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FOR CONSIDERATION

MEMORANDUM

TO : THE BOARD OF DIRECTORS

**FROM : Omar KABBAJ
President**

**SUBJECT : POLICY ON CAPITAL ADEQUACY AND EXPOSURE
MANAGEMENT***

Please find attached hereto, the above-mentioned document.

Attch.

*** Questions on this document should be referred to:**

Mr. Tim Turner	Manager	FRMU	Extension 4160
Mr. Mario Ernst	Director	FBFP	Extension 4093
Mr. B. Ogunjobi	Director	OCDN	Extension 4040

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EXECUTIVE SUMMARY

- i. Following recent policy updates on provisioning, arrears, and country eligibility for ADB non-concessionary resources, the attached paper on exposure management policy is part of an on-going program of financial reforms designed to align the Bank with changes in internationally accepted industry best practices.
- ii. Currently, it is the Bank's practice to limit lending to any single borrowing country to no more than 15% of the outstanding portfolio. This limit is called the country exposure ceiling. The rationale for this ceiling can be traced to the Bank's minimum reserves to loans target of 15% and has two principal objectives: to ensure adequate diversification of the Bank's public sector loan portfolio; and to ensure equitable access for all eligible borrowers to the Bank's resources.
- iii. While this ceiling has served well for a number of years and its importance is unanimously acknowledged, weaknesses in its formulation have become increasingly evident. The most fundamental shortcoming of the current country exposure ceiling is its linkage to demand for the Bank's resources (share of the outstanding portfolio) instead of the Bank's effective risk bearing capacity. Because of a recent slowdown in global portfolio growth stemming from the Bank's stricter eligibility rules, several of the most active and creditworthy borrowers have approached the 15% ceiling and caused the Board of Directors to question whether the Bank has the risk bearing capacity to continue to lend to these countries. Paradoxically, this comes at a time when the Bank has concluded a fifth capital replenishment and has approved enhancements to its financial products to rejuvenate its lending operations. The current framework has also been criticized as being uniquely focused on public sector lending and therefore poorly adapted to incorporate exposures for private sector operations and the Bank's new financial products including guarantees and risk management products. Finally, the framework has been criticized by the rating agencies as too simplistic to be useful for portfolio risk management because it applies the same effective lending ceiling to all eligible countries.
- iv. To address these concerns, Management is proposing to revise the Bank's country exposure ceiling for ADB non-concessionary resources. Drawing on the principles and practices established by banking regulators, industry experts, and other peer group financial institutions, the revised ceiling would be set at 15% of the maximum sustainable portfolio instead of 15% of the outstanding portfolio. The maximum sustainable portfolio would be defined as the maximum total portfolio the Bank's risk bearing capacity can prudently support and would be computed regularly based on an assessment of the risk profile of the outstanding portfolio in relation to the Bank's on-balance sheet risk bearing capacity. The exposures incorporated in this risk assessment would include all on and off-balance sheet public sector exposures, all on and off-balance sheet private sector exposures, and all on and off-balance sheet credit exposures related to the Bank's

own treasury book. Operational lending limits for all eligible countries would be scaled against the revised 15% country exposure ceiling to serve as a risk-based benchmark for designing the Bank's country lending strategies.

- v. If adopted, the proposed enhancement of the Bank's exposure management framework is expected to have several direct effects on the Bank's operations. First, the proposed framework will relieve the constraint on lending to the Bank's most active and creditworthy borrowers by raising the ceiling to reflect the Bank's effective risk bearing capacity. Analysis of the potential impact of the revised country exposure ceiling confirms that the Bank would indeed be able to withstand an extended default by any borrower at or near the 15% ceiling and that under all circumstances the Bank's key debt limits would be respected. Second, it will enable the Bank to explicitly incorporate private sector exposure as well as exposure created by the new financial products recently approved by the Board. It will also integrate the increasingly complex credit exposures embedded in the Bank's own treasury book. As such, it will create a framework of quantifiable indicators for the Board and Management to comprehensively monitor and control credit exposure and to assess the adequacy of the Bank's capital to support these risks.

- vi. To ensure adequate checks and balances in the decision-making process while protecting the Bank from erroneous disclosure of sensitive information such as country ratings, implementation of these exposure policy enhancements is proposed at three levels. First, as set out in its terms of reference, the Risk Management Unit would have principal responsibility for independently assessing the risks associated with all of the Bank's credit sensitive assets. The Unit would prepare regular reports on the risk profiles of the Bank's portfolios. Second, in line with the recommendations of the Bank's external auditors, a Senior Management committee would provide process oversight by reviewing and validating: all risk ratings; the assessment of the Bank's risk bearing capacity; and the proposed operational limits. Third, the Board of Directors would retain ultimate responsibility for assuring that prudent credit decisions are made. It would exercise this role by reviewing quarterly reports on portfolio credit risk, the Bank's risk bearing capacity, and the resultant maximum sustainable portfolio and exposure ceiling. The Board would ensure compliance with the Bank's exposure policy by continuing to approve all credit extension operations on a project by project basis.

1 INTRODUCTION

- 1.1 Like all financial institutions that extend credit, the African Development Bank has a natural exposure to credit risk –the potential non-performance of borrowers or other financial counter-parties on obligations to the Bank. Because such exposure is an unavoidable part of performing its development mandate, the Bank relies on a framework of credit and exposure management policies to protect its long-term financial soundness.
- 1.2 Risk managers and banking regulators generally classify credit and exposure management policies into two broad categories. The first category consists of the policies that address the **probable** or **expected losses** in a portfolio of credit sensitive assets. For the Bank, the principal policy limiting expected losses is the eligibility policy, which limits access to ADB resources to those countries assessed as creditworthy. To control losses on outstanding loans, the Bank applies an arrears policy that imposes sanctions on borrowers that fail to perform as agreed on their obligations to the Bank. While these sanctions seek to limit repayment delays, the Bank also applies a provisioning policy to ensure that an adequate reserve is set aside for those losses that cannot be eliminated but which can be adequately estimated. Finally, in the private sector, the Bank applies a pricing policy, which seeks to compensate the Bank for the expected credit risks on each transaction.
- 1.3 Although the probable level of default is typically in the order of a few percent of the outstanding portfolio, a portfolio of credit sensitive assets will also be exposed to **very low probability losses** that are frequently several orders of magnitude higher. These **unexpected losses** typically result from unanticipated systematic events such as the Asian financial crisis. To mitigate such potentially catastrophic unexpected losses, financial institutions have traditionally relied on two principal mechanisms. The first mechanism is to establish limits on counter-party exposure and portfolio concentration. By diversifying exposure, financial institutions seek to combine assets whose credit performance will not be affected by the same external factors. The second mechanism is to maintain sufficient capital and reserves as a cushion against unexpected loss producing events. Experience has demonstrated that well capitalized institutions have a better chance of surviving, even under extremely unfavorable conditions, than highly leveraged institutions.

Recent Policy Developments

- 1.4 As part of the Bank's on-going financial reform program, the Board of Directors has recently reviewed a number of proposals for enhancing the Bank's credit and exposure management policies. Among them, the Board confirmed the Bank's policy for country eligibility to ADB non-concessionary resources (ADB/WP/BD/98/33), approved a new provisioning policy (ADB/WP/BD/98/124 & 125), and discussed ways to reinforce the arrears policy by increasing possible sanctions on non-performing borrowers (ADB/BD/WP/99/46). These initiatives have helped to bring most of the Bank's policies and guidelines for controlling **expected losses** broadly in line with internationally accepted industry best

practices. The purpose of this paper therefore is to address the second group of policies, namely the policies which focus on low probability or **unexpected losses** with a view to introducing enhancements which will likewise bring the Bank up to date with developments in the industry's best practices.

- 1.5 This paper is organized in four principal sections. Following the introduction, the paper begins by examining the Bank's current country exposure ceiling and the accompanying reserves target, the operational impact of this policy framework, and its strengths and weaknesses. The next section of the paper presents Management's proposal for enhancing the exposure guideline for ADB non-concessionary resources and for introducing an explicit capital adequacy policy. This section lays out the conceptual principles upon which this proposal is based, describes the mechanics of the framework as proposed for the African Development Bank, assesses the potential impact that adopting this framework would have on the Bank's operations, and examines the key implementation issues. The last section of this paper summarizes Management's conclusions and presents its recommendations for the Board's consideration.
- 1.6 Because capital adequacy and exposure management has developed into a highly technical field, this document is organized to separate the policy issues from the purely operational aspects of the proposal. In specific, the main text of this paper synthesizes the essential policy issues for the Board's consideration. For completeness however, numerous annexes are presented which contain the associated technical explanations and guidelines. Answers to questions raised by Board members as well as sample capital adequacy and exposure reports are provided in an accompanying document (Policy on Capital Adequacy and Exposure Management – Questions and Answers).

2 THE BANK'S CURRENT EXPOSURE FRAMEWORK

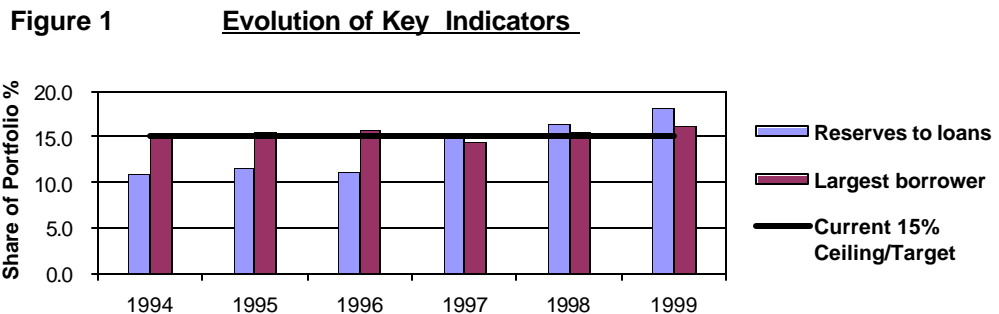
2.1 Mechanics of the Country Exposure Ceiling

- 2.2 In 1992, the Board of Directors established a practice that restricts the maximum exposure for any single country to 15% of the Bank's disbursed and outstanding portfolio (ADB/BD/WP/92/95). This limit, frequently referred to as the country exposure ceiling, serves two principal purposes. On the one hand, from a risk management perspective, limiting the maximum exposure of any single borrower aims to ensure an adequate degree of diversification in the Bank's portfolio. On the other hand, this ceiling also seeks to provide equitable access to the Bank's resources for those countries deemed to be creditworthy.
- 2.3 Linked to the country exposure ceiling, the Bank's current capital adequacy policy requires that reserves be maintained at a minimum of 15% of the Bank's outstanding portfolio. The principle rationale for maintaining reserves at least equal to the exposure ceiling is to have sufficient reserves to cover possible default by any single large borrower.

- 2.4 Although the 15% country exposure ceiling and the associated reserves requirement has the apparent advantage of being straight-forward to apply, in practice three significant short-comings in the current policy have become increasingly evident.

Inadequate Linkage to the Bank’s Risk Bearing Capacity

- a) The most fundamental weakness of the current policy is the way the exposure ceiling is related to the outstanding portfolio (a reflection of customer demand) instead of being directly linked to the Bank’s risk bearing capacity. Indeed, because of the linkage to customer demand, the recent slowdown of growth in the Bank’s outstanding loan portfolio has resulted in virtually zero growth in the country exposure ceiling over the past four years. As illustrated in figure 1, this has caused several of the Bank’s most active (and creditworthy) borrowers to approach or even exceed the 15% ceiling. This in turn has led the Board to question whether the Bank has the risk bearing capacity to continue lending to these countries. Paradoxically, this comes against a backdrop where the Bank’s reserves¹ have strengthened beyond the 15% target, the Bank’s capital base has been reinforced by a fifth capital increase, and sweeping changes to the Bank’s lending products have been approved by the Board to stimulate lending activities.



Expressing the exposure ceiling in relation to the outstanding portfolio has had another unexpected effect. During the past few years, several countries have prepaid their loans to the Bank. As a result, the size of the Bank’s outstanding portfolio has decreased and correspondingly the portfolio share of the other countries has gone up. This linkage to the outstanding portfolio combined with the limited number of eligible borrowers, causes the guideline to be inherently unstable and therefore weakens its usefulness as an exposure management tool.

Focus Limited to the Public Sector

- b) A second deficiency of the current framework stems from the fact that it was created when the Bank was principally lending to public sector borrowers. As such, it does not incorporate private sector exposures nor does it provide for

¹ The reserves to loans ratio is defined as net reserves over gross loans. This is the most conservative definition.

off-balance sheet exposures. Therefore, the guideline is poorly adapted to handle the new financial instruments such as guarantees or risk management products that the Bank is preparing to intermediate and is not currently configured to integrate non-sovereign exposures at a time when the private sector has become a pillar of the Bank's new vision.

Hinders Effective Credit Risk Management

- c) A third fundamental short-coming of the country exposure ceiling, which has been highlighted by the rating agencies, is that the same 15% exposure limit is effectively applied to all eligible countries. Currently there is no systematic framework that sets operation country limits to reflect country specific circumstances. Therefore, the policy as it is currently applied hinders effective management of the credit quality of the Bank's portfolio.

3 THE PROPOSED FRAMEWORK ENHANCEMENTS

3.1 Conceptual Principles Underlying the Proposed Framework

- 3.1.1 In evaluating options for enhancing the Bank's credit and exposure management policy framework for non-concessionary resources, Management has drawn on the best practices of other multilateral institutions and commercial banks, as well as the standards recommended by international banking regulators. Of particular importance has been the work of the Basel Committee on Banking Supervision, which is the creator of the well-known and widely-adopted Basel Capital Accord.
- 3.1.2 The Basel Capital Accord was introduced by international banking regulators in 1987 to strengthen the soundness and stability of the international banking system and to diminish any source of competitive inequality among international banks. The Accord is built upon two fundamental principles:
- Risk capital is the principal source of an institution's capacity to withstand large low-probability credit-related losses.
 - The level of risk capital required to support a portfolio of credit-sensitive assets depends on the inherent riskiness of those assets.
- 3.1.3 To implement these fundamental principles, the 1987 Basel Accord articulated a standardized methodology for aggregating all on and off-balance sheet credit exposures. The Accord also established the definitions of what constitutes risk capital as well as setting the minimum risk capital level required by internationally active commercial banks at 8% of risk assets. This standard has been adopted by banking regulators in most major countries.

- 3.1.4 Although the Basel Accord has been widely adopted by regulators including most African Central Banks, it has also been criticized for being overly simplistic and for possibly creating unexpected incentives for some commercial banks to take additional risks. In response to these criticisms, in early 1999 the Basel Committee published a proposal for amending the Accord. The principle enhancement offered by the Committee is to make a more explicit linkage between regulatory capital requirements and the riskiness of assets. In specific, the Committee has proposed to apply graduated requirements based on the credit risk ratings of the assets. The international banking community has been given a year to examine and comment on the proposal before the regulators expected to implement any changes to the Accord.
- 3.1.5 Despite the wide-spread adoption of the Basel Capital Accord by most national banking regulators, the multilateral development banks have only recently begun to look to the Accord as a source of inspiration for their internal exposure management policies. Among the leading MDBs in this area is the World Bank Group's International Finance Corporation (IFC), which formally introduced capital requirements as part of its exposure management framework a number of years ago. Management believes that the principles promulgated by the Basel Capital Accord and adopted by these sister institutions can also be used by the African Development Bank to address the weaknesses identified in the current exposure management framework. Moreover, advances in the Bank's internal risk assessment capacities provide a basis for the ADB to move directly to adopt some of the key elements of the amended approach that is now being proposed by the Basel Committee. (a summary of the exposure and capital adequacy policies of selected MDBs is presented in Annex I)

3.2 Mechanics of the Proposed Framework

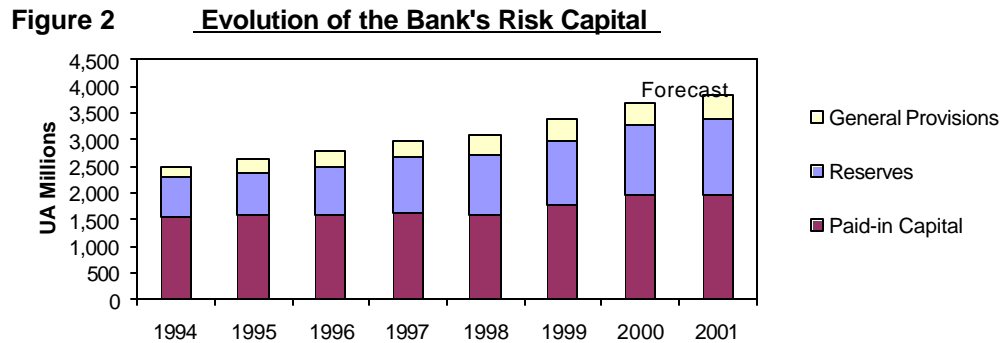
- 3.2.1 Drawing on the principles of the Basel Capital Accord, the first and most critical step towards addressing the weaknesses of the Bank's current policy, is to create a more explicit and dynamic linkage between the risks that should be assumed by the Bank and the Bank's risk bearing capacity. *This can be achieved by re-configuring the country exposure ceiling to be 15% of the Bank's maximum sustainable portfolio instead of 15% of the disbursed and outstanding portfolio, where the maximum sustainable portfolio is defined as the maximum portfolio that the Bank's risk bearing capacity can prudently support.*
- 3.2.2 The maximum sustainable portfolio would be computed in a three steps process as follows:

Step One – Assessing the Bank's Risk Bearing Capacity

- a) The first step in determining the maximum sustainable portfolio is to assess the Bank's risk bearing capacity using 'risk capital' as the measurement yardstick. Drawing on the Basel Accord, the Bank's 'risk capital' is defined as

the sum of the on-balance sheet components of its risk bearing capacity, namely: net paid-in capital; net reserves; and general loan loss provisions. Callable capital is not included as part of risk capital principally in view of its role as the last line of defense for the Bank’s bondholders. However, because risk capital includes all three components of the Bank’s on balance sheet capital base, it is a more comprehensive measure of risk bearing capacity than “reserves” as used in the “reserves to loans ratio”. (The proposed guidelines for assessing risk capital are presented in annex II)

Figure 2 below illustrates how the Bank’s risk capital has evolved since 1994 and how it is expected to change over the next two years. This chart shows the positive effect of the fifth general capital increase and the annual accumulation of both reserves and general provisions on the Bank’s risk bearing capacity².



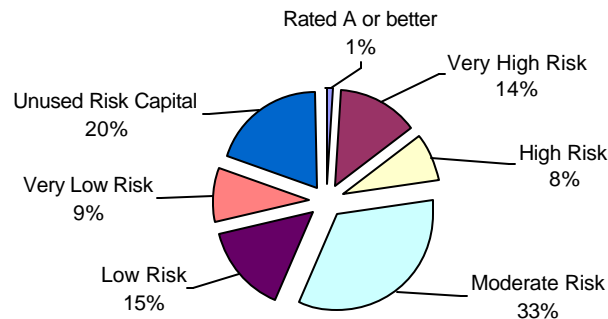
Step Two – Assessing Used Risk Bearing Capacity

- b) The second step for determining the maximum sustainable portfolio is to assess the amount of risk capital required to support the Bank’s disbursed and outstanding public and private sector portfolios as well as any other credit-sensitive assets including all off-balance sheet positions. For the public and private sector portfolios, the Bank’s internal risk ratings are used to categorize all exposures into five basic risk classes (the proposed guidelines for assessing credit risk are presented in annex III). In line with the principles promulgated in the most recent Basel proposal, each risk class would have a graduated level of required risk capital. For off-balance sheet instruments with public or private sector borrowers, exposures are aggregated on a ‘loan equivalent basis’ with each borrower’s on-balance sheet exposures. For the Bank’s treasury book, which includes investments and all derivative positions, the risk weightings recommended in the Basel Accord are applied. (the proposed guidelines on risk capital requirements are presented in annex IV)

² The paid-in portion of GCIV is deemed to have full effect on the Bank’s risk bearing capacity from 2000.

Figure 3 illustrates how the Bank's risk capital was conceptually deployed under the proposed framework. It is notable that given the risk profile of the Bank's outstanding assets at the end of December 1999, it was estimated that approximately 80% of the Bank's risk capital was required as backing and therefore implies that the remainder, 20% of the Bank's risk capital, was unused.

Figure 3 **ADB Risk Capital Utilization, Dec. 31 1999**

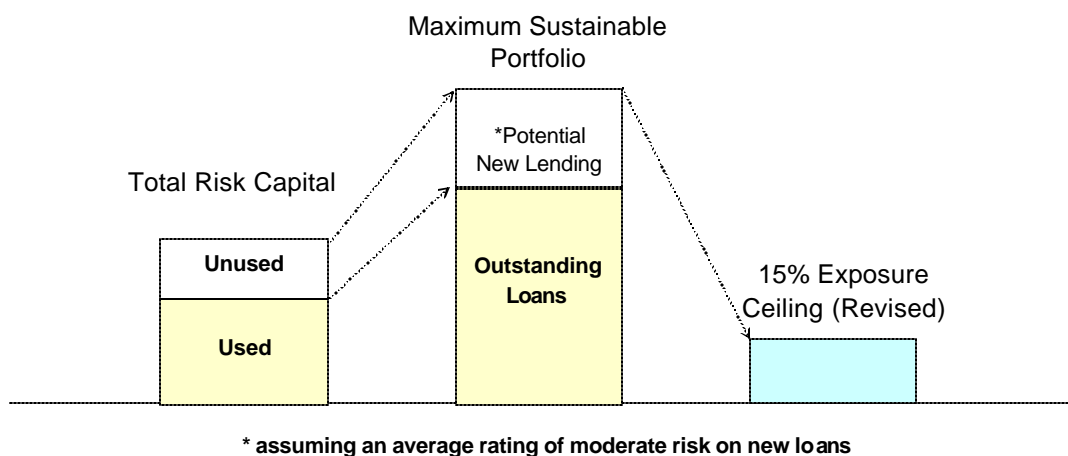


Step Three – Translating Unused Risk Capital into Lending Capacity

- c) Once the Bank's total risk capital and the used component have been determined, the final step is to translate any unused risk capital into potential new lending. Taking a conservative assumption that all new lending is in the moderate risk class, potential new lending is determined by translating unused risk capital into potential new lending using the risk capital requirement for moderate risk assets. The maximum sustainable portfolio is then computed as the sum of the outstanding portfolio plus the potential new lending derived from unused risk capital. (see annex V)

3.2.3 The key feature of the proposed approach for determining the maximum sustainable portfolio is that it would create a comprehensive linkage between the Bank's risk bearing capacity and the level of on and off-balance sheet risk the Bank should prudently assume. As illustrated schematically in figure 4 below, the 15% country exposure limit, being linked to the maximum sustainable portfolio, would therefore be directly and dynamically linked to the Bank's entire on balance sheet risk bearing capacity. This linkage is more comprehensive than the current practice of just targeting reserves at 15% of the outstanding loan portfolio.

Figure 4 Revised Country Exposure Ceiling



- 3.2.4 In the proposed framework, if the Bank’s outstanding portfolios grow rapidly or portfolio risk unexpectedly increases, the level of risk capital required to support these risks would increase accordingly. This would trigger either a compensating reduction in potential new lending or send a signal that additional capital would be necessary. Alternatively, changes in the Bank’s risk bearing capacity (up or down) would also feedback into the maximum sustainable portfolio and the exposure ceiling. To ensure the Board is alerted to potential capital adequacy concerns in time to take appropriate actions, a specific threshold could be established when the used portion of risk capital reaches 80% of total risk capital (i.e. when the unused portion falls below 20% of total risk capital).
- 3.2.5 Although the changes proposed to the exposure ceiling will correct most of the deficiencies identified in the Bank’s current exposure framework, they will not address the rating agencies’ concern that a single 15% country ceiling is applied for all borrowers eligible for ADB non-concessionary resources regardless of size or risk. To correct this deficiency, operational limits for all eligible countries would be developed underneath the 15% global country exposure ceiling. These country limits would be scaled against the 15% ceiling based on an assessment of each country’s economic potential and risk rating and would serve as a risk-based benchmark for designing the Bank’s country lending strategies. (the proposed guidelines for scaling country limits against the 15% exposure ceiling are presented in annex VI)
- 3.2.6 In view of the Board’s decision to place greater emphasis on private sector and equity investment operations, Management is also proposing to extend the exposure management framework to incorporate non-sovereign exposures. This would be achieved at two levels. First, the Board would be asked to approve explicit ceilings for all private sector loan and equity exposures that would be established as a share of the Bank’s total risk capital. (Management would present a specific proposal to the Board in the context of private sector strategy

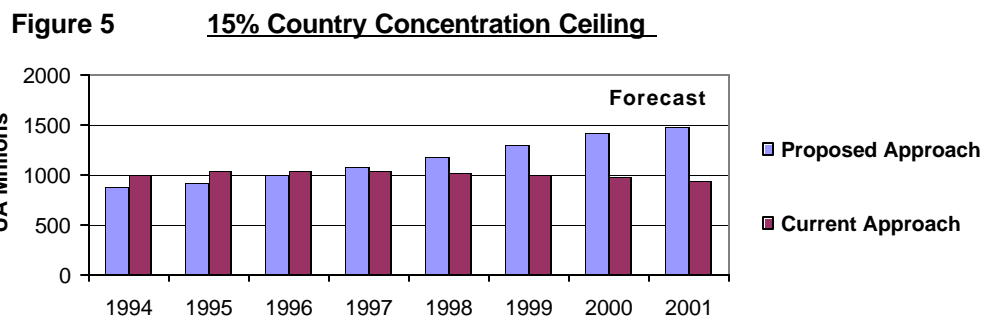
discussions later this year) Second, experience from the Asian financial crisis, among others, has shown that private sector debt can quickly become liabilities of the State in a crisis. Therefore, private sector operations would be also included as part of total exposure for each country.

3.3 Operational Impact of the Proposed Framework

3.3.1 If adopted, the proposed enhancements to the Bank's credit and exposure framework would have several direct effects on the Bank's operations.

Headroom for Creditworthy Borrowers

3.3.2 First, because 20% of the Bank's risk capital is currently assessed as unused, linking the country exposure ceiling to the maximum sustainable portfolio will effectively raise the 15% country exposure limit. This effect is illustrated in the projections in figure 5, where the 15% country exposure ceiling using the proposed maximum sustainable portfolio approach is appreciably higher than the ceiling using the current approach, which in fact is projected to decline.



3.3.3 Thus, by redefining the exposure ceiling to be linked to the Bank's maximum sustainable portfolio, the current constraint on the largest borrowers would be substantially reduced and the Bank would be able to more effectively exploit its risk bearing capacity in pursuit of its development lending objectives. Moreover, by aggregating all exposures on a loan equivalent basis, the credit risks associated with the proposed new financial products including guarantees and risk management instruments would be explicitly incorporated into the limits.

Consistent with Other Policies

3.3.4 Although the country exposure ceiling would indeed rise in absolute terms if the proposed framework is adopted, Management's analysis confirms that the Bank can withstand the low probability risk that a single large borrower with a portfolio share equal to the exposure ceiling defaults on its obligations to the Bank (see

annex VII). Therefore, the exposure ceiling would continue to fulfill its primordial function to maintain an adequate level of portfolio diversification. Moreover, as long as the Bank's risk capital is not exhausted, the revised approach would not cause any eligible borrowers to be denied access to ADB resources. Therefore, the exposure ceiling would also continue to satisfy the criteria of providing equitable access to all eligible borrowers. Finally, an increase in lending would require the Bank to raise the level of borrowing on the international capital markets. Analysis confirms that even if the Bank would lend until the maximum sustainable portfolio is achieved, the associated borrowing requirements would not overshoot the Bank's prudential debt ceilings (see annex VIII).

- 3.3.5 The proposed framework would also affect the Bank's private sector and equity investment operations. By establishing an explicit risk capital limit for private sector and equity investment operations, the Board would have direct control on the potential size and risk profile of the Bank's private sector portfolios.

3.4 Implementation of the Proposed Framework

- 3.4.1 To ensure adequate checks and balance in the decision-making process while protecting the Bank from erroneous disclosure of potentially sensitive information such as the country ratings, implementation of the enhancements to the Bank's credit and exposure management framework is proposed at three levels.

Risk Management Unit

- 3.4.2 The first level of implementation would involve the Risk Management Unit. The Risk Management Unit would have principal responsibility for independently assessing the risks associated with all of the Bank's credit sensitive assets. This would include co-ordinating the annual country risk rating exercise with the Bank's country experts and overseeing the quarterly rating updates of all private sector and equity investment operations. The Risk Management Unit would be responsible for producing annual public and private sector credit risk reports that: analyze the risk profile of the Bank's portfolios; assess the associated risk capital requirements; and compute the implied maximum sustainable portfolio and 15% country exposure ceiling. A set of capital adequacy and exposure indicators would be developed to facilitate monitoring of portfolio risk between annual reports (a sample quarterly indicators report is included in the question and answers document). The Risk Management Unit would also be responsible for implementing the country limit scheme during the design of the Bank's country lending strategies.

Credit Committee

- 3.4.3 The second level of implementation would involve Senior Management review. In line with the recommendations of the Bank's auditors and industry best practices, a Senior Management Committee would be established as the senior-most management forum on exposure issues. The Committee would be responsible for reviewing and validating the Bank's risk ratings, clearing the annual public and private sector portfolio credit risk reports, and regularly monitoring internal compliance with the credit and exposure management guidelines. The Committee would also be the focal point for formulating future enhancements of the Bank's credit and exposure management policies and guidelines. (a draft terms of reference of the Committee is presented in annex IX. However until the committee is fully operational these functions would be assumed by the Asset and Liability Management Committee, ALCO)

Board of Directors

- 3.4.4 The final level of implementation would involve the Board of Directors. Consistent with accepted best practice, the Board of Directors has ultimate responsibility for assuring that prudent credit decisions are made. In the proposed framework, one of the Board's new roles would be to review Management's annual and interim reports on the Bank's portfolio credit risks. These reports would analyze the risk profile of the Bank's portfolios, assess the Bank's risk bearing capacity, and evaluate the implied maximum sustainable portfolio and 15% country exposure ceiling. Operationally, the Board of Directors would continue to approve the three-year country lending programs as presented in the annual budget and planning cycle as well as the CSPs. The Board would also continue to approve all credit applications on a project by project basis.

4 CONCLUSIONS AND RECOMMENDATIONS

- 4.1 The Bank's current country exposure management framework was first introduced in 1992. This paper has argued that although the current policy has served its original functions, it is no longer well-suited to the Bank's evolving operating environment and its changing business objectives.
- 4.2 One of the principal criticisms of the current policy is that because of its linkage to the outstanding portfolio, paradoxically it is restricting the Bank from effectively exploiting its reinforced risk bearing capacity at a time when the Bank is attempting to rejuvenate its lending activities by making its products and services more attractive to borrowers. The current policy has also been criticized for being poorly adapted to handle the exposures created by Bank's private sector and equity investments operations as well as the new off-balance sheet financial instruments such as guarantees and risk management products that are soon to be offered. Moreover, the current policy framework has been shown to be

significantly lagging the industry best practices exemplified by the standards set out in the Basel Capital Accord and already implemented at sister institutions such as the IFC and the IBRD.

- 4.3 In this paper, Management has presented a proposal to correct the deficiencies in the current policy framework. These policy enhancements would bring the Bank more in line with current internationally accepted industry best practices and have received a very positive reaction from representatives of the other MDBs³ and the credit rating agencies.
- 4.4 The proposed enhancements to the Bank's credit and exposure management policies would:
- create a framework for comprehensively evaluating the Bank's exposure to on and off-balance sheet credit risk and the adequacy of its capital to support these risks;
 - create a direct linkage between the Bank's risk bearing capacity and the maximum credit risks it should prudently assume; and
 - establish a permanent management forum to channel the Bank's country risk expertise and to formalize the management of exposure.

Recommendations

- 4.5 In light of the arguments presented in this paper, Management recommends the following changes to the Bank's capital adequacy and exposure management framework:
- a) The global country exposure ceiling would be set at 15% of the maximum sustainable portfolio. The maximum sustainable portfolio would be computed using the capital adequacy methodology and guidelines outlined in this paper.
 - b) A capital adequacy alert would be triggered if used risk capital reaches 80% of the Bank's total on-balance sheet risk capital.
 - c) Using this capital adequacy framework, explicit risk capital limits for private sector and equity exposures would be approved by the Board of Directors.
 - d) The Risk Management Unit, with over-sight from the Senior Management Committee, would have principal responsibility for implementing the proposed enhancements to the Bank's capital adequacy and exposure management framework.
 - e) Through annual and quarterly reports, the Board would review the risk profile of the Bank's credit sensitive portfolios and its risk capital structure, and ensure compliance with the Bank's capital adequacy and exposure

³ The proposed credit and exposure framework was presented to the MDB Controllers Forum in October, 1999

management policies. The Board would continue to approve the three-year lending programs during the annual budget and planning cycle as well as through individual country CSPs. Finally, the Board would retain ultimate control of the exposure management framework by approving credit decisions on a project by project basis.

ANNEX I

COMPARISON OF THE PRACTICES OF SELECTED MDBS

1. INTERNATIONAL FINANCE CORPORATION (IFC)

In 1994, the IFC introduced the major elements of the Basel Capital Accord into its capital adequacy policy. As one of the first MDBs to offer clients access to guarantees and risk management products, the IFC's capital adequacy policy fully incorporates all off-balance sheet exposures using the Basel Capital Accord's loan equivalent and current exposure methodologies respectively. The IFC defines risk capital to include paid-in capital, reserves, and general loan loss provisions (the same definition proposed for the ADB) and allocates 100% risk capital backing for equity investments.

The IFC's minimum capital adequacy ratio is 30% by policy, whereas in practice its operational minimum is 40%. Although its operations are exclusively in the private sector, the IFC limits exposure in any single country to the lower of 12% of the portfolio or 25% of risk capital.

2. WORLD BANK (IBRD)

Prior to a policy change in 1996, the IBRD limited exposure to any single country to 10% of the outstanding portfolio. In response to concerns that this policy was placing unnecessary constraints on lending to large creditworthy borrowers, the IBRD updated its exposure management practices to create a more direct link between the exposure ceiling and risk bearing capacity.

Drawing on the principles articulated by the Basel Accord, the IBRD now uses a simulation model to dynamically set the exposure ceiling based on the largest portfolio size of a single borrower that could go into default while still allowing it to: withstand some additional risk; to rebuild its reserves; and to continue to intermeditate on behalf of other borrowers. In this framework, the IBRD does not include callable capital as a source of risk bearing capacity for setting operational country limits. Country specific commitment levels are provided to Operations by the Country Credit Risk Management Division prior to the development of the annual lending programs. The strategic credit sub-committee is chaired by the head of risk management and reports to the Asset and Liability Committee.

3. COMPARATIVE CAPITAL ADEQUACY INDICATORS

Although not all of the Multilateral Development Bank's have developed explicit capital adequacy policies and guidelines, it is instructive to compare their implicit operational risk capital indicators. The table below presents a comparison of risk capital versus gross client assets⁴ for five MDBs. As expected, the IBRD has the lowest ratio of risk capital to client assets reflecting its large diversified portfolio. On the other hand, the IFC has the highest ratio reflecting the riskiness of its pure private sector mandate. The Bank's indicators are broadly similar to the IADB and the AsDB.

Comparative Capital Adequacy Indicators

(Figures in UA Billions)

	IBRD (6/99)	IADB (12/98)	AfDB (12/99)	AsDB (12/98)	IFC (6/99)
Total Risk Capital	23.9	8.4	3.1	7.2	4.0
Total Client Assets	87.2	23.3	6.9	17.9	6.1
Risk Capital to Client Assets	27%	36%	44%	40%	65%

⁴ Client assets include loans and equity investments net of specific provisions.

ANNEX II

GUIDELINES FOR ASSESSING RISK CAPITAL

4. BACKGROUND

The concept of “risk capital” as the measure of risk bearing capacity is adapted from the principles established by the Basel Capital Accord. The Accord considers that the key elements of risk capital on which emphasis should be placed are paid-in capital and disclosed reserves. Notwithstanding this emphasis, the Accord considers other important and legitimate constituents of a bank’s capital base, which may be included within the system of measurement. In specific, the Accord allows for the inclusion of some elements of undisclosed and re-valuation reserves, general loan loss provisions, and hybrid debt-capital instruments such as sub-ordinated debt.

5. DEFINITION OF ADB RISK CAPITAL

Risk capital consists of three on-balance sheet components:

- Paid-in capital net of cumulative exchange adjustments on subscriptions;
- General and special reserves net of cumulative currency translation adjustments; and
- General provisions.

This definition of risk capital specifically excludes callable capital, specific provisions, or hybrid debt-capital instruments such as sub-ordinated debt.

The exclusion of callable capital reflects the view that callable capital serves principally to enable the Bank to borrow at very favorable terms on the capital markets by providing bondholders assurance that they will ultimately be re-paid by the Bank’s shareholders in the event of financial distress for the Bank.

Although general provisions are considered part of risk capital, the exclusion of specific provisions reflects the nature of specific provisions as reserves for impaired assets.

The exclusion of sub-ordinated debt reflects the view that in the context of a multilateral institution, sub-ordinated debt and senior debt would be treated similarly in the event of financial distress for the Bank.

ANNEX III

GUIDELINES FOR ASSESSING CREDIT RISK

1. BACKGROUND

Rigorous assessment of credit risk is the foundation for all credit and exposure management frameworks. Standardized guidelines are applied for assessing three principal sources of credit risk:

- Counter-party credit risk on the treasury investment and swap portfolios.
- Country credit risk on the public sector portfolio;
- Commercial credit risk on the private sector portfolio; and

2. COUNTER-PARTY CREDIT RISK

Treasury-related counter-party credit risk is measured using the credit ratings from approved rating agencies.

3. COUNTRY CREDIT RISK

Country risk is measured on a composite risk index from 0 to 100 and expressed on a five-point rating scale from “very low risk” to “very high risk”. The composite risk index is derived from an on-going assessment of five sub-indices:

- Macroeconomic and policy performance;
- Debt sustainability;
- Socio-political environment;
- Business environment; and
- ADB debt repayment performance.

4. COMMERCIAL CREDIT RISK

Commercial credit risk is measured on a ten-point rating scale from “excellent” to “expected loss” and expressed on a five-point rating scale from “very low risk” to “very high risk”. The commercial risk ratings are derived from an assessment of two sets of factors:

- Country risks; and
- Project-specific risks.

5. COMPARATIVE RATINGS

The country risk ratings and commercial risk ratings correspond as illustrated below.

Comparative Credit Risk Ratings

Risk Class	Private Sector Rating	Country Rating
Very Low Risk	1	100
Low Risk	2	80
Moderate Risk	3	70
	4	60
High Risk	5	50
	6	40
Very High Risk	7	30
	8	20
	9	10
	10	0

ANNEX IV

GUIDELINES ON RISK CAPITAL REQUIREMENTS

1. BACKGROUND

The Bank's guidelines on risk capital requirements draw on the principles established by the Basel Capital Accord. The Accord considers that riskier assets require more capital support than low risk assets and that off-balance-sheet exposures should be incorporated into the risk measure. The risk capital requirements applied by the Bank reflect three principle factors: 1) the overall riskiness of the Bank's operating environment; 2) the limited opportunities for effective risk diversification; and 3) the primordial objective of being able to withstand even extremely low probability loss-causing events.

2. RISK CAPITAL REQUIREMENTS

For on-balance sheet exposures, risk capital requirements are applied to the nominal outstanding balances (less any specific provisions). For direct credit substitutes such as guarantees, the risk capital requirements are applied to the loan equivalent value of the position. For swaps and other risk management products, risk capital requirements are applied to the loan equivalent value of the position as determined using the current exposure method articulated in the Basel Accord.

Client Exposures

• Very low risk	25%
• Low risk	28%
• Moderate risk	35%
• High risk	50%
• Very high risk	75%
• Equity investments	100%

Treasury Exposures

• Cash, AA- or better sovereigns	0%
• AA- or better non-sovereigns	1.6% ⁵
• A+ to A- sovereigns	1.6%

⁵ 1.6% corresponds to 20% risk weighted assets as set by the Basel rules.

ANNEX V

African Development Bank Uses of Risk Capital by Risk Class

December 31, 1999
(provisional figures)

	Amount (UA Millions)	Share (% of total)
1) Total Risk Capital	3,215	100%
of which:		
Net Paid-in Capital	1,622	50%
Net Reserves	1,220	38%
General Provisions	373	12%
2) Total Used Risk Capital	2,585	80%
of which:		
a) Very High Risk	446	14%
of which:		
Public Sector	442	14%
Private Sector	4	0%
b) High Risk	245	8%
of which:		
Public Sector	236	7%
Private Sector	9	0%
c) Moderate Risk	1,093	34%
of which:		
Public Sector	1,063	33%
Private Sector	30	1%
d) Low Risk	487	15%
of which:		
Public Sector	487	15%
Private Sector	-	0%
e) Very Low Risk	294	9%
of which:		
Public Sector	294	9%
Private Sector	-	0%
f) Rated A or Better	19	1%
of which:		
Treasury	19	1%
3) Total Unused Risk Capital (1-2)	630	20%
	Outstanding (UA Millions)	Share (% of total)
4) Maximum Sustainable Portfolio	8,736	100%
of which:		
Current Portfolio*	6,935	79%
Potential New Lending**	1,801	21%
5) Country Concentration Ceiling	1,310	15%

* Includes all public and private sector loans and equity net of any specific provisions

**Computed using the 35% risk capital required for moderate risk assets (1,801*.35=630)

ANNEX VI

GUIDELINES FOR OPERATIONAL COUNTRY LIMITS

1. BACKGROUND

To ensure an adequate degree of risk diversification, the total exposure to any single country should not exceed 15% of the maximum sustainable portfolio. However, to reflect specific country circumstances and the evolution of the Bank's risk bearing capacity, more conservative operational exposure limits guide the development of medium-term country assistance programs.

2. OPERATIONAL COUNTRY LIMITS

Like the country exposure ceiling, operational country exposure limits are expressed as a percentage of the maximum sustainable portfolio. The operational country exposure limits are derived from an assessment of two principal factors:

- economic potential as derived from the IMF quota; and
- risk as derived from the Bank's internal ratings

As illustrated in the exposure limits matrix below, the highest attainable operational limit, for very large and very low risk countries, is equal to the 15% country exposure ceiling. All other operational limits are scaled back from the 15% ceiling.

Exposure Limits Matrix*

Economic Potential	Very Large	5%	8%	11%	13%	15%
	Large	5%	7%	10%	12%	14%
	Medium	4%	6%	9%	11%	12%
	Small	3%	4%	6%	7%	8%
	Very Small	1%	1%	2%	2%	2%
		Very High	High	Moderate	Low	Very Low

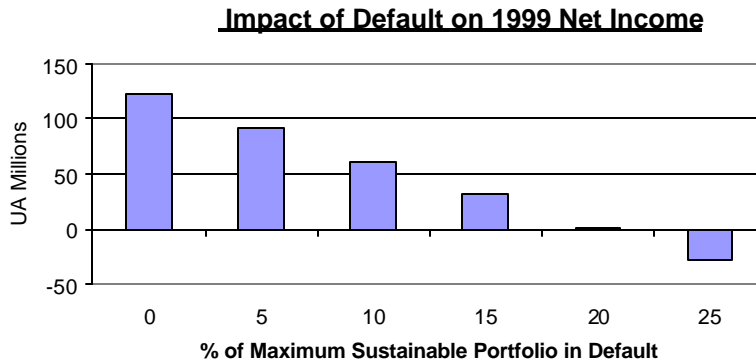
Risk Rating

* expressed in relation to the maximum sustainable portfolio

ANNEX VII

IMPACT OF A LARGE SINGLE BORROWER DEFAULT

The Bank operates a comprehensive model for making its financial projections. Using this model, the relationship between the size of default and the Bank's 1999 net income has been analyzed. As illustrated below, the larger the default (measured as a percentage of the maximum sustainable portfolio), the more significant the negative impact on the Bank's ability to generate net income to help build reserves. Indeed, assuming the countries that are currently in non-accrual remain in non-accrual, a default roughly equal to 20% of the maximum sustainable portfolio could be sustained before the Bank's net income is completely eroded⁶. This break-even level of default is 5% higher than the revised 15% country exposure ceiling.



ANNEX VIII

IMPACT ON THE BANK'S KEY DEBT LIMITS

The principal objective of the capital adequacy framework outlined in this paper is to create an explicit linkage between the risks assumed by the Bank's operations and the Bank's risk bearing capacity.

At the end of December 1999 the total outstanding portfolio was UA 6.9 billion compared to the maximum sustainable portfolio of UA 8.7 billion. An increase of lending to reach the maximum sustainable portfolio would require roughly an additional UA 1.8 billion in borrowing raising outstanding debt from UA 5.2 billion to UA 7.0 billion. This additional level of borrowing would raise the Bank's "debt to usable capital ratio" from less than 60%⁷, to less than 75%. This is still comfortably below the Bank's ceiling of 100%.

⁶ Assuming no change to the provisioning policy.

⁷ Assuming full subscription to GCI-V.

ANNEX IX

DRAFT TERMS OF REFERENCE FOR THE CREDIT COMMITTEE

PURPOSE

1. The Credit Committee is the Bank's senior-most executive forum vested with powers of executing ADB credit and exposure management policy. The Committee exercises this authority to ensure optimal deployment of the Bank's capacity to extend credit in furtherance of its development mission. The Committee oversees compliance with the Bank's credit and exposure management policies and develops guidelines to this effect, while primary responsibility for compliance with the Bank's credit and exposure management policies and guidelines shall still remain with the head of the organizational unit concerned.

TERMS OF REFERENCE

2. The Credit Committee shall be responsible for developing guidelines and controls, which govern the management of the Bank's credit and exposure.
3. The Credit Committee shall ensure that all plans, strategies and priorities relating to credit operations are consistent with the Bank's approved policies, guidelines, strategies, and priorities.
4. The Credit Committee shall establish an adequate framework for monitoring the risks associated with all credit operations.
5. The Credit Committee shall create sub-committees and working groups to formulate and implement the Bank's credit and exposure management guidelines.

MEMBERSHIP

6. The credit Committee shall be independent of the day to day management of the Bank's credit extension operations. Members of the Committee shall include those with sufficient experience to form distinct and informed views as to the appropriate credit and exposure management policies and guidelines. It shall comprise: a chairperson; one alternate chair; nine members; and a secretariat.

Chairperson	:	Vice President, FPVP
Alternate Chair	:	Vice President, OPVP
Members	:	Directors, OCDs
	:	Director, OCOD
	:	Director, OPSD

Secretariat : Director, FLAD
 : Head, FRMU
 : An independent body designated by FPVP

7. Membership on the Committee is strictly on a functional basis and cannot be delegated.

ORGANIZATIONAL AND REPORTING GUIDELINES

8. The Credit Committee shall report to the President.
9. The Committee shall meet at least quarterly or as deemed necessary by the chairperson.
10. The Committee shall adopt its own rules, in particular concerning quorums and the procedures for adopting decisions and recommendations.
11. The Committee shall prepare comprehensive minutes of each meeting to be kept for permanent record.

CONFIDENTIAL

AFRICAN DEVELOPMENT BANK

ADB/BD/WP/2000/29/Add.1

21 April 2000

Prepared by: FRMU

Original: English

Probable Date of Board Presentation
27 April 2000

FOR CONSIDERATION

MEMORANDUM

TO : THE BOARD OF DIRECTORS

FROM : Philibert AFRIKA
Secretary General

SUBJECT : POLICY ON CAPITAL ADEQUACY AND EXPOSURE MANAGEMENT *

QUESTIONS AND ANSWERS

Please find attached hereto, as an **addendum**, the **questions and answers** relating to the above-mentioned document.

Attach:

cc.: The President

* Questions on this document should be referred to:

Mr. T. TURNER,	Division Manager	FRMU	Extension 4160
Mr. M. ERNST	Director	FBFP	Extension 4093
Mr. B. OGUNJOBI	Director	OCDN	Extension 4040

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1. INTRODUCTION

- 1.1 Management discussions on the proposed policy on capital adequacy and exposure management were initiated in early 1998. During the process of formulating the final policy proposal, Management has exchanged views on the key issues with a wide range of interested parties including international banking regulators, the rating agencies, the Bank's investors, other multilateral and regional development banks, and with members of the Board of Directors. Although most of these issues are addressed in the policy paper, this complementary note has been prepared to summarize Management's responses to specific questions that were raised during the development process.

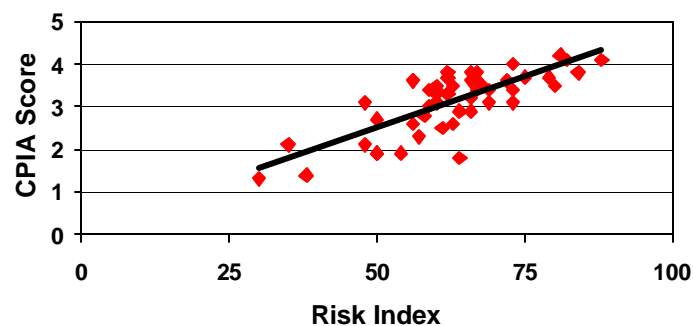
2. FREQUENTLY ASKED QUESTIONS AND ANSWERS

2.1 Rating Methodology and Process

- 2.1.1 *What are the objectives of the Bank's country risk ratings and how do they differ from the ratings produced in the CPIA?*

The Bank's internal country risk ratings express an independent opinion on the likelihood that borrowing member countries will have the capacity and willingness to service debts to the Bank in full and on time. In making this assessment, the Bank's country risk ratings look forward over a three year horizon at the factors that can affect the probability of a country experiencing future debt service difficulties. The Bank's country risk ratings differ in several ways from the country policy and institutional assessments (CPIA ratings) which are prepared annually by the Bank's country teams. The CPIA ratings seek to assess the quality of a country's policy and institutional framework at the time of the assessment but do not necessarily reflect the impact of this framework on the country's economic performance or how such performance is expected to evolve. Although the two ratings have distinctive features, a comparison of the two rating systems in the figure below shows a strong correlation between the results. This confirms the view that countries which have conducive policy and institutional frameworks are most likely to demonstrate strong performance results over the long term.

1999 Risk Ratings vs CPIA Ratings



2.1.2 *How are the Bank's country risk ratings determined? Is there sufficient independence in the rating process to ensure objective results?*

Since 1997, the Bank has operated a comprehensive country risk rating system covering all African countries. The Bank's internal rating system is built upon a framework of five sub-indices. These five sub-indices provide objective measures of:

- Macro-economic performance
- Debt sustainability
- Socio-political risk
- Conduciveness of the local business environment
- Relationship with the ADB

The indicators used to derive the scores on the first four of these sub-indices are based on the generally accepted standards used by other country rating experts. However, the fifth index is unique to the ADB as it measures the country's performance track record on servicing its debt to the Bank and in implementing Bank projects.

An internal model is used to combine the scores from each of the five sub-indices into a single composite risk index on a scale of 1 to 100. Based on the composite scores, countries are classified into one of five risk rating classes:

- Very low risk
- Low risk
- Moderate risk
- High risk
- Very high risk

The choice of these five risk classes reflects the Bank's operating environment. For example, the very low risk category is reserved for countries whose probability of default is assessed as very low and corresponds roughly to internationally accredited ratings in the BBB category (investment grade).

The Risk Management Unit co-ordinates the Bank's country risk rating process and has principal responsibility for ensuring objectivity and rigor. A key input into the rating process is an annual survey of the Bank's public sector and private sector country experts and from country specialists outside the Bank. The results of the annual survey are subjected to a variety of validation tests by the Risk Management Unit before final ratings are assigned by the Unit. In addition to the annual review of all country ratings, the Risk Management Unit maintains a watchlist of countries whose performance is subject to possible change over the short-term. The rating watchlist is updated quarterly and where deemed justified, country ratings are modified during the year.

2.1.3 *Has the Bank's country risk rating system been adequately tested for it to be used as a key input in the proposed country exposure framework?*

Although the Bank's internal country rating system has only been operational for three years, the results it has produced have been carefully checked against independent benchmarks. For example, the Bank's ratings are routinely compared to the ratings of the professional agencies including S&P, Moody's, the EIU, Euromoney, and the PRS group. The results are also cross-checked with the views of the World Bank risk management team. Although there is a strong correlation between these institutional ratings, such cross institutional comparisons are used only as a test for reasonableness of the Bank's own ratings. Where diverging views are identified, a further internal scrutiny of the fundamentals of the country in question is initiated. It is also noteworthy that the ADB is the only institution that regularly rates the risks of all African countries.

2.1.4 *If the Board does not have access to the Bank's internal risk ratings, how can it perform its role to oversee compliance with the Bank's exposure policies?*

In general the Board has two principal roles. First, the Board is responsible for approving all policies. Second, the Board monitors compliance with the approved policies and the related guidelines.

To enable the Board to perform its oversight role, the Risk Management Unit will prepare an annual report and seminar on the public sector portfolio as well as an annual report and seminar on the private sector portfolio. These reports and seminars will analyze the trends in risk ratings, the risk profile of the Bank's portfolios, the adequacy of capital and provisions, and the projected exposure limits. Between annual reports, quarterly updates will allow the Board to monitor the key capital adequacy and exposure indicators. As an intermediate step in quality control, the Asset and Liability Management Committee (ALCO) will review all capital adequacy and exposure management reports.

To verify the quality and independence of the Bank's risk ratings as well as the proper application of the Bank's capital adequacy policies and guidelines, the Bank's internal and external auditors will regularly review the work of the Risk Management Unit and ALCO.

2.2 Capital Adequacy Methodology

2.2.1 *Why are general provisions included in the computation of risk capital whereas specific provisions are not?*

The decision to include paid-in capital, reserves, and general provisions in the computation of risk capital was based on the standards set by the Basle Accord.

Unlike a general provision, a specific provision represents an estimation of the permanent credit impairment of a specific asset. If the permanent credit impairment becomes confirmed, a specific provision can be written-off against the underlying asset.

2.2.2 Since GCI V was not justified as needed to increase the Bank's lending operations, why is GCI V included in the computation of risk capital?

One of the principal justifications for the fifth capital increase was to reinforce the Bank's financial soundness. The proposed capital adequacy framework clearly illustrates the positive impact that GCI V will have on the Bank's risk bearing capacity over the implementation period.

Although the medium term projections show that anticipated lending operations will not fully utilize the Bank's risk bearing capacity, a decision to exclude the paid-in portion of GCI V from risk capital would lead to an under-estimation of the Bank's resources. The result would be an unnecessary constraint on lending to some of the Bank's largest and most creditworthy borrowers at a time when the Bank is attempting to rejuvenate its lending operations by introducing more competitive and attractive financial products.

2.2.3 How were the proposed risk capital requirements determined? Are they adequately prudent?

The principal technique used to determine the proposed capital requirements was benchmarking against comparable financial institutions. In making this assessment, Management looked at other financial institutions to assess the nature of the business they are in and the amount of risk capital they have to support this business. This comparative analysis showed that not only does the Bank operate in an environment where its clients have the highest credit risks, but the Bank is also faced with very high individual borrower concentrations and extremely high group/sector concentrations. In other words, the Bank operates in one of the most risky environments.

The Basle standard for G-10 banks requires a minimum capital equal to 8% of risk assets while the strongest G-10 banks have between 10-14% risk capital. Specialized financial institutions, such as the Nordic Investment Bank, have between 20-30% risk capital, while the World Bank has an implied risk capital ratio of about 27%. The IFC, which has exclusively private sector exposure, currently has a risk capital ratio of 65% although they have a minimum policy standard of 30%. Management therefore scaled the risk capital requirements for the Bank's individual risk classes to achieve an average risk capital ratio between 35%-40% if the Bank reaches at its maximum lending capacity. This was judged to be adequately conservative and is reflected in the capital requirements for

individual risk classes. For example, the lowest capital requirement is 25% for very low risk assets. This is approximately 3 times the minimum required by commercial banks. At the other end of the scale, very high risk assets require capital backing of 75% and equity investments 100%.

No additional adjustment of the risk capital requirements is made for country classification (A,B,C) or arrears status. These factors are already fully embedded into the country risk ratings.

2.2.4 *The proposed framework appears to focus on credit risks only. What about the capital requirements to support other types of risk?*

It is generally accepted that credit risk is the largest source of risk for lending institutions. Although the capital adequacy framework developed by the Basle committee focuses principally on ensuring an adequate cushion against potential credit losses, an element for market risk (potential losses due to adverse changes in interest rates or currency exchange rates) is also embedded in the methodology for computing the loan equivalent value of assets in the trading book.

More recently, the Basle committee is examining methodologies for quantifying a financial institution's exposure to operational risks such as human error or system failures. When agreement is reached on acceptable approaches for estimating operational risk, an explicit capital allocation for this risk can be incorporated into the Bank's capital adequacy framework. In the meantime the Bank has been in contact with the New York Federal Reserve to discuss possible approaches for measuring operational risk.

2.2.5 *In computing the maximum sustainable portfolio, why are new loans assumed to require 35% risk capital backing?*

Recent lending trends show that most of the Bank's new lending has been to countries in the very low, low and moderate risk classes. Using the proposed capital requirements for each risk class weighted by the volume of new lending in each class, the average capital requirement over the past four years has been about 30%. Therefore using a 35% capital requirement to compute the maximum sustainable portfolio was judged to be conservative. This assumption will be regularly "back-tested" for reasonableness and if necessary adjusted to maintain a conservative profile.

2.2.6 *Although the projections show the Bank will remain well below the maximum sustainable portfolio over the next five years, what would happen to the Bank's key debt ratios in such a theoretical scenario?*

Stress testing of capital adequacy under rapid growth scenarios demonstrates that even if the maximum sustainable portfolio is reached (used risk capital equals 100% of the usable risk capital), the Bank's debt to usable capital ratio is unlikely to exceed 80% compared to a ceiling of 100%. Although such a scenario is highly unlikely in the foreseeable future, as further precautionary measure, an alert is proposed when used risk capital reaches 80% of usable risk capital. This corresponds roughly with a debt to usable capital ratio of 60-65% and should give the Bank adequate time to plan for a future capital increase or to adjust its lending activities accordingly. The rating agencies have expressed their general satisfaction with these thresholds.

2.3 Exposure Limits

2.3.1 Why is it necessary to have a capital adequacy approach to exposure management when the Bank's limits problem could be resolved by raising the ceiling to 20% or 25%?

Although raising the country exposure ceiling would remove the short-term constraint on lending to two of the Bank's largest borrowers, it would not resolve the fundamental weakness inherent in the current system. Specifically, it would not address the issue of linking the exposure limits to the Bank's risk bearing capacity, nor would it incorporate the exposures attributable to private sector operations or the off-balance sheet products such as guarantees.

2.3.2 Why not adopt the World Bank's approach to setting country exposure limits?

The IBRD applies a two-tier country exposure limit, where the effective limit is the lower of a) 10% of the statutory lending limit (total subscribed capital plus reserves), b) the on-balance sheet risk bearing capacity. The limit imposed by the 10% statutory lending limit rule is generally not a binding constraint. This means that the effective concentration limit is determined from an assessment of the institution's risk bearing capacity. The IBRD makes this assessment by using a 10-year projection model to determine the maximum share of the portfolio that could go into non-accrual but still allow the IBRD to rebuild its reserves over the medium term. Because this "stress scenario" approach is "risk-based", it indirectly yields the same result as applying a capital adequacy based approach. However, because it is a "model-driven" approach, it is potentially less transparent to operate.

2.3.3 Why are private sector exposures included in the country limits?

Private sector exposures are incorporated in the proposed framework in two ways. First, private sector exposures in a given country are included in the global exposure limit for that country. On the one hand, this is a reflection of the

experience from the Asian financial crisis where private sector debts became liabilities of the State during times of systemic stress. On the other hand, this reflects the importance of the enabling environment for successful private sector operations. The exposure limits will favor lending in countries where the business environment is conducive and limit lending in countries without the fostering environment.

The proposed capital adequacy framework can also be used as a strategic planning tool for the Bank's private sector operations. By allocating a specified portion of the Bank's risk capital to private sector operations, the Board can establish clear limits on private sector exposure as a lending window. It is also possible to use the framework to define a target risk profile for the private sector portfolio as a tool to guide Management in developing the pipeline of projects to be prepared for the Board's approval.

2.3.4 *It appears that changes in one country's rating will affect the exposure limits for other countries. Is this fair?*

The impact of rating changes can be seen at both the portfolio and country specific levels. At the portfolio level, changes in country risk ratings are automatically reflected in the computation of used risk capital and will translate into a corresponding increase or decrease of the maximum sustainable portfolio and the 15% country ceiling for all borrowers. This compensating mechanism protects the Bank's long-term financial soundness by ensuring that the risks assumed by the Bank are commensurate with its risk bearing capacity.

At the country specific level, changes in an individual country's rating would also affect the country's position in the credit matrix and therefore impact the country's exposure limit and the corresponding sustainable lending program.

2.3.5 *What is the linkage between economic potential and country risk rating in the framework for determining the country limits?*

The economic potential indicator attempts to assess the magnitude of a country's economy and its potential to productively utilize financial resources. The IMF's country quota index is used as the principal indicator of economic potential.

The Bank's country risk rating is used as an adjustment factor to discount the raw economic potential based on the actual country performance including the growth prospects, debt burden, socio-political environment, the business environment, and the country's debt servicing record.

2.3.6 *Will the new capital adequacy and exposure framework affect the Bank's credit policy?*

The Bank's credit policy, also referred to as the country eligibility policy, defines which countries have access to non-concessionary and concessionary resources. Since 1994, the Bank has applied the World Bank's classification of A, B, and C countries, which is based principally on GNP per capita, to determine eligibility.

The proposed capital adequacy and exposure management framework will not affect the Bank's definition of eligibility. However, the framework has been designed to accommodate alternative definitions of country eligibility.