INVESTMENT POLICY REVIEW PANEL REPORT

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I. SUMMARY AND CONCLUSIONS

- 1.1 Still unfolding, the current crisis has proved to be a major disruption in the world financial markets. Since the end of July, 2007, financial markets are under extreme distress: commercial banks, investment banks, asset managers and insurance companies in Europe and the United States have accumulated unprecedented losses, price volatility is at historical highs and liquidity in the structured finance segment has virtually disappeared. The policy response has been equally unprecedented: nationalizations, blanket guarantees, unorthodox discount operations by central banks and direct governmental support are now common among developed economies.
- 1.2 Multilateral Development Banks (MDBs) have not been immune to these events. The liquid investment portfolio of the IDB has experienced over US\$1 billion in mark-to-market losses as of the end of September, 2008. The main source of these losses is the IDB's exposure to structured securities (asset-backed and mortgage-backed securities) that grew to approximately 60% of the portfolio during the last decade. Other MDBs purchased similar securities; however, their portfolios had significantly less concentration in these instruments and thus have performed better than the instruments held by the IDB since the beginning of the crisis.
- 1.3 The Board of Executive Directors instructed OVE to conduct a review of the IDB investment portfolio, for which the outside consulting firm, Oliver Wyman, was hired. This report provides most of the data used in the review. Paradoxically, while individual investment transactions are almost at their limit, the review has found the Liquid Investment Portfolio to be broadly in conformity with the Bank's policies and guidelines. This leads to two conclusions: first, a relatively weak policy environment allowed significant problems to develop largely undetected; and second, Management placed undue reliance on policy to prevent problems and failed to develop an adequate risk management culture that also could have detected problems and provided remedies before the accumulation of significant losses.
- 1.4 Policies governing the investment of the Bank's liquidity have been found to have lacked a clear definition of the Bank's risk appetite, were incomplete with regard to the nature of the risks being assumed, relying almost exclusively on agency ratings, and failed to articulate clearly the nature of the risk/return trade-offs faced by the Bank. Moreover, the Bank's policies never specified a definition of liquidity, resulting in no ongoing monitoring of actual liquidity and the eventual appearance in the current crisis of the inconsistency of illiquid liquidity. Policies also required the accumulation of a liquid portfolio that is large in relation to the Bank's historically observed liquidity needs, and such a large portfolio magnified the financial consequences (both positive and negative) of investment decisions.
- 1.5 The Bank had not developed by the time of the crisis a strong risk management culture, since its principal activity had been making sovereign-guaranteed loans. Managing a substantial liquid asset portfolio is not the Bank's principal activity,

and therefore insufficient attention was paid to the risks being incurred by that endeavor. Oversight structures (both Management and Board of Executive Directors) did not detect the potential problems in a timely manner. These same oversight arrangements failed to recognize the risks posed by internal institutional incentives to "reach for yield."

- 1.6 In light of these findings, the review's principal recommendations relate to needed changes in both the policy framework and the institutional governance of the investment function. The Bank requires a clear policy articulation of its risk appetite, one that transparently acknowledges the risk/return trade-offs inherent in different portfolio compositions. It also requires a clear recognition and management of the full range of risks being assumed by the portfolio, and the development of organizational units and attitudes that can manage these risks more effectively. It is also necessary for the Bank to review the policy regarding the size of the desired liquidity portfolio.
- 1.7 Once risk appetite and portfolio composition are defined, attention needs to be paid to the way in which the portfolio is managed and overseen. A more complex and sophisticated portfolio requires different management than a simpler one, and if the Bank's preference is for the former, which is not readily apparent, it will then need a further decision to create the needed managerial capacity, which will require some expert advice from specialized institutions, at least during the first couple of years.
- 1.8 Finally, regardless of the decisions made on the complexity of the portfolio, both the management and the oversight of the investment function need to be substantially improved. The recent move by Senior Management to establish a Risk Management Unit independent from the Finance Department is a positive step in this direction, but structural problems with risk management remain. There is also a need for more active oversight by the Board of Executive Directors of the investment function. Accordingly, the Board of Executive Directors should establish their own Investment Review Committee, assisted by financial experts, to review on a regular basis both the policy environment and the management structures relating to this critical aspect of the Bank.

II. RECENT PERFORMANCE OF THE BANK'S INVESTMENTS

- 2.1 During the 1980's, the Bank's liquid investment portfolio purchased primarily government obligations, taking interest rate risk by lengthening or shortening maturities in the portfolio produced investment returns that were positive on the whole, but exhibited significant volatility from one year to the next. This volatility was passed through to borrowers in the form of loan charges.
- 2.2 In 1997, the Bank adopted a new Asset Liability Management (ALM) framework that was designed to reduce volatility by avoiding interest rate risk through borrowing and investing mainly on a floating-rate basis. The Bank would borrow on fixed-rate terms and swap into floating-rate, and the liquidity portfolio would also invest only in floating-rate securities.

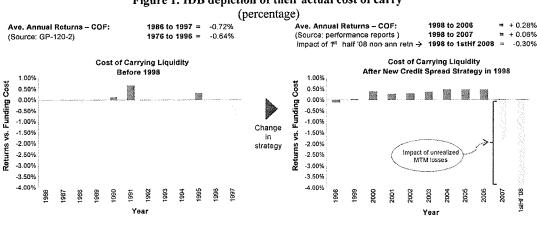


Figure 1. IDB depiction of their actual cost of carry

NYC-IAD00211-004 Source: Oliver Wyman

- 2.3 As Figure 1 demonstrates, this shift accomplished the policy objective of reducing volatility, and also resulted in a number of years in which investment income was in excess of the Bank's borrowing cost. Rather than incurring a cost of carrying liquidity, the Bank earned a positive return on its liquidity portfolio (i.e., a negative cost-of-carry).
- 2.4 Starting in 2007, however, the Bank began to experience performance problems in the liquidity portfolio. Nominal returns, which had been generally comparable to those of other MDBs, showed considerable deterioration relative to those of its peers. As Figure 3 shows, in 2008 the Bank recorded significant mark-to-market

¹ The liquid investment portfolio is defined as the OC Portfolio (US\$ 16.1 billion as of 31 December 2007). The OC Portfolio has two sub-portfolios, the Trading (US\$ 12.3 billion) and the Held-to-Maturity (US\$ 3.8 billion) Portfolios. The Trading Portfolio includes the Transactional (US\$ 600 million), Operational (US\$ 11.3 billion) and External Managers Portfolio (US\$ 400 million). The Held-to-Maturity Portfolio is reported on a book value basis, while the rest of the portfolios are on a Mark-to-Market basis.

losses which were eight times larger as a share of portfolio than similar losses at the World Bank (IBRD).²

Figure 2. Portfolio returns, December 2006 – December 2007

(percentage)

6.0

2006 × 2007

5.0

4.0

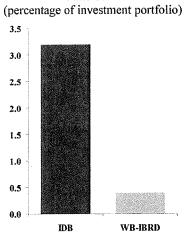
3.0

1.0

African DB

IDB

Figure 3. Unrealized losses in portfolio, June 2008

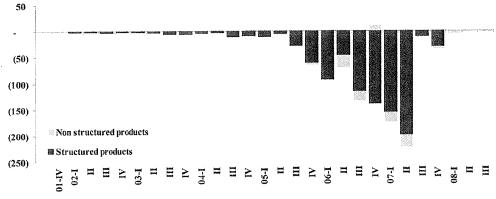


Source: 2007-2008 financial statements and IDB's Investment Portfolio Performance Report, June 2008.

Asian DB

2.5 The review of the Bank's portfolio has established that these significant losses were concentrated in U.S. structured products bought in 2006 and 2007 (see Figures 4 and 5). These include: Mortgage Backed Securities (MBS), Collateralized Debt Obligations (CDOs), and Collateralized Loan Obligations (CLOs), as well as AAA-rated tranches backed by lower quality collateral, such as Home Equity Lines of Credit (HELOCs) and second lien mortgages.

Figure 4. Distribution of unrealized gain/loses as of September 22 2008, by settlement date (US\$ millions)



Source: Oliver Wyman

Figure 5. Liquid investment portfolio and unrealized gain/losses (UGL) characteristics, as of September 22 2008

² As of June 2008, IDB's unrealized mark-to-market losses are US\$510 million and its portfolio is of US\$15.9 billion, while IBRD's unrealized mark-to-market losses are of US\$99 million with a portfolio of US\$25.2 billion.

(in US\$ millions)

| (III US\$ Infinitions) | | | | | | | nion. | | | | |
|------------------------------|---------|---------|------------------------|---------------------------|-------------|-------|--|-----------|------------|----------|------|
| SHAMILTINE (A) | Louit | Marshie | 1401 | Geographical dist. of UGL | | | Temporal dist, of UGL by settlement date 98-05 2006 07-1 Sem 07-H Sem 2008 | | | | |
| | | | | | Europe | Other | 98-05 | | | /-11 Sem | 2008 |
| | multers | | CUTACODES ACONSTRUCTOR | | S millions) | | | | Smillions) | | |
| MBS - Whole Loans | 97 | 1,878 | -338 | -243 | -82 | -14 | -41 | -150 | -144 | -4 | 0 |
| MBS - Alt-A | 15 | 175 | -123 | -123 | 0 | 0 | -7 | -62 | -47 | -8 | 0 |
| CDO | 24 | 368 | -99 | -75 | -24 | 0 | -17 | -40 | -37 | -6 | 0 |
| CLO | 36 | 1,075 | -95 | -17 | -78 | 0 | -38 | -21 | -37 | 0 | 0 |
| MBS - HELOC | 28 | 133 | -82 | -82 | 0 | 0 | -19 | -56 | 0 | -6 | 0 |
| MBS - Second lien | 43 | 193 | -51 | -44 | -7 | 0 | -7 | -3 | -41 | 0 | 0 |
| CMBS | 30 | 581 | -49 | -17 | -32 | 0 | -3 | -26 | -21 | 0 | 0 |
| MBS - HEL | 32 | 128 | -36 | -36 | -1 | 0 | · -7 | -7 | -22 | 0 | 0 |
| ABS - Other | 50 | 403 | -33 | -14 | -10 | -9 | -6 | -20 | -6 | -2 | 0 |
| Bank - Debt | 136 | 3,104 | -32 | -9 | -11 | -12 | -1 | -15 | -9 | -6 | 0 |
| Bank - Secured Debt | 2 | 32 | -15 | -11 | -4 | 0 | 0 | -11 | -4 | 0 | 0 |
| Corporate MBS | 3 | 62 | -14 | -13 | -1 | 0 | 0 | -1 | -13 | 0 | 0 |
| Corporate ABS | 6 | 42 | -12 | -12 | 0 | 0 | ~1 | -1 | -10 | 0 | 0 |
| ABS - Auto | 6 | 77 | -10 | -10 | 0 | 0 | -4 | -4 | 0 | -2 | 0 |
| Government - Notes | 9 | 138 | -10 | 0 | -10 | 0 | -1 | -8 | 0 | 0 | -1 |
| Bank - Foreign Government G. | 161 | 1,025 | -9 | 0 | -9 | 0 | -2 | -3 | -2 | -1 | -2 |
| Government - Bonds | 58 | 788 | -7 | 0 | - 7 | 0 | 0 | 0 | 0 | 0 | -7 |
| Bank - Notes | 33 | 406 | -6 | -12 | 6 | 0 | -4 | 4 | -6 | 0 | 0 |
| ABS - Lending | 1 | 19 | -6 | -6 | 0 | 0 | 0 | 0 | 0 | -6 | 0 |
| ABS - Card | 6 | 74 | -5 | -5 | 0 | 0 | 0 | 0 | 0 | -5 | 0 |
| ABS - Student Loans | 5 | 70 | -5 | -5 | 0 | 0 | 0 | -2 | 0 | -3 | 0 |
| Government - Debt | 51 | 508 | -1 | 0 | -2 | 0 | 0 | 0 | 0 | 0 | -1 |
| Swaps | 12 | -3 | -1 | -1 | 0 | 0 | 0 | -2 | 0 | 0 | 1 |
| MBS - Other | 4 | 10 | -1 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 |
| Bank - CD | 53 | 1,227 | -1 | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 |
| ABS - Consumer Loans | 2 | 21 | -1 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 |
| Bank - Floating Rate Notes | 2 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bank - Deposit Notes | 2 | 50 | o | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Corporate Debt | 1 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bank - Discount Notes | - 14 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Government - Discount Notes | 5 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bank - Bankers' Acceptance | 16 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bank - MM | | 1,903 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Government - Bills | 109 | 869 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Government - Non-US Bonds | 4 | 12 | o | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Foreign Government G. | 1 | 9 | 0 | 0 | 0 | o | 0 | 0 | 0 | . 0 | 0 |
| Government - Local | 3 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Government - Foreign | 34 | 142 | 1 | 0 | -1 | 1 | 1 | 0 | 1 | 0 | -1 |
| Government - Secured Debt | 91 | 367 | 4 | 0 | 0 | 4 | 1 | 2 | 1 | 0 | 0 |
| Total | 1,195 | 16,187 | -1,038 | -734 | -274 | -30 | -156 | -427 | -398 | -47 | -11 |
| ~ ^1. YT | | | | | | | L | ·· | | | |

Source: Oliver Wyman

2.6 As shown in Figure 5, 90% of the portfolio's losses correspond to these structured products. An individual transactions review indicates that now-compromised securities were sold by a variety of dealers, with the worst losses generally found

on purchases beginning in early 2007.³ Figure 6 shows the changing composition of the portfolio over the last decade.

Figure 6. Evolution of the Trading Portfolio (in percentage)

100%

80%

60%

40%

1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

Source: Oliver Wyman

2.7 Not only has growth of the Asset-Backed Securities/Mortgage-Backed Securities (ABS/MBS) category been strong relative to other investments, the IDB's portfolio also exhibited the highest level of accumulation of structured products among the MDBs. Over time, since the implementation of the new ALM framework in 1998, the Bank has been investing in ABS/MBS more aggressively than other MDBs. The 2007 Trading Portfolio concentrations in ABS/MBS reveals that the Bank has the largest share in structured products, twice that of the World Bank's and almost ten times that of the Asian Development Bank (see Figure 7). These differences were by far more important in 2006, when the ratio of IDB's ABS/MBS over the whole portfolio was more than 10 percentage points above the ratio of 2007.

³ This review found no evidence of inappropriate activity, such as stuffing or dumping, by any counterparty. This finding is consistent with sales made in good faith.

Figure 7. Portfolio concentrations in ABS/MBS, 1997-2007 (percentage of investment portfolio)

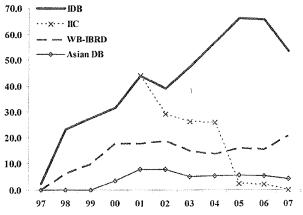
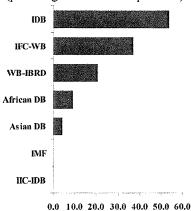


Figure 8. Portfolio concentrations in ABS/MBS, 2007

(percentage of investment portfolio)



IDB (Inter-American Development Bank); IFC-WB (International Finance Corporation – The World Bank Group); WB-IBRD (World Bank - International Bank for Reconstruction and Development); African DB (African Development Bank); Asian DB (Asian Development Bank); IMF (International Monetary Fund); IIC-IDB (Inter-American Investment Corporation – Inter-American Development Bank Group). Source: Oliver Wyman

2.8 Figure 7 also shows an interesting divergence between the IDB and its affiliate, the Inter-American Investment Corporation. Both institutions had roughly 40% of their liquidity invested in structured products in 2001, but the IIC sharply reduced its exposure to nearly zero by 2005. In contrast, the IDB continued to increase exposure to structured products until 2006, topping out at roughly 60% of the portfolio.

III. THE POLICY ENVIRONMENT FOR THE INVESTMENT FUNCTION

3.1 The portfolio composition and performance described in the previous section was produced within an environment defined by a set of investment and risk management policies. These policies define the connection between liquidity and the Bank's purpose, establish a desired level for liquidity, and provide specific guidance for the types of investments that the Bank can hold and the types of risk the Bank should accept in its liquidity pool.

A. POLICY OBJECTIVES AND THE BANK'S PURPOSE

- 3.2 The Bank's purpose is stated in Article I of the Agreement Establishing the Inter-American Development Bank (the Charter); "The purpose of the Bank shall be to contribute to the acceleration of the process of economic and social development of the regional developing member countries, individually and collectively". The Charter also defines the resources of the Bank as composed of Ordinary Capital Resources (OC) and the Fund for Special Operations (FSO), and unambiguously declares that: "The resources and facilities of the Bank shall be used exclusively to implement the purpose and functions enumerated in Article I of this Agreement."
- 3.3 The Bank's liquid investment portfolio supports the Bank's purpose by facilitating the funding and disbursement of the loans to borrowing member countries that are the principal mechanism through which the Bank discharges its Article I obligations. Both the purpose and the size of the investment portfolio are defined by the Bank's Ordinary Capital Liquidity Policy.

B. THE ORDINARY CAPITAL LIQUIDITY POLICY

- 3.4 The Liquidity Policy establishes the needs for liquidity and determines the size of the liquid investment portfolio. It establishes that liquidity is needed "to meet anticipated contractual obligations and to ensure uninterrupted financial operations in the event the Bank were to refrain from borrowing in response to unattractive market conditions or other constraints." Over its nearly 50-year history, the Bank has "refrained from borrowing" and has drawn down liquidity to meet contractual obligations only once, during the protracted negotiations surrounding the Seventh Replenishment. The decision to stay out of the market at that time was not due to a financial crisis or an inability to borrow, but rather to a reluctance to borrow with some uncertainty regarding shareholder support for the institution.
- Despite this historical record, the Bank's Ordinary Capital Liquidity Policy sets a policy target of sufficient liquidity to cover 18 months of operations. A part of the justification offered for this long time period (and correspondingly large liquidity pool) was to show prudence to the rating agencies and to provide sufficient time for a concerted international response in the event of non-payment on outstanding Bank loans. In a sense, these additional funds constitute a sort of

- "war chest" to protect the Bank against extreme events and guard against a ratings downgrade in times of crisis.
- 3.6 The Liquidity Policy does not discuss the possible disadvantages of such a large liquidity pool. These include the fact that a large pool magnifies the consequences for the Bank's balance sheet of varying investment returns, that holding funds well in excess of actual liquidity needs could reduce attention to the actual liquidity of instruments in the portfolio, and that management of a large liquidity pool creates demands for resources and management attention that might otherwise be devoted to the core business of the Bank.
- 3.7 While the Liquidity Policy commits the Bank to the task of managing a substantial investment portfolio, it contains no explicit guidance as to how the portfolio should be managed. This is partially a reflection of the fact that the unit within the Finance Department that developed policy was not the unit with responsibility for management of the portfolio. Guidance on portfolio management is provided by the Board of Executive Directors in periodic "Resolutions Authorizing the Use of Bank Funds," and occasional reviews of policy, the most significant of which was the adoption of a new Asset Liability Management (ALM) framework in 1997.

C. INVESTMENT RESOLUTIONS

- 3.8 The Bank may invest funds only in those instruments that have been authorized by the Board of Executive Directors. Until the late 1980s, these authorizations allowed the purchase only of securities issued or guaranteed by governments or their agencies, along with short-term bank deposits. To limit the interest rate risk the Bank was allowed to take on such instruments and maturities were capped at 60 months.
- 3.9 In 1991 amendments to the resolution expanded the list of eligible investments to include securities of multilateral organizations, and introduced ratings criteria (AA or higher for government guaranteed securities, AAA or higher for multilateral organizations). The amendments also authorized a limited program of futures and options. In 1996, further amendments authorized currency and interest rate swaps, required as a part of the new ALM framework.

D. THE ALM FRAMEWORK

3.10 The most profound change to investment management practices came in 1997 when the Board of Executive Directors adopted Management's proposal for a new Asset-Liability Management framework. This new framework both changed the way the Bank funded itself, by switching IDB debt issuance from fixed-to floating-rate securities (or swapping fixed-rate issues into floating-rate), and then requiring that assets in the investment portfolio also be held (or swapped) into floating-rate. The policy mandated an investment strategy that avoided taking interest rate risk, which was seen as a way of reducing the volatility of returns in the investment portfolio.

- 3.11 This policy change had important implications for the types of investments that could be held in the Bank's liquid portfolio. Prior to 1997, the Bank's investment strategy involved taking interest rate risk by buying government securities at advantageous points on the yield curve, within duration constraints set by the investment authorization granted by the Board of Executive Directors. This generated investment returns that exceeded the cost-of-carry on an average basis, but produced substantial volatility in returns on a year-to-year basis. After 1997, this strategy was no longer available.
- 3.12 To help mitigate the implied cost-of-carry, amendments were made to the resolution authorizing investment of Bank funds to allow it to buy and hold securities issued or unconditionally guaranteed by corporate entities or trusts, including ABS and MBS, provided that these securities were rated AAA by U.S. rating agencies.

E. INVESTMENT GUIDELINES

- 3.13 While resolutions of the Board of Executive Directors establish the broad policy context, the details of the Bank's investment portfolio were managed by the Finance Department, with the support of a Committee for Asset Liability Management (CALM) that was formed in 1998, after the introduction of the new ALM framework. The CALM was chaired by the Finance Manager, and was advisory to him rather than being an independent decision-making body. The CALM met regularly to, *inter alia*, oversee the portfolio and adopt specific guidelines for managing the portfolio. As part of the Bank's 2007 realignment, the CALM was replaced by the Asset Liability Committee (ALCO), with a broader membership and broader responsibilities than the original CALM. The ALCO is co-chaired by the head of the Office of Risk Management and the Finance Manager.
- 3.14 The principal responsibilities of the ALCO are to implement the guidance provided by investment resolutions approved by the Board of Executive Directors and to approve the specific types of securities that can be held in the portfolio. In addition, this committee approves the investment guidelines, which establish prudential limits for different types of securities in the portfolio.
- 3.15 An examination of the concentration limits in the portfolio suggests that a range of portfolios with widely varying risk profiles are possible given the investment guidelines. The riskiest portfolio possible given the Bank's current investment guidelines is composed almost entirely of complex securitized instruments and structured products. Conversely, the Bank's counterparty limits and avoidance of corporate bonds make the construction of a conservative portfolio more difficult.

IV. GAPS IN THE POLICY AND SUPERVISORY ENVIRONMENT

- 4.1 In reviewing the policy environment surrounding the investment function at the IDB, what is most striking is the lack of an integrated approach to all of the risks associated with the investment of liquidity. Individual aspects of risk are managed individually, and guidance is spread across a variety of resolutions, policies, and guidelines. This diffuse and poorly-integrated policy environment allows problems in individual areas to go undetected by the rest of the system, and has great difficulty seeing the ways in which the different policies interact to produce unintended consequences. Key among these unintended consequences is the observed creation of a portfolio with high credit ratings but with high exposure to structured products, high exposure to the financial sector, significant potential losses, and compromised liquidity.
- 4.2 Three aspects of the policy environment are principally responsible for this situation. First, there is no single policy statement governing the Bank's liquid investment portfolio, and thus neither a clear statement of the Bank's overall objectives and risk appetite, nor a clear operational definition of what actually constitutes liquidity. Second, credit risk is addressed largely through reliance on agency ratings, which have not proven to be an adequate defense against losses. Third, different policies produce conflicting guidance on portfolio concentration, making it difficult to ensure adequate diversification.

A. LACK OF A UNIFIED POLICY STATEMENT ON THE MANAGEMENT OF LIQUIDITY

- 4.3 Most institutions make a concerted effort to define in a single place their desired approach to the assumption and management of risk in their portfolio. Best practices in this area are reflected in the enterprise risk guidelines established by COSO, which recommend institutions adopt a risk appetite statement, defined as: "A statement of the amount and character of the risk that an organization will knowingly accept. It is closely linked to an organization's risk management philosophy and the organization's strategic choices." The IDB lacks such a statement, and instead spreads out the treatment of risk across a number of policy documents.
- 4.4 Resolutions authorizing the investment of Bank funds address credit risk only, and that through the specification of allowed issuers and their associated credit ratings. This both places excessive reliance on ratings to determine credit quality, and ignores other types of risk such as concentration or liquidity risks.
- 4.5 Market, liquidity and concentration risks are addressed through investment guidelines issued and monitored by the ALCO, without reference to a clear policy statement approved by the Board of Executive Directors. Liquidity risk should in theory be addressed in the Liquidity Policy, but that policy has no definition of

⁴ Committee of Sponsoring Organizations of the Treadway Commission (COSO), ERM Framework, 2004

liquidity. The changes proposed to the Liquidity Policy in 2005 offered "...a level of protection consistent with the Bank's risk appetite and rating" but the policy did not include a risk appetite statement nor a reference to such a statement elsewhere.

- 4.6 There are a number of problems that arise from this lack of an over-arching risk statement, but from the point of view of the current crisis, the most significant is that the Bank's policy framework completely lacks a definition of what liquidity actually means in the portfolio.
- 4.7 The 1993 review of the Ordinary Capital Liquidity Policy (GP-117-10) defined liquidity as "the amount of cash and easily marketable (i.e., highly liquid) securities, which an institution such as IDB holds to meet its future financial obligations even under circumstances when access to borrowings on reasonable terms is limited." While this seems straightforward, no operational definition of "easily marketable" was ever provided in the policy, and those managing the portfolio also found no need to make explicit the liquidity characteristics the portfolio should have The lack of attention to this issue allowed the Bank to become heavily invested in ABS and MBS securities without having to establish the marketability (liquidity) characteristics of such instruments. When this market began to deteriorate in 2007, the ability to sell such securities at close to par value vanished, leaving the Bank with a choice of incurring substantial losses on the ABS/MBS securities in the portfolio, or continuing to hold them and hope that a liquid market for such securities would reappear.
- 4.8 While the current market conditions are undoubtedly severe, the secondary market for partially seasoned MBS securities has never been robust. These securities are difficult to value and are generally bought in a long-term "buy and hold" context. Holding such assets in a portfolio designed to meet emergency liquidity needs of the Bank would have been questionable practice even without the present crisis.

B. CREDIT RISK

- 4.9 The Bank approaches credit risk in the portfolio almost exclusively through reliance on agency ratings. The current crisis has established, however, that there is considerable heterogeneity within a given ratings category, and not all securities rated AAA are equally resilient in the face of market turmoil.
- 4.10 This can be seen from an analysis of the IDB holdings. An analysis of "ratings transitions" (changes in ratings over time) was conducted for the IDB portfolio of structured securities compared with an average constructed by Standard & Poor's. The analysis shows that approximately 17% of AAA-rated structured securities initially were downgraded over the past months, and that the IDB portfolio performed slightly better than the S&P averages.

⁵ FN-600, Proposal for a New Ordinary Capital Liquidity Policy, 14 June 2005, paragraph 2.3

Figure 9: Comparison of all IDB structured products rating transitions against Standard and Poor's Global Structured Finance by count

| (distribution) | | | | | | | | | | |
|----------------|-----------------|-------------|----------------------------|-------|--|--|--|--|--|--|
| Ratings | S& 9/19/2007 | P 9/19/2008 | IDB 9/22/2007 9/22/2008 | | | | | | | |
| AAA | 100 | 84.1 | 100 | 82.4 | | | | | | |
| AA | 0 | 7.1 | 0 | 8.8 | | | | | | |
| A | 0 | 1.3 | 0 | 0.7 | | | | | | |
| BBB | 0 | 2.0 | 0 | 5.3 | | | | | | |
| BB | 0 | 1.6 | 0 | 2.8 | | | | | | |
| В | 0 | 1.1 | 0 | 0.0 | | | | | | |
| CCC - C | 0 | 2.6 | 0 | 0.0 | | | | | | |
| D | 0 | 0.3 | 0 | 0.0 | | | | | | |
| Total | 100 | 100.0 | 100 | 100.0 | | | | | | |

IDB (AAA original rating) - 284 securities

Source: Oliver Wyman

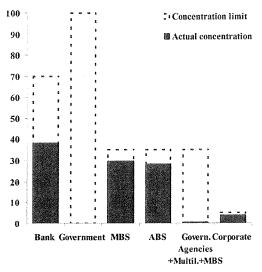
- 4.11 In an absolute sense, a downgrade of 17% of a portfolio would suggest that complete reliance on ratings to assess credit quality is problematic, despite the comfort that can be taken in the fact that the IDB pattern is not worse than the market as a whole.
- 4.12 The problem of credit quality, however, may well be greater than that suggested by the current ratings profile. With structured securities, the IDB buys the AAA "tranche" within an overall structure, which spans the ratings spectrum. Lower-rated tranches are the first to experience actual losses in the event of default on the underlying assets, and this structure provides some protection to holders of the higher-rated tranches. Whether this protection is sufficient cannot be known until the tranche is paid. The fact that the Bank has significant mark-to-market losses on these structured products could indicate that investors are not completely confident of full payment on even the highest-rated tranches.

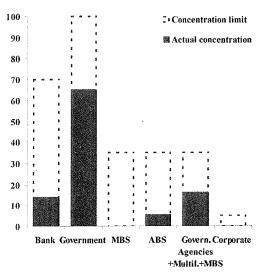
C. DIVERSIFICATION

4.13 Diversified portfolios are generally more resilient in the face of unforeseen events and diversification strategies can be stated simply and implemented clearly. The Bank, however, does not have an affirmative policy on risk diversification in its portfolio. Instead, it approaches this issue indirectly, by establishing concentration limits on certain types of assets. The problem with this approach can be seen in Figures 10 and 11, which shows concentration limits for the main asset categories in the two IDB's biggest sub-portfolios, along with actual holdings as of December, 2007

Figure 10. Concentrations limits and actual OC Operational portfolio (US\$ 12.3 billion),
December 2007

Figure 11. Concentrations limits and actual OC HTM portfolio (US\$ 3.8 billion), December 2007





Source: IMS Viewer - Composite information breakdown, 12/31/2007 and Investment Guidelines

- 4.14 First, the concentration limits are permissive rather than directive: they permit a certain share of the portfolio to be in each asset type, but they do not require a distribution across asset types for the portfolio. Government securities, for example, are permitted to be 100% of the portfolio, but actually only accounted for a little over 10% if both portfolios are considered.
- 4.15 Second, the categories chosen for concentration limits do not have unique risk profiles. ABS and MBS securities, for example, have separate ceilings but very similar risk profiles. Adding ABS and MBS ceilings, therefore, gave for December, 2007, a total permitted exposure concentration of 70% of the portfolio to structured securities.
- 4.16 Third, concentration guidelines do not contemplate the risks of concentration by sector of economic activity. Bank instruments, ABS and MBS all create exposure to the financial sector, an exposure which could account for 100% of the portfolio under current concentration guidelines. Given that the current crisis has thus far been confined primarily to the financial sector, the concentration permitted by the guidelines has increased the Bank's potential vulnerabilities.
- 4.17 Clearly, the investment guidelines approved by the CALM and the ALCO did not have the effect of producing a portfolio diversified across instruments and sectors. Of even greater concern, however, is that other policies also had the effect of limiting diversification in the portfolio. For example, the ALM framework required the Bank to match floating-rate funding with investments in floating-rate securities which prevented Management from taking interest rate risk by, for example, buying longer-term sovereign bonds.

- 4.18 Similarly, the credit guidelines imposed by various investment resolutions virtually eliminated corporate bonds as a viable asset category. There are very few AAA-rated corporates, a fact reflected in the low ceilings assigned to this asset category and the even lower holdings of such securities in the portfolio.
- 4.19 The significance of these diversification problems can be seen clearly by examining how alternative investment portfolios would have performed over the recent period. Two such portfolios were constructed, one which included structured products but balanced them with an equal share of corporate bonds (alternative 1), and one which limited holdings to CDs, money market funds, and longer-term government debt. (alternative 2). Alternative 1 would have been prohibited by the agency ratings limit on corporates, while alternative 2 would have been prohibited by the ALM policy. Both hypothetical portfolios significantly outperformed the actual IDB investment portfolio during the current crisis.

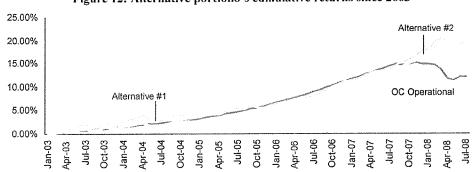


Figure 12: Alternative portfolio's cumulative returns since 2003

Source: CALM/ALCO investment presentations, Datastream, Oliver Wyman analysis

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D. INCENTIVES TO REACH FOR YIELD

- 4.20 Neither the Bank's ALM framework nor the Ordinary Capital Liquidity Policy ever indicated that generating a positive return (or a negative cost-of-carry) is part of their goals. On the contrary, the ALM Framework document is explicit in that its specific objective is to "simultaneously minimize: i) the volatility and average level of the cost of carrying liquidity; ii) the financial risks of carrying liquidity; and iii) the risk of being forced to borrow, i.e. loss of flexibility to time market entry", and warned the Board of Executive Directors about a specific trade-off of the proposed strategy that "would also reduce the Bank's opportunity to benefit (i.e. obtain attractive profit of carrying liquidity) during either bullish markets or when there are inverted yield curves."
- 4.21 Despite this clear policy guidance, when the ALM framework was approved the Bank's policy for setting loan charges was based on targeting a certain level of income, and in that environment positive investment income from the liquid investment portfolio helped to reduce the charges required on loans to meet the net income target. While the sums involved were relatively small, any reduction

- in loan charges was seen in a positive light by most shareholders. This helped to create internal institutional incentives for improving the returns on the portfolio.⁶
- 4.22 The specific link between loan charges and investment returns was severed in 2003 with the adoption of a new Capital Adequacy Policy. However, a review of reports to the CALM, ALCO and the Board of Executive Directors from 1998 to early 2007 show that the beating the benchmark and generating a negative cost-of-carry were seen as positive outcomes.
- 4.23 Reaching for yield was also encouraged by the previously-noted failure to specify the liquidity characteristics required for inclusion in the portfolio. If the Bank was funding itself as a highly-rated borrower in the floating rate market, and restricted by policy to holding only highly-rated assets, there is little room to reach for yield by taking credit risk. Instead, the incentive was to take unacknowledged liquidity risk (in the form of structured products), both because this risk was not tracked and because the total investment portfolio was very large relative to historically observed liquidity needs.
- 4.24 Unacknowledged internal incentives to reach for yield help explain the portfolio concentration in structured products and at the same time make sense out of some investment decisions, which do not appear to be fully aligned with the purpose of the liquid investment portfolio. For example:
 - The Bank holds some securities backed by Mexican residential mortgages, which would seem to be at odds with a liquidity portfolio intended to be uncorrelated with Latin America to avoid double exposure with the loan book, even if wrapped by a U.S. monoline insurer.
 - A Protected Investment Alpha Note (PIANO), bought in May, 2007, is categorized as a bank note because the principal is guaranteed by a commercial bank. The income from this security, however, is derived from a portfolio of obligations, which the Bank would have been prohibited from purchasing by its guidelines, had these been offered on a free-standing basis and not "wrapped" in a bank guarantee of principal.
 - In October, 2007, the Bank invested in two Countrywide MBSs (HELOCs), taking Countrywide's origination risk after its shares had fallen over 50% in response to concerns over its financial stability.

⁶ For example, after Management's presentation of the investment program in 2006, a few months before the crisis began, "several Executive Directors suggested that the Bank assume more risk, to increase the return on its investments," as it is stated in the 12 February 2007 minutes of the Budget and Financial Policies Committee.

V. THE BANK'S RISK MANAGEMENT PRACTICES AND CAPABILITIES

- 5.1 In all institutions risks are managed by specific organizational units within the constraints established by the policy framework. The IDB's approach to the management of risk has been evolving.
- 5.2 First, the dispersed policy environment described earlier is partly a refection of weak management of risk. Bank Management proposes policies for approval by the Board of Executive Directors, and the failure to specify a unified risk statement is largely the responsibility of Management.
- 5.3 Second, management of risk in the portfolio had historically been located within the Finance Department, which actually managed the portfolio and made investment decisions until the recent realignment of the Bank. OVE noted in its 2006 evaluation of the Bank's Capital Adequacy Policy that this structure "reduces transparency and violates best control practices." The CALM, responsible for oversight of the portfolio, was chaired by the Finance Manager, a practice that provided too little autonomy for the risk-assessment function. This has been somewhat remedied in the new ALCO, which is co-chaired by the head of the Risk Management Unit, who is independent of FIN, and the Finance Manager. It is important to note, however, that the realignment made Risk Management a unit reporting to the Executive Vice President rather than either a Vice Presidency or a Department. Best industry practice is to have risk management at the same hierarchical level as those who book the risks.
- Third, the technical unit responsible for treasury risk management (TRM) has not yet fully developed the analytical capacity required to assess the risks of the relatively complex portfolio that the Bank has created. A self assessment carried out by TRM pointed out that its functions should include the capacity: (i) to develop market risk measures such as VaR and stress tests; (ii) to identify, measure, and control all forms of market risk embedded in IDB's investment portfolio, such as repricing risk, basis risk, yield curve risk, option risk, and exchange rate risk; (iii) to prepare comprehensive assessments and reports on the impact of changes in market risk factors; (iv) to ensure that daily market risk exposures stay within limits; (v) to perform credit analysis on industries, corporations, and securities, highlighting developments that may impact the credit risk profile of the investment portfolio; and (vi) to conduct fundamental value analysis for structured credit products such as ABS and MBS.
- 5.5 These functions remain underdeveloped in part for a lack of Management willingness to allocate required resources. Repeated requests for budget and staff increases for the risk management function have not been granted by Senior Management and contrast sharply with noticeable increases in resources allocated

⁷ RE-322 Evaluation of the Bank's Capital Adequacy and Loan Charges Policy, 14 November, 2006, paragraph 4.28

to the external relations function. Strengthening the technical capacity for risk management is part of a needed process for enhancing a risk-management culture throughout the institution, and should be implemented even if the Bank decides to return to a simpler and smaller portfolio.

VI. GOVERNANCE - COMMUNICATION AND OVERSIGHT

- 6.1 Senior Management and the Board of Executive Directors have not been effective in executing important "top down" communication and oversight to Management levels of the Bank. There are two factors that have complicated the communication between Management and the Board of Executive Directors, (i) the membership of the Board of Executive Directors rotates frequently and capital markets experience varies widely among Executive Directors and their staff; and (ii) the Board of Executive Directors has not clearly communicated their requirements regarding risk information for the Liquid Investment Portfolio. Even in this current crisis, the Board of Executive Directors continues to allow Management to bring the information they deem important instead of working with Management to establish a mutually agreed reporting protocol.
- Other committees that could execute this oversight role did not accomplish this goal, leaving the investment strategy and risk management supervision entirely in the hands of their executors. Despite the fact that the IDB has a number of Executive and Management level committees that could provide oversight, the ALCO is the only committee having direct risk management responsibilities and operates in isolation making key decisions regarding investment strategy and risk exposure in the Liquid Investments Portfolio without Senior Management oversight. Other committees have inadequate membership or are not closely monitoring. The Executive Committee's terms of reference make no mention of risk management and, similarly, risk monitoring is not mentioned in the terms of reference of the Finance Committee.
- 6.3 Critical formal procedures are also absent: the Bank has no escalation procedures concerning the communication of losses and significant negative events in the portfolio; and currently has no formal stop loss, limit processes or policies in place.
- 6.4 Lack of oversight and lack of communication is reflected in Management reports to the Board of Executive Directors. Reporting has been limited prior to the crisis and reflected a narrow view of risk in the Liquid Investment Portfolio. Prior to the crisis, Management reported on the Liquid Investment Portfolio risks only twice a year and only on asset class concentrations, ratings and returns. Discussions within the ALCO have been limited mainly to counterparty limits and market risk. Moreover, the large exposure to the financial sector mentioned before has not been analyzed yet.
- 6.5 Lack of enforcement capacity also precluded effective change. In the examination of monitoring and reporting a 2005 finding from the Bank's Office of the Auditor General (AUG) was found, which registered concern regarding the significant concentration of ABS and MBS investments in the portfolio. The finding called for "FIN/INV to formalize the process to define internal limits for some categories of investments such as ABS and MBS. Evaluate the need for

FIN/TRM to become involved in the analysis/monitoring of those limits." This finding has remained outstanding from 2005 until the present day. It is often cited in TRM presentations requesting more resources from the Board of Executive Directors. It is highly unusual that an AUG finding of this nature would go not only unaddressed but be presented to Senior Management as unaddressed on frequent occasions without comment or remedy.

6.6 The most important consequence of this lack of robust governance practices is that it can lead to an investment strategy that diverges significantly from the expectations of the Board of Executive Directors and the implied risk appetite of the institution. One way limited reporting, lack of oversight, lack of enforcement and lack of communication can become problematic is when an institution's investments staff find that they are able to choose and implement increasingly complex investment strategies with approval from within their own organizational units (FIN and ALCO) and limited questioning from Senior Management and the Board of Executive Directors. This severely impacts accountability. While all of the investments in the Liquid Investment Portfolio are technically in compliance with the investment guidelines, some investment choices have pushed the boundaries of the guidelines.

VII. RECOMMENDATIONS

- 7.1 In proposing recommendations for future action by the Bank caution should be exercised against over-reaction to current market circumstances. Today's credit crisis is an exceptional event, and one should not assume that prohibiting the Bank from holding the kinds of securities that have generated today's losses will fully protect the portfolio from performance problems in the future. Instead, it is recommended that the Bank improve the policy and governance arrangements dealing with the investment portfolio in order to create more resilience of that portfolio to potentially adverse events in the future. This requires the following steps:
 - 1. Modify the Bank's Liquidity Policy by clearly distinguishing the actual liquidity needs of the institution from the "war chest" function provided by holding assets that are not likely to be required to meet liquidity needs but provide comfort to the markets that the Bank is financially prepared to deal with an economic crisis in the region.
 - 2. For that portion of the portfolio identified as needed for liquidity purposes, clear guidelines should be established defining the liquidity characteristics of permitted investments. Instruments held in this portfolio should have a high probability of being liquid in the most adverse market conditions. This form of market insurance may have a premium associated with an increased cost-of-carry, as highly liquid instruments may yield less than the costs of Bank funding. Such a premium is vastly preferable to the risk of carrying illiquid liquidity.
 - 3. The "war chest" function of the portfolio should be re-examined in consultation with other MDBs. Investment of large pools of assets not needed for liquidity purposes are not a core function of these institutions, and potentially draw resources and managerial attention away from these core functions. This will require at least an evaluation of the size of the liquid investment portfolio. The historical track record and strong support from shareholders should allow MDBs to retain AAA credit ratings without reliance on liquidity "war chests."
 - 4. The Board of Executive Directors should approve an explicit risk appetite statement to be incorporated in the resolutions authorizing the use of Bank resources. Such a statement should include, at minimum, guidance on agency ratings, credit risk dimensions beyond agency ratings, concentration risk by instrument type, concentration risk by sector, and liquidity risk. Such a statement should apply to the portfolio as a whole and to any identified subportfolio.
 - 5. A portfolio conforming to this risk appetite can be managed internally by Bank staff with expert external advice from financial management firms. The more complex the desired portfolio, the more expertise is required to manage and mitigate the risks inherent in it. Currently, the Bank's risk management

lacks the specialized systems and skills to adequately assess the risks in the current, relatively complex, portfolio. The Bank thus faces two choices: a portfolio complexity choice, and a risk management choice. On the basis of the consulting firm's experience and observation of recent Bank events, the recommendation is for the Bank to manage internally only a relatively simple portfolio consisting mainly of highly liquid government securities. More complex instruments, if desired, should be managed with assistance from expert external advice.

- 6. Prudent management of the portfolio requires the Bank to strengthen its risk management function. The risk management function should be elevated to the level of either a Department or a Vice Presidency, with direct reporting lines to both the President and the Board of Executive Directors. The risk management function should have the tools, technology and resources available to them to adequately support the Bank's investment activities, to identify, measure, and control all forms of market risk embedded in the IDB's investment portfolio, to be able to prepare comprehensive assessments and reports on the impact of changes in market risk factors, to perform credit analysis on industries, corporations, and securities, highlighting developments that may impact the credit risk profile of the investment portfolio, perform the Parametric Value-at-Risk and Stress Testing and Scenario Modeling analyses. To achieve the aspirations of the IDB requires an adequate internal Risk Management organizational unit with sufficient budget to acquire necessary talent and tools to assure that the goals articulated for the portfolio are achieved. Withholding the necessary resources will only hamper the Bank's achievement of its fundamental goal to provide needed resources to its member countries at the most advantageous terms.
- 7. Regardless of the choice of portfolio management techniques, there is an urgent need for the Bank to improve oversight for the investment function. Existing management and oversight arrangements did not detect important problems in a timely manner, did not identify the lack of a clear statement on what constitutes liquidity, and did not act on warnings of concentration risk issued by AUG. In light of these findings, the Board of Executive Directors should establish an Investment Policy Review Committee consisting of Executive Directors supported and advised by external financial experts. While this function could possibly be assigned to the existing Audit Committee, the issues involved are highly technical, and require a separate Board of Executive Directors committee supported by highly-qualified financial market experts. This committee could serve as an ongoing monitoring function and oversight body, similar to the bodies that oversee mutual funds and pension funds in the U.S.