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Enabling poor rural people  
to overcome poverty

## Internal Control Framework for IFAD Investments

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## Abbreviations and acronyms

ALM	asset liability management
CFO	Chief Financial Officer
CFS	Controller’s and Financial Services Division
CM	cash management
FISCO	Investment and Finance Advisory Committee
FALCO	Investment, Finance and Asset Liability Management Advisory Committee
FRA	Financial Planning and Risk Analysis Division
IM	investment management
IPS	Investment Policy Statement
TRE	Treasury Services Division

## **Preamble**

1. IFAD's Investment Policy Statement, presented to the Executive Board at its 103rd session in September 2011, provides an overall framework for the management of IFAD investments.
2. In their discussion of this item, Board members raised several issues, including the need for further information on the internal control structures in place at IFAD, capacity development, the risk management framework proposed and the envisaged governance structure.
3. This paper, presented for information to IFAD's Audit Committee and Executive Board, addresses the above points.

# Internal Control Framework for IFAD Investments

## I. Overview of internal control best practices

1. Many more businesses are now systematically documenting, testing, evaluating and improving their internal control processes. One of the most complete and extensive models is the widely used Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Under the COSO framework, internal control is broadly defined as a process effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance, though not to guarantee, that business activities are efficient and effective, financial reporting is reliable, and applicable regulations and the entity's internal policies are complied with. This is achieved by ensuring the accuracy and reliability of data in compliance with policies and procedures. Internal controls therefore form an integral part of any organization's financial and business policies and procedures.
2. An effective internal control framework has five essential components:
  - (a) **Control environment:** Organizational values and culture; policies; organizational structure. The control environment is the foundation for all other components of internal control;
  - (b) **Risk assessment:** Identification and measurement of threats, and responses to them;
  - (c) **Information and communication:** Reliability, timeliness, clarity, usefulness;
  - (d) **Control activities:** The policies and procedures that help ensure that management directives are carried out; and
  - (e) **Monitoring:** Processes used to assess the quality of internal control performance over time.
3. This paper presents the proposed internal control framework strictly on IFAD's investment-related activities. Section II focuses on aspects of the control environment, specifically organizational structure, and roles and responsibilities of the various key players. Section III examines the other four components of the framework.

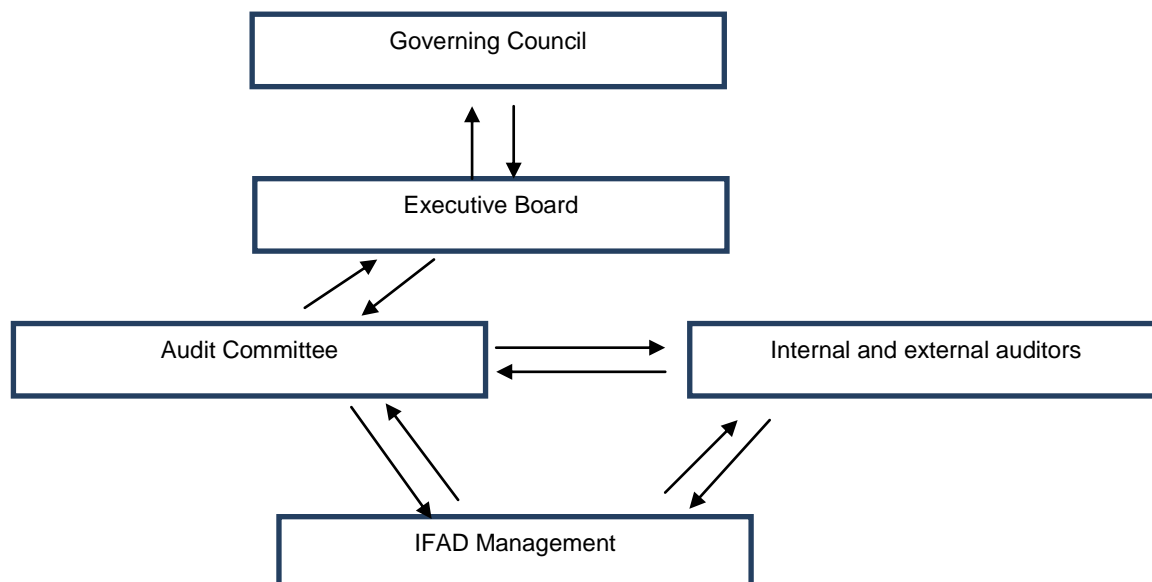
## II. Organizational structure, roles and responsibilities

### A. Players and their roles

4. According to the COSO framework, everyone in an organization has responsibility for internal control to some extent. Virtually all employees produce information used in the internal control system or take other actions needed to effect control. Also, each major entity in corporate governance has a particular role to play. This translates, in the case of IFAD, to:
  - (a) The **Governing Council**, which is the supreme plenary organ of the Fund. It is composed of representatives of the Member States. All powers of the Fund are vested in the Governing Council. Subject to the limitations stated in the Fund's charter, it may delegate powers to the Executive Board.
  - (b) The **Executive Board** and the **Audit Committee**, which is appointed by the Board, supervise internal control and risk management. Assisted by the Audit Committee, the Board approves the operating principles of internal control including the main features of the risk management process, a summary of risks, control objectives and common control points for financial reporting.

- (c) The **internal** and **external auditors** of the organization also measure the effectiveness of internal control. They assess whether the controls are properly designed and implemented and are working effectively, and make recommendations on how to improve internal control.
- (d) **Management** is responsible for implementing the internal control and risk management process together with the group management team, subsidiary management teams and finance managers.
- (e) **The Enterprise Risk Management Committee** is responsible for supporting and overseeing the risk management activities of the Fund. It is a critical element for the management of operational risk as it affects the investment activities of the Fund.
5. IFAD's Management and staff are committed to IFAD's Code of Conduct, which was established to regulate their conduct and align it with the interests of IFAD.
6. The upper-level organizational structure and reporting lines are presented in chart 1.

Chart 1

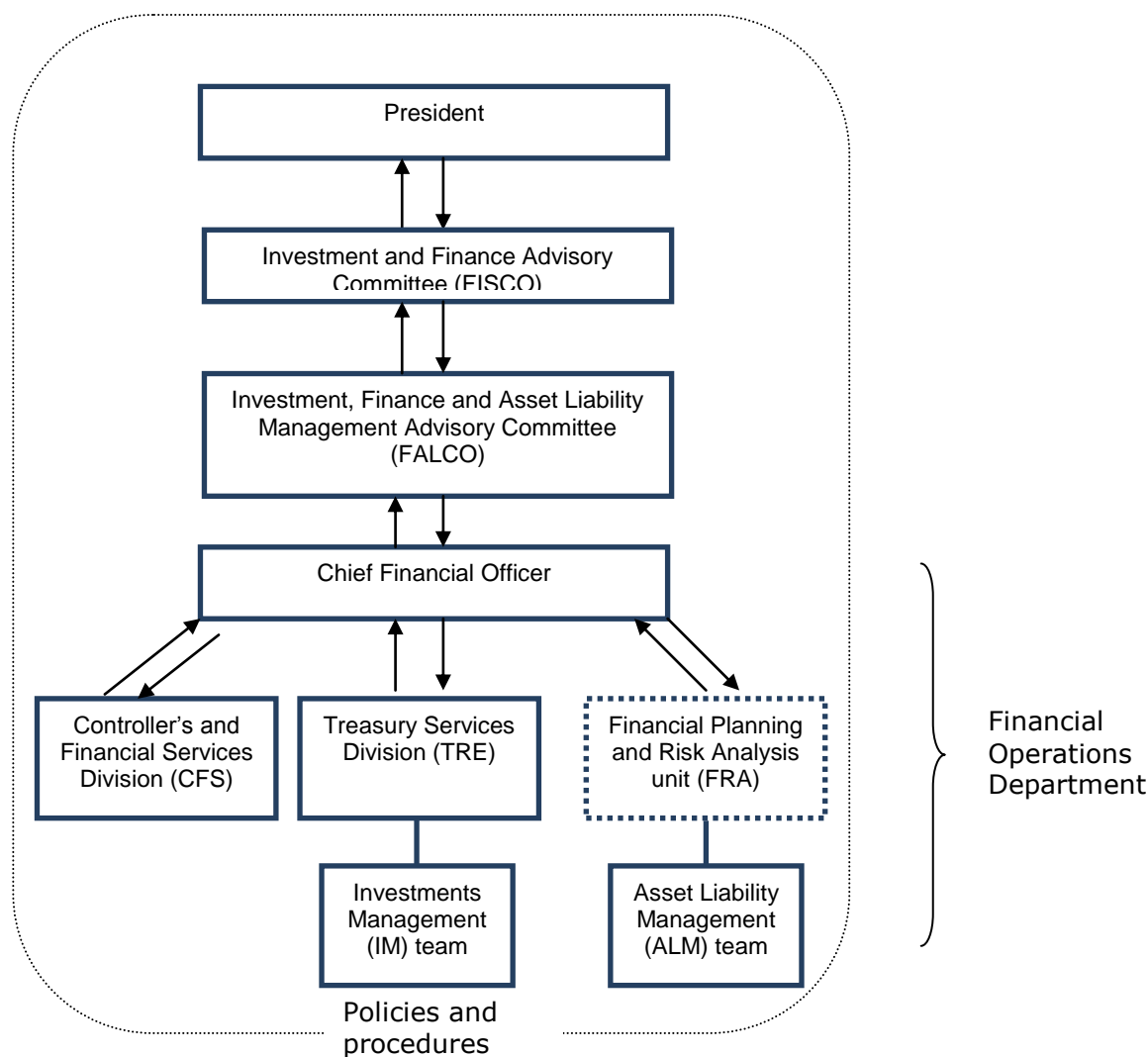
**Upper-level organizational structure**

7. Part B of this section examines in detail IFAD's internal organizational structure and specific roles and responsibilities while also presenting the components driving the investment framework.

**B. IFAD roles and responsibilities in the financial framework**

8. The internal organizational structure of IFAD in terms of investments is presented in chart 2.

Chart 2  
Internal organizational structure



9. **President.** The President has oversight and decision-making responsibility for the investment of the assets based on the approved Investment Policy Statement (IPS). He or she may delegate specific investment authorities.
10. **Investment committees.** On 15 January 2007, the President issued a President's Bulletin announcing the establishment of the following two new committees to replace and supersede the Investment Advisory Committee:
  - (a) The Investment and Finance Advisory Committee (FISCO) – the high-level committee; and
  - (b) The Investment, Finance and Asset Liability Management (ALM) Advisory Committee (FALCO) – the operational committee.
11. The FISCO assists and advises the President in making decisions concerning the investment of funds and other strategic financial matters. The Committee's purpose is to review, monitor, discuss, and deliberate on, resource requirements, significant financial market trends, the status of ALM, the investment and liquidity policy, and the performance of financial service providers. The FISCO is chaired by the President and meets at least quarterly. The rules of procedure and terms of reference of the FISCO are presented in annex I.

12. The FALCO was established as a forum for comprehensive discussion, review and analysis of technical and operational issues relating to the financial and investment management of all of IFAD's funds, including funds held in trust. The Committee's purpose is to provide written advice and recommendations for consideration by the FISCO on strategic financial matters and on the implementation of policies and strategies relating to financial resources. The FALCO is chaired by the Chief Financial Officer (CFO) of IFAD and meets at least monthly. The rules of procedure and terms of reference of the FALCO are presented in annex II.
13. **Chief Financial Officer.** As Head of the Financial Operations Department, the CFO is responsible for IFAD's financial resource management. Through the Treasury Services Division (TRE) and the Controller's and Financial Services Division (CFS), and, once it is approved, through the Financial Planning and Risk Analysis unit, the CFO:
- (a) Manages and reports on IFAD's financial resources in a framework of cost efficiency, risk containment, transparency and accountability;
  - (b) Invests and manages financial assets not immediately needed in line with operational requirements;
  - (c) Safeguards and maximizes the resources available for operations through prudent financial management and investment of financial resources, and through appropriate accounting, reporting and projection on IFAD's use of these resources; and
  - (d) Works with internal and external partners in sharing knowledge, harmonizing financial management systems and procedures, and/or enabling their collaboration.
14. **Controller's and Financial Services Division.** The main specialized services provided by CFS are the following:
- (a) Maintaining adequate internal control systems to ensure that all IFAD's financial transactions are properly, completely and accurately recorded and reported, and are consistent with IFAD's authorities, policies and procedures;
  - (b) Performing accurate and timely internal and external financial reporting work that reflects and captures all the Fund's transactions, and reports financial results and the financial position;
  - (c) Originating governing body and other official documents on financial matters, e.g. financial statements, reports on resources available for commitment;
  - (d) Strengthening financial management and fiduciary responsibilities for internal and external stakeholders, including control over loans, grants and supplementary funds administration, funds flows and reporting;
  - (e) Ensuring financial and budgetary management of extrabudgetary funds and hosted entities; and
  - (f) Liaising with the external auditors and the Audit Committee.
15. **Treasury Services Division.** The specialized services provided by TRE include:
- (a) Formulating and implementing financial policies and procedures, including the investment policy and the minimum liquidity requirement;
  - (b) Managing cash flow processes of disbursements and receipts through operational bank accounts;
  - (c) Managing cash flow operations and short-term liquidity;
  - (d) Managing investments internally/externally for IFAD and non-IFAD funds;
  - (e) Leading harmonization of TRE operations across the United Nations system;

- (f) Developing partnerships with other international financial institutions on financial matters; and
  - (g) Developing and managing business relationships with financial service providers.
16. Through FALCO and FISCO, TRE supports the President and the CFO in making corporate decisions that impact IFAD's investments and financial operations.
17. TRE relies on two operating units to deliver these services:
- (a) The **Cash Management team**, which manages IFAD's operational cash and liquidity requirements for all funding sources. Responsibilities include:
    - (i) Executing and settling disbursements;
    - (ii) Processing the receipt of funds;
    - (iii) Managing IFAD's electronic funds transfer banking system (Society for Worldwide Interbank Financial Telecommunication [SWIFT]); and
    - (iv) Recording and reconciling all cash-related transactions in IFAD's books of account.
  - (b) The **Investment Management team**, which monitors and manages IFAD's investments in both its internally and its externally managed portfolio. Responsibilities include:
    - (i) Periodically reviewing IFAD's investment policy and investment guidelines to ensure alignment and compliance with IFAD's investment goals and adequacy in the light of changing financial conditions;
    - (ii) Directly managing the internal held-to-maturity portfolio and other internally managed non-IFAD funds; and
    - (iii) Managing the relationships with the custodian and the external portfolio managers.
18. **Financial Planning and Risk Analysis Unit (FRA)**. The proposed division will include the ALM team, which will be strengthened and will report directly to the CFO. The ALM team was established in 2004 to consolidate risk management functions that were fragmented across various divisions. The objective was to create a separate team under the Treasurer to focus on the management of assets, liabilities and their related risks in order to safeguard the financial stability of IFAD. The team was designed with a specific emphasis on a risk management approach through an ALM framework, which means that it carries out risk management measures and analyses in the portfolio analytics and makes long-term financial/resource projections. In this regard, since 2004 the team has been responsible for managing and enhancing IFAD's financial model.

### **C. Investment policies and procedures**

19. The overall framework for IFAD's investment processes and controls is set by the following policies and procedures:
- (a) Financial Regulations;
  - (b) IFAD's IPS;
  - (c) Investment guidelines;
  - (d) Internal Control Framework for IFAD Investments;
  - (e) Investment management and custodian agreements;
  - (f) Treasury Manual; and



- (g) Rules of procedure and terms of reference of IFAD's Investment Committees (FISCO and FALCO).
20. **Financial Regulations:** the Financial Regulations govern the financial administration of the Fund and are interpreted in accordance with the Agreement Establishing IFAD.
21. **Enterprise Risk Management (ERM) policy:** the Enterprise Risk Management policy establishes a formal, systematic and integrated approach to identifying, managing and monitoring risks in IFAD and defines key roles and responsibilities for all stakeholders in ERM activities. Some of the activities performed under ERM which are relevant to the Fund's investments include the implementation of:
- (a) **Financial disclosure policy:** The policy requires staff with key roles in finance, investments, procurement and external resource management to provide, every year, a signed, confidential statement reporting their significant outside activities and interests. This policy, which is part of the deliverables of IFAD's 8<sup>th</sup> Replenishment, aims to enhance transparency in IFAD's financial operations, and is currently in its second phase. Finalization is foreseen by end-2011.
- (b) **Management assertion and external audit attestation of internal controls over financial reporting:** IFAD is finalizing the implementation of all the necessary actions and processes required to issue a Management assertion on the effectiveness of internal controls over financial reporting for financial years 2011 and 2012, and obtain an external audit attestation thereon by 2012.
22. **IFAD's Investment Policy Statement.** The IPS provides the overarching principles regulating IFAD's key investment players and their roles, investment universe and acceptable risk levels.
23. More specifically, the purpose of the IPS is to:
- (a) Identify the key roles and responsibilities relating to the governance of IFAD's investment portfolio;
- (b) Set out IFAD's investment objectives for risk and return, including eligible asset classes;
- (c) Define key components of investment guidelines; and
- (d) Establish formalized criteria to measure, monitor and evaluate performance and risk.
24. **Investment guidelines.** For each asset class, IFAD's investment guidelines define the principles by which a fund is managed and monitored. The guidelines determine, among others, the mandate's benchmark, the eligible universe and currencies, the mandate's credit floor, the maximum and minimum portfolio duration, and prohibited jurisdictions. The investment guidelines are monitored through daily compliance checks.
25. **Investment management and custodian agreements.** The agreements with external parties ensure that the relationship falls within a verified and constantly updated legal framework.
26. **Treasury Manual.** This manual provides a detailed and authoritative description of the specialized services provided by TRE, and defines how the Division's workload is divided among its various functions.
27. The manual is divided into two main sections: the executive manual, which provides a broad overview of the organization and its major processes; and the operating manual, which can be considered a working document that provides the user with

specific details, descriptions and examples of processes and procedures. Table 1 gives an overview of the Treasury Manual.

Table 1  
**Overview of the Treasury Manual**

	<i>Executive manual</i>	<i>Operating manual</i>
What is it?	An overview document that provides a concise description of TRE's functions and procedures in a summary format.	A detailed description of the functions, tasks and processes that make up the responsibilities of TRE staff.
How is it used?	Contains embedded navigation links that take the user directly to relevant sections within the operating manual for additional information.	Contains specific listings of duties, activities, detailed process flows, and other "how-to" material. Can be used as a step-by-step instruction guide for most procedures.
Who are the prospective users?	Intended for use as a quick reference for those interested in how TRE operates and what its major functional responsibilities are.	Intended for use as a detailed reference for those tasked with carrying out TRE's day-to-day functions.

28. To maintain flexibility, accessibility and adaptability, the Treasury Manual is published on IFAD's local area network in portable document format (PDF). The electronic file is controlled by the TRE front office. In view of the constant process of revision and the restricted nature of parts of the Treasury Manual, no hard copies are distributed.
29. **Confidentiality.** Due to the confidential nature of the information presented, parts of the Treasury Manual are restricted and can be viewed by authorized users only. It is largely a restricted document, and authorized users may not divulge its contents to third parties. The public sections of the two manuals are available to be viewed by all staff on the TRE intranet site.

### III. Risk assessment, control and monitoring activities

#### A. IFAD's investment portfolio structure

30. IFAD's investment portfolio is allocated to several asset classes within the fixed-income universe. Currently, cash and held-to-maturity investments are managed internally while marked-to-market investments are managed through eight mandates with external managers.
31. As at 30 June 2011, the portion of internally managed funds equalled approximately 22 per cent of the overall investment portfolio, currently allocated as follows:
- Cash:** Cash is allocated within several banks with a minimum short-term rating of P-1 by Moody's, A-1 by Standard & Poor's or F-1 by Fitch.
  - Held-to-maturity portfolio:** Funds are invested with a laddered-bond strategy whereby equal tranches of fixed-income instruments mature every quarter and are reinvested with a maturity of five years. The credit floor is AA- (except for corporate bonds, which require a rating of AAA); the duration is approximately 2.5 years; and the benchmark is a customized index calculated internally.
32. As at 30 June 2011, the portion of externally managed funds equalled approximately 78 per cent of the overall investment portfolio. The externally managed portion of the investment portfolio is currently allocated across the following three asset classes:
- Global government bonds:** Funds are invested in a multi-currency mandate of government bonds from major countries. The credit floor is AA-; the

duration is approximately 2 years; and the benchmark is the J. P. Morgan Global Government Bond Index, 1-3 years;

- (b) **Diversified fixed-income:** Funds are invested in a United States dollar mandate of a blend of fixed-income bonds, including agency mortgage-backed securities, supranationals and corporate bonds. The credit floor is AA-; the duration is approximately 4 years; and the benchmark is the Barclays Capital (ex-Lehman) U.S. Aggregate Bond Index (AA and above); and
- (c) **Inflation-indexed bonds:** Funds are invested in a multi-currency mandate of inflation-indexed bonds. The credit floor is AA-; the duration is approximately 5 years; and the benchmark is the Barclays Capital World Government Inflation-Linked Index, 1-10 years.

## B. Identification of risks

33. IFAD's investments are exposed to a variety of financial risks. Marked-to-market investments are affected by market risks (specifically interest rate, currency and liquidity risks), as well as credit, counterparty and operational risks. A detailed definition of these risks and a summary of the key measures used to measure such risks in IFAD's investment portfolio are given below.

### Market risks

34. **Interest rate risk** is defined as the risk that an investment's value will change as a result of a change in the absolute level of interest rates, in the spread between two rates, in the shape of the yield curve or in any other interest rate relationship. Interest rate risk is monitored on the overall portfolio and on the single managers, based on measures obtained with the enhanced risk management system (see section D, paragraph 49). The measures include standard deviation, ex ante tracking error (active risk), value at risk (VaR) and conditional value at risk (CVaR). The allowable limits for tracking error and the CVaR are stated in annex II of the IPS. In addition, stress test scenarios on the portfolio may be performed upon request or whenever considered necessary because of market conditions.
35. The data provided by the custodian may be complemented with internal analyses on single securities using tools provided by Bloomberg or other sources.
36. **Currency risk** arises from the change in price of one currency against another. IFAD faces currency risk on a balance sheet level, as the majority of IFAD's commitments, i.e. the undisbursed loans and grants, are denominated in special drawing rights (SDR). Therefore, to the extent possible, IFAD maintains a portion of its assets (the investment portfolio, the promissory notes and the contribution receivables) in the currencies and ratios of the SDR. Similarly, the General Reserve and commitments for grants denominated in United States dollars are matched by assets denominated in United States dollars. This is the so-called "SDR currency alignment procedure".
37. **Liquidity risk** is defined as the risk stemming from the lack of marketability of an investment that cannot be sold quickly enough to generate liquidity to meet contractual obligations. At any point in time, IFAD must be able to meet its disbursement obligations for loans and grants.
38. The liquidity risk is addressed through the minimum liquidity requirement. This amount must be available at any point in time to ensure IFAD's ability to meet its disbursement obligations.

### Credit risk

39. Credit risk is defined as the risk of loss of principal or loss of a financial reward stemming from a borrower's failure to repay a loan or otherwise meet a contractual obligation.

40. Credit risk is managed through the establishment of a minimum rating floor in the investment guidelines. The eligibility of individual securities and issuers is determined on the basis of ratings by major credit rating agencies. Credit analyses by security and issuer are performed by TRE for all internally managed investments and, on a selective basis, for externally managed assets, and for commercial and central banks, by using financial information systems, credit analysis providers and other sources. All other credit analysis is made and reported as an integral part of the risk management process.

#### **Counterparty risk**

41. Counterparty risk is defined as the risk to each party of a contract that the counterparty will not live up to its contractual obligations.
42. Counterparty risk is managed for all investments through the establishment of a minimum rating for eligible counterparties, including banks for operational cash and for short-term investments. Counterparty risk is also managed by capping exposure to each issuer/bank. Counterparty risk analyses are performed by TRE for the purpose of investment management, including on trading, derivatives and banks eligible for investments; in the case of commercial and central banks, TRE uses financial information systems, credit analysis providers and other sources. All other counterparty risk analysis is made and reported as an integral part of the risk management process.

#### **Operational risk**

43. Operational risk is defined by the Basel Committee on Banking Supervision as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events." Operational risk is the risk that is not inherent in financial, systematic or market-wide risk. This includes business continuity, legal risk and reputational risk. A typical example of operational risk is the lack of clear segregation between the front and back office, which in the case of the Barings Bank led the General Manager and Head Trader to incur massive losses through unauthorized and concealed trading activities. The true position was not noticed earlier because of a serious failure of controls and managerial confusion within Barings.
44. The operational risk is addressed by defining a sound framework of responsibility and accountability within IFAD's financial structure, by establishing back-up procedures and by performing legal reviews of all official policies.

### **C. Risk measurement and management**

#### **Risk budgeting and risk tolerance**

45. The aforementioned risks are addressed through a risk-budgeting framework based on predetermined risk metrics as defined in the IPS (annex II), investment guidelines, other policies and internal procedures.
46. Specifically, risk budgeting is the procedure of allocating risk within funds. It entails setting predetermined risk limits for the investment portfolio – on an aggregate level and at the level of individual managers – monitoring these measures and adjusting the portfolio whenever they exceed the tolerance level. In more detail, risk budgeting is the process of:
- (a) Measuring and decomposing the aggregate risk of a portfolio into its constituents on a quantitative basis;
  - (b) Setting risk limits (risk budgets) for the overall investment portfolio and/or each asset class ex ante through the definition of ranges of selected risk metrics in line with the investor's risk appetite and tolerance level;
  - (c) Allocating risks across the assets in compliance with risk budgets;
  - (d) Monitoring the use or abuse of risk budgets on an ongoing basis;

- (e) Analysing the results (ex post); and
  - (f) Changing investments when necessary to align the portfolio with the desired risk level.
47. Annex II of IFAD's IPS sets the limits for predefined risk measures on IFAD's overall investment portfolio and single mandates. Further limitations are set in IFAD's investment guidelines, in its liquidity and other investment policies, and in its internal procedures. Table 2 details the risk measures selected for the risk-budgeting framework and their tolerance level as defined in these IFAD policies and guidelines. The table, together with chart 3, also presents the internal procedures established under the new, strengthened risk management framework to monitor and manage the risks within the new risk-budgeting framework.

#### **Background of IPS risk-budgeting levels**

48. The risk measures and their tolerance level presented in annex II of IFAD's IPS have been established as result of several analyses conducted with the help of two external risk management providers.<sup>1</sup> Specifically:
- The established levels of one-year **CVaR for each asset class** have been set based on the CVaR of several benchmarks representing IFAD's desired investment universe for the specific asset class. The final risk-budgeting levels have been derived by adding a security buffer to account for market volatility.
  - The established levels of one-year **CVaR for the overall portfolio** have been set based on the CVaR of a hypothetical portfolio consisting of IFAD's current asset classes plus an exposure to emerging markets government bonds in hard currency amounting to 8 per cent of the total portfolio. It must be noted that the 8 per cent exposure is not the level recommended by IFAD for the revised investment policy. It was considered to be a conservative level, which would have allowed some leeway for the mandate to grow in value.
  - The established levels of ex ante **tracking errors for each asset class** have been set based on IFAD's investment guidelines for existing mandates and on accepted industry-wide tracking error levels as discussed with IFAD's external portfolio managers for the emerging market government bonds mandate.

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<sup>1</sup> IFAD is currently engaging private contractors in a competitive bidding process to install enhanced risk management software in-house. This will allow IFAD to perform internally "what if" analyses on the portfolio and managers' risk levels.

Table 2  
**IFAD's Investment risks, established limits and control framework**

<i>Risk type</i>	<i>Risk measure and source</i>	<i>Established limit</i>	<i>Monitoring frequency/Tool</i>	<i>Reporting frequency</i>	<i>Alert level/Action taken</i>
Interest rate risk	Manager's duration (determined in IFAD's investment guidelines)	Duration must be no lower than zero (i.e. divesting into cash, lower limit) and no higher than two years above the benchmark duration (upper limit)	Daily through compliance system	At least monthly in compliance report	<p>Should the duration upper or lower limit be breached, the issue will be reported by the ALM team to FRA, the IM team,, the Treasurer and the CFO. The IM team will immediately liaise with the investment manager to:</p> <ul style="list-style-type: none"> <li>• Verify the reason for the duration position/strategy.</li> <li>• Agree on a reasonable time frame for the manager to restore duration within allowable limits.</li> <li>• Upon execution of required trades, request written confirmation by the manager of the new duration level.</li> </ul> <p>The ALM team will then verify the duration level and report to FRA, the Treasurer and the CFO.</p>
	1-year forward - looking ex ante tracking error (determined in IFAD's IPS)	<ul style="list-style-type: none"> <li>• Global government bonds: maximum 1.5%</li> <li>• Diversified fixed-income bonds: maximum 3.0%</li> <li>• Inflation-indexed bonds: maximum 2.5%</li> <li>• Emerging markets government bonds: maximum 4.0%</li> </ul>	Weekly through risk management system	At least monthly in risk report. More frequently if alert level for measure is reached.	<p>Should the tracking error on any manager exceed its threshold by more than 5%, or should the change from prior month exceed 5%, the issue will be reported by the ALM team to FRA, the IM team the Treasurer and the CFO. The IM team will immediately liaise with the investment manager to:</p> <ul style="list-style-type: none"> <li>• Verify the reasons underlying the discrepancy in tracking error.</li> <li>• If deemed necessary for risk mitigation, agree on a reasonable time frame for the manager to restore tracking error within allowable limits.</li> <li>• Upon execution of required trades, request written confirmation by the manager of the new tracking error<sup>a</sup></li> </ul> <p>The ALM team will verify the tracking error level and report to FRA, the Treasurer and the CFO.</p>

<sup>a</sup> It should be noted that a high tracking error does not necessarily indicate a higher risk, but only a higher degree of difference when compared with the benchmark. For example, should a benchmark contain subprime mortgage-backed securities, a portfolio indexed against this benchmark and not containing such securities may show a high tracking error but a lower risk level in absolute terms.

<i>Risk type</i>	<i>Risk measure and source</i>	<i>Established limit</i>	<i>Monitoring frequency/Tool</i>	<i>Reporting frequency</i>	<i>Alert level/Action taken</i>
Interest rate risk (continued)	1-year conditional value at risk at 95% confidence level (determined in IFAD's IPS)	<ul style="list-style-type: none"> <li>• Overall portfolio: maximum 10%</li> <li>• Global government bonds: maximum 4%</li> <li>• Diversified fixed-income bonds: maximum 15%</li> <li>• Inflation-indexed bonds: maximum 9%</li> <li>• Emerging markets government bonds: maximum 27%</li> </ul>	Weekly through risk management system	At least monthly in risk report. More frequently if alert level for measure is reached.	<p>Should the CVaR on the overall portfolio or on any single manager exceed its threshold by more than 5%, or should the change from prior month exceed 5%, the issue will be reported by the ALM team to FRA, the Investments Section, the Treasurer and the CFO. The following actions will be taken:</p> <ul style="list-style-type: none"> <li>• The ALM team will perform a break-down analysis to identify the sources of increased CVaR.</li> <li>• Depending on the result of the break-down analysis, the ALM team will recommend to the CFO and to the Treasurer corrective measures on the overall portfolio or for a single manager. These measures may include, but are not limited to, increasing the cash exposure, decreasing duration and divesting from a certain sector.</li> <li>• The measures will be discussed within TRE and FRA and an action plan will be presented to the CFO and to the Treasurer.</li> <li>• Upon approval, the recommendations will be implemented with the concerned counterparty.</li> </ul>
Currency risk	Percentage deviation from SDR currency ratios	Not more than 2.5% deviation from SDR basket for maximum of three months	At least monthly through internal analysis	At least monthly in risk report. More frequently if alert level for measure is reached.	<p>Should the percentage deviation in any single currency exceed 2.5%, the following actions will be taken:</p> <ul style="list-style-type: none"> <li>• The ALM team will recommend a realignment strategy by one of the following tools: foreign exchange transactions on internally managed cash or change in currency composition of one or more of the externally managed mandates.</li> <li>• An execution time frame for the realignment will be communicated by the ALM team to FRA, the Treasurer and the CFO and to the concerned</li> </ul>

<i>Risk type</i>	<i>Risk measure and source</i>	<i>Established limit</i>	<i>Monitoring frequency/Tool</i>	<i>Reporting frequency</i>	<i>Alert level/Action taken</i>
					<p>teams (the IM and/or the CM teams)</p> <ul style="list-style-type: none"> <li>The concerned party will be instructed to execute the trades.</li> <li>Upon execution, a new analysis will be performed to verify the realignment of the assets.</li> </ul>
Liquidity risk	Percentage of gross disbursement (determined in IFAD's liquidity policy)	Minimum liquidity requirement (composed of investment portfolio's highly liquid assets) <sup>b</sup> set at 60% of the total of annual gross disbursements (cash outflows) and potential additional requirements due to liquidity shocks <sup>c</sup>	Semi-annually through internal analysis	Semi-annually	Should the highly liquid assets in IFAD's investment portfolio decrease to reach the level of 70% of gross disbursements, the issue will be reported by the ALM team to the CFO and to the Treasurer and immediately communicated to the Programme Operations Department in order to revise the plan for future disbursements.
Credit risk	Credit rating (determined in IFAD's investment guidelines)	<p>Minimum credit floor in investment guidelines:</p> <p>AA- for government bonds</p> <p>BBB for emerging market government bonds</p> <p>Maximum exposure to corporate bonds in investment guidelines for diversified fixed-income mandates</p> <p>Maximum 40% of the portfolio may be invested in corporate bonds</p>	Daily through compliance monitoring system	At least monthly in compliance report	Should a security be downgraded below IFAD's minimum credit floor, the issue will be reported by the ALM team to the Investments Section, the Treasurer, FRA and the CFO. As per the investment guidelines, the manager will dispose of the concerned security within 30 days of the date of the downgrading by the rating agency.
Counterparty risk	Credit rating for counterparties (determined in IFAD's investment guidelines)	<p>Minimum credit rating for eligible counterparties:</p> <p>Banks for cash and short-term investments: short-term rating of A-1 Standard &amp; Poor's, P-1 Moody's or F-1 Fitch</p>	Monthly through internal analyses	Ad hoc basis	Should counterparty be downgraded below IFAD's minimum credit floor, the issue will be reported by the ALM team, FRA, the Treasurer, the CFO, the Investments Section and the Cash Management and Contributions Section. Immediate action will be taken with the investment manager.

<sup>b</sup> Highly liquid assets are intended as cash and government bonds rated minimum AA-.

<sup>c</sup> Liquidity policy, document EB 2006/89/R.40.

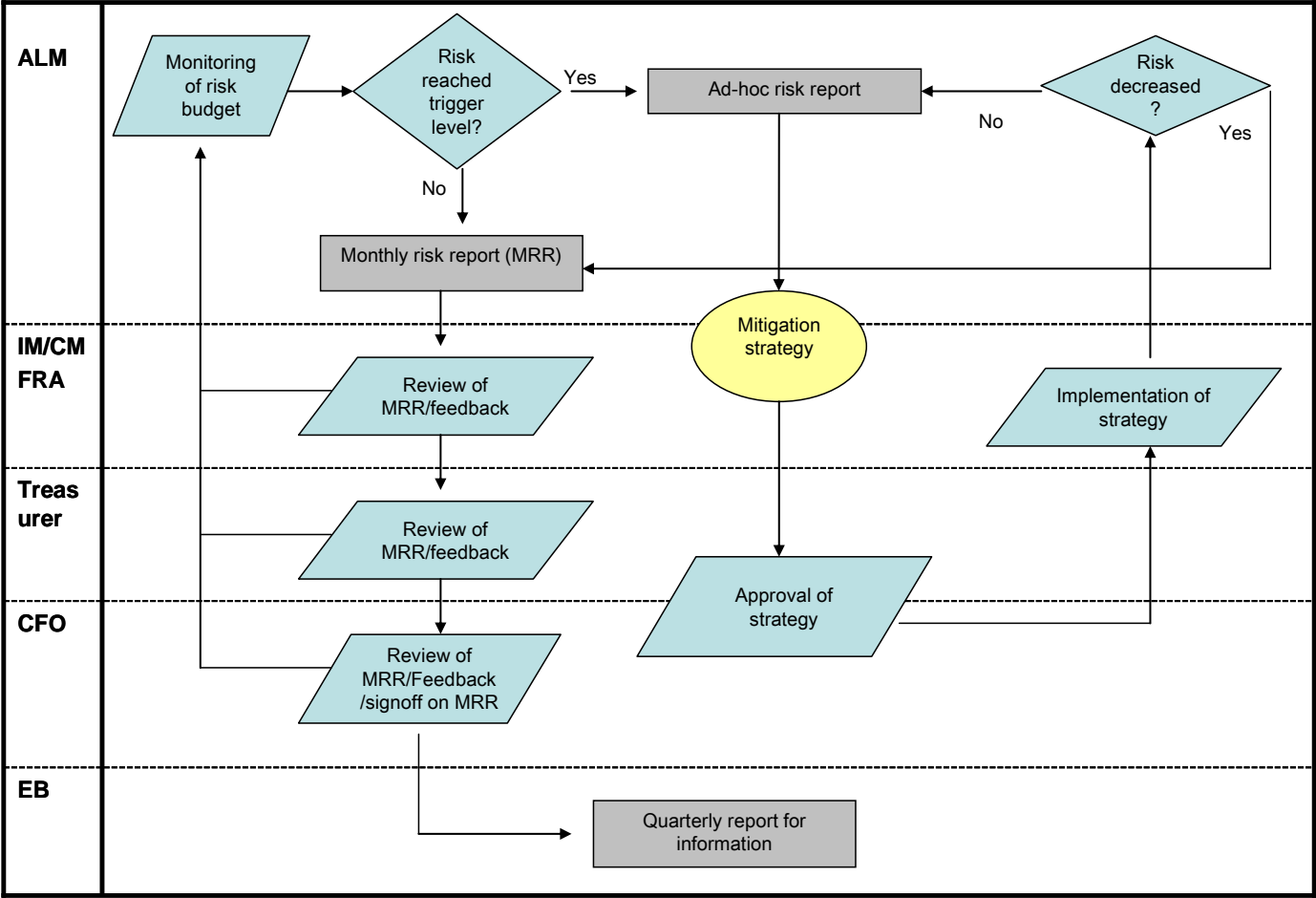


<i>Risk type</i>	<i>Risk measure and source</i>	<i>Established limit</i>	<i>Monitoring frequency/Tool</i>	<i>Reporting frequency</i>	<i>Alert level/Action taken</i>
Operational risk	Segregation of duties within TRE, back-up procedures, legal control (determined in the Treasury Manual)	Not applicable	Continuous	Annually, through the revision of the Treasury Manual.	<p>Segregation of duties for core financial procedures is implemented within the FOD department between CFS and TRE, whereby the former has the authority to instruct movements of IFAD funds to external parties, and the latter to execute such instructions through operational bank accounts. In addition, CFS and TRE independently post relating accounting entries in IFAD General Ledger which are reconciled as part of the monthly closing of books.</p> <p>Furthermore, with regards to the investment portfolio, the first level of sign-off is performed between the external portfolio managers and IFAD's Global Custodian, thereby ensuring accountability and segregation of duties.</p> <p>Procedures are reported periodically in the Treasury Manual. Whenever a new procedure is set up, back-up functions are established and documented to ensure business continuity.</p>

## D. Control activities and monitoring

49. The risks in IFAD's investments are currently monitored with a variety of tools:
- **Enhanced risk management system.** In order to be equipped for an effective risk-budgeting framework, IFAD is in the process of strengthening its analytical resources. A new enhanced risk management system will be implemented by the end of 2011. This system will strengthen IFAD's ability to monitor the risks in the investment portfolio on a daily basis, and enable TRE to perform ex ante analyses as well as stress tests on assets, on the single mandates and on isolated managers.
  - **Compliance monitoring system.** This Web-based application supplied by the global custodian enables IFAD to verify on a daily basis the compliance of external portfolio managers with the respective investment guidelines. Eighty per cent of the guidelines are currently coded in the system, and the application flags breaches or alert levels on a daily basis. Guidelines that cannot be coded in the system are monitored through internal analyses and manual procedures.
  - Compliance checks on the internally managed held-to-maturity portfolio are, for reasons of segregation of duty, performed by the global custodian who alerts IFAD as soon as a breach occurs and produces a monthly report.
  - In addition to the above, IFAD performs qualitative analyses on selected issuers and counterparties.
50. The risks in IFAD's investment portfolio are monitored by the ALM team. A comprehensive monthly risk report is produced by the team for the Treasurer and the CFO. If deemed relevant, it is also shared with FALCO and FISCO.
51. Whenever a risk measure reaches the "alert level", as defined in table 2, ALM will inform the Investments Section, FRA, the Treasurer and the CFO. Appropriate risk-mitigating strategies will be recommended and actions will be taken, as described in table 2. Upon completion of the actions, the ALM team will verify the risk level and report the new level to the concerned parties. The process is visualized in chart 3.
52. In addition to the risk measures established in annex II of IFAD's IPS for risk-budgeting purposes, a comprehensive set of risk measures is analysed through the risk management system at least monthly. Whenever one of the risk measures either on the overall portfolio or on a single manager is deemed to be excessive or shows a significant change from the previous month, the ALM team will bring the issue to the attention of the Treasurer and the Investments Section.
53. The additional measures (whose definitions are given in annex III) include:
- (a) Annualized standard deviation or returns by manager, by asset class benchmark, and for the overall portfolio and the overall benchmark;
  - (b) Value at risk (VaR) with a three-month forward-looking horizon and a 95 per cent confidence level, by manager, by asset class benchmark, and for the overall portfolio and the overall benchmark;
  - (c) Historical overall monthly VaR for the historical period of the past two years;
  - (d) Overall risk decomposition, by risk type; and
  - (e) Risk-adjusted return indicators (Sharpe ratio, tracking error, information ratio, beta, alpha).
54. Additionally, specifically in the area of investments, CFS executes full data control and reconciliation of financial records against the custodian and/or third parties.

Chart 3  
Flow of control framework for investment risks



## **Rules of procedure and terms of reference of the Investment and Finance Advisory Committee (FISCO) (High-level committee)**

### **1. Purpose**

This Committee is established:

- 1.1 To assist and advise the President of IFAD in making decisions concerning the investment of funds not needed immediately for the Fund's operations or administrative expenditures; and on other strategic financial matters.
- 1.2 To review, monitor, discuss, and deliberate on, the following issues, based on information and recommendations provided to it by the FISCO members and/or by the Investment, Finance and Asset Liability Management Advisory Committee (FALCO):
  - Resource requirements – long and medium term;
  - All financial inflows and outflows of the Fund;<sup>2</sup>
  - Significant financial market trends and movements;
  - Status of asset liability management (ALM);
  - Investment Policy Statement;
  - Liquidity policy;
  - Financial services providers' performance.

### **2. Composition**

The membership of the Committee shall be determined by the President and shall include:

- The President (Chairperson)
- Vice-President, Office of the President and the Vice-President (OPV)
- Associate Vice-President, Programmes, Programme Management Department (AVP/PMD)
- Chief Financial Officer and Head, Financial Operations Department (FOD)
- Chief Development Strategist, Controller's and Financial Services Division (CFS)
- Director and Treasurer, Treasury Services Division (TRE) (Secretary)
- Director, OPV
- Director and Controller, CFS
- General Counsel, Office of the General Counsel
- Director, Office of Audit and Oversight (Observer)
- Any other member as the Chairperson may decide from time to time

### **3. Quorum**

- 3.1 A quorum shall consist of the President as Chairperson or, in the event of the President's inability to attend, his/her delegate (under a specific delegation of

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<sup>2</sup> Including, but not limited to, investment income replenishment contributions, expenditures, and loans and grants.

authority from the President); the Treasurer as Secretary or his/her appointee; three other members; and the observers.

#### **4. Attendance at meetings**

- 4.1 Members and the observers will attend all meetings. In the event members or observers are unable to attend, they may designate qualified experienced alternates.
- 4.2 Other Senior Management Directors and IFAD staff directly concerned with the matters to be discussed may be asked to attend by the Secretary in consultation with the Chairperson.

#### **5. Frequency of meetings**

- 5.1 Meetings will be held as often as the business of the Fund so requires and at least every two months.

#### **6. Role and functions of the Committee**

- 6.1 The role of the Committee is to review, monitor and evaluate investment and financial management, and to make recommendations to the President on these and on broad financial policy matters in an organization-wide strategic context.
- 6.2 The functions of the Committee are:
  - (a) To assess the medium- and long-term financial/resource requirements;
  - (b) To identify and review financial market trends and assess their impact on the Fund's investment portfolio;
  - (c) To review IFAD's financial operations, ALM, financial risk, the quarterly financial results and the investment portfolio, and to recommend appropriate action;
  - (d) To review IFAD's Investment Policy Statement and guidelines, including strategic and tactical asset allocation, credit criteria, duration and risk, investment products and rebalancing needs;
  - (e) To evaluate the liquidity policy and to recommend appropriate action;
  - (f) To review the proposals for external financial services providers, including global custodians, investment portfolio managers and financial advisors, and make appropriate recommendations;
  - (g) To review the performance of IFAD's financial services providers and make appropriate recommendations;
  - (h) To review other issues raised by the Committee and the FALCO and make appropriate recommendations;
  - (i) To submit all its recommendations to the President for decision; and
  - (j) To identify amendments to its Rules of Procedure when appropriate; and to make recommendations to the President.

#### **7. Responsibilities of the Secretary**

The Treasurer of IFAD will act as the Secretary of the Committee and is responsible, inter alia, for the following:

- (a) Scheduling meetings;
- (b) Drafting the agenda in consultation with the Chairperson of FALCO;
- (c) Coordinating and distributing documentation to the Committee at least four working days prior to the meeting date;

- (d) Preparing the minutes of the meeting for the Chairperson's approval and an updated tracker of actions required by the Committee. The minutes shall include advice, recommendations, substantive observations and decisions taken by the Committee; and actions to be undertaken by responsible officers;
- (e) Distributing signed minutes to all members and observers; and
- (f) Ensuring that all investment and financial matters falling within the scope of the purposes and objectives of the FISCO are brought to the attention of the Committee.

## **8. Documentation**

In addition to the specific documentation prepared for each meeting of the Committee, members will receive the following as regular documents:

- (a) Highlights of actual budget status;
- (b) Summary of financial flows and resources management and other financial issues;
- (c) Highlights of the financial market status;
- (d) Summary of the investment portfolio status;
- (e) Summary of the liquidity status;
- (f) Minutes of prior FALCO meetings;
- (g) Quarterly updates on actual payments versus budgeted fees for external financial services providers; and
- (h) Other information that the Chairperson, FALCO and the Secretary deem relevant.

## **9. Decisions**

Based on the recommendations of the Committee, the President shall make his/her decision, which shall be recorded in the minutes by the Secretary.

# **Rules of procedure and terms of reference of the Investment, Finance and ALM Advisory Committee (FALCO) (Operational committee)**

## **1. Purpose**

This Committee is established:

- 1.1 To be a forum for comprehensive discussion, review and analysis of technical and operational issues relating to the financial and investment management of all the funds of IFAD, including funds held in trust; and
- 1.2 To provide written advice and recommendations for consideration by the Investment and Finance Advisory Committee (FISCO) on strategic financial matters and implementation of policies and strategies relating to:
  - (a) Resource requirements and strategies – long and medium term including alternative funding;
  - (b) Financial inflows and outflows of the Fund;<sup>3</sup>
  - (c) Significant financial markets trends and movements;
  - (d) Asset liability management (ALM);
  - (e) Investment and liquidity policies and strategies and implementation thereof;
  - (f) Performance of treasury and finance activities;
  - (g) Developments and changes in treasury and finance activities including loans and grants and other funds;
  - (h) Treasury counterparty activities and limits;
  - (i) Financial services providers' performance;
  - (j) Financial and accounting policies and issues;
  - (k) Financial management of loans and grants, and development of any new instruments and products; and
  - (l) Relevant reporting to the Audit Committee and the Executive Board.

## **2. Composition**

The membership of the Committee shall be determined by the President and shall include:

- Chief Financial Officer (Chairperson)
- Treasurer and Director, TRE (Secretary)
- Director and Controller, CFS
- Director or representative, PMD, as designated by AVP/PMD
- Assistant Treasurer, TRE
- ALM Senior Officer, TRE
- Investment Management Senior Officer, TRE
- Cash Management Senior Officer, TRE

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<sup>3</sup> Including, but not limited to, investment income, replenishment contributions, expenditures, and loans and grants.

- Manager, Accounting and Financial Reporting, CFS
- Senior Accounting Officer, CFS
- Senior Loan Officer, CFS
- Legal Counsel, Office of the General Counsel (LEG)
- Any other member as the Chairperson may decide from time to time

### **3. Quorum**

3.1 A quorum shall consist of the Chief Financial Officer or alternate, the Secretary and four Members including at least one each from TRE and CFS.

### **4. Attendance of meetings**

4.1 Members of the Committee will normally attend all meetings. In the event Members are unable to attend, they may, if necessary, designate qualified experienced alternates.

### **5. Frequency of meetings**

5.1 Meetings will be held monthly, in principle, and otherwise as frequently as the business of the Fund may require.

### **6. Responsibilities of the Secretary of FALCO**

6.1 The Treasurer of IFAD will act as Secretary of the Committee.

6.2 The Secretary will be responsible, inter alia, for the following:

- (a) Scheduling meetings;
- (b) Establishing the agenda;
- (c) Coordinating and distributing documentation to the Committee at least two working days prior to the meeting date;
- (d) Preparing the minutes of the meeting for the Chairperson's approval, said minutes to include advice, recommendations, substantive observations by Committee members and decisions taken by the Chairperson;
- (e) Distributing signed minutes to all members and other participants; and
- (f) Ensuring that all investment and financial matters falling within the scope of the purposes and objectives of the FALCO are brought to the attention of the Committee for its consideration.

### **7. Documentation**

7.1 In addition to the documentation provided for each meeting of the Committee, members of the Committee will receive the following:

- (a) Highlights on the investment portfolio balances, performance and risk;
- (b) Overview of external service providers' fees and other related costs; and
- (c) Other information that the Secretary deems to be relevant.

### **8. Role and activities of the Committee**

8.1 The Committee will review and analyse the Fund's investment and financial operations in order to make recommendations to the FISCO concerning investment and financial policies and strategies, and will advise the FISCO on actions required to implement such policies and strategies and on technical and operational issues and considerations resulting from such implementation.

8.2 In order to fulfil its role, the Committee will discharge the following functions, as needed:



- (a) Review, analyse, provide written advice to, and inform the FISCO on specific investment, liquidity and financial matters, including:
- Resource requirements;
  - Financial inflows and outflows;
  - Significant financial market trends and movements;
  - Status of ALM;
  - The Investment Policy Statement;<sup>4</sup>
  - The liquidity policy;
  - Accounting issues within the scope of the Committee's remit;
  - Loans and grants management within the scope of the Committee's remit;
  - Other financial issues raised by the FISCO and by the Chairperson of the FALCO.
- (b) Review the performance, composition and risk structure of the overall investment portfolio and of each asset class managed internally and externally including the performance evaluation of each external service provider;
- (c) Ensure that FALCO members (TRE, CFS, LEG) are represented on the technical panel for evaluation of candidates for external financial services (such as custody, financial advisory and investment management services); and
- (d) Recommend amendments to these terms of reference.

## **9. Recommendation process**

- 9.1 The members or their alternates shall make recommendations to the Chairperson who shall decide whether to adopt and approve such recommendations and, if required, advise and inform the FISCO of such recommendations. Both the recommendations and the decisions taken shall be recorded in the minutes by the Secretary and shall be provided to the FISCO.

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<sup>4</sup> Including, but not limited to, strategic and tactical asset allocation and investment guidelines; risk and compliance management; financial instruments and products; and financial and investment planning.

## Glossary of risk measures and related terms

**Active risk:** The risk a portfolio or fund acquires when it is actively managed, especially when its managers attempt to outperform some benchmark. More specifically, the more a fund or portfolio differs from the benchmark upon which it is based, the more likely it is to underperform or outperform that same benchmark. This extra risk is active risk. For example, a one-year forward-looking active risk of 0.2 per cent means that, over the coming year, the portfolio excess return over the benchmark is expected to be in the range of +/- 0.2 per cent of its mean value.

The active risk can be predictive (or ex ante), based on expected return, or ex post, derived from the actual returns of the portfolio.

**Alpha:** Alpha is a risk-adjusted measure of the so-called "excess return" on an investment. It is a common measure of assessing an active manager's performance as it is the return in excess of a benchmark index or "risk-free" investment.

**Benchmark:** A benchmark is a standard against which the performance of a security or manager can be measured. The benchmark should have certain characteristics of investability, transparency and replicability so as to best represent the performance of a certain investment universe. In financial markets, the most popular indices are used as benchmarks. For example, the Standard & Poor's 500 is a widely used benchmark for United States "large-cap" equities markets.

**Beta:** Beta is a measure of the volatility, or systematic risk, of a security or a portfolio in comparison with the financial market as a whole.

**Conditional VaR:** CVaR is a measure of the average expected loss of a portfolio assuming that the value at risk has been reached. Since assumption is made that the portfolio loss has exceeded the VaR, the CVaR gives an indication about the magnitude of the losses in "the tails" of the distribution, i.e. in extreme loss cases. The higher the CVaR, the more a portfolio is expected to lose in extreme scenarios and, hence, the riskier it is.

**Confidence level:** This is the range (with a specified value of uncertainty, usually expressed in percentage terms) within which the true value of a measured quantity exists. It is also the level of certainty to which an estimate can be trusted.

**Duration:** This is a measure of the sensitivity of a bond's price to changes in the level of market yields. For bonds, prices and yields have an inverse relationship. If the yields increase, the bonds' prices decrease. A bond with longer duration is more sensitive to changes in market yields meaning that, all else equal, its price will decline more for a given increase in yields than the price of a bond with shorter duration.

**Fat tails:** A fat-tailed probability distribution is one in which extreme events are more probable.

**Historical simulation:** Historical simulation is a procedure for predicting the values of a portfolio deriving such values from historical portfolio data.

**Information ratio:** This is a measure of risk-adjusted performance. The information ratio measures the relation between the portfolio's average excess return (in excess of the benchmark return) and its tracking error. A higher information ratio indicates a better reward for the portfolio's tracking error, thereby indicating also more successful investment management skills.

**Risk-adjusted return:** This is a measure of how much an investment returned in relation to the amount of risk it took on. It is often used to compare a high-risk, potentially high-return investment with a low-risk, lower-return investment. A simple risk-adjusted return measure is dividing the portfolio's annual return by its annual standard deviation. This ratio gives an indication of the amount of return generated by each risk unit. The higher the ratio, the better the risk-adjusted return.

**Risk-free rate:** This is the theoretical rate of return of an investment with no risk of financial loss. The risk-free rate represents the interest that an investor would expect from an absolutely risk-free investment over a given period of time. Risk-free assets usually refer to short-dated government bonds. For United States dollar investments, usually United States Treasury bills are used, while a common choice for euro investments are German Government bills or the Euro Interbank Offered Rate (Euribor).

**Sharpe ratio:** This is a measure of risk-adjusted performance. It measures the relation between the portfolio's average excess return (in excess of risk-free return) and its standard deviation. The higher the Sharpe ratio is, the better the reward for market risk.

**Standard deviation:** This is a measure of the volatility of a certain value around its average. The higher the standard deviation, the more the value is dispersed around its average. In the case of portfolio returns, the higher the standard deviation of returns, the more returns are expected to vary around the average expected return. Therefore, a portfolio with a high standard deviation is considered more risky than one with a lower one, all else being equal.

**Value at risk:** This is the maximum potential loss an investment can incur over a defined time horizon within a specified confidence level. If an investment portfolio of US\$100 million has a three-month VaR of 1.5 per cent with a confidence level of 95 per cent, the maximum amount that could be lost over the next three-month period is US\$1.5 million; and this estimate can be trusted with 95 per cent certainty, meaning that it is expected that the estimate is correct 19 times out of 20 (95 per cent of the times).

**Volatility:** This is a measure of the fluctuation in the market price of the underlying security. Mathematically, volatility is the annualized standard deviation of returns.