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IFAD Asset and Liability Management Framework

Note to Executive Board representatives

Focal points:

Technical questions:

Jose Joaquin Morte Molina
Chief Risk Officer
Financial Operations Department
Tel.: +39 06 5459 2561
e-mail: j.mortemolina@ifad.org

David Le Brun
Senior Risk Officer
Tel.: +39 06 5459 2547
e-mail: d.lebrun@ifad.org

Dispatch of documentation:

Deirdre Mc Grenra
Chief
Institutional Governance and
Member Relations
Tel.: +39 06 5459 2374
e-mail: gb@ifad.org

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Executive summary

1. The proposed Asset and Liability Management (ALM) Framework establishes the process and tools for the optimal use of IFAD's assets so as to ensure that liabilities are adequately managed in order to protect IFAD's balance sheet. This is critical for the continuity of IFAD's development operations and its work in support of inclusive and sustainable rural transformation, even in times of stress.
2. The need for such a framework has been highlighted in recent independent reports on financial governance, including the report of Alvarez & Marsal, which observed that a robust ALM approach and tools are of the utmost importance and are currently missing from IFAD's financial structure.
3. The proposed framework is based on best practices as applied by development finance institutions (DFIs) and has been adapted to IFAD's specific niche. It will complement and support key financial policies, namely the Capital Adequacy Policy, Liquidity Policy and Investment Policy Statement.

Background and approach

4. The purpose of ALM is to ensure that liabilities are adequately managed (i.e. that debt is repaid on time). Generally, the need for active ALM arises from mismatches between the financial profile of assets and liabilities in terms of denomination currencies, maturities and interest rates. If such mismatches are not managed, these unhedged exposures can create liquidity constraints for an institution and, eventually, affect its capitalization.
5. The original ALM Framework was presented to the Board in December 2003 in the context of the Consultation on the Seventh Replenishment of IFAD's Resources.¹ With the evolution of the Fund, a more integrated framework is now required to ensure comprehensive management of ALM risks and accommodate recently adopted policies.
6. As a DFI, IFAD assumes and manages financial risks inherent to its operations. In practice, IFAD's experience in ALM has been relatively limited and mostly centred around the management of its investment portfolio, with the setting of rules and procedures to reduce counterparty risk and avoid excessive mismatches in the balance sheet. With the introduction of borrowing, representing the first real liability on IFAD's balance sheet, the need for an active and holistic approach to ALM is necessary, hence the need to design a specific framework for IFAD.
7. An ALM Framework is particularly important for IFAD given its high concentration of concessional loans and the related risks, as well as the necessity to prudently manage its position relative to different operational currencies including special drawing rights. Moreover, the introduction of borrowing into IFAD's funding structure, along with the adoption of new financing terms for beneficiary countries with the purpose of facilitating the delivery of IFAD's programme of loans and grants, has increased the sophistication and complexity of the financial risks faced by IFAD as it evolves to maximize its development impact.
8. The ALM Framework will be guided by the following overarching principles:
 - (i) To maintain sufficient liquidity to meet IFAD's obligations, namely the disbursement requests from clients and the servicing of its debt;
 - (ii) To adequately manage the currency composition of its assets and liabilities to limit losses deriving from fluctuations or adverse reduction in the financing capacity of IFAD; and

¹ See EB 2003/80/R.14/Rev.1.

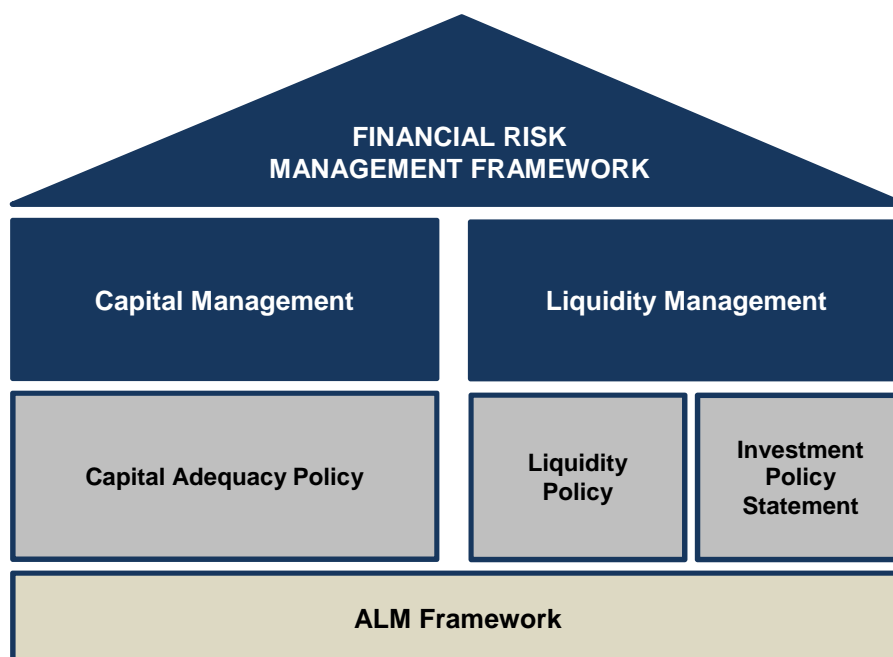
- (iii) To protect IFAD from fluctuations in market interest rates in order to reduce volatility in earnings and avoid reduction in capital.

Rationale for an ALM Framework

9. By nature of its mandate, IFAD operates as a risk-taking institution: it is required to offer loans at different financing terms, as established in the Policies and Criteria for IFAD Financing. Countries can also choose between different maturities and currencies.
10. To date, IFAD risk management has focused essentially on ensuring that the institution's commitment capacity is preserved and that the cash funds not needed immediately for operations or administrative expenses are adequately managed. To that end, IFAD established its Liquidity Policy² and Investment Policy Statement as the key pillars for risk management.
11. With the increase in borrowing, the overall financial and risk architecture is being reconfigured. It will now be based on two fundamental pillars: the Capital Adequacy Policy and the new Liquidity Policy. To complement these pillars, the ALM Framework will provide a systematic approach to ensure the optimal degree of protection of the balance sheet from any asset and liability mismatch.

Figure 1

Risk management framework and ALM Framework



12. As per figure 1, capital and liquidity management represent the two key risks affecting IFAD's balance sheet. These two risks are supported by policies, which include the setting of prudential limits. The ALM Framework complements the policies from different angles: on the one side, and in line with the Capital Adequacy Policy, the ALM Framework aims to minimize, to the extent possible, the amount of capital consumed by non-core risks in order to optimize its capital allocation to pursue its mandate. On the other side, by avoiding balance sheet mismatches, the ALM Framework ensures that the requirements prescribed in the Liquidity Policy and Investment Policy Statement are met.

² See EB 2006/89/R.40.

13. To achieve these goals, the ALM Framework prescribes risk indicators to monitor and mitigate interest, currency and liquidity risks.
14. The implementation of the ALM Framework will require subsequent guidelines and adequate systems and standards, including controls to actively manage ALM risks. It will entail establishing responsibilities and creating a hierarchical structure that safeguards against conflict of interest and ensures good governance.

I. Asset and Liability Management Framework and methodology

A. Objectives

1. The proposed Asset and Liability Management (ALM) Framework establishes standards for the sound management of financial risks and sets the principles for managing liquidity, interest and currency risks which are inherent to IFAD's activities, while maintaining its financial soundness and long-term financial sustainability. This is critical for the continuity of IFAD's development operations and its work in support of inclusive and sustainable rural transformation.
2. The framework will provide staff involved in the Fund's ALM activities with a structured decision-making tool to manage the mismatch between IFAD's mix of assets and liabilities efficiently and prudently, according to their characteristics (term structure, interest rates and currencies, among others).
3. For the purpose of the framework, ALM activities cover the investment of liquid resources and all the debt funding transactions that support IFAD's operations.
4. The ALM Framework aims to limit potential losses arising from ALM-related risks in accordance with IFAD's risk appetite, minimizing to the extent possible the amount of capital dedicated to non-core risks.
5. The ALM Framework will be guided by the following overarching principles:
 - (i) To maintain sufficient liquidity to meet IFAD's obligations, namely disbursement requests from clients and the servicing of its debt;
 - (ii) To adequately manage the currency composition of assets and liabilities to avoid losses deriving from fluctuations or adverse reduction in IFAD's financing capacity; and
 - (iii) To protect IFAD from fluctuations in market interest rates in order to reduce volatility in earnings and avoid reduction in capitalization.
6. The methodologies for monitoring the different types of risks are detailed below.

B. Liquidity risk management

7. Liquidity risk is the potential for loss resulting from the inability to meet cash flow needs in a timely manner. The Fund's principal liquidity risk management objective is to hold sufficient liquid resources to enable it to meet all probable cash flow needs related to normal and predictable obligations, without having to resort to unplanned requests to Member States for additional financing.
8. Liquidity risk can also result from the lack of marketability of an investment i.e. one that cannot be readily sold in the secondary markets at a reasonable price to generate the necessary liquidity to meet contractual obligations – and from the inability to raise funds to finance IFAD's operations. In light of the above, IFAD's liquidity management will include monitoring tools to assess the liquidity coverage of current and projected contractual obligations, the credit quality of liquid assets, and the availability of funding. IFAD's key liquidity management tools are:
 - (i) The Liquidity Policy,³ which establishes the level of the minimum liquidity requirement (MLR) that IFAD must hold to meet its obligations even in times of stress;

³ See EB 2006/89/R.40.

- (ii) The Investment Policy Statement, which guarantees that assets in the investment portfolio are managed under the principles of capital preservation and liquidity;
- (iii) Liquidity planning, which will be integrated with the strategic planning process (jointly with the capital planning process) during each replenishment cycle in order to ensure an adequate long-term liquidity and funding position, identify potential funding sources, and ensure the feasibility of the envisioned funding plan; and
- (iv) Complementary indicators. These are additional ratios – such as contractual maturity gaps and rating agencies' liquidity ratios – that will be assessed to complement any aspect not captured by the MLR.

C. Interest rate risk

9. Interest rate risk is the potential for loss arising from adverse movements in market interest rates. The Fund's interest rate risk management objective is to reduce the risk of loss resulting from a duration mismatch between its assets (investment portfolio and loan portfolio) and liabilities (borrowed funds).
10. In line with its mandate, the majority of IFAD's loan portfolio operations are granted on concessional terms, therefore the duration of its assets is relatively long and subject to interest rate mismatches.
11. IFAD's exposure to interest rate risk will be managed as follows:
 - (i) Matching to the extent possible the interest rates of IFAD's assets and related liabilities in order to minimize losses arising from interest rate risk;
 - (ii) Managing the investment portfolio, defining low duration targets to minimize the sensitivity of such investments to changes in the level of interest rate;
 - (iii) Employing to the extent possible interest rate derivative instruments to reduce IFAD's exposure to interest rate risk; and
 - (iv) Allocating capital to account for the remaining interest rate risk.
12. IFAD will monitor the following key indicators in order to manage interest rate risk:
 - (i) Repricing gap – the difference between assets and liabilities that will reprice within a specific time period;
 - (ii) Economic value of equity – sensitivity of net present value of assets and net cash flows of liabilities; and
 - (iii) Duration, value at risk and conditional value at risk of the investment portfolio.

D. Currency risk

13. Currency risk arises from the potential for losses stemming from changes in foreign exchange rates. IFAD's equity is exposed to foreign exchange risk to the extent that assets and liabilities are denominated in different currencies.
14. IFAD's balance sheet is still mainly denominated in special drawing rights (SDR), since the majority of loan assets outstanding are denominated in SDR. However, with the introduction of the single currency lending facility in 2016, the currency composition of the loan portfolio is expected to change in the medium term.
15. The purpose of IFAD's currency management is twofold:
 - (i) Protect IFAD's capital by minimizing IFAD exposure to losses arising from adverse movements in exchange rates that could lead to adverse changes in the Fund's commitment capacity; and

- (ii) Ensure that the Fund is able to cover its projected cash flow needs in the different currencies in which it conducts its operations.
16. IFAD currency risk will be managed as follows:
- (i) Matching to the extent possible the currency of IFAD's assets and related liabilities in order to minimize losses arising from exchange rate risks;
 - (ii) Employing currency derivative instruments to reduce IFAD's exposure to exchange rate risk fluctuations;
 - (iii) Monitoring IFAD's net currency position (assets denominated in one currency, less the liabilities denominated in that currency) in each currency against the currency of reference and keeping the currency position within the established tolerance limits;
 - (iv) Covering short-term projected cash flow needs by currency; and
 - (v) Allocating capital to account for the remaining currency risk.

II. Stress testing

17. Stress testing is an important tool to assess vulnerabilities under hypothetical adverse scenarios. The results of stress testing are used to assess the Fund's resilience to a range of adverse shocks and gauge their impact.
18. As a principle, the Liquidity Policy requires that at any point in time the Fund's liquidity is a strong positive factor for internal and external stakeholders.
19. IFAD must conduct stress testing to identify potential liquidity strain and to ensure that current exposures remain in accordance with the established liquidity risk tolerance as stipulated in the Liquidity Policy.
20. IFAD must use stress test outcomes to adjust its liquidity management strategies and policies and to develop effective contingency plans.
21. IFAD must run stress tests periodically based on more extreme interest and currency rate shocks and alternative yield curve movements from both a net interest income perspective and an economic value of equity perspective. A series of complementary indicators are used to stress test for foreign exchange and interest rate risk factors:
- (i) Stressed economic value of equity – measuring by how much the net present value of equity would change in response to a stress scenario; and
 - (ii) Net interest income change – measuring by how much the net interest income would change in a stress scenario.

III. Systems and monitoring tools

22. In order to identify, monitor and minimize ALM risks, the Treasury Services Division (TRE) of the Financial Operations Department must ensure that a robust system is in place to comprehensively project the cash flows set out in the ALM Framework for liquidity, interest and currency risks. TRE documents the cash flow projection process, methods and procedures.
23. TRE collects reliable, sufficient and relevant data for projection. Data collection requires cooperation and support from across the Fund. TRE seeks the opinions of information providers and liaises with them to understand the cash flows occurring in their business areas. TRE and these information providers then agree upon the best sources of data.

24. Projection methodologies. TRE may choose to use a model-based data method (the Fund's own experience of trends and historical activity) in order to estimate future cash flows.
25. Consolidation and reviews. The cash projection models must be updated regularly with new information and reviewed with sufficient frequency. TRE must be continually aware of movements within the cash flow environment in order to base decisions on the very latest information.

IV. Governance and responsibilities

26. IFAD Management creates and maintains an organizational structure that ensures clear lines of responsibility, accountability and oversight.
27. Executive Board. The proposed ALM Framework will be submitted to the Executive Board for information.
28. The Audit Committee is entrusted with the task of submitting the proposed framework and any amendments thereto to the Executive Board for information.
29. The Investment and Finance Advisory Committee (FISCO) will review all reports and documents related to ALM.
30. The Treasury Services Division is responsible for the day-to-day management of ALM risks.
31. The Risk Management Unit of the Financial Operations Department is responsible for monitoring and reporting on IFAD's ALM risks to FISCO.
32. The Accounting and Controller's Division is responsible for producing IFAD's financial statements, which are the basis of the ALM analysis.

Glossary

Conditional value at risk (CVaR): This 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 value at risk, 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 probability that the institution will remain solvent and is derived from the generally very low probability that losses will be larger than the available capital.

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.

Net present value: This represents the value of cash flows discounted at a rate required by the market for the level of risk.

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 value at risk 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).