



IMF Policy Discussion Paper

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Research Department

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Abstract

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In this paper, we develop a proposal for a controlled approach to capital account liberalization for economies experiencing large capital inflows. The proposal essentially involves securitizing a portion of capital inflows through closed-end mutual funds that issue shares in domestic currency, use the proceeds to purchase foreign exchange from the central bank and then invest the proceeds abroad. This would eliminate the fiscal costs of sterilizing those inflows, give domestic investors opportunities for international portfolio diversification and stimulate the development of domestic financial markets. More importantly, it would allow central banks to control both the timing and quantity of capital outflows. This proposal could be part of a broader toolkit of measures to liberalize the capital account cautiously when external circumstances are favorable. It is not a substitute for other necessary policies such as strengthening of the domestic financial sector or, in some cases, greater exchange rate flexibility. But it could in fact help create a supportive environment for these essential reforms.

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I. INTRODUCTION

Capital account liberalization was once viewed as an important component of the process of economic development, especially since it held out the promise of money flowing to capital-poor developing countries and ratcheting up growth. While many developing countries have indeed benefited greatly from inflows of foreign capital, sudden stops and reversals of these flows have precipitated costly crises in some of these countries. This has led to a reconsideration of the benefits of capital account liberalization, with capital controls regaining some of their luster, among certain academics and policymakers, as effective tools to limit outflows.

Restrictions on capital outflows can, however, create problems when developing economies, especially those with underdeveloped or poorly supervised domestic financial markets, face substantial external inflows.² Non-FDI inflows, in particular, either feed directly into the domestic financial system, often with adverse repercussions for macroeconomic management, or the government bears the sterilization costs of keeping the liquidity out of the system. Outflows could relieve some of the pressures caused by surges in inflows, but governments have a considerable, and often legitimate, fear of letting go of controls.

Is there a way for economies experiencing large inflows to turn things to their advantage and make controlled progress towards the eventual goal of capital account liberalization? In this paper, we outline a proposal that would help achieve these objectives. The main element of the proposal is essentially to allow for securitization of capital inflows through closed-end mutual funds that would issue shares to domestic residents in domestic currency, use the proceeds to purchase foreign exchange from the central bank and then invest the proceeds abroad. This would reduce the fiscal costs of sterilization and also give domestic residents broader investment possibilities as well as an opportunity to diversify their portfolios

² Recent experiences of some emerging market economies indicate that speculative inflows can seep in through both official and unofficial channels, notwithstanding the existence of controls on capital inflows (see Genberg, MaCauley, Park and Persaud, 2005, and Prasad and Wei, 2005).

internationally. In addition, it would help alleviate some of the domestic risks typically associated with surges in inflows.

There are alternative approaches to limited capital account liberalization that could provide some of the benefits of our proposal. These approaches include allowing pension funds or other institutional investors to invest abroad, having the government invest abroad and sell foreign-currency-denominated securities to domestic investors, etc. While each of these approaches has its merits, our proposal is superior in some respects as it would entail smaller risks to the government's balance sheet, provide broader diversification benefits to domestic investors, and help stimulate the development of local financial markets. Another key benefit is that, unlike many other forms of limited capital account liberalization, it would allow governments to control both the amount *and* timing of outflows, which could be crucial in the initial stages of capital account opening. Nevertheless, our proposal should be seen as one in a menu of options for controlled liberalization.

We emphasize that our proposal is not intended to be a substitute for other policies that developing economies should focus on, including strengthening of domestic financial markets and, in some cases, moving toward greater exchange rate flexibility. But the proposal would have the benefit of allowing countries to make progress towards the goal of eventual full capital account convertibility in a carefully calibrated manner, without exposing the domestic financial system to risks associated with uncontrolled outflows. Having such a safety valve in place could also, in the first place, mitigate problems associated with inflows of capital such as strong pressures for exchange rate appreciation.

Furthermore, by relieving the pressures caused by inflows, this approach could in fact provide some breathing room for countries to undertake necessary policy reforms. It gives them some ability to insulate themselves from the ebbs and flows of international markets. Not least, if appropriately structured, it has limited downside risk.

II. SOME BACKGROUND

Consider first how adjustment to capital inflows would take place in a developed country with an open capital account, liquid capital markets, and a freely floating exchange rate. A rise in inflows into such a country would engender a combination of greater outward investment by the country's residents and a larger current account deficit (read trade deficit), with the exchange rate moving to balance inflows to outflows. The extent to which the exchange rate would have to appreciate, or equivalently, that the trade balance needs to go into deficit, would thus be moderated by capital outflows.

By contrast, for an emerging market country with a relatively closed capital account, private capital outflows are too limited to provide a safety valve to relieve the pressure of inflows. Were it not for government intervention, exchange rates would need to appreciate sharply. In fact, such sharp appreciation and the resulting overvalued exchange rates caused many emerging market countries to run large current account deficits in the 1980s and 1990s. Eventually, these deficits proved unsustainable, foreign investors stopped pouring capital in, and boom turned to bust. No wonder then that countries attempt to slow appreciation, or in the case of some countries with fixed exchange rates, counter it completely.

Since domestic private investors cannot send capital out from a country with a closed capital account, the central bank does so to counter the pressure for exchange appreciation. It does this by buying the foreign currency that flows in, and typically investing it in foreign government bonds--in short, accumulating reserves. Of course, the domestic currency it issues to buy the foreign currency could prove inflationary, so the central bank undertakes "sterilization" by selling domestic currency bonds and mopping up the excess domestic currency.

For a country that is opening up to global trade and financial flows, reserves provide a useful cushion to protect the economy from financial and balance of payments crises. A plenitude of reserves can, however, soon turn into a problem.

Sterilization typically becomes increasingly costly as a country accumulates reserves. The returns on the foreign reserves held by the central bank are typically lower than what it has to pay on the bonds it has issued. Furthermore, as domestic investor portfolios are stuffed with more and more government or central bank bonds, they demand higher interest rates to accept them. Moreover, while foreign reserves in reasonable amounts can help insulate a country against external shocks, thus providing a precautionary value over and above the interest they pay, eventually reserves are enough to protect against everything except Armageddon. With the precautionary value falling, and explicit financing costs rising, reserve accumulation creates a growing strain on government finances, in addition to creating a perception of exchange rate manipulation in some cases.

If the government is unable to send capital out in a cost-effective way, would it not make sense to make the capital account convertible and allow private investors to send money out? The problem is that many of the emerging markets with closed capital accounts have underlying fragilities like a huge fiscal deficit, a banking sector with significant non-performing loans, or an opaque corporate or financial sector, which make full capital account convertibility risky. If domestic investors can take their money out at will, they are likely to run from the country if there is a hint of any of these fragilities materializing, precipitating a costly full-blown crisis. Countries are appropriately wary of opening their capital account fully until these fragilities have been eliminated. But is there an intermediate approach that could facilitate capital account liberalization without exposing an economy to the attendant risks of uncontrolled outflows?

III. THE PROPOSAL

Modern finance offers an alternative between the extremes of giving free choice to domestic investors and no choice at all. The main element of our proposal would be to “securitize” reserves, thereby eliminating the fiscal costs of sterilizing capital inflows, while at the same time giving domestic investors an opportunity to diversify their portfolio holdings.

Here is how it would work. Once the central bank has accumulated the reserves it feels it needs for precautionary purposes, it would determine the amount of outflows that it would be

willing to permit. It would then license a private fund management company to start a closed end foreign asset fund with initial assets totaling that amount (we say “a company” only for convenience; in practice, multiple companies could be licensed each time). The company would raise money from domestic investors by selling them fund shares denominated in the domestic currency. The central bank would sell the fund foreign currency, at the prevailing market exchange rate, in exchange for the domestic currency the fund raises from investors. The fund would then invest the foreign currency in foreign financial assets like stocks and bonds. Periodically (say every quarter), new funds could be licensed, or the size of existing ones augmented, based on the desired level of capital exports, which, in turn, could depend on factors such as the level of inflows.

The benefits are widespread and considerable. Unlike with full capital account convertibility, the central bank controls the pace of capital outflows because it decides the timing, number and size of funds licensed. Moreover, because such funds would be closed end, investors will not be able to withdraw cash. In contrast to the traditional approach of sterilizing inflows, there are no fiscal costs because the central bank has effectively securitized reserves and taken them off its balance sheet. Domestic investors will benefit from the investment and diversification opportunities afforded by international funds, and these instruments could catalyze the development of local securities markets. Domestic fund management companies will develop international investment skills in preparation for the time the capital account does become fully convertible.

IV. THE IMPORTANCE OF SECURITIZING AND ALTERNATIVE APPROACHES

Let us see why our approach would work. First, assume the fund is invested in precisely the same mix of foreign government securities that were originally held as reserves, for simplicity U.S. treasuries. If the fund passes through everything to its shareholders, they will behave as if they are holding the treasuries directly. So they will be willing to pay full value for the treasuries (in domestic currency equivalent) and the fund’s shares will trade at their net asset value (NAV). Put another way, the net cost of holding the treasuries is zero because the interest and principal repayments on them exactly equal the rate investors demand from them.

Four factors could make the fund trade at a value different from the NAV. First, the investors do not control the trading strategies of the fund's management. If the fund has limited leeway to change its investments, this is not a problem. If it has leeway, however, the fund may trade at a premium or discount depending on whether investors trust or mistrust the fund's management.

Second, with an otherwise closed capital account, domestic investors lack international diversification opportunities, and in some cases, any opportunities for safe domestic investments. Because the fund provides an opportunity for diversification, it could be very attractive to domestic investors, especially in countries with fragile financial systems, and its shares will then tend to trade at a premium.

Third, investors may fear either government expropriation if the country needs the foreign assets or hope for a government bailout if the fund does poorly. Unless the government distances itself from the fund, these fears and hopes will influence the attractiveness of the fund to investors.

A final concern is currency appreciation. If the country has a fixed but undervalued exchange rate, then fears of a step revaluation may inhibit demand for the fund's shares. If, however, the country has a relatively freely floating exchange rate, this concern is mitigated.

These observations also explain why the government does not get the same benefits if it holds the U.S. treasuries on its balance sheet and issues public debt to finance them. Unlike with the fund, the returns on the U.S. treasuries are not passed through directly to investors. Therefore, if the country's public debt is denominated in domestic currency, investors will fear both inflation and default, and demand a risk premium for both. If the public debt is denominated in foreign currency, investors will fear default. Even though the holding of U.S. treasuries will bring down government default risk, unless they are fully securitized investors will not give the government the full credit for holding them (since the government or the central bank can always spend those holdings at will – in fact, in a crisis, those reserves will

probably vanish, leaving little protection for investors). Not only will investors apply a large discount for potential government mismanagement of reserves, they will not see the reserve holdings as a form of personal diversification.

But this discussion also highlights what the government needs to do to make the proposal work. It would be important to maintain a clear separation between the government and the fund management companies. Having a clearly defined legal arrangement that minimizes expropriation risk would be necessary to avoid the risk premium investors will demand if they feared that the funds' assets could be taken over by the government at will.

It also suggests the problems with some intermediate proposals that resemble the same basic idea of securitization of inflows. For instance, the central bank could itself create a special purpose vehicle holding foreign securities, which it could sell to the private markets. While this could go a long way in achieving what our proposal does, it also creates a direct link between the government and investors, which could be detrimental. To the extent that the foreign securities perform poorly, investors may pressure the government for a bailout.

The virtue of the two-step process we suggest is that it puts a private intermediary between the government and investors, and thus insulates the government from pressure to bail out the funds. Oversight by the government of the mutual fund's activities is appropriate and desirable (as with any domestic fund). But the government's role should be limited to determining the quantum of external investment allowed, with no government guarantees involved in terms of the returns generated by the fund.

As noted earlier, there are other options for liberalizing capital outflows in a controlled manner, including qualified domestic institutional investor schemes that allow pension funds, insurance companies and other large institutional investors to invest limited amounts abroad.³

³ The Indian authorities have taken a different approach of making foreign exchange available to corporates in order to facilitate outward FDI. This reflects a policy stance in respect of capital account liberalization that is based on a hierarchical ordering of economic agents, with corporates at the top, followed by financial intermediaries and individuals.

But these schemes would make it difficult for national authorities to control the timing of outflows since they typically involve only ceilings on outward investments. They would also not help stimulate development of domestic securities markets. Furthermore, it is not obvious that these approaches would give individual investors the portfolio diversification mix that they desire since institutional investors may have different investment goals than individual investors. Nevertheless, there could be benefits to having such schemes, which are already in operation in many emerging market economies, run in parallel with ours.⁴

A further concern with even limited liberalization of outflows is that it could stimulate even greater inflows since such liberalization would make it easier to take money out of a country when circumstances change and pressures for outflows intensify. But our approach to liberalization of outflows is specifically designed to be calibrated in a manner that it could not be used as a channel for reversal of speculative inflows.

V. POTENTIAL CONCERNS

A. Investor Education and Fund Structure

There may be some initial impediments to putting this plan into effect. It may take time for domestic retail investors to overcome their “home bias” and develop confidence in foreign investments (though poor domestic investment opportunities will, no doubt, be a spur). Some domestic investors may need to be educated about the diversification benefits of investing abroad. Investors may also be wary about investing in an indefinitely closed end fund

⁴ Genberg, McCauley, Park and Persaud (2005) have recently proposed the establishment of an Asian Investment Corporation, which would pool a portion of Asian economies’ reserves and manage them on commercial grounds as a national wealth fund. This could help increase the return on reserves relative to holding them in just industrial country government (or government agency) bonds, but it would not deal with the more basic issues related to reserve accumulation that our proposal aims to address. A smaller point is that, even if these reserves were managed more efficiently, such an investment corporation is likely to put liquidity considerations ahead of being on the risk-return frontier faced by individual investors (for an interesting discussion of this issue in the context of the composition of asset holdings of the U.S. Federal Reserve, see Broadus and Goodfriend, 2001).

because these tend to trade at a discount. This concern can be mitigated by setting a fixed life for the fund (say five years).

A fixed life would have the collateral benefit of allowing the central bank to provide the fund with domestic currency to pay off investors, while letting the central bank take the fund's foreign currency assets back into reserves at the end of the fund's life, a useful safety net if there is a chance the central bank could have underestimated its need for foreign reserves. Furthermore, since the licensing of funds can be staggered, the assets of the earlier funds licensed would revert to the government, so the government can rebuild reserves at a measured pace if needed. If the need is more pressing, since the foreign assets of a yet-to-mature fund will eventually revert to the government, it could borrow from foreign banks using those assets as collateral. At the same time, too many such options will reduce the necessary separation between the government and the funds, so they should be approached with caution.

B. Exchange Rate Appreciation

Typically, with foreign investors clamoring to bring money in, there is pressure on an exchange rate to appreciate. In an economy with a flexible exchange rate, one might argue that the pressures for appreciation would dampen domestic demand for foreign-currency-denominated assets. Of course, such an argument does not allow for the possibility that controlled liberalization of the capital account could itself alleviate exchange appreciation pressures. Even taking exchange appreciation as a given, in countries where deposits in fragile state-owned banks constitute the only viable domestic financial asset, there could be considerable interest in alternative investment opportunities that include foreign bonds and equities.

Concerns that our proposal subjects domestic investors to additional exchange risk should therefore be set against the benefits of a reduction in investor risk concentration. In most emerging market countries with relatively closed capital accounts, investor jobs and wealth are currently fully exposed to domestic economic fragilities. In addition, in an emerging

market country with volatile output growth, the exchange rate risk involved in foreign assets would generally serve domestic investors' diversification objectives well.⁵

There are, however, additional concerns associated with an economy with an undervalued fixed exchange rate.⁶ Not only does the possibility of a significant step appreciation impose considerable risk on domestic investors who are invested in foreign assets, they may also hold the government responsible for their losses (unlike in the case where the exchange rate is more market determined). This is why our proposal is likely to have a better chance of success if the exchange rate is flexible, or when fixed, it is deemed to be close to equilibrium. It should be noted, however, that our proposal will alter perceptions of what the equilibrium is, and may thus have merit even in situations where wider gaps would otherwise exist.

It is also important to note that, at worst, the scheme we are proposing would not get off the ground if domestic investors judged that the diversification benefits would be outweighed by the potential costs associated with an exchange rate appreciation. This is ultimately an empirical matter, but the key point is that the downside risk to the government of setting up such a scheme is limited as long as adequate separation is maintained.⁷

VI. SOME TECHNICAL ISSUES

There may be concerns that implementation of this scheme would be technically very complicated and beyond the ability of many emerging market governments. Many of these

⁵ In these economies, exchange rate movements tend to be positively correlated with the strength of the domestic economy, implying that returns on foreign-currency-denominated assets would covary negatively with domestic macroeconomic fluctuations.

⁶ Note that our proposal has broader relevance than just in circumstances where capital inflows are the result of market assessments of exchange rate undervaluation. For instance, perceptions of improved economic prospects of a country can also generate surges in inflows that pose similar challenges for domestic macroeconomic management.

⁷ Shares in the fund could of course trade at a discount in secondary markets if investors' cost-benefit evaluation were to change after the launch. But that would not have any implications for government finances.

technical constraints can be managed. For instance, it is true that, in an economy with a closed capital account, there may be limited domestic expertise to manage international investments. This can be resolved by first licensing foreign fund managers (some countries already do this in other contexts) and setting up mechanisms for them to transfer their expertise to domestic funds over time. While there could also be some concerns about governance issues, it is not obvious to us why these concerns should be any greater than those related to the management of domestic mutual funds or financial institutions.

Another issue is that excess demand for these investments could in principle generate rents for the fund, thereby squandering potential government revenue. This could be solved by auctioning off the license to run the fund. In any case, once the scheme gets going and the amounts involved become larger, more funds could participate in the scheme, thereby introducing competition. It is important to note, however, that any license auction would need to be separated from the sale of foreign currency to a fund (which, as noted earlier, would take place at the prevailing market exchange rate) in order to avoid generating multiple exchange rate practices.

In principle, this proposal can also be extended to the existing stock of a country's reserves if the authorities deem them to be excessive.⁸ When a portion of the stock of the government's sterilization instrument matures, the government would simply not roll that over. To match the additional liquidity this would generate in the system, the government would then allow the fund to sell shares in domestic currency for that amount and make the corresponding amount of foreign currency reserves available to the fund to purchase assets abroad. There would be no change in domestic liquidity.

⁸ We recognize that determining the "adequate" level of reserves is far from straightforward (see Reddy, 2005, for a policymaker's perspective on this matter). But actions recently taken or under consideration by various emerging market country authorities to use their reserves for purposes such as bank recapitalization, infrastructure investment, debt management and so on suggests that there is indeed a sense in many of these countries that the level of reserves exceeds self-insurance requirements. News reports have quoted some Chinese and Korean officials as saying that their countries have accumulated more than adequate reserves.

Our proposal may be relevant in other contexts as well, including in cases where positive terms of trade shocks such as oil price increases may have contributed to large current account surpluses and consequent accumulation of high levels of reserves. Discussions of how to use these windfall gains, especially in countries that do not have facilities such as oil revenue stabilization funds, generally focus on expenditure priorities. Many developing economies in these circumstances do have legitimate needs for social and infrastructure expenditures. Rather than “using” reserves for these purposes, however, it may be more transparent (and therefore less subject to governance problems) to finance such expenditures directly through the budget rather than take them off-budget. Our proposal could work in conjunction with this approach, helping to control domestic inflation by soaking up liquidity and also generating revenue for the government budget through the auction of mutual fund licenses.⁹ The other advantages of our proposal would of course apply here as well.

VII. CONCLUDING REMARKS

We have formulated a proposal that would facilitate the process of capital account liberalization in developing economies while mitigating many of the associated risks. This proposal may be especially relevant for economies that have accumulated large stocks of reserves beyond levels essential for prudential purposes and that are looking for ways to “use” their reserves and deal with further capital inflows.

One of the main attractions of this proposal is that it could satisfy any pent-up demand for capital outflows (arising from diversification motives) in a manner that the government would be more easily able to calibrate and control in the short term. Alternatives such as allowing qualified investors to invest abroad typically do not allow the government to control the quantity or timing of external flows as easily. Furthermore, our proposal would give

⁹ There is also a redistributive element implicit in our proposal. The demand for foreign investments is likely to come mostly from relatively wealthy households. The existence of such demand would allow the government to auction licenses for the mutual funds at a premium, in effect procuring revenues for granting access to international investment opportunities. These revenues could then feed directly into the budget and help finance needed expenditures.

domestic retail investors experience with international investments and allow for gradual learning-by-investing. In countries with weak financial systems, it would allow domestic banks some breathing room to adjust to the new reality of their depositors having alternative investment opportunities. These developments would better prepare the ground for eventual capital account liberalization in a fuller manner.

At the same time, one should be wary of the good becoming the enemy of the perfect. The greater ease of “sterilizing” inflows will imply a commensurately lower pressure for countries to achieve the ultimate goal of full capital account convertibility and to undertake the broader reforms, including greater exchange rate flexibility, necessary to attain that goal. But it will make the path easier and, just for that, it deserves consideration.

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