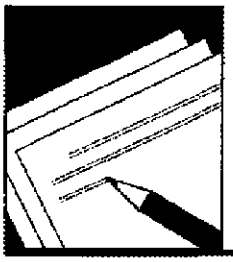
Policy Discussion Paper



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Reconsidering External Financing of Domestic Budget Deficits: Debunking Some Received Wisdom

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Reconsidering External Financing of Domestic Budget Deficits: Debunking Some Received Wisdom

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Abstract

The past decade has witnessed a steady increase in outstanding external sovereign debt issued by emerging market economies. This paper examines some of the "received wisdom" regarding the benefits of external financing of domestic budget deficits and argues that it is often predicated on a narrow set of assumptions and incomplete evaluation of the underlying costs. The paper also suggests alternative sources of financing that can help capture some of the benefits associated with foreign financing without all of its costs.

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I. INTRODUCTION

In the past decades, the international capital market has seen two important developments with major repercussions for emerging market economies. First, sovereign borrowers in emerging market countries have gained increased access to external funding. Second, as capital controls are removed (and investors have in any case become more adept at evading them), the distinction between "resident and domestic currency" versus "nonresident plus foreign currency" has become increasingly irrelevant. Many issuers who used to be able to exploit a captive market have now to compete globally. And while it may be possible to preserve an element of segmentation, it is often no longer in the interest of governments, as issuers, to do so (Fry, 1997).

Partly in response to these changes, external sovereign debt issued by the governments of emerging market countries has risen sharply in the past ten years. Estimates show that the level of such debt has risen from a relatively low level prior to 1993 to between 300-500 billion U.S. dollars at the end of 1999. By 1995, the external debt issued or guaranteed by the governments of developing countries was almost three times larger than their foreign currency reserves, exposing these governments to a "large net currency risk" (Cassard and Folkerts-Landau, 1997).

The purpose of this paper is to examine whether the apparent preference of some emerging market countries to resort to external financing of domestic budget deficits (as opposed to domestic financing) can always be justified. In particular, the paper investigates some of the frequently cited benefits associated with borrowing in the international capital markets. Received wisdom suggests that these are to reduce funding cost, to reduce crowding out, to establish market presence, to acquire a disciplinary device, to build up gross reserves,

and to achieve portfolio diversification. Some of these assumed benefits are associated with the characteristics of the subscribers of the debt issues (nonresidents versus residents), while others are connected to the currency denomination of the debt issues (foreign currency versus domestic currency) although the distinction may not always be clear in borrowers' minds. Against the background of criteria for sound debt management policy, in particular that of the least cost in the medium term (subject to the risk tolerance of the issuer), the paper concludes that the benefits of accessing the international capital markets may be overstated while the cost and risks are understated.[2]

II. Considerations For Financing Budget Deficits

When a government deliberates over how to finance a budget deficit or to roll over maturing debt, it needs to consider the following questions:

- What are the government's debt management aims?
- Who has the savings?[3] Are there sufficient savings within the domestic economy[4] to meet both the government's needs and those of the private sector (e.g., for productive investment)?

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[2] Although the paper may benefit from the inclusion of country case studies, such amplification is best left to a later longer study.

[3] Generally, nonresident retail investors will not be interested or accessible for emerging market sovereign issues.

[4] Some residents think in terms of the domestic currency and markets ("resident domestic"); others have access to foreign currency and perhaps also to foreign markets, and so have different opportunity costs ("resident international"); while accessible nonresident investors will tend to think in terms of the international markets ("nonresident international").

- Taking account of the government's own risk appetite and investor preference/risk appetite, will issuance be cheaper in domestic currency (whether fixed, floating or CPI linked) or denominated in (or linked to) a foreign currency? (And if a decision has been made to borrow in foreign currency, which foreign currency should the debt be denominated in?)

Governments should make borrowing decisions within the context of their debt management aims. Normally, the primary aim is to minimize the cost of debt finance in the medium term, consistent with least or a prudent degree of risk. But there may be other broader economic aims: to raise foreign exchange for balance of payments purposes or to build foreign exchange reserves; to develop the domestic capital markets (which could result in reduced government funding costs in the medium term), sometimes with an objective of supporting private sector borrowing; or to provide a high quality savings instrument for domestic investors. Generally, these will be secondary to the 'least cost' aim (though they are not necessarily incompatible with it), and should always be measured against it. For instance, if a more expensive option is chosen because it will help to develop markets, how much is the government paying for such development? And can it measure whether or not its actions have, in fact, aided market development? (This is far from being simple; but the issues should be considered and periodically reviewed.)

Although the liberalization of capital accounts has made it more difficult to target domestic and foreign investors separately, the answer to the second set of questions should determine the appropriate channel for issuance and location of settlement (i.e., which legal jurisdiction and which central securities depository (CSD) to use). These operational features of the debt offering, together with the currency denomination of the issuance (Table 1), can

help influence the type of subscribers at least at the margin, even in the absence of capital controls. For example, a Euro bond issue with a high minimum denomination whose trading requires having a settlement account with an international CSD (e.g., Euro clear or Clearstream) will likely keep out domestic retail investors. Similarly, low denomination CPI indexed bonds sold on tap by the government in the domestic market may be less attractive to foreign investors and more difficult for them to access.

Table 1. Operational Features of Sovereign Debt Offering

Investor	Issuance Method	CSD	Denomination
Resident retail	Tap or subscription	Domestic retail	Domestic or FX linked
Resident wholesale	Auction or syndication	Domestic	Domestic, FX linked or FX denominated
Nonresident wholesale	Syndication	International CSD	FX denominated

The answers to the second and third set of questions, taken together, will determine the terms of the debt issuance. It should factor in any expected depreciation of the currency; the evolution of the yield curve; the currency composition of the government expenditure; the relative level of domestic and foreign interest rates; and the currency preference of the targeted investors.[5]

[5] For example, some foreign investors may only want to take on sovereign risk and not foreign exchange risk. To hedge against the latter, they may use forward markets (though this still involves counterparty risk) or repo, borrowing from domestic banks to finance the government debt. Some international investors will not participate in a developing market domestic currency issues if they cannot use these hedging instruments simply.

III. Received Wisdom Regarding Foreign Financing

This section examines six of the most frequently cited or assumed benefits associated with external financing of domestic budget deficits. Some are related to the geographic location of the subscribers (nonresidents versus residents), while others are connected to the currency denomination of the debt issues (foreign currency versus domestic currency). It will be argued that many of these benefits are confined to a narrow set of assumptions, and others are exceeded by the associated cost. Moreover, it will be shown that under some circumstances external financing is significantly more expensive than domestic financing.

A. Reduction of Funding Cost

Direct borrowing costs

Perhaps, the most frequently cited benefit of external financing of domestic budget deficits is that it is cheaper. The argument rests on three asymmetries. The first asymmetry (which concerns only debt issues denominated in foreign currency) can arise when potential investors expect or fear a larger devaluation of the government's domestic currency than that forecast by the government. This may stem from either the government's more optimistic assessment of the economy or a lack of credibility in its exchange rate policy. In either case, potential investors will demand a larger foreign exchange risk premium for holding domestic currency denominated debt issues than the government might think justified. In this situation, the government may determine it is to its advantage to take on the foreign exchange risk itself by issuing foreign currency denominated debt, even when both its needs and its income are denominated in domestic currency.

The second asymmetry is typically associated with a small country whose financing requirements are limited in absolute terms, and whose capital account is fairly liberal (in

particular with respect to the ability of residents to acquire foreign assets). The residents of such a country, when their asset portfolios already consist mainly of claims on the domestic sector may not want to take on additional domestic exposure. When this is the case, domestic investors would demand a higher return on holding domestic government debt than foreign investors who may actually seek to purchase such assets in order to diversify their own portfolios.

The third asymmetry may occur when the perceived sovereign risk of the borrowing country is high, or if a government is viewed as less likely to default on an international bond than a domestic one.[6] Consequently, domestic investors of relatively poor countries, whose saving decisions are dominated by a precautionary motive, may not want to take on such high risk; while some large international wholesale investors, who invest for speculative returns, may actively seek it. The second and the third asymmetries may lead the government of the borrowing country to conclude that international investors have larger risk appetite for its debt and may be willing to accept lower returns for assuming the same risk.[7]

It can be easily seen that even when the first asymmetry is present, the case for reduction in ex-ante funding cost through foreign financing is less than clear. This is because when the revenue of the borrowing government is in domestic currency, the government incurs a short foreign exchange position by assuming foreign currency denominated debt. The government's ability to repay such debt will worsen in the event of a depreciation in the

[6] Sometimes defaults on a domestic obligation may trigger a default on international issues due to cross-default provisions.

[7] It is difficult to assess the risk preferences of different types of investor's ex-ante; but discussions with major (and potential) investors, together with market pricing, can provide useful information.

exchange rate by facing the dual costs of an increasing external debt service cost and a declining foreign currency value of its revenues (Dooley, 1998). Therefore, if the market expects a depreciation, it will demand a higher credit risk premium on the government's foreign currency denominated borrowing. Even though the government pays no foreign exchange premium on its foreign borrowing, it will end up paying a higher credit risk premium. The increase in credit risk will at least partly offset the gains from eliminating the foreign exchange risk premium.

As for the second and third asymmetries, their impact on the government's funding cost under an external financing scheme may depend on other factors, such as the liquidity of the government debt: when domestic residents invest mainly for long-term goals (e.g., to finance retirement) and foreign investors (e.g., hedge funds) are motivated by short-term gains, the liquidity of debt instruments may matter more to foreign investors than to domestic retail investors. This means that, in countries whose capital markets are less developed or whose outstanding debt does not reach a critical mass for active trading, foreign investors may demand a higher liquidity premium than domestic retail investors.

Total budgetary impact

More generally, the relative cost of the alternative placement schemes may depend on the exchange rate regime. It can be shown that when the monetary impact of external foreign currency borrowing is fully sterilized, it is going to be more expensive than domestic borrowing for all but a very few borrowers. To see this, it is necessary to look at the impact of such borrowing on the consolidated balance sheets of the government and the central bank, as illustrated in the following example. It will be assumed that the government plans to use the proceeds from its borrowing to finance domestic currency denominated expenditure;

and that both the money market and the foreign exchange market are in equilibrium prior to the government's borrowing decision.

Under a quasi-fixed exchange rate regime (in which the central bank also targets interest rate or monetary aggregates), the government will sell all of the proceeds from its foreign borrowing to the central bank. By purchasing foreign exchange from the government, the central bank releases domestic currency liquidity into the system. The central bank may be required to undertake sterilization operations to maintain interests rates at the level prior to the government's borrowing. It can, for example, do so by issuing central bank bills or by selling any holding of treasury bills.[8] The central bank will, at the same time, invest the increase in its foreign exchange reserves in foreign securities. Table 2a shows relevant items from the consolidated balance sheet of the central bank and the government. It can be easily seen that as long as the sovereign risk and term premium on the government's borrowing exceeds that of the credit risk of the (shorter-term/more liquid) foreign securities the central bank invests in, the consolidated borrowing cost of the government would be higher under a foreign financing scheme than under a domestic financing one.[9] Compared with Table 2d, expanding the balance sheet with foreign currency assets and liabilities will almost always increase net financing costs.

The analysis is different under a currency board or a flexible exchange rate regime. Under a currency board, the central bank will not be able to undertake sterilization

[8] The level of central bank bills issued, denominated in local currency, will have to exactly match the government's borrowing to fully sterilize the effect of liquidity injection.

[9] The central bank can also choose to sterilize the excess liquidity by raising non-renumerated reserve requirement. This, however, simply passes part of the government's funding cost to the commercial banks as a form of increased domestic taxation.

operations. Instead, the excess domestic currency liquidity released into the system[10] will work its way out through a balance of payment deficit. The "dishoarding" of domestic currency will continue until the foreign exchange reserves of the central bank are eventually restored to their original level.

Under a flexible exchange rate regime, the government can convert the proceeds of its foreign exchange borrowing into domestic currency by selling them in the market.[11] Nonetheless, as Table 2c shows, if the uncovered interest parity condition holds, there should be no difference in the government's funding cost whether the borrowing is raised in foreign or in domestic currency. Moreover, there will be second and third round effects associated with foreign financing: an increased government short foreign exchange position may result in a deterioration in credit rating, and so higher borrowing costs; short-term exchange rate appreciation may lead to a current account deterioration (with possible consequences for the government's budget).

If the government thinks that the exchange rate is undervalued, it may be attracted to financing its expenditure by borrowing abroad, and preferably at long maturity. When the government chooses foreign financing for this reason, it effectively assumes it knows better than the market. However, even if the government turns out to be right in the end, long-term debt can be expensive because of the term premium, while short-term debt, on the other hand, can be very risky given the higher rollover risk and the fact that short-term exchange rate movements may not follow the perceived fundamentals.

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[10] Assuming the government spends the domestic currency its obtains from the central bank.

[11] Either directly or through the central bank (when it is the banker for the government).

Table 2. Relative Costs of Domestic versus Foreign Financing of Domestic Budget Deficit

a. Government Borrowing from Abroad under a Quasi Fixed Exchange Rate Regime

	Assets	Liabilities
Government		Foreign bond issue • sovereign risk premium • term premium • expected foreign inflation • foreign real interest rate
Central Bank	Increase in foreign reserves • expected foreign inflation • foreign real interest rate	CB bill issue • expected domestic inflation • domestic real interest rate

b. Government Borrowing from Abroad under a Currency Board Arrangement

	Assets	Liabilities
Government		Foreign bond issue • sovereign risk premium • term premium • expected foreign inflation • foreign real interest rate

c. Government Borrowing from Abroad under a Flexible Exchange Regime

Assets	Liabilities
	Foreign bond issue • sovereign risk premium • term premium • expected foreign inflation • foreign real interest rate • expected exchange rate change

d. Government Borrowing Domestically

Assets	Liabilities
	Domestic bill issue • expected domestic inflation • domestic real interest rate

It may be the case that, even after a long period of exchange rate stability, the domestic currency risk premium priced into domestic interest rates is still 'unreasonably' high. This may point to more fundamental problems. It may be that the fiscal stance of the government, or fundamental economic weakness, has led the market to believe that a substantial foreign exchange rate risk remains (a small risk of a big devaluation at an uncertain point in the future).

B. Avoidance of Crowding Out

Supporters of foreign financing of domestic budget deficits sometimes argue that such borrowing does not crowd out domestic investment by pushing up interest rates at home. It can be shown that this argument is true only under a limited set of conditions: for example, when government's expenditure needs are in terms of imported goods, external financing will limit any direct spillover from the transactions to the rest of the economy.

The "insulation" property of external financing becomes more dubious when the government needs to finance consumption of domestically produced goods. Consider a given level of government spending and tax revenue, and thus, a given deficit to be financed. Under a flexible exchange rate regime, foreign financing will lead to an appreciation of the exchange rate (the government sells the proceeds of its borrowing to the market). This, in turn, will give rise to an increase in imports but a decline in exports. While a deterioration in the trade balance will temper the crowding out effect of government spending on private consumption and investment, exporters and some domestic producers will be 'crowded out' (the latter through import substitution). Domestic financing, on the other hand, will lead to an increase in interest rates, whose negative impact on private investment will be partly offset by an increase in capital inflows, and possibly by an increased savings rate domestically. It is difficult to determine what will be the relative impact of the two types of financing on both long-term and short-term output growth.

External financing, to the extent that it is sterilized, will have the same effect on domestic interest rates as domestic financing (and therefore the same net crowding out effect). When external financing is not sterilized (whether in a flexible or a fixed exchange

rate regime), it can reduce other types of capital inflows by strengthening the real exchange rate.

Theoretically, a case can be made that when the economy as a whole has net external financing needs, the government should seek external financing if it can raise funds in the international markets more cheaply than can the private sector. In practice, this can be difficult to justify since it may be impossible to assess the actual net external financing needs of the private sector. Also, external financing of the government should not be used to delay necessary adjustment of the exchange rate or to provide "cheap" foreign exchange to favored segments of the economy.

C. Establishment of Market Presence

Another frequently cited benefit of external financing is that it enables the borrowing government to establish market presence (e.g., to receive international credit ratings) and presumably to make future foreign borrowing cheaper than otherwise. However, it must be questioned what do governments actually achieve by establishing market presence. While such presence might enable the borrowing government to broaden demand for its debt and facilitate future access, it is less clear that it will necessarily reduce its funding cost. In fact, to the extent that there is a perceived information asymmetry between domestic and foreign investors (e.g., domestic investors are better informed than foreign investors[12]), foreign investors may actually demand an information risk premium on holding sovereign debt.

[12] This information asymmetry was illustrated by the tequila crisis during which Mexican residents exited the domestic currency before foreign investors.

It has also been sometimes argued that there is a second round effect associated with the establishment of presence by the government in the international capital market: a positive externality whereby issues by private entities in the international capital market may be facilitated by a government benchmark rating. This, however, may not be the case since (1) many domestic companies that are capable of raising financing abroad can probably do so without the government first obtaining international sovereign ratings, and (2) the credit risk of the government and that of private enterprises may be sufficiently different so that the pricing of one does not necessarily help the pricing of the other. Even if government debt issues do facilitate private issues at the margin, the government is subsidizing domestic enterprises by borrowing at potentially higher cost in order for them to borrow at lower cost (relative to what they would be paying in the absence of government issues). Whether this is an optimal subsidy depends on a cost-benefit analysis and comparison with other competing subsidies in the economy.

In short, there is no generalized need to establish a presence; it should be done only to serve a wider or longer-term goal; finally, the costs should be justifiable in these terms.

D. Acquisition of a Disciplinary Device

Another defense for foreign financing of domestic budget deficits is that, since the government cannot inflate away its foreign debt (as opposed to domestic debt), it signals to investors its commitment to monetary and fiscal discipline by raising the cost of reneging on the commitment. (In this context, it is the foreign currency denomination rather than borrowing abroad that matters.) It is argued that this can help lower inflationary expectations and reduce the interest rate on the borrowing government's domestic debt issues (Drudi and Prati, 1993).

The problem with this type of disciplinary device is that while it may work in normal times (and this is not guaranteed; it may have no impact, or even a negative impact if foreign exchange debt is seen as potentially destabilizing), it can backfire during crises. It may seriously constrain the ability of governments to respond to adverse and unforeseen circumstances by tying their hands. For example, when facing permanent external shocks (e.g., terms of trade shocks), countries may not be able to devalue in order to restore the competitiveness of their exports because of consideration of the impact of the devaluation on their net foreign obligations.[13]

In any case, the distinction between domestic and foreign currency financing in this context may be false. If domestic currency issuance has a relatively short-term maturity, or a short-term re-pricing mechanism (e.g., a long maturity floating rate note), then the domestic market can also "discipline" the government. If a government "decides to inflate" (this is short-hand for "resorts to monetary financing or arrears because voluntary financing was not available at a 'reasonable' price"), the market could take evasive action (refusal to roll-over loans, or pricing in a jump in inflation) before prices/inflation respond to the government's actions.

The government can issue inflation indexed bonds to signal the commitment to fiscal and monetary discipline (Watanabe, 1992). In the early 1990s, New Zealand completely eliminated its net external debt and partially substituted it with inflation linked domestic debt

[13] On the other hand, excessive short-term domestic currency denominated government debt positions may constrain the authorities' ability to raise interest rates to prevent an excessive depreciation of the domestic currency.

issues. But investors normally believe that "actions speak louder than words": effectively implemented policies will have a stronger effect than signaling.

E. Accumulation of Gross International Reserves

Another frequently cited benefit of external financing of domestic budget deficit is that it can help build up gross international reserves. It is argued that by building up such reserves, the government can temper expectation of short-term exchange rate depreciation (when the foreign borrowing of the government is long-term)[14] and reduce roll-over risk on existing foreign debt, both of which, if true, can help lower the government's cost of funding on its future foreign borrowing. However, it is important to recognize that there is a cost to holding gross reserves, as borrowing costs will almost always exceed returns on the invested funds (on a risk-adjusted basis). This is because reserve assets, to serve the purposes stated above, need to be secure and liquid, and the return on such assets will be lower, as a rule, than a (especially non AAA rated) government's borrowing costs.

In any case, borrowing in foreign currency to boost gross reserves may be more of a monetary (exchange rate) policy than a debt management objective. It may be legitimate for one of the aims of debt management to be to obtain foreign exchange in support of the monetary policy target of a stable exchange rate; but, in this case, such borrowing should be undertaken only at the request of the central bank, and arguably should be undertaken directly by the central bank (if it owns the reserves), to ensure clarity of objectives.[15] If the

[14] Increased confidence in the domestic currency is more still likely to come from evidence of sound fiscal and macroeconomic policies and strong net reserves.

[15] It may be more effective for the government to borrow on behalf of the central bank; but in this case, the central bank's liability should be a debt to the government rather than an

(continued...)

government uses such foreign currency borrowing to meet part of its financing needs, then the central bank will need to finance its acquisition of reserves by selling bills (or bonds) in the domestic market to avoid monetary financing.

Increase of Diversification

It is sometimes suggested, perhaps by analogy with international portfolio management, that currency diversification of debt issues should help reduce risks for sovereign borrowers. However, while it is perhaps true that in countries where government revenues are positively correlated with real exchange rates, some portion of debt in foreign exchange may help smooth tax rates (World Bank, 2000), government revenues in most countries are likely to be positively correlated to nominal domestic GDP, so that domestic currency borrowing will normally hedge its position better. In the latter case, diversification may actually increase risk. Moreover, even if borrowing in foreign currency could reduce risks, this need not involve international capital markets: domestic borrowing can be foreign currency denominated. In sum, debt managers in emerging markets may find it difficult to specify or quantify the benefits of using the international capital markets as a (long-term cost saving) risk management tool.

IV. Alternatives to Foreign Financing

This section suggests some alternatives to international capital markets for financing a domestic budget deficit. Some of these alternatives can help capture the benefits of foreign financing without most of its costs. In emerging markets, domestic currency fixed interest

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increased government cash balance, which could be disbursed. Otherwise, the central bank would need to sterilize the domestic monetary creation.

issuance may appear expensive because of uncertainties about the real exchange rate (the risk that either inflation will spike sharply upwards, or that the exchange rate will be sharply devalued, or both). Where possible, governments will want to borrow without paying for this uncertainty risk. We do not discuss here in detail the basic instrument of short-term domestic currency bill issuance in the domestic market: this is touched on in section III.A and table 2, where it is suggested that T-bill issuance may in some circumstances be an alternative to central bank bills.

F. Dollar versus Linked Issues

Foreign currency borrowing may be used to raise funds from the domestic market. A variation on foreign currency borrowing from the domestic market is foreign currency *linked* borrowing.[16] In this case, the government combines the need for domestic currency to cover that part of its expenditure not met by current revenues with avoidance of the domestic currency risk premium, although it is still exposed to the same foreign exchange risk. But by borrowing in the domestic currency, it avoids any need for central bank sterilization with associated cost benefits.

Another possibility is consumer price indexed loans. If domestic investors use a foreign currency as a proxy for real value, then in principle a CPI bond will meet investors' needs more exactly. A foreign currency denominated bond is open to dual currency risk: the domestic currency might appreciate against other currencies, or the chosen foreign currency might depreciate against other currencies. But a CPI linked bond will always maintain its real value in domestic currency terms, and provide a positive real return. In principle, it should

[16] Borrowing whose interest and principal payments are tied to the exchange rate.

therefore be cheaper to issue than a foreign currency linked bond (although it must be remembered that a foreign currency linked bond may be of interest to nonresident investors, whereas a CPI bond will tend to be of interest only to the domestic market). CPI bonds have been used successfully by some countries that have good inflation performance (Price, 1997). They have many of the benefits of foreign currency linked bonds (reduced risk premium), without the government taking on foreign exchange risk. However, they can only work if the CPI is generally believed to be an accurate and unbiased measure of inflation. Moreover, if the government were to shift its tax base from direct to indirect taxation, indexed interest costs would increase also. In both cases, these linked bonds can allow the government to issue longer maturity bonds into the domestic (including 'resident international') market than is possible with domestic currency fixed interest issues.

In principle, governments could use other links: a government with substantial revenues linked to oil prices could hedge its position by linking bond returns to the oil price. But the costs of locating investors willing to take such bonds may outweigh potential savings.

Nonresidents may of course enter the domestic currency securities market. If the central bank were to buy foreign exchange from nonresidents (e.g., in under a currency board arrangement), it would need to sterilize the capital inflow; while if nonresidents purchase it in the foreign exchange markets (e.g., under a floating exchange rate regime with no sterilization) there will be an exchange rate (or current account) impact. At the same time, broader demand should reduce the interest cost of issuance.

G. Retail versus Wholesale

Consideration of the target market is also important. A government may believe that the most cost-effective form of borrowing is a foreign currency denominated five-year loan; but this does not necessarily determine the target market or issuance route. If at the same time the government needs to or wishes to raise foreign exchange, perhaps to fund imports deemed necessary to economic development, then accessing the international capital markets may make sense; and the exact form of such access, whether a bank loan or a bond, may depend on the size of the borrowing and existing relations with international banks (for $50 million, a bank loan may be appropriate; for $500 million or more, a bond issue may be needed). But the same cost of borrowing, and same risk exposure could be obtained from issuing foreign currency denominated or foreign currency linked bonds in the domestic market. Foreign currency denominated bonds could be sold to the local banks, via an auction, or structured as a retail instrument and sold on tap (the retail market cannot be organized in the same way as the wholesale) at a fixed—but competitive—rate.

In dollarized economies, households may think in foreign currency terms for savings purposes; and may also hold large quantities of foreign currency, as well as relatively large domestic currency balances. It is not unusual for households to hold foreign currency notes, or foreign currency bank balances at low rates of interest, while the government borrows foreign currency from the international markets at relatively high interest rates. If the government can access this household market, and provide investors with the required degree of liquidity (such as the right to sell the security back to the issuer, possibly at a small penalty)—and there are examples of this being done, with simple infrastructure—then even when borrowing in foreign currency, it may make sense for the issuer to access the domestic

market (the economy as a whole saves money by disintermediating the international capital markets). Doing so with a foreign currency denominated loan may initially ease the way for subsequent issuance in domestic currency in the domestic market.

V. Conclusion

When a government is deciding where to raise funds, the distinction should no longer be domestic versus foreign, but domestic retail versus everyone else, i.e., between the domestically oriented investor (who will tend to be resident and retail), and the internationally-oriented investor (who may be resident or nonresident, retail or wholesale).

Borrowing from the international capital markets (or from IFIs) may make sense if a government wishes to increase resources available to the economy; and in some cases, this route will not be open to the private sector directly. The government then takes on a foreign exchange risk, but accepts this as justified.

But if a government is accessing international capital markets simply because it appears to be cheaper, it needs to make sure that all costs have been taken into account. This is particularly true where the capital inflow will be sterilized by the central bank, as the costs of sterilization are most likely to outweigh any benefits from borrowing abroad. Where second round effects cannot be precisely quantified (for instance on the exchange rate and the domestic productive sector), they should be at least considered and taken into account when choosing between different borrowing options.

If domestic investors are concerned about the risk of future inflation or exchange rate depreciation, and so charge a high risk premium on fixed interest domestic currency issues, the government may be able to design instruments which will minimize the risk to the

investors, and allow the domestic market to be accessed more cheaply than international capital market borrowings.

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