MANAGING LARGE SCALE FOREIGN EXCHANGE INFLOWS: INTERNATIONAL EXPERIENCES

I. INTRODUCTION

1. Most countries in the Caucasus and Central Asia (CCA) regions are experiencing large-scale inflows of foreign exchange. The sources of these inflows vary—in some cases it is primarily remittances, in others capital flows (portfolio, official and foreign direct investment), and in others oil export earnings. But in all cases, the inflows are simultaneously a welcome opportunity and an importance policy challenge.

2. The benefits of strong inflows are obvious: they enable these countries, all of which have massive needs for capital investments to help complete their economic transition, to finance these investments more rapidly. In addition, in many of these countries, the inflows ease what had been critical shortages of foreign exchange.

3. However, at the same time, large inflows create serious problems for policy makers, who are confronted with a difficult choice. Either the inflows can be allowed to cause significant nominal appreciation of the exchange rate, at a time when these countries are trying to enhance their competitiveness and develop their export base, and when many citizens rely on remittances to finance consumption, or the authorities can defend the nominal exchange rate at the cost of rising inflation.

4. The CCA countries are not the first to confront this difficult dilemma. Many countries throughout the world have faced similar challenges from foreign exchange inflows, including countries at different stages of economic development and/or transition, and countries with varying exchange rate regimes. This paper summarizes very briefly the experiences of a number these countries, with the aim of helping policy makers in the CCA countries draw

lessons for their own challenges from these earlier experiences. It draws extensively on a companion paper, *Policy Options for Managing Foreign Exchange Inflows,* which covers the same issues and experiences in greater depth.

5. The paper is organized as follows. Section II discusses experiences in managing short-term foreign exchange inflows. Section III discusses the different experiences of countries managing medium- to long-term foreign exchange inflows. Section IV discusses policies to mitigate various risks associated with large-scale foreign exchange inflows. Section V offers some conclusions and suggestions.

II. MANAGING SHORT-TERM FOREIGN EXCHANGE INFLOWS

6. If foreign exchange inflows are perceived to be temporary—substantial for a few months, before declining again—both economic theory and the experiences of other countries call for policies that focus on limiting exchange rate volatility while preserving macroeconomic stability (particularly moderate inflation). The most common way to do this is for the central bank to sterilize the inflows by purchasing the foreign exchange, while simultaneously undertaking other measures to withdraw the domestic currency liquidity that is injected through these purchases. These measures can include central bank sale of treasury bills they hold, or central bank bonds, or other instruments. Another way to withdraw liquidity from the economy is for the government to transfer deposits it holds in domestic commercial banks (including such deposits as pension or oil funds) to banks abroad or to the central bank. For example, Indonesia in the early 1990s moved state-owned enterprise deposits from commercial banks to the central bank to reduce liquidity.

7. Such sterilization can work successfully if the inflows are truly short-term. However, extended use of sterilization can be self-defeating, as it will drive up domestic interest rates. This increase in interest rates will attract even greater inflows, compounding the initial problem. This was the case, for example, in the Czech Republic in the mid-1990's. Extensive use of sterilized interventions over a period of several years, designed to prevent inflows from leading to nominal appreciation, led to increases in domestic interest rates, and thus greater inflows. The result was both an eventual acceleration in inflation and the freeing of the exchange rate.

8. If money demand is growing rapidly—as it appears to be in many of the CCA countries—not all the interventions will need to be sterilized, as growing money demand will absorb some of the additional liquidity without inflationary pressures emerging. This was the case in Russia in the early 2000s. But even in such cases, there is a limit to how much additional liquidity the domestic market can absorb.

III. Managing Medium- and Long-Term Foreign Exchange Inflows

9. If foreign exchange inflows are longer-term in nature, as appears to be the case for most CCA economies, monetary and exchange rate policies will not be able to prevent an eventual appreciation of the real exchange rate. Suppose the central bank focuses on keeping the nominal exchange rate (relatively) constant and thus purchases the inflows. Since sterilizing those purchases is only a short-term solution, eventually inflation will accelerate and the real exchange rate—the relative price of the output basket in the CCA economies compared to the rest of the world—will appreciate. If, on the other hand, the central bank focuses on keeping inflation under control, they will not be able to sustain interventions, and

the nominal exchange rate will eventually appreciate. While the eventual impact of both approaches on the economy's competitiveness is the same, the approach that focuses on keeping the nominal exchange rate broadly unchanged also results in accelerating inflation, with its harmful effects on growth. Thus, most economists that have studied the international experiences have concluded that flexible exchange rates are preferable in case of large-scale medium- and long-term capital inflows.

10. While monetary and exchange rate policies cannot prevent the eventual real appreciation, a tightening of fiscal policies can. Tighter fiscal policy—if politically feasible—can reduce domestic demand, and withdraw liquidity from the economy, easing both inflationary pressures and pressures on the real exchange rate. Estonia's experiences in the 1990s provide a clear example, where despite large and persistent foreign exchange inflows, the authorities managed to maintain a fixed exchange rate and low inflation due to a very flexible and tight fiscal policy.

11. Structural reforms can also help mitigate the impact of any real appreciation on competitiveness. Creating an attractive environment for investment through structural reforms will direct capital toward productivity-enhancing investments. Increased investment and enhanced productivity limited the competitiveness problems from inflows in the 1990s in Asia relative to Latin American countries, where a larger share of inflows went into consumption.

12. Capital controls have been an alternative approach that has been tried by some countries facing foreign exchange inflows. The most prominent example is Chile, which applied such controls on short-term inflows, while allowing longer-term inflows, from 1991

through 1998. The evidence indicates that these controls did manage to (temporarily) increase the maturity structure of capital inflows. But there is no evidence that they influenced the volume of inflows, and even their impact on the maturity structure was short-term, as financial markets were effective in finding ways around the controls. Malaysia introduced capital controls in 1998, but found that their impact was small. Finally, Thailand imposed capital controls in late 2006, in an attempt to reduce inflation pressures; these controls are now being relaxed.

13. Finally, some countries in Central and Eastern Europe have used prudential regulation of financial institutions and markets as an instrument to try to address macroeconomic imbalances. To increase the costs of lending and thus try to reduce the inflows, Croatia imposed a 55 percent reserve requirement on foreign exchange obligations of commercial banks, while in Bulgaria an additional reserve requirement becomes operational once credit growth exceeds a preset level. While some of these measures have only recently been introduced, and thus they have not yet been thoroughly evaluated, the experience to date is not encouraging, as financial markets have found ways around the regulations. For example, in Croatia, where many banks are owned by foreign banks, large domestic customers received loans directly from the foreign parent. In other cases, as the regulations targeted banks, business was moved to non-supervised financial institutions, reducing banking sector intermediation.

IV. Mitigating Risks Associated with Foreign Exchange Inflows

14. While generally a positive factor for economic development, large foreign exchange inflows subject an economy to a number of risks. Two main risks have been identified: the

risk of a reversal of inflows, and risks stemming from the mismatch in the currency composition of assets and liabilities for one or more sectors of the economy.

15. The most obvious risk is the possibility of a sudden reversal of flows. If an economy is dependent on inflows, which suddenly stop or reverse—possibly because of global developments beyond the control or influence of the country—there will be a sudden shortage of foreign exchange to finance imports, as well as a dramatic decline in domestic demand. Combined, these could produce both a currency crisis, with huge swings in exchange rates, and a recession.

16. Policies during the time of inflows should be designed to both mitigate the risk to the economy of a sudden stops or reversals, as well as to reduce their impact should they occur. Key to both objectives would be to assure the holding of sufficient foreign exchange reserves by the central bank. This strengthens the case for intervention in countries with low or modest reserve levels. By absorbing a large share of the inflows, the central bank can prevent an appreciation of the nominal exchange rate, which would otherwise lead to a widening of the current account deficit. This will enhance confidence in the economy, reducing the risk of a sudden reversal. Substantial reserves—whether they already exist or are acquired through intervention—will also reduce the economy's dependence on inflows, and give the central bank a cushion to replace the inflows, at least temporarily. As noted, however, any accumulation of reserves needs to be consistent with macroeconomic stability and, if reserve money expands too fast, will call for a tighter fiscal stance.

17. Evidence suggests that, for countries with growing exposure to international capital flows, rigid exchange rate regimes are more often associated with currency crises than more

flexible regimes. However, while the choice of exchange rate regime is important in limiting the risk of a crisis, at least as important is the consistency of macroeconomic management. What is essential is that the combination of fiscal, monetary and exchange rate policies are consistent with maintaining low to moderate inflation. Examples of successful transition economies include countries with flexible exchange rates (Poland), heavily managed exchange rates (Slovenia) and fixed exchange rates (Estonia).

18. An over-dependence on inflows, or a mismatch of the currency composition of assets and liabilities, either for the public sector, the corporate sector or other sectors (so-called balance sheet risk), can also generate serious problems for the economy, particularly if there is a reversal of inflows. Ukraine suffered a reversal of inflows following the Russian crisis. Prior to that, the government had relied heavily on foreign inflows to finance the fiscal deficit. With the loss of this source of financing, the government initially borrowed from the central bank. However, it was eventually forced to sharply tighten fiscal policy because of the loss of external financing, aggravating the recession that was underway. The way to mitigate this risk for the fiscal sector is to reduce foreign exchange obligations during times of inflows, and to reduce the dependence of current operations on foreign exchange inflows.

19. Similar problems can exist in the corporate or household sectors, particularly when their liabilities in foreign exchange greatly exceed their foreign exchange assets or earnings. A reversal of inflows can lead to a sudden depreciation, making the local currency cost of servicing these debts much higher, creating serious problems for these sectors. If that leads to an inability to fully service their foreign exchange obligations, the withdrawal of inflows could trigger a financial crisis, with non-performing loans jeopardizing the health of the financial sector. The result will be to make the recession that was triggered by the withdrawal

of inflows even longer and deeper. For these sectors, minimizing portfolio risks, and particularly the risk to the financial sector, will involve strong prudential regulation, forcing banks to properly assess portfolio risks, provision accordingly, and limit their foreign exchange exposure to borrowers with limited or no foreign exchange income or assets.

V. CONCLUSIONS

20. In the face of large, likely persistent, foreign exchange inflows in CCA countries, international experience provides the following lessons:

- Monetary policy should continue to target low to moderate inflation;
- Real appreciation cannot be prevented over the medium- to long-term, except by fiscal tightening that may not be politically sustainable;
- Structural policies need to be designed to encourage these inflows to be directed toward productivity-enhancing investments, to limit the competitiveness problems from the real appreciation;
- Capital controls and the use of prudential regulations to restrict inflows are unlikely to be successful;
- Central banks should seek to hold a substantial level of foreign exchange reserves, while ensuring that any needed accumulation is consistent with the inflation objective;
- Countries with significant short-term inflows should seek to make their exchange rates more flexible, to reduce the risk of a currency crisis, and should strengthen prudential and

other financial market regulations, to reduce the risks of financial market problems in the event of a reversal of the inflows.