Poland's vulnerability to turbulence in financial markets

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Introduction

This paper was written at the beginning of November 1999, when the current account deficit in Poland reached 7% of GDP and political disputes over the budget and reform of the tax system weakened the zloty within its trading band. This was the right moment to reassess Poland's susceptibility to turbulence in the domestic and international financial markets. The paper is organised as follows. The first section discusses the risk management problems at the macro and micro level. The second section describes the evolution of the exchange rate regime in Poland towards a floating exchange rate. The third section looks at the development of financial markets in Poland and their impact on exchange rate policy.

Risk management at the macro and micro level

Fiscal stance and central bank autonomy

The first-generation models of currency crises focused on risky macroeconomic policy, such as expansionary fiscal policies (Krugman, 1979). They were the cause of several currency crises including Argentina in 1981, Mexico in 1982 and Russia in 1998. With a budget deficit well below 2% of GDP, Poland is not exposed to such a risk. Additionally, Poland has recently launched several structural reforms, including pension system reform, which will contribute to fiscal discipline in the future. Public debt declined from the equivalent of 89% of GDP in 1993 to 42% in 1999. The external part of the public debt amounts to US$ 33 billion (50% of public debt). This is relatively low as official gross

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reserves amount to US$ 26 billion. The cost of servicing the public debt represents 3% of GDP. According to government projections, by 2004 the ratio of public debt to GDP will fall to about 37%. The relative decrease of the public debt creates room for the issuance of domestic debt to finance repayments of external debt in coming years.

The decisive factor keeping the Polish economy on a sustained growth path is the independence of the National Bank of Poland (NBP). An illustration was the sharp rise in interest rates implemented by the NBP in July 1997 to stop the rapid growth in domestic credit. The move was effective in closing the developing demand gap in the Polish economy, although it produced a substantial decrease in the rate of GDP growth. Without real NBP autonomy such a step would not have been politically viable.

Banking supervision

The second-generation models of currency crises are driven by the deficiencies of risk-management at a micro level, which can produce macroeconomic imbalances despite sound macroeconomic policies. Examples are the excessive private sector indebtedness in Chile in the late 1970s and in South Korea in the 1990s resulting from the lack of proper banking supervision and the existence of (sometimes implicit) government guarantees for the domestic banking system. Again, this is not something that applies to Poland. After the serious bad loan crisis in 1991–92, NBP introduced a properly functioning system of banking supervision. In addition, banks were provided with more capital, although bad loans were not taken out of their balance sheets. Banks were forced to operate with bad loan portfolios, which was a learning experience on the merits of prudent lending policy and a pre-emptive action against the moral hazard potentially influencing the banks' future behavior.

The influence of banking supervision has been strengthened by the development of risk management procedures in banks. Domestic banks started to develop special risk management departments, which are assessing credit and market risks. Larger banks implemented *value-at-risk* procedures to measure the market risk. At the same time, they started to utilise *VaR* methodology to monitor credit risk. However, this is much more difficult as losses resulting from credit risk are not normally distributed. Domestic banks are not able to use instruments such as

JP Morgan's *CreditMetrics* because only a few domestic firms have obtained a credit rating, which can be translated into the probability of their default.

Argentina's experience during the tequila crisis in 1995 illustrated that a properly capitalised and strictly supervised banking system can weather even a serious currency crisis combined with bank panic resulting in deposit withdrawals. As in Argentina, in Poland too, banks' capital adequacy ratios exceed Basel Committee standards.

There is also an additional safety valve in the form of excess liquidity within the banking system, which is a typical phenomenon for economies in transition. This will change in the near future as the NBP decided to securitise its claims on the government into Treasury bonds and sell these bonds to absorb the excess of liquidity from the domestic banks. The first step was taken with issuing NBP floaters to absorb a large part of the excess liquidity in order to create room for reducing the ratio of required reserves from 12% to 5% in October 1999.

Without the cushion of excess liquidity domestic banks will be more exposed to risks associated with potential capital outflows. This is one of the reasons why Poland is not considering the imposition of a currency board, since that would mean NBP relinquishing the function of lender of last resort.

Corporate governance

As far as the corporate sector is concerned, risk management procedures are in their infancy. Privatisation alone is by no means enough to impose proper corporate governance. The force that can impose proper corporate governance standards is a developed capital market. In this respect, the situation in Poland is similar to that in other transition economies. Capital markets have had to be built from scratch.[1] Thus they are much less developed than in Asia or Latin America. The capitalisation of Warsaw Stock Exchange amounts to about 15% of GDP. Thus its role in imposing proper corporate governance standards can be only modest. The pension system reform will contribute to the development of the capital market in Poland, but this will take some time. In the interim Poland's economy will be exposed to the risk of inefficient allocation of resources. The tools to reduce this risk are strict banking supervision and disciplined macro policies. However, they can not substitute fully for the discipline of a developed capital market.

The legal infrastructure for corporate governance in Poland does not differ from international standards. The corporate sector operates under the *Civil Code, Commercial Code*, and *Bankruptcy Law* from 1938, when there was a fully-fledged market economy in Poland.

[1] See Kokoszczyński (1999) for the early history of the development of the Polish capital market in the 1990s.

Exchange rate regime

Evolution towards a flexible exchange rate

The Mexican and Asian crises showed that the rational choice for emerging economies is a flexible exchange rate regime. As far as Poland is concerned, there was an evolution towards a flexible exchange rate. The reasons for this evolution were not only the lessons from currency crises in other countries but also the mounting costs of sterilisation resulting from massive capital inflows. In 1995 Poland's foreign exchange reserves increased by an amount equivalent to M1 in Poland in 1994. The NBP reacted to the massive capital inflow by widening the trading band of the zloty from 2% to 7% around its crawling peg in May 1995 and the step revaluation in December 1995.

Initially, this did not increase the volatility of the market rate of the zloty much. The reason was that in the shallow foreign exchange market NBP interventions were effective. The risk associated with speculation against NBP intervention level was high. Accordingly, foreign exchange market dealers preferred to stick to the NBP intervention level.

Due to the stability of the market rate of the zloty, NBP could use the changes in its intervention level as a substitute for small central rate devaluations, as was the case in 1997, when the trade account started to deteriorate substantially. The widening of the zloty trading band allowed NBP to enjoy the comfort of not defending the domestic currency during turbulence in international financial markets such as during the Czech crisis in May 1997 when NBP allowed a short-lived blip in the

zloty. The next such period occurred in 1998 during the Russian crisis when the zloty dropped initially by 8%, but rebounded fully without NBP intervention.

The trading band of the zloty was successively widened from 7% around the central rate to 10% (February 1998), then 12% (October 1998) and finally to 15% (March 1999). In March 1998, NBP sharply reduced the scale of its interventions in the foreign exchange market. The withdrawal was prompted by inflows of short-term capital, which inflated the amount of excess liquidity absorbed by the NBP to the equivalent of US$ 8 billion. Thereafter, the only form of central bank intervention in the market was so-called transactional fixing introduced previously to provide liquidity to the shallow market. However, in June 1999, due to the deepening of the market, the NBP withdrew from this form of direct market involvement. In fact, the NBP withdrawal from active and passive intervention in the market meant a change of exchange rate regime. Officially there is a crawling band system, however the zloty fluctuates freely within a 30% band.[2]

Corporate sector external borrowing

The major reason for currency crises in several countries was excessive foreign borrowing without hedging against exchange rate risk. Domestic firms were usually tempted to borrow abroad in order to reduce the cost of capital. During the currency crisis the combined impact of a sharp drop in the exchange rate and a hike in interest rates produced a liquidity crisis in the banking system. The IMF multibillion dollar assistance was needed to bail out banks and firms from an insolvency crisis.

The need to dissuade domestic firms from borrowing abroad was one of the factors that prompted the evolution towards an increasingly flexible exchange rate regime in Poland. One of the reasons why the NBP did not intervene in the foreign exchange market during the Russian crisis was to provide the corporate sector with a learning experience on the risks associated with borrowing abroad without hedging against exchange rate risk. However, the episode was too short

[2] The evolution of the Polish exchange rate regime is presented in greater detail in Durjasz and Kokoszczyński (1999).

to bring about the intended results. The zloty rebounded quickly, in spite of the fact that portfolio capital was flowing out. It was the external borrowing of the corporate sector that pushed up the zloty. Domestic firms perceived the fall of the zloty as only temporary. Accordingly, the continued external borrowing made this a self-fulfilling expectation. The actual scale of the domestic firms' exposure to exchange rate risk was larger than reflected by the statistics, primarily due to the zloty-denominated loans indexed to Libor. Domestic banks were using foreign exchange swaps to fund such loans. The maturity mismatch of the swaps was closed with the dollar indexed loans.

The effective learning experience for the corporate sector was in January and February 1999, when the zloty slipped by 14% from its previous level as a result of the deep cut in the domestic interest rate and the Brazilian crisis. There was a massive withdrawal by the corporate sector from borrowing abroad, as for the first time the zloty did not rebound quickly after a short-lived fall. The increased volatility of the zloty was among the factors that kept external borrowing by the corporate sector at a relatively low level despite the large interest rate differential.

Privatisation and exchange rate behaviour

The most important problems of exchange rate policy in transition economies are appreciation pressures produced by capital inflows resulting from privatisation. In spring 1999, market expectations about such capital inflows was the reason why the zloty was appreciating strongly despite the continuing deterioration of the current account. The zloty weakened after the announcement that the government funds from privatisation would be deposited with the central bank and a large part would be used to fund the repayment of the external debt. The decision[3] solved the problem of potential excessive zloty appreciation but it may have exposed Poland to potential problems stemming from a situation in which part of the official stock of foreign exchange reserves is not owned by the central bank.

[3] At the time of writing, there is a general agreement between the central bank and the government, but its details are still being negotiated.

Development of financial markets

The need for a liquid secondary bond market

In the 1990s, a large part of the capital that flowed to the emerging countries was in the form of portfolio investments. Lending through investing in bonds reduced the credit risk for investors. However, they were exposed to the risk that shallow bond markets in emerging economies could turn illiquid, as was the case, albeit extreme, in Russia. In other countries, investors faced unexpectedly sharp drops in bond prices, as happened also in Poland.

In September 1998, investors were selling Polish treasury paper in order to cover losses they took in Russia. However, the shallowness of the Polish treasury bond market produced a sharp drop in prices. The episode illustrated the structural weakness of the Polish treasury bond market stemming from the inefficient securities settlement system. Since then the system has been improved. Nonetheless, the market is not deep enough to sustain substantial capital flows without strongly affecting bond prices.

The other structural weakness of the capital market in Poland is the lack of a developed corporate bond market. This produces a situation in which the largest domestic firms are not able to borrow funds they need, neither from the strictly supervised banks nor the almost non-existent corporate bond market. The result is that they are issuing bonds in the international market, that can be a factor adding to the strength of the zloty when the current account deficit is widening.

There is potential for development of the domestic corporate bond market, which would add to domestic savings and reduce the need for borrowing abroad. During the last two years, the short-term commercial paper market has been developing successfully. Domestic firms preferred short-term debt owing to the downward trend in interest rates. However, due to the burden of short-term debt service, firms have become more interested in issuing longer-term debt. The factors that will contribute to the development of the bond market in Poland are the pension system reform and the rapid development of the life insurance sector, that will increase the number of institutional investors and the demand for longer-term instruments.

Opening of the capital account

As in other countries, the opening of the capital account has contributed greatly to the development of domestic financial markets in Poland. Nonetheless, short-term capital flows can limit central bank choices, as was the case in Poland in 1995, when persistent short-term capital inflows forced a step zloty revaluation, and in 1998, when the leverage of the non-deliverable forward market accelerated the NBP's decision to withdraw from interventions.

The NBP did not try to cope with short-term capital flows by imposing strict foreign exchange restrictions. As far as foreign investors are concerned, the zloty is in fact fully convertible. They are not allowed to borrow in zloty and keep zloty time deposits with Polish banks if the maturity of these transactions is shorter than legally defined minimum periods. However, they do use foreign exchange swaps to borrow synthetically in zloty or engineer zloty time deposits. The forex swap market contributed greatly to the integration between the Polish money market and the international financial market. There are periods when the interest rates in the forex swap market influence substantially the interest rate behaviour in the domestic interbank deposit market. Non-resident banks are playing an increasingly important role in the domestic foreign exchange market. In the long term, this will deepen the market and reduce the volatility of the zloty.

As far as domestic firms are concerned, the only important foreign exchange restriction is the necessity to obtain permission for borrowing short-term abroad.

Concluding remarks

The pains experienced after the international debt crisis taught the emerging economies the price which had to be paid for imprudent macro policies. The second-generation crises of the 1990s illustrated the need for proper risk management at the micro level. The problem is that authorities in emerging countries can impose prudential rules on banks and financial institutions, but it is difficult to achieve quickly a substantial improvement in corporate governance as this depends largely on the existence of a developed capital market. This will take

time until the privatisations, the development of the domestic capital markets and the opening of the economy produce a situation in which the corporate governance in transition economies catches up with international standards. Before such a situation is achieved, transition economies will be exposed to the risk of inefficient resource allocation.

The recent weakness of the zloty should not result in larger-scale turmoil in the domestic financial markets, as there is no threat of a liquidity crisis in the public or private sector and exports have just started to recover. Nonetheless, the challenge for policymakers in Poland is to create a situation in which corporate governance will be improved enough to shield the economy against the risk of imprudent investment decisions at a micro level producing large macroeconomic imbalances.

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