European
Investment
Bank

2004 REPORT ON RISK MANAGEMENT IN THE EIB

The 2004 report on risk management in the EIB was submitted to the Board of Governors for information at its meeting on 2 June 2004. For confidentiality reasons, minor editorial changes have been made to the published document.

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Background

Last year saw a transition from a moderate recession to a mild and hesitant economic recovery. As signs of an upturn began to emerge, the credit quality of the European corporate sector ceased to deteriorate and started to a gradual stabilization. Nevertheless, the overall credit quality of the Bank's loan portfolio continued to present an excellent profile, largely as a result of its efforts to maintain the emphasis on improving risk management and monitoring in general.

1. Changes to Organisational Policies

In line with the guidelines expressed by the Board of Governors in its decision to increase the capital of the Bank from January 2003, and following a recommendation by the Audit Committee in its report to the Governors in June 2003, the Management Committee decided to consolidate the management of the main risks within a central unit. As a result, the credit, market and operational risk functions have been grouped together in the new Risk Management Directorate (RM). The Director General of RM reports, for credit risks, to the President of the Bank, for market and operational risks, to the designated Vice President. The President and designated Vice Presidents meet regularly with the Audit Committee to discuss the topics relating to credit, market and operational risks. They are also responsible for overseeing risk reporting to the Management Committee and the Board of Directors.

This consolidation of risk functions in a single Directorate not only follows best banking practices but also allows for a more comprehensive assessment and quantification of the different risks implied by EIB's activity. The Bank for International Settlements (BIS) has recently published a report containing the findings of the Joint Forum's Working Group on Risk Assessment and Capital (a group of bank, insurance and securities firms' supervisors) aimed at better understanding the approaches to the management of major individual risks in the banking, insurance and securities industries.[1] Although predominantly concerned with related issues[2], on the matter of the allocation of risk management functions, while recognising relatively ample variations among the firms surveyed, this report concludes:

"The Working Group has observed two important trends on the basis of a survey of 31 financial institutions in 12 jurisdictions – (1) greater emphasis on the management of risk on an integrated firm-wide basis, and (2) related efforts to "aggregate" risks through mathematical risk models. The Working Group believes that these trends stem from the interest of firms in understanding better

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[1] See: Basel Committee on Banking Supervision, "Trends in risk integration and aggregation", BIS, August 2003, pp.1-41. The part of this report most relevant for the purpose at hand is contained in Annexes 1 and 2. This report can be found at the following address: www.bis.org/index.

[2] The main topics dealt with are: whether or not to centralise risk taking, hedging, and pricing decisions; the correlation assumptions underpinning the aggregation of risks and the apportionment of any diversification benefit among a group's business units; what degree of de-centralisation to allow in capital measurement and attribution

the variety of risks that they face, thereby enabling them to determine more accurately the amount of capital they need to operate their businesses." (page 1)

Noting that one underlying objective in risk assessment is the quantification of economic capital needs, the following points of this report are also worth mentioning:

- *"The Working Group believes that the efforts that firms have been making to develop more systematic and integrated firm-wide approaches to risk management should continue to be strongly encouraged by the regulatory and supervisory community. Such approaches hold out the promise of more informed risk decision-making by firms, improved risk reporting to senior management and boards of directors, greater accountability for risks, and better identification of risk concentrations, among other potential benefits." (pages 11-12)*

- *"When used by financial firms, economic capital typically aggregates, at a minimum, market, credit and operational risks. These risks have in common that an unexpected loss of net asset value is possible, against which economic capital would safeguard…Market and credit risks were often the first to be combined, with operational risk added at a later stage." (page 21)*

- *"The firms employing economic capital methods tended to view the process of obtaining an aggregate perspective on risks as a valuable one. These firms indicated that senior management appreciated (a) the opportunity to conduct a thorough review of all risks facing the firm, (b) the ability to get a handle on the group's total risk, and (c) the resultant sense of how the group's various risks compare to one another." (page 27)*

It is not only the changing regulatory framework for the banking sector in the EU that provokes a re-thinking of the Bank's risk assessment and management processes. The widening range of objectives and tasks entrusted to the EIB by its shareholders, such as the launch of the "European Action for Growth" and the management of the Investment Facility (IF) also called for extensions and adaptations of the Bank's organisation and risk management policies. A new set of credit risk policies, specifically oriented to the IF, has indeed been introduced early this year, while the credit risk framework for the SFF has been revised.

The Management Committee has further reinforced the Bank's management control systems by regrouping the Accounting Department and the Planning, Budget and Control Division within the General Secretariat under the responsibility of the Deputy Secretary General. With a view to complement the Bank's group management control within the General Secretariat, a Management Control Committee has been instituted and this committee is to ensure that homogeneous management standards apply throughout the decentralised environment of the Bank.

2. Changes to Policies for Credit, Market and Operational Risk

The present document outlines the changes and adaptations that have been made in the course of 2003 to the Banks policies with respect to risk management for the above-mentioned three main risk categories. This includes the credit risk policies established for investments outside the EU and the modifications made to credit policies for operations within the EU, ongoing changes with regard to the software used for performing the Bank's asset and liability management, as well as developments in the

management of operational risk, particularly in the context of the Bank's Internal Control Framework (ICF).

2.1 Main Changes to Policies and Methodologies for Credit Risk Management

2.1.1. Sub-limits for SSSR Bank loans

Late in 2002, in order to better control the growth in single signature and single risk[3] (SSSR) bank loans, the use of specific sub-limits for such exposures was approved. Over 2003, several such sub-limits were introduced for a number of banks. As a consequence, of the seventy SSSR individual bank exposures outstanding at the end of last year (for a total of EUR 19 bn), twenty nine were given individual sub-limits by end-2003, the remaining will be assigned as new operations for these counterparts are assessed. These new sub-limits are generally expressed as a percent of the counterpart's own funds, and take into account its overall credit quality, its size, as well as the lending opportunities this counterpart offers for achieving the Bank's own COP objectives.

Based on this experience, the Bank has codified a set of broad criteria that will guide the establishment of such limits, and the Bank's Credit Risk Policy Guidelines have been modified accordingly.

2.1.2. Development of methodologies for assessing credit risk concentration

During 2003, the Bank continued to refine its methodologies to measure credit risk concentrations within its loan portfolio. The methodology adopted is based on the same theoretical foundations used by "Basel II" when defining capital allocations for credit risk. This broader perspective on credit risk responds to the Board's request of strengthening, also by way of more analytical approaches, the assessment and reporting of credit risk concentration.

[3] "Single Signature" (SS) loans are lending operations where no genuine external credit enhancement (e.g. an independent third-party guarantee or a valuable collateral) exists to improve the intrinsic credit quality of the obligor. As such, it is primarily the borrower's own credit standing which represents the "adequate guarantee" foreseen in the Bank's Statutes. However, in the majority of cases, appropriate contractual stipulations (e.g. loss of rating clause) exist and give the Bank the right to call for additional security, or request prepayment, if the creditworthiness of the obligor deteriorates below a certain threshold. Many bank and corporate loans are enhanced by a guarantee (or other form of credit support) from a legally separate entity within the same corporate group to which the obligor belongs or, more generally, from a third party with close links to the borrower. Although not considered as single signature loans for statistical or reporting purposes, given that the default correlation between obligor and guarantor is high, such operations are, from a credit risk point of view, deemed to be effectively equivalent to single signature, and are termed "Single Risk" (SR) loans.

2.1.3. Risk pricing policy

The Bank's risk-pricing policy evolved significantly in the course of 2003. The introduction of Additional Risk Pricing (ARP[4]) for SSSR corporate loans took place in February, and was followed, in July, by its extension to "project finance" and to the "justified exceptions" loans (the latter comprising SSSR operations not in full compliance with the Bank's general credit rules). While for ordinary SSSR corporate loans, ARP is applied whenever outstanding exposure to any corporate obligor exceeds EUR 400 m and the resulting pricing is over 10 bp, no such thresholds are foreseen for "justified exception" loans, where moreover the "incremental return on capital" is upped from 1% to 2%. For project finance lending, the 10 bp margin threshold is eliminated, and its application is limited to operations in excess of EUR 300 m.

2.1.4. Structured Finance Facility (SFF)

Amendments were introduced in the framework governing SFF operations. These modifications were suggested for a number of reasons. First, to make the SFF more responsive to the policy objectives of the "European Action for Growth" and in particular to enhance the Bank's capacity to fund priority lending in the TEN and R&D sectors. Second, to take stock of the experience to date for these types of higher-risk operations. Finally, to provide for a better continuity and coherence in credit risk assessment and pricing with respect to other types of operations.

Overall, these measures are expected to provide additional room for SFF operations for any given level of the SFF Reserve, and make SFF pricing more consistent with that applied to other Bank products. At the same time, these loans still attract a robust level of capitalisation, while their expected remuneration remains in line with their higher credit risks.

The future development of SFF activities, which are now feasible in all countries where the Bank operates, has been supported by a EUR 250 m transfer from the Special Supplementary Reserve to the SFF Reserve approved by the Board of Directors in October and by the Board of Governors in December 2003. This will allow the SFF to become an integral part of the "European Action for Growth" initiative, as well as to support the Bank's lending activities in other priority areas, such as in the "Reinforced FEMIP".

2.1.5. New credit policies for operations under the Cotonou Agreement (Investment Facility)

On the basis of the discussions at their 2003 Board of Governors meeting, the President undertook to extend to the IF a framework for credit risk assessment and management which, although inspired by the rules applying to EU operations, also takes into consideration the objective of poverty alleviation and for private sector support which are the cornerstone of the Facility. Another goal also pursued is to safeguard its revolving and self-sustaining nature.

[4] Additional Risk Pricing integrates the concentration and correlation effects generated by the dependence of credit exposures on common risk factors.

2.1.6. Objectives achieved.

Against an unfavourable macroeconomic background and a deteriorating credit environment, since about year 2000 the Bank put in place several measures designed to avoid the financial repercussions of adverse circumstances. The results of such measures are briefly summarised here below.

2.1.6.1. Portfolio Diversification

The degree of concentration has continued to decrease in 2003. In particular, the number of risk-weighted exposures in excess of 5% of own funds, and which the Bank defines as "large", has fallen from 15 at end-2002 to 13, and now accounts for just over 90% of the Bank's own funds against 107% in 2002. This progress is even more apparent if comparisons are made with respect to end-2001, when 19 such exposures existed, and accounted for 142% of own funds.

2.1.6.2. Credit Quality

The credit quality of the Bank's loans has been maintained and remains in line with COP targets: loans internally graded A to C represented 95.6% of the EU loan portfolio, up from 95% last year, and compare to a COP target for 2003 of at least 93%.

2.1.6.3. SSSR Exposures

Another aspect that drew, on several occasions, the attention of the Board is the amount and trend of SSSR exposures. After years of growth, they peaked at EUR 59 bn at end-2001, when they accounted for 31% of the loan book within the Union. They fell to EUR 54 bn by end-2002, and are now at some EUR 50 bn, accounting for 24% of the lending portfolio.

The table below summarizes the evolution of certain indicators of portfolio diversification, credit quality and SSSR exposures over the 2001-2003 period.

	2001	***2002***	***2003***
Portfolio Diversification			
- N° of risk-weighted counterparts > 5% of own funds	*19*	*15*	*13*
- Large exposures expressed in % of EIB own funds	*142%*	*107%*	*93%*
Credit Quality			
- Percentage of loans in A to C loan grading category	*92.5%*	*95%*	*95.6%*
SSSR Exposures			
- Nominal (EUR bn)	*59*	*54*	*50*
- Percentage of EU loan book	*31%*	*27%*	*24%*

The Bank believes that the efforts made in the last few years in the context of an adverse credit environment have borne their fruits. The portfolio situation now is quite solid, and additional reductions in both concentration levels and SSSR loans seem less

needed. The Bank will of course continue to pay due attention to the trends in key risk variables, and pursue further improvements in risk management and monitoring, but with more emphasis given to consolidate the results achieved, and to the adequate remuneration for the risks incurred.

2.2. Main Changes to Policies and Methodologies for ALM and Market Risk Management

It is recalled that the Bank pursues very conservative policies with respect to market risk and its risk management policies are geared to contain such risks.
The strategic objectives for ALM and Market Risk management remain those of facilitating a stable and predictable capital growth, ensure the self-financing of the Bank's operations and maintaining, over the long term, the economic value of its own funds.

These objectives are achieved through a combination of:

- Investing the Bank's own funds according to a long term investment strategy;
- Balancing banking revenues and operational costs;
- Tracking and controlling any deviations from the Bank's market risk limits.

In December 2003, the Management Committee decided to update the terms of reference of the Bank's Asset Liability Committee. The primary missions of this Committee are now:

- To oversee the Bank's overall ALM and financial risk management framework, comprising all the policies, methodologies, procedures, and reporting necessary for its correct functioning.

- To monitor the Bank's overall ALM objectives, and their translation into an operational framework, including setting appropriate limits and hedging strategies, both for the overall balance sheet and, if appropriate, for sub-categories of it.

- To ensure that all the main ALM and financial risks are subject to an adequate degree of timely disclosure to the relevant bodies, *inter alia,* the Management and Audit Committees, the internal and external auditors.

The alignment of the Bank with best market practices and supervisory recommendations will be further enhanced in 2004 by the creation of comprehensive "Market Risk Policy" guidelines containing rules on ALM, market risk and risk adjusted performance measurement. Market risk reporting will be extensively reviewed and upgraded in the course of this year.

2.2.1 Technical advances

During 2002 and in the framework of its ISIS project, the Bank acquired a software package, which allows aggregating, measuring and managing the market and liquidity risks of the balance sheet. The implementation of this package started during the year 2003 and will yield its first operational results in this year.

From an ALM and market-risk viewpoint, this will, *inter alia*, enhance, under different scenarios:

- The management of the variability of future earnings (Earnings-at-Risk);
- The management of the variability of economic values (Value-at-Risk);
- The impact on both earnings and economic value of changes in interest rates and other market variables under specific, potentially critical scenarios_(Stress testing).

2.3 Main Changes to Policies and methodologies for Operational Risk Management

In January 2003 the Management Committee approved the Bank's Operational Risk Policy, setting out the principles for the management of Operational Risk as well as the key element of the Operational Risk Management Framework.

2.3.1 Internal Control Framework

The Bank continued to implement its plans for the introduction of the Internal Control Framework (ICF) throughout the key services and for the update of those already established.

In order to improve the documentation of the Internal Control Framework, in 2003 the Operational Risk Division within the Risk Management Directorate installed and made fully operational a dedicated, network-based system that allows management to perform on line consultations, analysis and updates both by key business process or by organisational unit. Pursuing a decision of the Management Committee, the Operational Risk Division is responsible, inter alia, for supporting the services in the update and maintenance of the Bank's ICF.

Internal Audit is responsible, in accordance with its Audit Charter, for independently reviewing the operational risk framework and for providing assurance in regards to its adherence to the standards set out in the Operational Risk policy. It is also responsible, either within or outside the context of its regular audit program, for testing the effectiveness of internal controls and agree action plans with management as needed.

2.3.2 Operational Risk Report

The Bank monitors a set of key Operational Risk indicators in order to allow the early detection of operational risk *before* an actual operational failure occurs through the investigation of unexpected or unusual trends.

In 2003 the Bank started a review of the key risk indicators with the objective of assigning risk-based thresholds to such indicators and therefore be able to promptly react when such thresholds are overcome. This will result in 2004 in the regular production of an Operational Risk Scorecard, which will provide an overall picture of the operational risk profile of the key departments and of the Bank as a whole.