized to conduct business; and
 - ✓ actively monitor exposure to investment dealers and other counterparties.

3.2.8. Investment Portfolio Concentration Limits

- Clearly defined and documented investments portfolio concentration limits ensure that the nature and level of a company's exposure in the form of either securities or credit positions is appropriately diversified and does not exceed sound and

prudent limits. Investments portfolio concentration occurs when a company's investments portfolio contains an excessive level of exposure to:

- ✓ one type or class of investment; or
- ✓ investment in single and groups of associated parties.

- Excessive concentration is contrary to the sound investment principle of adequate diversification and renders a company vulnerable to adverse price changes in the area where exposures are concentrated.
- Determining whether or not an undue concentration risk exists is a matter of judgment.
- As with other aspects of financial management, a trade-off exists between risk and return.
- The objective of investment portfolio management need not necessarily be the complete elimination of exposure to changes in market prices of investment. Rather, it should be to manage the investment portfolio's risk and return and the impact of price changes within self imposed limits after careful consideration of a range of possible market price environments.
- Investment portfolio diversification policies must establish sound and prudent aggregate and individual exposure limits for each type or class of investment. Usually, limits by class of investment include limits for how much of the portfolio should be made up of specific types of investment such as equities and the portfolio concentration by geographic and industrial sector.
- Such limits need to be established in the context of the company's aggregate exposure to a single investment type and in a group of associated parties in terms of both investment and credit exposures. The management of such aggregate exposures is usually done at a level senior to investment traders and lending personnel so as to ensure that appropriate "firewalls" are maintained between the investments portfolio and credit risk management areas of the company.
- Investment concentrations by single or associated parties need to be reviewed regularly to ensure that prior considerations have not changed to an extent that warrant reclassification. Investment portfolio concentration limits are usually defined either in absolute value or volume terms or in terms of a company's capital or assets.

3.2.9. Investment Portfolio Management Process

- To develop and maintain a sound investment portfolio, each company must have:

- ✓ an effective formal evaluation process that provides for an objective analysis and assessment of investment proposals; and
- ✓ clearly defined, prudent and appropriate levels of delegation of investment transaction approval authority, formally established in writing.

3.2.10. Investment Analysis and Assessment

- Prudence suggests that investment decisions be made only after careful examination and consideration of several areas including:
 - the company's investment portfolio management policies, and other corporate objectives and policies, such as the nature of the company's liabilities and the need to maintain adequate liquidity;
 - potential risks and returns related to a particular investment in the overall context of the company's investments portfolio management policies, the composition of the investment portfolio and the reasonable expectation of a fair return or appreciation given the nature of the investments, and the risk of loss or impairment;
 - current and projected regulatory and economic/financial environment under which investment transactions are made; and investment alternatives.

3.2.11. Investment Transaction Approval Authorities

- Clearly defined and appropriate levels of investment transaction authority help to ensure that a company's investment activities are appropriately undertaken and that investment positions do not exceed the limits established under its investment portfolio management policies.
- Approval limits may relate to type of investments, size, maturity, or other criteria, such as the retention or delegation of voting rights acquired through securities. Authorities may be absolute, incremental or a combination thereof, and may also be individual, pooled, or shared within a committee.
- The delegation of authority needs to be clearly documented, and should include:
 - ✓ the absolute and/or incremental investments transaction approval authority being delegated;
 - ✓ the units, individuals, positions or committees to whom investment transaction authority is being delegated;

- ✓ the ability of recipients to further delegate approval authority; and
- ✓ the restrictions, if any, placed on the use of delegated authority.
- ✓ The degree of delegation of investments transaction authority will depend on a number of variables including:
 - the company's investment portfolio management objectives and the overall risk philosophy;
 - the quality of the investment portfolio;
 - the ability of the company to absorb losses;
 - the size and types of investment and the complexity of risks being assessed; and
 - the experience and ability of the individuals responsible for carrying out the investment portfolio management activities.

3.2.12. Investment Portfolio Management Monitoring Procedures

- Each company needs to develop and implement effective and comprehensive procedures, accounting policies and information systems to monitor and manage the characteristics and quality of its investment portfolio. These procedures should be appropriate to the size and complexity of the company's investment activities and need to include:
 - ✓ systems to measure and monitor investment positions;
 - ✓ controls governing the management of the investment portfolio;
 - ✓ independent audits.

3.2.13. Investment Portfolio Monitoring

- Managing investment activities requires a clear understanding of the nature and characteristics of the investment portfolio and investment positions. To make these determinations, each company needs to ensure that:
 - effective information systems are developed and used to appropriately record, and regularly monitor and evaluate the investment portfolio;
 - effective and appropriate quality and performance criteria are developed and implemented, and that the portfolio is regularly assessed against these criteria; and

- appropriate and conservative accounting policies and procedures are developed, documented and implemented for:
 - ✓ properly classifying and carrying investment on the books of account of the company; and
 - ✓ recognizing income related to such investment.
- Regular evaluations of the investment portfolio should be carried out so as to provide an effective means of ensuring that portfolio performance and quality are meeting the company's investment portfolio management policies and objectives, and that the portfolio is not unduly concentrated by type of security, and by single and associated groups.

3.2.14. Investments Portfolio Management Controls

- Sound investments portfolio management dictates that effective procedures be established and followed relative to the execution of investment transactions decisions and the management/ custody of investment.
- Effective procedures and controls ensure that investment activities are in compliance with the company's investments portfolio management policies and provide safeguards to protect a company from potential losses by ensuring that unauthorized exposure does not occur from improper or uncontrolled investment activities. Although the controls over investment activities will vary among companies depending upon the nature and extent of their activities, the key elements of any investment portfolio management control program are well-defined guidelines governing:
 - organizational controls to ensure that there exists a clear and effective segregation of duties between those persons who:
 - ✓ authorize, initiate or supervise investment activities; and
 - ✓ are responsible for operational functions such as the physical custody of investment, or arranging prompt and accurate settlement of investments transactions, or account for investment activities;
 - procedural controls to ensure that:
 - ✓ investments are properly recorded and accounted for by the company;
 - ✓ investments transactions are settled in a timely and accurate manner;
 - ✓ investments are appropriately safeguarded,
 - ✓ unauthorized investment activity is promptly identified and reported to management; and
 - ✓ controls to ensure that investments activities are monitored frequently against the company's investment portfolio management policies and risk limits, and excesses reported.

- Moreover, each company needs to ensure that employees conducting investment trading activities on behalf of the company do so within a written code of conduct or guideline governing investments dealing.
- Such a guideline or code of conduct should provide guidance respecting confidentiality, trading with related parties and transactions in which potential conflicts of interest exist.
- Each company should ensure that these guidelines are periodically reviewed with all investment portfolio management personnel.

3.2.15. Internal Audits

- Internal Audits provide an objective assessment of the investments portfolios' existence, the integrity of the investments portfolio management process, and promote the detection of problems relating thereto. Each company should use them to ensure compliance with, and the integrity of, the investments portfolio management policies and procedures.
- Internal audits should, over a reasonable period of time, test the company's investments portfolio management activities in order to:
 - ensure that investments activities are in compliance with the company's investments portfolio management policies and procedures, and with the laws and regulations to which these activities are subject;
 - ensure that investments transactions are duly authorized and accurately and completely recorded on the books of the company;
 - ensure that recorded investments exist and are conservatively valued on the books of the company;
 - ensure that management has established suitably designed controls over investments positions and that such controls operate effectively; and
 - ensure the adequacy and accuracy of management information reports regarding the company's investments portfolio management activities.
- Assessments of the investments portfolio management activities should be presented to the company's board of directors on a timely basis for review.
- In arriving at specific policies, boards of directors should have in mind that in addition to the interests of shareholders, they have a duty of care and a fiduciary responsibility to their policyholders.

3.3.Liquidity Risk

3.3.1. Introduction

- Operating liquidity or cash management, covers the day-to-day cash requirements under normally expected or likely business conditions. Strategic liquidity considers liquidity needs on a longer-term basis and recognizes the possibility of various unexpected and potentially adverse business conditions. Strategic liquidity is a key consideration of asset/liability management because of its potential effect on the ultimate viability of the company.

3.3.2. Definition

- Liquidity is the availability of funds, or assurance that funds will be available, to honor all cash outflow commitments (both on and off-balance sheet) as they fall due. These commitments are generally met through cash inflows, supplemented by assets readily convertible to cash or through the company's capacity to borrow.
- The risk of illiquidity increases if principal and interest cash flows related to assets, liabilities and off-balance sheet items are mismatched.

3.3.3. Liquidity risk management program

- Managing liquidity is a fundamental component in the safe and sound management of companies,
- Sound liquidity management involves prudently managing assets and liabilities (on and off- balance sheet) to ensure that cash inflows have an appropriate relationship to the size of approaching cash outflows,
- Liquidity planning assesses potential future liquidity needs, taking into account various possible changes in economic, market, political, regulatory, and other external or internal conditions,
- In the case of general insurance the unpredictability of cash flow requirements, in terms of both quantum and timing of payment, will obviously have a significant impact in determining liquidity needs,
- Planning for liquidity needs involves identifying known, expected and potential cash outflows and weighing alternative business management strategies to ensure that adequate cash inflows will be available to the company to meet these needs,
- The objectives of liquidity management are:
 - honoring all cash outflow commitments (both on and off-balance sheet) on a daily and ongoing basis;

- avoiding excess funding costs realized through, for example, raising funds at market premiums or through the forced sale of assets; and
- satisfying statutory liquidity requirements, if any,
- Although the particulars of liquidity management will differ among companies depending upon the nature and complexity of their operations and risk profile, a comprehensive liquidity management program requires:
 - ✓ establishing and implementing sound and prudent liquidity policies; and
 - ✓ developing and implementing effective techniques and procedures to monitor, measure and control the institution's liquidity requirements and position.

3.3.4. Liquidity Policies

- Sound and prudent liquidity policies set out the sources and amount of liquidity required to ensure that liquidity is adequate to ensure the continuation of operations and to meet all applicable regulatory requirements.
- These policies should address both (i) operating liquidity and (ii) strategic liquidity and must be supported by effective procedures to measure, achieve and maintain liquidity.

3.3.5. Operating Liquidity

a) Definition:

Operating liquidity is liquidity required to meet a company's day-to-day cash outflow obligations. The policy should consider a time horizon of about one month. It should take into account the factors that influence liquidity needs as well as the various sources of liquidity.

b) Sources:

The company's policy with regard to liquidity management should set out the mix and priority in employing funding sources. These will take into account both the direct and indirect cost of such funds. Such funding sources include:

- liquid assets (i.e., cash, money market instruments, and other marketable instruments);
- bank lines of credit;
- premium income; and
- other borrowing.

- The potential for creating an interest rate risk should be considered.
- Holding assets in liquid form will often involve some loss of earnings relative to other investment opportunities. Nevertheless, the primary objective with respect to managing the liquid asset portfolio is to ensure its quality and convertibility to cash.
- Essentially, operating liquidity is adequate if the company's approaching cash inflows, supplemented by assets readily convertible to cash and by the company's ability to borrow, are sufficient to meet the approaching cash outflow obligations.

3.3.6. Strategic Liquidity

- The company's strategic liquidity requirement should take into account:
 - the economic and market conditions;
 - the regulatory and political environment;
 - consumer confidence in the industry and the company;
 - strength of the company and its ability to borrow when needed;
 - asset/liability management strategies;
 - product design and administrative procedures; and
 - concentration of risk.
- The liquidity policy should address the corporate objective in terms of its ability to withstand cash demand. This could be expressed in terms of the amount of liquid assets deemed sufficient to support potential cash demands under adverse conditions.
- The policy should include a borrowing policy which may be used to manage any cash flow shortfall while recognizing that borrowing may not be available when needed.
- The liquid assets will not only include the assets defined in the Operating Liquidity section but would also include any other assets where the cash may be realizable, over a certain period of time, even if at an economic loss.
- The liabilities should also be examined as to their liquid nature from the policyholders' point of view. Some products will not include any cash-out privileges, others will include various adjustments or no adjustments. Also, various settlement periods may be used. These product features should be reflected in the need for liquid assets.
- The liquidity position under various conditions should be monitored regularly and reported to the board of directors at least quarterly.

3.3.7. Liquidity Management and Control Procedures

- Each company needs to develop and implement effective and comprehensive procedures and information systems to manage and control liquidity in accordance with its liquidity policies. These procedures must be appropriate to the size and complexity of the company's activities.
- Internal audits should be used to:
 - ensure that liquidity policies and procedures are being adhered to;
 - ensure that effective controls apply to managing liquidity; and
 - verify the adequacy and accuracy of management information reports.
- Assessments of the liquidity management operations should be presented to the company's board of directors on a timely basis for review.

3.4.Liability Risk

3.4.1. Explanation of Terms

Underwriting and liability risk is the exposure to financial loss resulting from the selection and approval of risks to be insured, the adjudication of claims, and other related liabilities.

3.4.2. Underwriting and Liability Risks Management

The nature of certain life and health insurance products involves commitments by the company to provide financial obligations and insurance coverage for extended periods of time. Emerging economic, medical and legal experience, as well as the developments within the enterprise and its changing ability to withstand risk, requires ongoing review of its practices. International experience indicates that the quality of management of underwriting and liability risks goes hand in hand with financial soundness.

This guideline focuses on a company's responsibility for managing and controlling underwriting and liability risks. It is intended to cover all products issued, including life, health and accident on either a group or individual basis. It is not intended to imply that these risks can be managed in isolation from the capital management, investment, product design and pricing, or marketing policy of the company.

3.4.3. Underwriting and Liability Management Program

Managing underwriting and liability risk is a fundamental component in the management of safety and soundness of an insurer. Sound underwriting and risk management involves understanding the risk and prudently managing the company's risk/reward relationship.

Although the particulars of underwriting and liability risk management will differ among companies depending upon the nature and the complexity of their products and the manner in which they are marketed and serviced, a comprehensive underwriting and risk management program is required as a basic component and processes designed to quantify the risk exposure at various points in time over the insurance cycle, such as when:

- ✓ the company accepts insurance risks;
- ✓ material changes occur in insurance exposures for which underwriting, or limitation of risk is required;
- ✓ claims arise requiring approval;
- ✓ ongoing claim assessment is required; and
- ✓ the company's capacity to accept insurance risk changes in a material manner.

Companies must develop policies to effectively manage and control liability at these critical points in the insurance cycle.

Good risk management with regard to Underwriting and Liability Risk Management also requires:

- ✓ developing, documenting and implementing effective processes for underwriting, for management of product options, and for adjudication of claims; and
- ✓ developing and implementing comprehensive procedures to effectively monitor and control the nature and characteristics of the insurance risks assumed, or claims approved.

3.4.4. Underwriting and Liability Risk Management Policies

The foundation of an effective underwriting and liability risk management program is the identification of the existing and potential risks inherent in a company's underwriting and liability program, and the maintenance of clearly defined policies, formally established in writing, that set out the underwriting and liability management philosophy of the company and the parameters under which the risks are to be controlled.

Pressure for increased profitability, marketing considerations and technological advances has led to more innovative and creative products. The long term nature of certain products, the consequences of which are not being fully known at issue, represents a unique risk to the insurance industry.

Understanding the risks attached to the underwriting of each product and to the adjudication of claims permits the determination of aggregate exposures for control and reporting purposes.

Underwriting and liability risk management policies establish the framework for accepting applicants and claimants, and reflect the company's culture, marketing strategy and capacity to accept insurance risk. To be effective, risk management policies in these areas must be communicated in a timely fashion, be implemented through all levels of the organization by appropriate procedures and revised periodically in light of changing circumstances.

Especially for longer-term products such as life and permanent health, the company's actuary should have input into the processes and policy areas referenced below. This will help to ensure that potential areas of risk are not overlooked.

Underwriting and liability risk management policies need to contain:

- ✓ an underwriting and liability philosophy governing the extent to which the company is willing to assume liability and claims risk;

- ✓ groups of individuals and/or other classifications which the company is prepared to underwrite, or is restricted from underwriting;
- ✓ the type of investigation required prior to claim approval and review;
- ✓ clearly defined and appropriate levels of delegation of approval; and
- ✓ sound and prudent underwriting concentration limits.

a) Underwriting and Liability Risk Philosophy

The underwriting and liability risk philosophy is a statement of principles that outlines a company's:

- ✓ willingness to assume underwriting,
- ✓ product options,
- ✓ claim risk in the context of its capacity to accept insurance risk.

Such principles need to address the use of reinsurance and alternative approaches in the mitigation of such risks.

The philosophy will vary with:

- ✓ the nature and complexity of its business,
- ✓ the extent of the risk assumed,
- ✓ its ability to absorb losses and the minimum expected return acceptable for a specific level of risk.

b) Underwriting Classification

The underwriting classifications which a company intends to utilize or prohibit would usually be a function of all or some of the following parameters:

- ✓ the legal jurisdiction in which it will operate;
- ✓ the nature of the risk to be assumed;
- ✓ the applicable product;
- ✓ premium classifications;
- ✓ occupational characteristics;
- ✓ age, health and other personal characteristics of policyholders as appropriate;
- ✓ other coverage in effect; and
- ✓ other risk profiles on which the company may wish to place constraints.

c) Claims Requirements

The claims requirements establish the degree of investigation required to accept, or reject a claim, and usually specify:

- ✓ the legal jurisdiction of the claim;
- ✓ the nature of the insurance risk;
- ✓ the product which is applicable;
- ✓ the documentation and proof of loss required; and
- ✓ the occupational, financial, contractual or health characteristics on which the company may accept or reject a claim.

d) Product Options

Product options vary with the type of product. Individual insurance would normally address whether and on what terms the company would provide:

- ✓ reinstatements;
- ✓ settlement options;
- ✓ dividend options;
- ✓ policy replacements;
- ✓ products available under conversion or guaranteed insurance options; and
- ✓ other options made available to policyholders involving non-guaranteed terms.

Group insurance would normally address whether and on what terms the company would provide:

- ✓ alternative funding;
- ✓ cancellation and transfer of liabilities;
- ✓ reinstatement; and
- ✓ conversion or guaranteed insurance options for certificate holders.

e) Approval Authorities

Clearly defined and appropriate levels of authority for underwriting design and liability approval help to ensure that:

- ✓ such decisions are prudent and acceptable,
- ✓ the integrity and credibility of the process is fair, consistent and objective,
- ✓ the risk is acceptable given the expected return.

Approval limits may relate to size or:

- ✓ satisfaction that requirements regarding risk selection, claim approval, service and sales staff training, presentation and contract materials, meet requirements;

- ✓ satisfaction that systems and administrative procedures are in place; and
- ✓ satisfaction of corporate objectives.

Authorities may be absolute, incremental or a combination thereof and may also be individual, pooled or shared within a committee.

The delegation of authority needs to be clearly documented and should include:

- ✓ the authority being delegated;
- ✓ the officers or positions or committees to whom authority is being delegated;
- ✓ the ability of recipients to further delegate; and
- ✓ any applicable restrictions that would apply in the event of further delegation.

The degree of authority delegated will depend on a number of variables, including:

- ✓ the company's risk philosophy and culture;
- ✓ degree of market responsiveness required;
- ✓ type of risk being insured; and
- ✓ experience of underwriters or officers.

f) Underwriting and Liability Concentration Limits

Concentration occurs when a case being underwritten contains excessive exposure to:

- ✓ a geographic region;
- ✓ a type of product;
- ✓ a distribution system or facility;
- ✓ a single individual or group;
- ✓ a number of associated individuals or groups;
- ✓ an industry;
- ✓ specific health characteristics; or
- ✓ any other specific risk profile.

Diversification policies should:

- ✓ be stated clearly;
- ✓ include global goals for the business; and
- ✓ place limits on individuals and groups.

3.4.5. Underwriting and Liability Documentation

The company faces the risk of financial loss resulting from inappropriate risk selection and underwriting of risks, product options and/or inadequate claims management.

To minimize its exposure, the company must give proper consideration to, and conduct an assessment of,

- ✓ each insurance risk,
- ✓ change in product,
- ✓ claim prior to acceptance,
- ✓ disbursement of funds.

Dimensions such as:

- ✓ concentration,
- ✓ anti-selection,
- ✓ misrepresentation,
- ✓ adverse experience
- ✓ reinsurance need to be considered.

The procedures reflecting these and other important considerations in underwriting and claims management need to be clearly documented. This documentation needs to address the maintenance and implementation of procedures necessary to maintain adequate safeguards within the underwriting, product, claims and reinsurance management processes.

3.4.6. Evaluating Insurance Risks and Claims

Each company should have an effective formal evaluation process that provides for an independent and objective assessment of insurance risks and claims. In this context, where circumstances dictate, companies should consider the formation of specialist groups. A strong independent process is an effective means of ensuring an appropriate analysis and review.

Underwriting and product option procedures should capture:

- ✓ the overall process of risk evaluation;
- ✓ the necessary criteria of risk evaluation;
- ✓ the method of monitoring emerging experience;
- ✓ the use of reinsurance; and
- ✓ the controls in the process.

Claims management procedures should capture:

- ✓ the proper process of acquiring evidence with regard to claim evaluation;
- ✓ the overall process of claims management;
- ✓ the required proof of claim;

- ✓ the criteria for claims investigation;
- ✓ the claims payment procedures and controls; and
- ✓ the reinsurer participation in the claims process.

Reinsurance management procedures should capture:

- ✓ the overall process of reinsurance management;
- ✓ the reinsurance limits and treaties for a given product;
- ✓ the procedures of risk cession;
- ✓ the reinsurance cash flows administration and controls; and
- ✓ satisfaction that the reinsurer is adequately capitalized.

The underwriting and liability management program should contain the necessary provisions for updating these procedures to ensure their consistency with emerging claims experience and other contingency, or regulatory developments.

3.4.7. Underwriting and Liability Monitoring and Control

Establishing adequate procedures to effectively monitor and control the underwriting, product options and claims function within established guidelines has been found to be an effective method of limiting the financial exposure of companies. If the company is making use of a professional actuary, he or she should be involved in the underwriting and liability control aspects to assist with the identification of existing and potential exposures, as well as providing input as to the financial capacity of the organization to accept insurance risk.

Accordingly, a company needs to develop and implement comprehensive procedures and information systems to effectively monitor and control risk selection and claims approval. These procedures need to define prudent criteria for identifying and reporting potential problems, followed up with appropriate corrective action.

3.4.8. The Role of Reinsurance

Reinsurance is a critically important method by which insurers mitigate their underwriting and liability risks.(See 2.8 of this document)

3.5. Technical Provision Risk

Technical provision risk is that the company's liability to policyholders could be understated. Clearly from the perspective of financial safety and soundness, the concern is with possible understatement of liability because any such understatement can result in the insurer being unable to discharge all of its obligations to the public. Thus, focus will be given on controlling the risk of liability understatement.

Because of the different nature of technical provisions between life insurers and general insurers, the two types of businesses are treated separately.

3.5.1. Life Insurers

The nature of life and health insurance products involves commitments by the company to provide financial obligations and insurance coverage for extended periods of time. Emerging economic, medical and legal experience, as well as the developments within the enterprise and its changing ability to withstand risk, requires ongoing review of its practices.

This guideline focuses on a life insurer's responsibility for fulfilling appropriately providing for its actuarial liabilities under all policies of the company. It is not intended to imply that actuarial liability management can be considered in isolation from other areas of a company's sound business and financial practices, for example, underwriting risk management and reinsurance risk management.

a) Actuarial Liability Management Program

The proper management and monitoring of actuarial liabilities is a fundamental component of the safe and sound management of each life insurance company. It involves the use of professionally qualified actuaries – who have the training and experience required to prudently and conservatively establish a wide range of underlying assumptions, all of which will play a role in the determination of the actuarial liability.

The main assumptions underlying the determination of the actuarial provisions are summarized below:

- ✓ assumed rate of interest and margins to allow for mis-matching, defaults, pre-payments, calls etc. for present value calculations;
- ✓ future expense levels including provision for inflation;
- ✓ predicted claim expenses, i.e. future rates of mortality, morbidity, accidental death, sickness, recovery etc.; and

- ✓ future lapse rates, rates of election of options, e.g. renewability, convertibility etc..

There are other less significant assumptions that have to be made but suffice it to say that the particular assumptions selected by the actuary can make a tremendous difference in the estimate of the life insurer's actuarial liability.

b) Actuarial Assumption Management Program

In light of the foregoing, it requires every board of director to put in place a series of policies that will establish a framework for the purpose of ensuring that the assumption areas mentioned above, fall within a reasonable range of options. For example:

- ✓ With regard to the interest rate assumption, the board might indicate that the selected rate would never be higher than the current rate of interest payable on short to medium term government bonds, or some other index, unless specifically approved by the board. A more complex interest rate standard might be developed, as long as it provides for a reasonably prudent valuation of the liabilities;
- ✓ For future expense levels the board might indicate that the valuation should not assume a lower level of expenses than presently being incurred by the company, except with justification agreed by the board.
- ✓ For lapse rates, the board might indicate that the lapse rate used in the actuarial calculations should not deviate from the current lapse rates being experienced on the various policies being offered by the insurer.

With regard to any area that is the subject of actuarial assumptions, it is always possible that there could be extenuating circumstances, so the board would likely make any proposed "rule" subject to modification based on explanations received from the actuary.

A recommended procedure is for the actuary to discuss with the board at least twice per year. The purpose of the first discussion would be for the actuary to provide an overview of the main provisioning assumptions to be utilized in the current year's valuation of the liabilities. At the second discussion the actuary could review the valuation results, explaining any significant developments, changes from the previous year and so on. The board would also expect the actuary to describe the main sources of gains and losses being monitored by management and the process being followed

to review and update the assumptions being recommended to reflect emerging experience and any revised outlook for future trends.

c) Other Policies Related to Liability Management

For policies of health insurance and some other types of yearly renewable business sometimes underwritten by life insurers, the situation is quite similar to that described below for general insurers. Life insurers writing such lines of business should also review the sections below relating to general insurance.

3.5.2. General Insurers

For general insurers there are two main areas for technical provisioning: outstanding claims and unearned premiums. The provision for outstanding claims is a key determinant of a general insurer's financial position. Because it represents management's estimate of the amounts that will ultimately have to be paid to settle outstanding claims, it is critically important for the board of directors to monitor performance in this area.

It is incumbent upon a general insurer to respond to claims in a prompt and equitable manner and at a reasonable delivery cost to the company. The company also has an obligation to ensure that its estimates of losses reflect a reasonable estimate of the funds required to discharge all claims.

This guideline focuses on a general insurance company's responsibility for fulfilling its contractual obligations when a claim is presented, for providing reasonable loss estimates, and for managing and controlling the claim settlement processes. It is intended to cover claims liabilities in relation to all products issued, whether direct or reinsurance assumed. It is not intended to imply that claim liability management can be considered in isolation from other areas of a company's sound business and financial practices, for example, underwriting risk management and reinsurance risk management.

a) Explanation of Terms

i) Claims liability:

A claim liability is the contractual obligation to a policyholder for an insured loss based upon the terms of the insurance policy. Since the actual cost of a claim cannot be known until it is settled, estimates must be made. These estimates should reflect the expected full cost of settlement. Full cost of settlement includes all anticipated claim adjusting and legal costs. Estimates should of course also include a provision for Incurred But Not Reported Claims.

ii) Unearned Premium Liability:

An unearned premium can be thought of as the unexpired liability which on average will have to be paid out to cover claims and expenses in connection with business in force. For each policy we can expect that on average, an amount not in excess of the

premium will be required to pay claims and expenses likely to be associated with the policy. In reality of course, for any one policy, the premium may be insignificant compared to the claims and other expenses that ultimately have to be paid under that policy. For many other policies there will be no claims whatsoever. On average, though, the premium should be sufficient to cover the liability for future payouts under the policies and so the unearned premium is the estimate of this liability.

Another way of looking at the unearned premium is to consider that when the premium has been paid, the insurer has promised to provide coverage for a future period but at the date of issue, no service at all has been provided. If the policy were cancelled right away, theoretically the full premium would have to be refunded. In other words, the insurer has accepted a payment for future services and has a liability to the policyholder for the future services still to be provided. As insurance coverage is provided over the term of the policy, this liability for future service is being extinguished, i.e. the premium is being earned. (Note: The premium should be earned as insurance coverage is provided. In most cases the expectation of claim is uniform over the policy term and the premium is therefore earned on a straight line basis over time. This is not always the case, however, and the insurer's algorithms for unearned premium calculation should take account of any cases where premiums should not be earned evenly over the policy term.) At any point in time, the liability for future service to be provided under the remaining term of the policy is the unearned premium for that policy. The technical provision for unearned premiums is simply the sum of the unearned premiums for all outstanding policies as at the balance sheet date.

b) Claim Liability Management Program

Managing claim liabilities is a fundamental component of the safe and sound management of each general insurance company. It involves:

- ✓ verification of the contractual obligation,
- ✓ ascertaining the monetary value of the liability,
- ✓ settling of the obligation in accordance with the terms of the insurance policy, consistent with the statutes and regulations of the governing entities.

The particulars of managing claim liabilities may differ among companies depending upon the nature and the complexity of their products, the manner in which they provide claim services, and the laws and regulations. A comprehensive claim liability management program requires:

- ✓ establishing and implementing sound and prudent claim liability policies;
- ✓ developing, documenting and implementing appropriate and effective claim management and control procedures; and
- ✓ developing and implementing comprehensive procedures to effectively monitor and control claims liabilities.

c) Claim Liability Policies

Policies for the management of claim liabilities establish the framework for:

- ✓ processing claims presented to the company
- ✓ reflect the company's culture,
- ✓ service strategy,
- ✓ the applicable statutes and regulations.

To be effective, policies must be :

- ✓ documented,
- ✓ communicated in a timely fashion,
- ✓ implemented consistently
- ✓ revised when changing circumstances dictate.

When circumstances and practical considerations warrant, companies should consider the formation of specialty committee within the company, with appropriate segregation of duties.

Further, companies should consider appropriate segregation of duties between:

- ✓ the areas of pricing,
- ✓ underwriting and claim liability management.

A strong independent process is an effective means of ensuring an appropriate analysis and review.

Claim liability management policies need to contain:

- ✓ clearly defined and appropriate levels of delegation of authority;
- ✓ claim settlement procedures, documentation, and controls; and
- ✓ loss estimating procedures and guidelines.

d) Claim Settlement Procedures, Documentation and Controls

Claim settlement procedures, documentation and controls should include:

- ✓ the claim determination and investigation procedure and the criteria for accepting or rejecting a claim;
- ✓ the systems and work flows of the claim settlement process;
- ✓ the file documentation and reporting required for each step in the claim settlement process; and
- ✓ the controls in place to ensure that the claim process is meeting the objectives of the company and complies with the appropriate internal controls and statutory and regulatory requirements.

e) Loss Estimating

Loss estimates are vital to the fair presentation of the financial results and condition of a general insurance company. They are essential to making sound and prudent business decisions about the company's operations and strategies, and its ability to meet its financial obligations. Loss estimating procedures need to:

- ✓ document the requirements, conditions, and timing for establishing and reporting case reserves for specific losses and loss adjustment expenses; and
- ✓ provide adequate assurance that the total loss estimates established by management are expected to be sufficient to discharge all unpaid claims, both reported and unreported, as of any given valuation date.

The company may wish to involve its actuary, auditors or other professional advisors to establish loss estimating policies and procedures and to periodically evaluate the accuracy of the data and methodologies used in establishing loss estimates.

f) Claim Liability Monitoring and Control

Establishing adequate procedures to effectively monitor, analyze and control the claims liability management function within established guidelines has been found to be an effective method of limiting the financial exposure for companies. If there is an actuary's report on the financial condition of the company, it will provide an existing source to assist with the identification and monitoring of current exposures to the risk of inaccurate estimates of loss provisions.

In any case, it will be incumbent upon every insurer to set up specific procedures designed to test the adequacy of the claim provisions on ongoing basis. These procedures need to define prudent criteria for identifying and reporting potential problems, followed up with appropriate corrective action. Monitoring procedures might include:

- ✓ the use of internal audits to ensure compliance with claims liability management policies and;
- ✓ in the case of reinsurance companies, audits of ceding companies to ensure that claims are appropriate and in accordance with treaties in place.

An assessment of the claims management operation should be presented to the company's board of directors on a timely basis for review. This should include a comparison of how previous year's provisions have compared with the amounts that have ultimately had to be paid out to settle the claims (including all adjusting and other costs of settlement).

3.6.Operational and Technological Risks

3.6.1. Introduction

- Operational and technological risks can be defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.
- It may arise from a number of sources as follows:

(a) People:

Events that may result into substantial loss include frauds like intentional misreporting of positions, employee theft, insider dealings, robbery, forgery and damage from computer hacking. Some of the contributing factors are as follows:

- ✓ Lack of adequate skills and knowledge;
- ✓ Inadequate training and development;
- ✓ Improperly aligned compensation schemes and incentives;
- ✓ Lack of understanding of performance standards or expectations; and
- ✓ Inadequate human resource control (including supervision and segregation of incompatible duties)

(b) Internal processes and systems:

Business disruption and system failures such as hardware and software failures, telecommunication problems, and utility outages, data entry errors, incomplete legal documentation and vendor disputes are examples of operational risk resulting from internal processes and systems. Some of the contributing factors are as follows:

- ✓ Damage to physical assets;
- ✓ Inadequate or obsolete technology;
- ✓ Lack of proper documentation;
- ✓ Lack of or inadequate policies, procedures and controls;
- ✓ Poor management information system; and
- ✓ Lack of or inadequate contingent plans.

(c) External events:

Terrorism, vandalism, earthquakes, fires and floods are examples of events that may cause operational risk in a company.

It is clear that operational risk differs from other risks in that it is typically not directly taken in return for an expected reward, but exists in the natural course of corporate activity, and that this affects the risk management process. At the same time, failure to properly manage operational risk can result in a misstatement of an company's risk profile and expose the company to significant losses.

3.6.2. Board Oversight

- Board of directors has ultimate responsibility for the level of operational and technological risks taken by the company. The board of directors:
 - ✓ Should approve the implementation of company-wide framework to explicitly manage operational and technological risk as distinct risks to the institution's safety and soundness.
 - ✓ Should provide senior management with clear guidance and direction regarding the principles underlying the framework and approve the corresponding policies developed by senior management.
 - ✓ is responsible for establishing a management structure capable of implementing the company's operational and technological risk management framework.
 - ✓ Should clearly define and document delegation of authority;
 - ✓ Should establish clear lines of management responsibility, accountability and reporting. In addition, there should be separation of responsibilities and reporting lines between operational risk control functions, business lines and support functions in order to avoid conflict of interest.
 - ✓ Should review the framework regularly to ensure that the company is managing the operational and technological risks arising from external market changes and other environmental factors, as well as those operational risks associated with new products, activities or systems.

- The framework should be based on an appropriate definition, which clearly articulates what constitutes operational and technological risk in that company. The framework should cover the company's tolerance for operational and technological risk, as specified through the policies for managing this risk and the company's prioritization of operational and technological risk management activities, including the extent of, and manner in which, operational and technological risk is transferred outside the company. It should also include policies outlining the company's approach to identifying, assessing, monitoring and controlling/mitigating the risk. The degree of formality and sophistication of the company's operational and technological risk management framework should be commensurate with the company's risk profile.

3.6.3. Senior Management Oversight

- Senior management:
 - ✓ should translate the operational and technological risk management framework established by the board of directors into specific policies, processes and procedures that can be implemented and verified within the different business units.
 - ✓ should clearly assign authority, responsibility and reporting relationships to encourage and maintain this accountability and ensure that the necessary resources are available to manage operational risk effectively.
 - ✓ should assess the appropriateness of the risk management oversight process in light of the risks inherent in a business unit's policy.

- ✓ should ensure that institution activities are conducted by qualified staff with the necessary experience, technical capabilities and access to resources, and that staff responsible for monitoring and enforcing compliance with the institution's risk policy have authority and are independent from the units they oversee.
- ✓ should ensure that the institution's operational and technological risk management policy has been clearly communicated to staff at all levels in units that are exposed to material operational and technological risks.
- ✓ should also ensure that the institution's remuneration policies are consistent with its appetite for risk. Remuneration policies which reward staff that deviate from policies (e.g. by exceeding established limits) weaken the institution's risk management processes.

3.6.4. Policies, Procedures and Limits

a) General

- The institution should put in place an operational and technological risk management policy. The policy should, at minimum, include:
 - ✓ The strategy given by the board of the institution;
 - ✓ The systems and procedures to institute effective operational and technological risks management framework; and
 - ✓ The structure of operational and technological risks management function and the roles and responsibilities of individuals involved.

b) Outsourcing

- Corporations increasingly rely on external contractors to perform services they would otherwise provide themselves. Retaining external service providers, or outsourcing, can expose an insurer to more operational risks than would be the case when the services are conducted internally. Such operational risks include:
 - ✓ loss of control over the services;
 - ✓ overpayment for the services; and
 - ✓ interruption of service due to financial, catastrophic or other difficulties experienced by the external contractors.
- If an insurer relies on external contractors to provide it with services, the board must be satisfied that there are policies and procedures in place to:
 - ✓ Select capable and reliable service providers;
 - ✓ Monitor the providers' performance;
 - ✓ ensure high quality and reliable service from external contractors;
 - ✓ avoid any potential for contingent liability as a result of actions by the contractor;

- ✓ have a high degree of confidence that disruptions to the external contractor's business will not likewise cause business disruptions for the insurer and that the contractor has a business continuity plan.
- ✓ Enforce appropriate standards of service quality, accuracy, security, and response time;
- ✓ Ensure the quality and security of external services, including independent auditing and testing;
- ✓ Ensure that any contracts that include electronic delivery of products or services meet the insurer's own information technology (IT) standards for safety, security, and connectivity; and
- ✓ Ensure that the contractual arrangement provides ISD access to data and any other information to the same extent as would be the case if no outsourcing had been arranged.

c) **Technology**

- Most insurers are highly dependent on the quality and reliability of their management information and IT systems. Companies have been rendered insolvent, both by the catastrophic failure of key technology systems and also by system problems that have gradually but irrevocably eroded their profitability.
- In managing the risks in this area, the board of each insurer should make sure that the company has in place policies and procedures to address the following:

a. **The Security and Operation of a Management Information System**

- ✓ Establishment of internal controls that protect the accuracy and security of the company's management information system and processes;
- ✓ All transactions are recorded on an accurate, complete and timely basis;
- ✓ There is accurate and complete accounting information for all on balance sheet and off balance sheet activities;
- ✓ Protection of the integrity of the system hardware, software and data through appropriate access and process controls;
- ✓ The system generates an accurate, secure and reliable audit trail for all transactions; and
- ✓ There is reliable back up of data on an appropriate periodic basis.

b. **Technology Development and Maintenance**

- ✓ Establishment of an appropriate framework for technology development and maintenance, and processes for:
- ✓ Planning for future technology requirements consistent with business strategies and business plans;
- ✓ Identifying and evaluating technology solutions for business activities;
- ✓ Development and/or acquisition of software;
- ✓ Documentation, testing and implementation of software;
- ✓ Delivery and support, including identification and solution of problems.

c. **Safeguarding Premises, Assets and Records of Financial and other Key Information**

- ✓ Establishing internal controls that will ensure:

- ✓ Premises of the insurer are safeguarded, including reasonable measures to establish protection of management and staff from exposure to crime or injury;
 - ✓ Safety and protection of the insurer's assets; and
 - ✓ Safety of financial records and other key information.
- d. Disaster Recovery and Business Continuity Plans**
- ✓ Establishment of appropriate disaster recovery and business continuity plans, including:
 - ✓ Processes to deal with short term and long term business disruptions;
 - ✓ Nature, frequency and extent of testing, backup, recovery and contingency plans.
- e. Monitoring Controls**
- ✓ Establishment of appropriate controls to monitor adherence to operational risk policy, including:
 - ✓ Appropriate segregation of responsibilities and duties;
 - ✓ Routines for transaction verification and validation for error detection and fraud prevention;
 - ✓ Establishment of an independent internal audit function reporting directly to the board or to an audit committee of the board.
 - ✓ Receiving reports from external and internal auditors.

3.7. Contagion and Related Party Risks

3.7.1. Introduction

Contagion and related party risks are risk of loss from contagion (group's problems) or transactions with related parties. Parties are considered to be related if one party has either the ability to control the other party or exercise significant influence over the other party in making financial or operating decisions. Transactions with related parties can consist of a transfer of resources or obligations between related parties regardless of whether a price is charged.

Transactions that insurance companies have with related or affiliated corporations are also a source of risk in their own right. First of course, they may clearly facilitate contagion risk, as financially troubled group members borrow cash or otherwise seek to obtain financial support from the insurance company. When this occurs, the insurance company will be left holding lower quality assets, lowering its own financial strength.

Transactions with related parties also give rise to significant risks, however, even when the related parties are not having financial difficulties. When transactions take place at arm's length, the parties have negotiated the terms and each party is satisfied that the proposed transaction is a desirable one and in its best interests. Otherwise the transaction would not take place. But when transactions are not at arm's length and when one party actually controls or has significant influence over the other, international experience has shown that it is very difficult to arrive at a fair balancing of interests. The controlling party may *believe* that it has negotiated a transaction that is fair to its subsidiary insurance company, but when the insurer doesn't really have the power to negotiate strongly in its own best interest, it seems almost inevitable that its interests will be subordinated to those of the controlling or influential shareholder.

Insurance companies are supervised because they are accepting funds from the public and in return are undertaking obligations to provide future services. These services may not be provided for many years in the future, and the delivery – or non-delivery – of those services may have a highly significant impact on the future financial health of the policyholders. When, through contagion or through specific related party transactions, the risks of unsupervised corporations are transferred into the insurance company, the risk to policyholders is inevitably increased.

3.7.2. Risk Management Processes for Contagion and Related Party Transactions

Transactions with related parties can consist of a transfer of resources or obligations between related parties, regardless of whether a price is charged. To manage and control risks with regards to contagion and related party transactions, insurers should consider the following:

- ✓ Business relationships and transactions with related parties in which a member of the board or manager has an interest, should be held and performed at arm's length. As appropriate the board, internal audit function and compliance function should verify this is the case and
- ✓ The internal control system of the insurer should be adequately set up and functioning with respect to contagion and related party transactions,

- ✓ As a matter of good corporate policy and practice insurers should endeavor to minimize transactions with related parties.
- ✓ Prior board approval is required for any related party transaction that is in excess of some threshold level (1% of equity is a typical figure), with prior approval being subject to the following conditions:
 - a. The board is satisfied that the proposed transaction will be in the interests of the insurance company, i.e. that it will be beneficial and will not increase the risk profile of the company beyond what is considered acceptable by the board;
 - b. The board is satisfied that the transaction will be at fair market value. This may require some investigation in order to determine a figure or range for the fair market value.
 - c. The transaction will not cause the total exposure in respect of all existing related party transactions to exceed some board-approved threshold. (International rating agencies and other authorities often considers a maximum exposure level of 25% of equity.)
- ✓ The board should put in place procedures for the pre-approval of related party transactions and the nature and perceived effectiveness of those procedures.

3.8.Reinsurance

3.8.1. Introduction

Insurance companies purchase reinsurance to provide financial security, to increase their own capacity to underwrite insurance business, and to stabilize their underwriting results. Adherence to sound reinsurance risk management policies and procedures go hand in hand with financial soundness. Failure to adhere to such policies and procedures may lead to an increased risk level assessment. The major risks that arise from weakness in a company's reinsurance risk management program are the impairment of capital or liquidity.

Components of a company's reinsurance risk management program are also related to other areas of a company's sound business and financial practices. For example, companies need to consider the credit risks related to their reinsurance counterparties, the use of reinsurance in capital management, the timing of payments of reinsurance premiums and claims in liquidity management and the relationship between the reinsurance program and pricing and underwriting management.

3.8.2. Reinsurance Program

Each company should develop a comprehensive reinsurance program to address the objectives of its reinsurance risk management policy. In developing the reinsurance program, the company should identify its tolerance to risks in its underwriting book and consider which reinsurance arrangements (e.g., the use of quota share reinsurance, surplus treaties, excess of loss coverage or stop loss policies) are most appropriate to limiting risks above its tolerance level. The reinsurance program should be documented and approved by Insurance Supervision Directorate (ISD).

Although the particulars of reinsurance risk management will differ among companies depending upon the nature and the complexity of their underwriting books, a comprehensive reinsurance risk management program requires:

- ✓ identifying when reinsurance is required to limit a company's risk;
- ✓ selecting appropriate reinsurance counterparties and intermediaries to facilitate risk transfer;
- ✓ selecting appropriate reinsurance agreements;
- ✓ developing, documenting and recording effective processes for reinsurance activities;
- ✓ developing and implementing comprehensive procedures to effectively monitor and control the reinsurance activities.

3.8.3. Reinsurance Policies

Well-articulated policies, setting forth the objectives of a company's reinsurance risk strategy and the parameters in which this strategy is to be controlled are the foundation of effective

and prudent reinsurance risk management. These policies need to articulate the extent of the company's willingness to enter into reinsurance arrangements for purposes such as:

- ✓ limiting the exposure of the company to catastrophic losses;
- ✓ limiting exposure to a particular risk or category of risks;
- ✓ increasing the company's capacity to underwrite risks;
- ✓ other non-traditional forms of reinsurance.

A company's policies should also address the extent to which the company is prepared to enter into reinsurance arrangements with reinsurance companies that are rated at various levels by international rating agencies. In determining the above policies, companies should consider whether reinsurance risks are acceptable given the expected return.

3.8.4. Reinsurance Procedures

Each company needs to develop, implement and maintain appropriate and effective procedures to manage the extent and means by which it will mitigate risks through the use of reinsurance, including:

- ✓ the development of a reinsurance program;
- ✓ procedures to select and monitor reinsurance counterparties¹ and intermediaries, and to limit the concentration of risk² among counterparties;
- ✓ documentation of approval authorities;
- ✓ reinsurance contract documentation; and
- ✓ reinsurance administration.
- ✓ develop and implement comprehensive procedures and information systems to effectively monitor, analyze and control:
 - the approval of reinsurance counterparties;
 - the exposure to concentration in excess of approved limits;
 - the approval of reinsurance contracts; and ongoing administration of business reinsured.

A company's risk monitoring and control program should also involve the use of internal audits. An assessment of the reinsurance risk management operation should be presented to the company's board of directors on a timely basis for review.

¹ The selection of safe and sound reinsurance companies and intermediaries is fundamental to a company's well being. A company should therefore carefully select the counterparties with whom it does business. Reinsurance transactions involves the transfer of premium in exchange for the right to receive funds in the event of a claim; reinsurance often involves a company taking on substantial credit risk

² Concentration occurs when a company's reinsurance program contains significant exposure to one reinsurer or broker and their related parties.

