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Local Currency Financing- The Next Frontier for MDBs?

Tobias C. Hoschka

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LOCAL CURRENCY FINANCING— THE NEXT FRONTIER FOR MDBs?

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April 2005

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FOREWORD

The ERD Working Paper Series is a forum for ongoing and recently completed research and policy studies undertaken in the Asian Development Bank or on its behalf. The Series is a quick-disseminating, informal publication meant to stimulate discussion and elicit feedback. Papers published under this Series could subsequently be revised for publication as articles in professional journals or chapters in books.

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ABSTRACT

This paper surveys the issues involved in local currency financing by multilateral development banks (MDBs). While MDBs have traditionally provided financing in foreign currency to their borrowers, greater sensitivity by borrowers to potential currency mismatches, political decentralization, and the development of local capital markets have recently led MDBs to consider providing financing in local currency. While still small in comparison to MDBs' foreign currency financing, this paper argues that local currency financing will evolve into an increasingly important financing mode for MDBs. The paper addresses the key benefits and challenges, and provides an overview of the current policies and experience of the major MDBs in this rapidly growing area.

I. INTRODUCTION

Traditionally, loans by multilateral development banks (MDBs) have been offered almost exclusively in foreign currency. However, over the past decade, important economic developments in many borrowing countries may warrant a review of MDBs' traditional approach to provide financing. This paper reviews one key component of providing greater flexibility to meet borrowers' demand, namely MDBs' ability to provide loans denominated in local rather than foreign currency.

The past decade has witnessed significant economic changes in many emerging markets in which MDBs operate: after the Mexican peso crisis, the Russian debt default, and the Asian financial crisis, lenders and borrowers have become increasingly reluctant to enter into foreign currency mismatches. More recently, large current account surpluses and substantial capital inflows have allowed some borrowing countries especially in Asia to build up significant foreign exchange reserves—thus reducing the need to borrow in foreign currencies from MDBs. In addition, a number of borrowing countries have liberalized their capital account, and as a result, sovereign as well as large local borrowers have gained access to international bond and syndicated loan markets, opening an additional source of borrowing foreign currency at competitive rates.¹ At the same time, local capital markets in many emerging markets are rapidly developing and longer-term tenors are becoming available, thus reducing the need to borrow offshore.

The nature of MDB-financed projects has also become much more varied, including, for example, social sector projects with a high proportion of local rather than foreign currency expenditures, and, in middle-income countries, infrastructure projects whose needs can often be met by local industry, rather than relying on imported foreign supplies, thus reducing the need to borrow in foreign currency from MDBs. Some 75 percent of disbursements by the International Bank for Reconstruction and Development (IBRD) in 2003, for example, were for local rather than foreign expenditures, a percentage that has increased rapidly over the last years (World Bank 2004). Moreover, revenues of MDB-financed projects are often entirely in local currency, leading to potential asset-liability mismatches if outstanding debt is denominated in foreign currency.

As a result of these developments, the issue of whether MDBs should enter into local currency lending has been raised recently both within the MDB community as well as by some borrowers. While most MDBs have started to engage in local currency lending under their private sector operations, public sector lending continues to be denominated almost exclusively in foreign currency. As public sector lending accounts for the bulk of MDB lending, this paper focuses on public rather than private sector lending by MDBs.²

¹ Emerging market bond spreads were at an all-time low at the beginning of 2005: the JP Morgan Emerging Markets Bond Index Global Diversified Bond Index was quoted at a spread of 380 basis points over US Treasuries in early April 2005. This compares to an average annual spread of 700–800 basis points as recent as 2002.

² Nevertheless, many of the treasury issues discussed also apply to lending by MDBs to private sector borrowers.

Two important developments over the past decade in a number of emerging markets may give rise to demand for local currency financing to be provided by MDBs: first, a number of countries have started a process of decentralizing government responsibilities toward local governments and devolving a number of functions that were traditionally provided by the central government to local governments such as state or provincial governments, municipalities, cities and townships. Second, an increasing number of government-linked companies or “parastatals”—while still majority-owned by the public sector—are beginning to be managed on an arms-length basis with independent financial management, funding strategies, and profit objectives. Clearly, both of these constituencies—local governments and parastatals—have a demand for local rather than foreign currency loans, given the absence of foreign currency revenues. MDBs are currently lending to these borrowers by channeling financing via the central government. The central government passes on funds to the ultimate borrower either by means of fiscal transfers or by extending a loan denominated either in foreign or local currency. However, this traditional lending structure may seem at odds with the very principle of decentralization, namely to devolve fiscal and managerial responsibilities to local governments and parastatals and for the central government to step back from direct financial involvement.

In this paper, we will discuss an alternative structure for MDBs to provide financing to local governments and parastatals: MDBs raising local currency financing and providing direct loans to these borrowers either with or, more likely, without a guarantee by the central government. The paper is divided into three sections: Section II reviews the potential demand and rationale for such local currency financing by MDBs. Section III addresses the MDB-specific treasury issues that need to be satisfactorily resolved before local currency products can be offered. Section IV reviews the experience, policies, and current initiatives of MDBs in this rapidly evolving area.

II. POTENTIAL DEMAND AND RATIONALE FOR MDBs EXTENDING LOCAL CURRENCY FINANCING

A. Potential Demand for Local Currency Financing

Sovereign governments have been the traditional client base for MDBs that provide foreign currency financing at highly competitive financial conditions for project and policy-based financing. However, there is unlikely to be demand by sovereign governments for local currency loans from MDBs, since sovereigns can typically raise funds domestically at lower costs than by borrowing from an MDB.³ Instead, demand for local currency financing may come from two categories of borrowers: local governments and parastatals.

³ This applies despite the fact that MDBs have a better credit rating than their borrowers, as local investors normally consider the sovereign to be the best credit in the local currency. However, some sovereigns may borrow in local currency from MDBs for nonfinancial reasons, including, for example, getting access to technical and project expertise, or ensuring that MDBs’ project management experience is applied to a project.

1. Decentralization and Local Government Financing

As a number of countries in emerging markets have been undergoing a process of political decentralization, sound local government finance is becoming increasingly important, as an increasing number of central governments have, in recent years, devolved to local governments the responsibility for delivering basic services and providing physical infrastructure, both of which require substantial financial resources. Better known as political decentralization, the premise of this process is that a local government should assume responsibility for delivering services to the residents within a defined geographical area. Decentralization also aims to reduce large fiscal deficits among both central and local governments by raising their efficiency in mobilizing resources and generating revenues.

As a result of this process of political decentralization, in some countries local governments and their associated entities are already playing a key role in the delivery of social and economic services (public health, education, housing, and urban infrastructure) and provision of infrastructure (power, irrigation, and transport).

Governments have made significant efforts to strengthen local government finance and to diversify financing methods by reforming revenue (particularly taxation) and expenditure systems, restructuring intergovernmental transfers, privatizing key development projects, and developing municipal credit markets. Nevertheless, local government finance in most emerging market countries remains weak and needs to tap new financial resources.

Two core models exist to provide financing to local governments: the bank-based model that is prevalent in Europe with its long history of specialty municipal banks, and the municipal bond model that provides the primary source of local government financing in the United States. In the emerging economies in the Asian and Pacific region, for example, where the process of decentralization is a relatively recent phenomenon, governments are in the process of experimenting with both models (see Kim 2003). In countries where specialty municipal banks do not have a long history of partner relationships, the effect of financial deregulation has been to force bank lending to municipalities within the framework of commercial banking, exposing local governments to short-term saving horizons. The People's Republic of China (PRC) illustrates the consequences of heavy reliance on commercial bank lending. In the PRC, the bulk of municipal lending for infrastructure finance now comes from commercial banks. Most of these loans carry terms of 3–5 years or less. Since local governments cannot repay these loans from infrastructure project revenues, they need to be rolled over. The reliance of local infrastructure financing on the continuing ability to roll over medium-term debt poses significant financial risks for borrowers. Similarly in India, special infrastructure financing intermediaries have lost their exclusive access to long-term savings and have been exposed to greater competition. As a result, institutions such as ICICI Bank, for example, have shifted from long-term infrastructure financing to retail banking.

As bank lending has become less attractive for local government financing, there has been growing interest in bond financing. In India, for example, the Tamil Nadu Urban Development Fund has been able to raise 15-year financing by floating a bond issue to finance a road project. In Shanghai, the municipal government has announced its intention to utilize the Shanghai Water Assets Operations and Development Company as a vehicle to issue long-term bonds for infrastructure financing.

Whether providing financing to local governments through banks or bonds (or a combination of both), assisting local governments in finding financial solutions is a rapidly emerging and evolving area and is becoming increasingly important for MDBs. Clearly, the ability to be able to lend in local currency is key to becoming a competitive provider of financial solutions in this area, as local governments should not be exposed to foreign currency risk and are in many cases, in fact, legally prohibited from borrowing in foreign currencies.

2. Reforming Public Sector Enterprises

In many emerging markets, public sector reforms have been targeted at reorienting the role of the state toward the provision of sound macroeconomic management and regulatory frameworks that enhance microeconomic efficiency, while at the same time reducing its direct involvement in the productive sectors of the economy and the management of public utilities. As a result, a number of public sector enterprises have emerged that are managed on an arms-length basis and are being restructured—often with the assistance of MDBs—into autonomous and financially independent entities. Such public sector enterprises are characterized by having a distinct legal personality, enjoying full control over their funding, budgeting, investment, and pricing policies; having a track record of good operational and financial performance; as well as having the necessary accounting, management information, and corporate governance systems in place. In fact, many of these public sector enterprises may eventually become candidates for privatization.

The MDBs have played an important role in contributing to the reform process in many of their borrowing countries by assisting in establishing the regulatory reform process, helping public sector enterprises in establishing the necessary internal systems and processes to professionalize management, and fostering the commercial orientation and setting the stage for potential stock floatations and eventual privatizations. Regarding potential financial assistance, it is clear that the vast majority of these public sector enterprises require local currency financing solutions rather than foreign currency loans, given the absence of foreign currency revenues.

B. Rationale for Extending Local Currency Financing by MDBs

While it is clear from the preceding discussions that there is likely to be significant demand for local currency financial solutions by local governments and public sector enterprises, this section further explores the rationale for MDBs to provide such financial solutions.

Recent empirical evidence shows that in virtually all of the financial crises in emerging markets in the 1990s, currency mismatches played an important role. Empirical researchers observed that the largest output falls have occurred in those emerging economies with the largest currency mismatches (Goldstein and Turner 2004). Currency mismatches occur when assets and liabilities are denominated in different currencies such that net worth and/or net income are sensitive to changes in the exchange rate. Borrowers in many emerging markets have at times faced currency mismatches on a massive scale. Foreign-currency denominated liabilities have frequently financed local-currency activities, while the stock of foreign currency-denominated assets has been comparatively limited. In such cases, a large and unexpected depreciation of the domestic currency can destroy much of the net worth of firms and households and initiate a wave of insolvencies, a financial crisis, and a deep fall in economic output.

So why do borrowers opt to enter into such currency mismatches in the first place? Currency mismatches typically occur when borrowers tap overseas markets, either because there are insufficient local financial resources available, tenors in the local market are too short, or borrowing offshore offers lower interest rates. While borrowers from developed economies are typically able to borrow internationally in their domestic currency (or enter a fully-hedged transaction if borrowing in a foreign currency), borrowers from emerging markets are often unable to do so.⁴

The MDBs have a potentially important role to play in reducing the extent of currency mismatches in their borrowing countries by providing suitable policy advice, assisting in the development of the local financial sector, and catalyzing the mobilization of local currency financial resources. One of the most effective means of assistance for MDBs is to “lead by example” and work with the local financial sector in finding local currency financial solutions for subsovereign borrowers.

The MDBs have three options to channel local currency financing to subsovereign borrowers: (i) the traditional lending approach, which consists of providing a foreign currency loan to the central government that in turn onlends the equivalent amount in local currency to the subsovereign borrower (or may use fiscal transfers to channel the funds to the subsovereign); (ii) lending directly to subsovereign borrowers with or without a central government guarantee; and (iii) providing a partial credit guarantee for a loan by a local financial institution, or a bond issue by the borrower.

- (i) **Traditional Lending Structure.** The traditional financing structure has the advantage in that in addition to channeling funds to a subsovereign borrower it also provides the sovereign with cost-efficient access to foreign currency funds. This traditional structure is economically advantageous if the sovereign (a) requires foreign currency to meet its foreign reserve management objectives, and (b) is willing and able to cover the foreign currency and credit risk through the on-lending spread. However, this traditional lending structure may seem at odds with the general principle and objective of decentralization and public enterprise reform, namely to devolve fiscal and management responsibility to local governments and parastatals. By maintaining the traditional financing approach of coursing all financing through the central government, subsovereigns lose the opportunity to increase their financial independence—a key objective of devolution in the first place.
- (ii) **Direct Lending.** There may be significant advantages for MDBs to lend directly to subsovereign borrowers in local currency. In certain cases, the central government may continue to provide a guarantee or set limits to the borrowing activities of subsovereigns. Once subsovereign borrowers are believed to be mature and stable enough to undertake financially responsible borrowing, the sovereign government can then fully devolve financial responsibility to subsovereigns.

⁴ Borrowing internationally in foreign currency on an unhedged basis has been referred to by some authors as “original sin” (e.g., Eichengreen, Hausmann, and Panizza 2003).

- (iii) **Partial Credit Guarantees.** MDBs should not be seen as crowding out the local financial sector, but instead complementing and catalyzing the development of local financial institutions. Thus, rather than lending directly in certain cases MDBs may support local currency financial solutions by providing partial credit guarantees (PCGs) to loans or bond issues. In many cases, PCGs may catalyze lending by local institutions, extend the tenor of financial instruments, or simply lower financing costs. Whether a loan or a guarantee is more suitable for a specific project depends on the characteristics of the project or borrower, the maturity of the market, and terms and conditions that are available for either financing option.⁵

When MDBs engage in direct lending or guarantee operations, such activities can provide significant benefits to borrower countries. Such benefits include:

- (i) **Capital Market Development Benefits.** On the capital market side, there are important benefits of MDBs' local currency funding activities. In the international capital markets, MDBs are known to be innovative issuers that often open new markets, introduce new financial instruments, or fill important gaps in the investment and issuer landscape. MDBs can play a similar role when issuing local currency bonds by following best-practice issue standards, setting new benchmarks, providing role model transactions in terms of documentation and execution, stretching the yield curve, introducing innovations with respect to available financial instruments in local capital markets, and providing significant diversification opportunities for local institutional investors such as insurance companies and pension funds. In fact, in many cases MDBs are the first foreign issuers and thus play an important role in paving the way for the deepening of local capital markets.⁶ Since issue activity by international financial institutions is often accompanied by interest rate and currency swap transactions, they also contribute to the development of more liquid derivative markets—important instruments to reduce tenor and currency mismatches of local borrowers. Similarly, when MDBs provide PCGs to local currency bond issues, such guarantees can make important contributions to capital market development by making certain bond issues feasible in the first place, extending their tenor and broadening their distribution.
- (ii) **Macroeconomic Benefits.** Allowing MDBs to enter local currency markets may have benefits that go beyond capital market considerations. As argued above, currency mismatches have played an important role in contributing to and exacerbating financial crises in many emerging economies, thus contributing to major financial crises. Thus, by contributing to strengthening the local financial system, MDBs can assist in reducing the need to borrow offshore and thus contribute to reducing the currency mismatches that can have severe macroeconomic implications. In addition, MDBs have historically played an important role in opening emerging market bond markets for international

⁵ In practice, the loan portfolio of MDBs is many times the size of its guarantee operations. The succeeding sections of this paper will therefore focus primarily on those situations where MDBs consider lending directly to public sector borrowers in local currency.

⁶ In the early 1970s, for example, ADB opened the Japanese capital markets to foreign issuers by launching the first "Samurai" bond issue. Similar path-breaking issues were undertaken in other regional capital markets, such as Australia; Hong Kong, China; India; Korea; Malaysia; and Taipei, China.

investors and thus paving the way for other local issuers to issue in local rather than foreign currency, reducing their exposure to currency mismatches (see Hoschka 2005). Thus, allowing MDBs to issue local currency bonds could contribute to internationalizing the local currency by attracting foreign investors, thus allowing local issuers to raise capital internationally in local rather than in foreign currency.

- (iii) **Catalytic Benefits.** MDBs' involvement in financing local and municipal level projects or providing financing to parastatals, can generate additional investor and cofinancing interest in such projects and therefore have important catalytic effects. Thus, rather than crowding out local institutions, MDBs can employ their financial products to contribute to effective mobilization of local financial resources.
- (iv) **Other Benefits.** MDBs have long-standing expertise in project financing and assisting the public sector on the national level in reforming and modernizing key sectors such as infrastructure and social sectors. Clearly, this expertise and knowledge base can be put to highly effective use with local governments as well. It would be expected that local governments could benefit as much as central governments from MDBs' powerful combination of technical assistance and long-term financing solutions at competitive conditions.

While this section has argued that there is potentially significant demand, as well as a strong rationale for MDBs to enter into local currency financing, clearly the next question that arises is whether and how MDBs can address the supply and treasury-related issues that are related to such financing activities.

III. LOCAL CURRENCY FINANCING BY MDBs: TREASURY-RELATED ISSUES

Local currency financing raises a host of treasury management issues for MDBs. These range from funding and financial policy to investment and risk management issues. These issues are not just internal to these organizations: since many capital markets in borrowing countries are still closed to foreign issuers, and swap markets often face regulatory restrictions, governments of borrowing countries play a key role in ensuring the success of local currency products by allowing MDBs to raise funds on a cost-efficient basis, as well as providing a suitable regulatory environment to implement cost-effective asset-liability management. This section provides an account of these key issues and possible approaches to managing them.

A. Funding Issues

Gaining cost-efficient access to local currency funds is an obvious requirement for MDBs to offer local currency financing. MDBs have two options when raising local currency funds: raising such funds on a project-by-project basis by entering into back-to-back funding transactions, or alternatively, by establishing a liquidity pool in a specific local currency similar to MDBs' funding approach in convertible currencies. Which of these funding routes is chosen depends on a variety of factors. If the volume of local currency lending is of sufficient scale and frequency in a particular currency then a "pool-based" approach may become feasible. This would allow for the decoupling of lending

and funding transactions. Target liquidity levels would be determined based on demand and disbursement projections, and asset and liabilities would be held vis-à-vis a floating rate benchmark to avoid any interest rate risks. However, for the floating rate pool-based approach to become feasible, cost of funding would need to be sufficiently low so as to avoid negative carry issues.⁷ Thus, MDBs would target to achieve sub-benchmark funding cost levels by funding when cross-currency or interest rate swap levels are favorable. Becoming a larger issuer in a specific local currency market would also lower funding costs for MDBs, as it would allow undertaking benchmark bond issues across the yield curve and thus establish greater liquidity of such bond issues, rather than such issues being “bought and held” by institutional investors. Greater liquidity would translate directly into lower funding costs.⁸

Whichever funding approach is chosen, MDBs have two main options to raise local currency funds: issuing a bond in the local or Euro markets, or entering a cross-currency swap (CCS).

- (i) **Funding via Bond Issues.** All MDBs currently have AAA-credit ratings, while most of their borrowers have a lower credit rating even in local currency. Nevertheless, as local investors typically consider the national government to be the best credit in the local currency, such credit rating advantages may not translate into subgovernment funding costs of a potential MDB bond issue in local currency.⁹ Thus, MDB bonds would normally be issued at a slight spread over government securities (see Table 1 for an example of recent ADB bond issues). The pricing of an MDB bond issue would also be influenced by its regulatory treatment: risk weighting for banks holding MDB bonds, ability of banks to use MDB bonds to meet reserve and liquidity requirements, and tax treatment of MDB bonds are key factors that influence the pricing of such bond issues. Clearly, if governments are willing to provide a more favorable regulatory treatment of MDB bonds, such advantages translate into lower funding costs, ultimately passed on to borrowers in the form of lower interest rates. Box 1 provides an overview of the terms that MDBs typically request from governments in which they intend to issue bonds.

⁷ The term “carry” refers to the spread between an institution’s cost of funding and the return on investment it earns if it retains liquidity. In the case of MDBs’ dollar portfolios, the carry is normally positive since MDBs are able to raise dollar funds at sub-LIBOR costs and invest in assets that yield at least LIBOR. Unlike for dollar borrowings, the carry costs may be negative in local currency. Thus, if an MDB raises funds at a cost of, say, 30 basis points over the local floating-rate benchmark, and assuming it is able to invest in assets yielding the same return as the benchmark of its funding costs, a negative carry of 30 basis points will arise. This cost needs to be passed on to borrowers.

⁸ An additional issue that needs to be addressed is whether the financing provided in the local currency can also have attached risk management features like caps and collars as well as conversion features from fixed to floating interest rate or vice versa. The capacity of the domestic market to offer and price these features would need to be assessed on a market-specific basis.

⁹ Exceptions may apply: in Peru, the International Finance Corporation was able to issue at a level of 40 basis points below local government securities. The European Investment Bank has issued below government benchmarks in certain Central and Eastern European countries.

TABLE 1
ADB BOND ISSUES IN ASIAN COUNTRIES

| ADB BOND ISSUE | COUNTRY CREDIT RATING* | SPREAD OVER GOVERNMENT (BP) |
|--------------------------|------------------------|-----------------------------|
| Hong Kong, China 2004-07 | AA- | 3 |
| Korea 1995/2002 | A+ | 0-5 |
| Malaysia 2004/09 | A+ | -2 |
| India 2004/14 | BB+ | 17 |

*Standard & Poor's local currency rating.

Box 1
MDBs' "WISH-LIST" FOR ISSUING LOCAL CURRENCY BONDS

Supranationals such as MDBs typically have a number of requirements to be able to issue local currency bonds. These requirements stem partly from the MDBs' Charter or Articles of Association, and partly from funding cost targets that typically require issuance at very competitive terms and conditions. Requirements typically include the following:

- (i) **Tax Exemptions.** Confirmation that interest payments by the MDB and its paying agents will be exempted from withholding taxes. This requirement is based on the fact that MDBs are granted tax-free status in their member countries.
- (ii) **Domestic Rating Exemptions.** Since MDBs are typically rated by all three major international rating agencies, securing an additional domestic rating adds little additional value for investors.
- (iii) **Broad Investor Access.** The ability of all major domestic institutional investors, including insurance companies and pension or provident funds, to invest in the MDB bonds increases the distribution and liquidity of bonds, lowering funding costs.
- (iv) **Risk Weighting.** Risk weightings of MDB bonds should be no more than 20 percent in line with current Bank for International Settlement guidelines ("Basle 1"). Under the new "Basle 2" guidelines this risk weighting will be reduced to 0 percent.
- (v) **Reserve Eligibility.** Similar to government bonds, MDB bonds may be eligible to be counted against statutory reserve and liquidity requirements imposed on financial institutions. This privilege broadens distribution to include commercial banks and typically improves liquidity of the bonds.

- (ii) **Funding via CCS.** Cross-currency swaps are a relatively recent market development.¹⁰ While CCS are now commonplace in the world's major currencies, in emerging markets, the development of CCS markets has only taken place over the last decade. The majority of MDBs' borrowing countries currently do not have active and liquid swap markets. Thus, funding local currency through CCS is an option only in a limited set of countries. However, where such swap markets do exist, CCS provide a flexible and cost-efficient funding route. This results from the fact that CCS can be structured in smaller amounts and thus can be closely matched with the disbursement schedule of a loan. In addition, it is possible to structure a CCS with an amortizing schedule that corresponds to the amortization schedule of the loan to be financed. Both of these advantages can eliminate the issue of "negative carry" that may be associated with a bond issue. Since the market for CCS is heavily influenced by demand and supply considerations, the pricing of CCS tends to be quite volatile. Thus, at times CCS can be very competitively priced compared to a bond issue while at other times, funding through CCS may not be competitive. Price changes of up to 100 basis points within just a few weeks are not uncommon.

Whether MDBs raise local currency funds through a bond or a CCS (where available) depends primarily on cost considerations. Ultimately, MDBs should be given the freedom by regulators to choose funding options as freely as possible so as to be able to minimize costs—a benefit that is ultimately passed on to their borrowers.

B. Financial Policy Issues

Financial policy addresses issues such as asset–liability management (ALM) and pricing of local currency loans. ALM is the practice of matching the term structure and cash flows of an organization's assets and liabilities to maximize returns and minimize risks. The previous section has already mentioned a number of ALM issues specific to local currency financing. This section provides an overview of some additional issues that MDBs need to manage when entering local currency financing.

- (i) **Currency Mismatches.** These can arise if a bank has an outstanding liability in a currency that is different from the assets that it is holding. Suppose, for example, that an MDB has issued a PCG to a local currency loan but is not holding any liquid assets in that local currency. In case the guarantee is called, the bank needs to be able to raise the local currency funds within the required period that is stipulated in the guarantee arrangement. In case the bank is unable to raise the local currency via a bond issue or a CCS, it needs to be able to convert from foreign currency into local currency via a spot transaction to meet its guarantee obligations. However, as a spot transaction creates a currency mismatch, the bank needs to create a local currency liability by refinancing the spot transaction. Thus, whenever an MDB extends a local currency guarantee, its treasury department needs to have reasonable market prospects of being able to raise local currency funds if required. Government approvals also need to be secured in advance.

¹⁰ In fact, the first-ever cross-currency swap was only executed in 1981 between the World Bank and IBM.

In general, MDBs try to avoid any forms of currency mismatches, an important guiding principle for all local currency transactions.

- (ii) **Interest Rate Mismatches.** These can arise if a bank has floating rate obligations while holding fixed-rate assets or the reverse. Similar to MDBs' LIBOR-based products, such interest rate risks are hedged by matching the terms of loans and funding transactions, or where this is not possible by entering into interest rate swaps (IRS) that hedge the banks' assets and liabilities. MDBs can therefore normally only enter local currency markets where an IRS market is in place, or bilateral IRS can be arranged, unless funding and lending are done on a full back-to-back basis with matching terms.

Another issue that arises in the context of local currency transactions is the issue of prepayments. Thus, in case a borrower prepays, an MDB needs to cover its risk of negative carry in order to avoid a financial loss, in particular if the loan is on a fixed-rate basis. As a result, MDBs typically levy a prepayment charge to be incorporated in all local currency lending transactions so as to compensate for potential negative carry.

In summary, local currency transactions add a level of complexity to MDBs' ALM, which needs to be carefully managed, monitored, and controlled. In principle, MDBs are unlikely to enter into markets where there is a significant risk of entering asset–liability mismatches. In practice, this implies that local currency markets will need to have reached a level of maturity that includes at least rudimentary derivatives markets before MDBs can enter into these markets in the area of local currency lending.

C. Investment and Risk Management Issues

In order to be able to minimize the cost of carry of holding liquidity in a specific local currency, MDBs need to be able to invest in a range of local instruments, including repo and reverse repo transactions, government bonds and bills, and short-term money market instruments. As MDBs typically enjoy tax-free status under their charters, governments would need to grant the necessary approvals to allow MDBs to receive interest income on a tax-free basis.

While MDBs invest in a range of financial instruments in convertible currencies such as corporate bonds or asset-backed securities, in local currencies they are limited to government securities and bank instruments typically offered by foreign banks. This stems from the fact that MDBs have conservative investment guidelines requiring them to invest in financial instruments that have at least investment grade ratings issued by international credit rating agencies. In most emerging markets, there are virtually no issuers that meet these criteria. The more limited investment opportunities thus lead to lower returns and may exacerbate the negative carry issue.

Regarding risk management, local currency financing raises specific issues in particular regarding swap arrangements. MDBs typically have minimum rating requirements for swap counterparties to reduce counterparty credit risks. As local banks do not normally meet these criteria, MDBs are limited to transacting local currency swaps with foreign banks.

IV. LOCAL CURRENCY FINANCING OF MDBs: EXPERIENCE AND LESSONS

Local currency financing for public sector borrowers is a new area for most MDBs. This section discusses the current policies and approaches of the key institutions in this area, and reviews the experiences and lessons learned from local currency financing activities.¹¹

A. International Bank for Reconstruction and Development

The International Bank for Reconstruction and Development (IBRD) has so far not extended any loans in local currency to its public sector borrowers. Several reasons may account for this: first, IBRD's charter places restrictions on its ability to extend local currency financing and stipulates that local currency loans should only be made in exceptional circumstances and in conjunction with a foreign currency loan.¹² Second, IBRD is not able to extend loans directly to public sector borrowers unless a full guarantee by the sovereign government is extended. This restriction forms a major barrier to extending IBRD's scope to address the financing needs of subsovereign borrowers, since sovereign guarantees are often unavailable. Third, IBRD also cites a number of treasury-related reasons why it does not currently extend any direct local currency loans. These include issues such as negative carry, the challenge to achieve true "back-to-back" arrangements, and the difficulty to prefund in local currency.

While IBRD has opted not to offer direct local currency loans, it does, however, offer hedging products as an extension of IBRD's LIBOR-based fixed-spread loan product. IBRD offers borrowers the option, subject to market availability and purely on a case-to-case basis, to convert or swap their foreign currency-denominated IBRD liabilities into local currency. To hedge its risks, IBRD enters into matching currency swaps from market counterparties. The availability of this hedging arrangement is therefore limited to countries where an active and liquid cross-currency swap market exists. The eligible volume of the local currency financing is limited to the local currency expenditure component of IBRD loans. Execution of such local currency hedges is on a best-efforts basis due to the volatile conditions of local currency markets. IBRD notes that local currency swaps are likely to have shorter maturities than the underlying IBRD loans, which can entail cash flow and foreign exchange risks for the borrower. IBRD charges a transaction fee for such hedging transactions of 25 basis points of the principal, in addition to passing through to the borrower the costs and terms that are associated with the swap.

¹¹ The Inter-American Development Bank (IADB) is not included in this section, as it has not yet extended local currency loans to either public or private sector borrowers in its borrowing countries. However, it has provided guarantees to selected local currency loans.

¹² The IBRD Charter, Article IV, Section 3(b) reads: "The Bank may, *in exceptional circumstances* when local currency required for the purposes of the loan cannot be raised by the borrower on reasonable terms, provide the borrower *as part of the loan* with an appropriate amount of currency" (emphasis added).

The IBRD notes that local currency hedging transactions are unlikely to be of interest for sovereign borrowers (for the same reasons that were discussed above, namely that sovereigns have access to local currency at more competitive terms than by borrowing from an MDB), but that local currency hedging products may meet the demands of certain subsovereign borrowers that conduct their financial management independently from the central government. While the hedging product was approved by IBRD's board in January 2001, it was not until mid-2004 that the first project employing this hedging product was approved (see Box 2 for a brief description of this project).

Box 2
IBRD's 2004 LOCAL CURRENCY SWAP APPLICATION IN MEXICO

While not offering direct local currency loan products, in January 2001 IBRD's board approved swap-related hedging products that allow borrowers to swap foreign currency IBRD loans into local currency obligations, subject to IBRD being able to transact cross-currency swaps in the local market. IBRD transacted the first such swap arrangements in June and July 2004, both with Mexican state-level borrowers. The swaps were for newly processed projects and the two approved projects totaled \$138 million (the loans are "Decentralized Infrastructure Reform and Development Project" for \$108 million and "State Judicial Modernization Project" for \$30 million). Loan and swap tenor are fully matched with a maturity of 18 years.

Since states in Mexico are prohibited from borrowing in foreign currencies from foreign institutions including the World Bank, a structure was devised through which IBRD transacts a swap with a market counterparty and lends directly in local currency to a government-owned intermediary (National Bank of Public Works and Services), which then onlends to state-level borrowers. The loan to the intermediary enjoys a full guarantee by the sovereign. The market-driven terms of the swap are passed through to the borrower. This innovative structure allowed IBRD to support the process of decentralization in the country where responsibility for key infrastructure services has been delegated to subsovereign entities such as states and municipalities. To remain relevant in this process, this pilot project was viewed as a key test case for the World Bank to be able to meet subsovereign financing needs. However, the structure is restricted by the availability of an active and liquid cross-currency swap market. In addition, financing terms are unpredictable and are driven by the terms available in the swap market at the time of disbursement.

B. International Finance Corporation

The International Finance Corporation (IFC), the World Bank Group's private sector arm, has provided local currency financing in 13 local currencies to around 61 clients so far, totaling an estimated \$3.5 billion equivalent in exposure. IFC provides local currency debt financing in three ways: (i) loans from IFC denominated in local currency; (ii) risk management swaps that allow clients to hedge existing or new foreign currency denominated liabilities back into local currency; and (iii) structured finance solutions such as partial credit guarantees that enable clients to borrow from other sources and risk sharing facilities, and to participate in securitizations.

The IFC has traditionally only financed projects that are majority-owned by the private sector, while the World Bank has provided financing to projects only with a sovereign guarantee. Thus, the World Bank Group has so far been unable to finance subsovereign borrowers without a sovereign counterguarantee. To address this gap, the World Bank Group in 2003 established the "Municipal Fund" which is a joint venture by the World Bank and IFC, combining the World Bank's client relationships in the public sector with IFC's credit assessment and structuring skills. The Municipal Fund is able

to finance projects at the state and municipal level by providing loans, equity, or guarantees without a sovereign guarantee. It uses IFC's balance sheet to undertake such financings.

Since its inception, the Municipal Fund has approved two transactions, both of which were guarantees. The first project was in Mexico, a \$9.6 million equivalent 9-year bond issue by a trust company that onlends to a city government to finance a wastewater treatment plant. IFC partially guaranteed the bonds, jointly with Dexa Bank, the large European public sector lender. The guarantee led to a credit enhancement of the bonds from AA to AAA by the local credit rating agency. If the trust fails to pay and the guarantors step up to pay, then the trust's obligations to the guarantors become a US dollar obligation. Importantly, through this mechanism, IFC avoids a currency mismatch that would arise if it pays in local currency but does not have a local currency liability.

The second IFC project is also a partial credit guarantee for a \$150 million equivalent 12-year issue by the City of Johannesburg, South Africa. IFC jointly with a local bank provided a 40 percent rolling guarantee of principal and interest payments that enhanced the credit rating of the bonds from A- to AA-, and allowed extension of the maturity of the city's borrowings from 6 to 12 years. In this case, IFC was willing to take on the refinancing risk, as the obligation by the city in case of a call on the guarantee remains in rand, rather than converted to dollars. Since South Africa has a deep and liquid capital market that is comparable to that of many developed countries, IFC was willing to take the refinancing risk for South Africa.

C. African Development Bank

The African Development Bank (AfDB) has been extending local currency loans in South African rand since 1997. It funds these transactions both through the cross-currency swap market, which is active and liquid in rand, as well as through issuing rand bonds in the offshore Euromarkets. Local regulatory issues have so far prevented the issuance of onshore rand bonds by AfDB. The rand lending program has been quite successful with 5–7 percent of AfDB's loan book now denominated in rand. Total outstanding commitments are 2.9 billion rand (\$500 million equivalent). About half the loans were extended to public sector borrowers in the Southern African Development Community, comprising 14 countries in Southern Africa, while the other half was lent to both public and private sector borrowers in South Africa. A significant percentage of these loans were extended to parastatals, initially with a guarantee by the central government, and since 2003 also without sovereign guarantees, after changing AfDB's policy on requiring sovereign guarantees (see Box 3). Local currency loans without sovereign guarantees are based on risk-based pricing, rather than AfDB's standard public sector lending spread. In addition to rand, AfDB has been actively studying the possibility of expanding local currency operations in other African countries, and is waiting for markets to develop sufficiently to allow for cost-efficient funding opportunities in local currencies.

Box 3
AfDB's New Nonsovereign Guaranteed Loan Products for Public Sector Borrowers

In September 2003, AfDB introduced a new loan product for public sector borrowers, the Non-Sovereign Guaranteed Lending Operations to Public Sector Enterprises. In its analysis of the market, AfDB noted that one of the reasons for the low level of AfDB lending operations in several middle income countries (MICs) is the reluctance of the governments in those countries to provide guarantees for the borrowings of their public-sector enterprises. This new loan product was therefore introduced to provide financial solutions to those borrowers, as part of the overall policy reform that AfDB supports in these countries. Total risk capital used for such nonsovereign operations is capped at 20 percent of AfDB's total risk capital. Pricing is according to risk-based principles and transactions are led by the bank's private sector department. Where suitable funding opportunities exist, such lending can be undertaken in local currency.

D. Asian Development Bank

The Asian Development Bank (ADB) launched its local currency lending initiative under ADB's private sector window in 2002. It approved its first transactions in 2003, including projects in India and the Philippines, and is currently considering local currency financing for private sector borrowers in other countries such as PRC, Pakistan, and Thailand.

The ADB issued its first local currency bond issue in Indian rupees in April 2004 (see Box 4 for more details on this funding transaction). The proceeds of this bond issue were used to fund three rupee-denominated private sector loans in India.

An innovative cross-currency swap structure is proposed for a project in the Philippines that was approved by ADB's Board of Directors in January 2004. The swap initiative involves ADB undertaking a local currency swap with the government, and using the local currency proceeds to provide long-term lending to private sector financial intermediaries for on-lending to local borrowers. Under this structure, ADB will swap a given amount of foreign currency in exchange for the equivalent in local currency. At the termination date of the swap, the transaction will be unwound and ADB will repay the local currency in exchange for dollars. During the life of the swap, ADB will lend the local currency to creditworthy financial institutions in the country which, in turn, onlend to developmentally sound investments and projects that require long-term local currency financing and meet ADB's regulations on environment, resettlement, and indigenous people. Thus, the ADB will absorb the risk of the country and the participating banks, both domestic and foreign. The participating banks will in turn absorb the commercial risk. In this manner, each player will take on risks that it is best equipped to absorb.

Box 4
ADB's INAUGURAL INDIAN RUPEE BOND ISSUE

In February 2004, ADB issued its first Indian rupee bonds with an aggregate principal amount of INR5.0 billion (about \$110 million equivalent), a coupon rate of 5.4 percent per annum, and a 10-year maturity. The issue was priced at 17 basis points over the comparable government benchmark. The issue was a first in many respects: first issue by a foreign entity; first supranational issue; and first issue rated triple-A by Fitch, Moody's, and S&P. Importantly, the issue also marked the first time ADB has tapped the domestic bond market of a borrowing member country. Moreover, the issue set a number of new standards in the rupee bond market. First and foremost, the issue established the regulatory framework and documentation for issuance by other foreign entities. Second, the bookbuilding process for the issue was based on spread over government securities, reflecting international best practice. Finally, the coupon payments of the issue are paid via wire transfers in lieu of checks, which was also a first in the rupee bond market.

The issue also illustrates some of the challenges associated with funding via a bond issue. The proceeds of the bond issue were targeted for three projects with staggered disbursement schedules. Thus, the issue of negative carry arises. However, the negative carry is counterbalanced by the commitment fee charged on the undisbursed loan amounts.

In addition to direct local currency lending activities, ADB has also approved a partial credit guarantee to support a local currency bond issue of a gas terminal project company in India, and to provide financing to small and medium enterprises in Pakistan. In addition to providing local currency loans to private sector borrowers, ADB is also reviewing the possibility of providing such loans to certain subsovereign public sector borrowers such as local governments and parastatal companies.

E. European Bank for Reconstruction and Development

Among MDBs, the European Bank for Reconstruction and Development (EBRD) was the first to provide local currency loans to its borrowers. The EBRD provided its first local currency loan as early as 1994 in Hungarian forint to finance a transport project where revenues were denominated purely in local currency. More recently, EBRD has extended several local currency loans to local governments including city governments, municipal water supply companies, and public-private partnerships in the infrastructure sector (see Box 5). As of November 2004, EBRD had extended a total of 23 local currency loans.

EBRD has established local currency lending facilities in Czech koruna, Hungarian forint, Polish zloty, Slovak koruna, and Russian rouble. The local currency funds have been sourced through a variety of funding sources, including single currency revolving facilities, cross-currency swaps, and local currency bonds issued domestically or in the Euro markets. EBRD has issued domestic bonds in Hungary and is preparing an issue in Russia, while having issued Eurobonds in the currencies of the Czech Republic, Estonia, Hungary, Poland, Russia, and Slovak Republic. However, EBRD issues bonds only on a back-to-back basis with the local currency loan and where there is no available derivatives market, i.e., when cross-currency swaps are not available. This strategy aims to minimize the costs of negative carry that may be associated with bond issues. EBRD has established local currency floating-rate liquidity pools via cross-currency swaps in Czech, Hungarian, and Polish currencies. EBRD loan terms are generally based on EBRD's cost of funding.

As EBRD's charter makes explicit reference to capital market development as a mandate of the institution,¹³ the bank undertakes significant development work when working on bond issues. Thus, for example, EBRD has worked with Euroclear/Clearstream, the two major international clearing systems, to get a number of currencies accepted for full settlement. In Hungary, EBRD worked on implementing delivery versus payment for the settlement of its first Hungarian forint domestic bond issue. And in Russia, EBRD has been working with the regulatory authorities to establish the issue regime for foreign issuers. These activities exemplify the capital market development benefits that MDBs can contribute to local currency markets.

Box 5
EBRD'S LOCAL CURRENCY LOANS TO SUBSOVEREIGN BORROWERS

EBRD has extended a number of local currency loans to subsovereign borrowers such as city governments and municipal entities particularly the infrastructure sector. Recent examples in the water and sewerage sector include:

- (i) **Archangelsk Municipal Water, Russia.** In November 2003, EBRD extended a RUB346 million (10 million Euro equivalent) loan to Russian Archangelsk municipal water utility, fully owned by the local government. The project aims to assist in the corporatization and commercialization of this public sector water utility. The loan is counterguaranteed by the Archangelsk regional government.
- (ii) **City of Yaroslavl, Russia.** In January 2003, EBRD extended a loan of RUB490 million (14 million Euro equivalent) to upgrade the municipal water and sewerage system.
- (iii) **City of Bydgoszcz, Poland.** In December 1999, EBRD approved a loan of PLN108 million (24.5 million Euro equivalent) to the city-owned municipal water and sewerage company to upgrade its water supply and sewerage system.

F. European Investment Bank

The European Investment Bank (EIB) is the world's largest international financial institution (IFI) in terms of loan volume (around 50 billion Euro annually). The EIB was the first IFI that started to lend to public sector borrowers without government guarantee at risk-based pricing and in the borrower's local currency. Outside the Eurozone, for example, EIB has established currency pools in four currencies in Central Europe. Box 6 presents more detail on EIB's local currency operations in these countries.

The EIB has been an active borrower in the capital markets of Central and Eastern Europe to raise local currency financing. Its decision to lend in local rather than foreign currency was a direct response to borrowers' demand to avoid the currency mismatches entailed with foreign currency lending. Under its local currency program, EIB is providing loans to the private sector as well as subsovereign borrowers such as local governments and parastatals. In the second half of 2002, EIB introduced subsovereign lending without requiring a sovereign guarantee for countries in Central and Eastern

¹³ EBRD Chapter 1, Article 2 on "Functions" states: "To stimulate and encourage the development of capital markets."

Europe. Since then lending to such borrowers has taken off significantly. Within the first year of introducing this product, EIB made loan commitments of more than \$2 billion to subsovereign borrowers. In contrast to public sector lending with sovereign guarantee, for nonguaranteed operations EIB undertakes an extensive financial, credit, and legal analysis; prices loans according to risk-based criteria; and requires the borrower to secure and maintain a sufficient credit rating by an international credit rating agency. EIB is currently considering relaxing the latter requirement under certain conditions.

The EIB has been an innovative issuer in the capital markets of Central and Eastern Europe. Since 1996, EIB has issued a total of 222 transactions in local currency, raising a total of EUR5.7 billion equivalent. In 2004, EIB completed market-opening transactions in Maltese liri, Slovenian tolar, Turkish lira, Bulgarian lev, and Russian rouble. The 2004 issuance volume in local currency passed EUR1.5 billion.

Box 6
EIB'S LOCAL CURRENCY FUNDING STRATEGY IN CENTRAL EUROPE

In order to be able to offer highly competitive loan products, EIB introduced loan pools in four major local currencies in the region, Czech Republic, Hungary, Poland, and Slovakia. Based on this decision, EIB has become the largest borrower in each of the four markets after the sovereign government. In the Czech Republic, for example, EIB first issued Czech koruna (CZK) bonds in 1996. Since then, EIB issuance has expanded considerably to reach a total issuance volume of CZK80 billion (\$3.2 billion equivalent) by November 2003. A major step in this process was the establishment of EIB's CZK30 billion (\$1.2 billion equivalent) Debt Issuance Program in 1998. It has enabled EIB to regularly access the domestic CZK bond market and to become firmly established as the leading CZK issuer after the Czech Republic.

In Hungary, EIB entered the domestic bond market in 1997 with the establishment of a small Domestic Debt Issuance Program for Hungarian forint (HUF) bond issues. When the forint became fully convertible in June 2001, the EIB was the first to issue a HUF bond in the international market. The EIB has been able to substantially increase its volume of HUF bond issuance in 2003. During 2003, the EIB issued HUF 87 billion (\$446 million), which was more than any other issuer in the market, except the Hungarian government.

In Poland, EIB local currency issuance started in 1997 when the currency was not fully convertible and all payments in relation to these "synthetic" Polish zloty (PLN) bonds had to be made in foreign currency. When the PLN became fully convertible at the end of 2000, EIB continued to issue PLN bonds in the international markets. International investors have been attracted by the opportunity to have PLN paper with the security of EIB's AAA credit rating. The scope for PLN issuance was enhanced at the end of 2001, when the PLN Domestic Debt Issuance Program was established. Within just three months of its signing, more than twice as much EIB PLN paper was issued than during the preceding 12 months. In 2003, EIB PLN issuance accounted for 700 million zlotys (\$205 million equivalent).

V. CONCLUSIONS

This paper has argued that there is significant potential demand for local currency financing solutions to be provided by MDBs. Demand is likely to stem from two main types of borrowers: local governments and public sector enterprises. MDBs have a potentially significant role to play in this area and local currency financing activities by MDBs can have significant benefits for borrowing countries in terms of developing local capital markets, contributing to reducing currency mismatches, and catalyzing additional investor and cofinancing interest. While local currency financing raises a host of treasury-related management issues, suitable solutions can be found under certain conditions. Borrowing countries play a key role in creating the enabling conditions for MDBs to address these issues. A review of the experience of the major MDBs in the area of local currency financing shows that approaches have so far been quite different, as the operating environments in the borrowing countries also widely diverge. One would expect, however, that as the area of local currency financing becomes more mature in the future, approaches and product offerings by MDBs will start to converge.

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