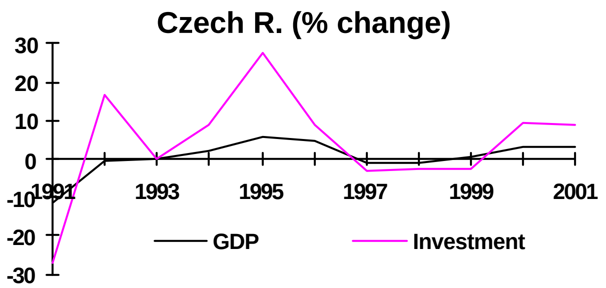
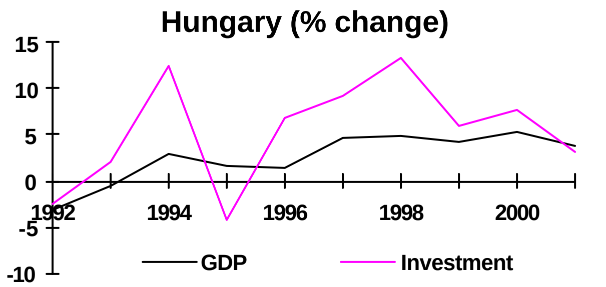
Central

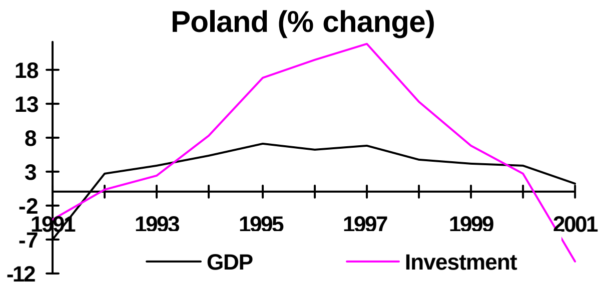
Europe Economic Letter

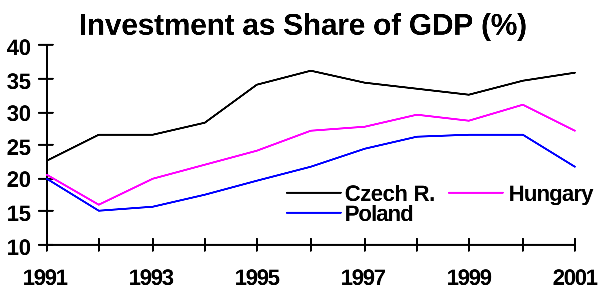
September 2002 economic trends • comparative analyses Krzysztof Bledowski elakrzys@pol.pl

In this issue









Investment and Recessions

The three large economies of the region (Czech Republic, Hungary, Poland) have all undergone at least one period of sharp economic downturn in the past decade. This invites the practical question of whether the experiences offer any common clues to future cycles. As Poland currently suffers from a "near recession", the insight might even shed light on the timing and depth of its economic ills.

The focus is on investment although the Hungarian crisis of 1994-1995 was caused by a lax fiscal stance, while the Czech recession of 1997-1999 was due to an unsustainable fixed FX regime at the time. Poland's sharp growth deceleration this year is not linked to any major policy mistake, yet its investment cycle exhibits similarities to those of its peers (graphs).

The average annual GDP growth yielded by a unit growth of investment varies widely, however. In the Czech a percentage point increase in capital formation pushed up total output 0.15 of a percentage point, in Hungary 0.26 while in Poland 0.49 percent over the past decade. The common sense explanation is that new additions to capital stock are very productive in Poland because its economy is relatively capital-scarce. Any new fixed stock raises sharply the capital-labor ratio, and hence, its marginal product. The data seem to confirm this. The share of investment in GDP has been highest in the Czech and lowest in Poland -- very consistently over time (graph).

So far, the collapse of investment spending in Poland (-10% in 2001 and estimated –10% this year) has caused surprisingly little damage to growth (graph). If one goes by the experience of the other two economies, however, bad news may be on the horizon. In recession years the loss of GDP growth associated with a unit fall of investment spending oscillated around 0.25 percent. Applying this ratio to Poland's cumulative 2002-2003 period ("recession years") yields a loss to GDP next year of about 1.2% if investment stops falling but does not grow. The big "if" is, of course, the direction of spending on plant and equipment. Even assuming that it grows by 3%-5% in 2003, GDP could inch up only 1%-2% by this accounting. This is well below the government's forecast and budget blueprints.

Another corollary of this insight is revealed in the behavior of investment relative to GDP. The ratio has shown a stable, rising trend over time, irrespective of major shifts in GDP in all countries (graph). Now that both 2001 and 2002 will have marked a sharp drop of this trendline for Poland, questions arise as to sustainability of future growth. As the economy becomes richer in capital stock, companies will require higher outlays on plant and equipment to eke out a marginal gain in output, just as the experience of the Czech and Hungary has shown. This means that to support above-average GDP growth (just to catch up with its peers), Poland will have to jack up its investment ratio sharply in years to come. The policy prescription is clear: higher domestic and/or foreign savings sources must be tapped to fund the flow.

Comments and suggestions are welcome. Send all correspondence (including requests to be added/removed from the distribution list), to elakrzys@pol.pl

Central Europe Economic Letter is published by Krzysztof Bledowski, Zelazna 67 m 21, 00-871 Warszawa, Poland. tel. (+48-22) 627-0501; fax 627-0502; elakrzys@pol.pl. *This publication is for information only and is not to be construed as an offer to buy or sell investments. The publisher, while considering the contents to be reliable, takes no responsibility for any individual investment decisions based thereon.*

Does the NBP Measure up?

1. What Policies for the NBP?

The NBP has come under fire for allegedly missing the recession's early warning signals in 2000 and for failing to ease its monetary policy accordingly. Recently, some members of the political opposition even advanced drafts of legislation that would limit independence of the bank. The arguments about timing of interest rate moves notwithstanding, how effective has the bank's policy been? This note will summarize the bank's record of management over the past decade in a semi-quantitative way. The key issue is not whether the NBP can be found "guilty" or not of any particular wrongdoing. The right questions to ask are: (i) what goals and policies the bank can take responsibility for; and, (ii) how successful it has been in implementing them.

One *can* evaluate the NBP's record of managing the real economy even though the bank controls directly only a few nominal variables. Through interest rate setting, selection of the exchange rate regime, or banking supervision the investment-saving equilibrium, balance of payments, or lending practices are determined, among others. In aggregate, spending decisions by investors, consumers, and the government are influenced in some measure by actions by the monetary authority. One should be clear, however, that this influence is rather smaller than in the more developed and better monetized economies of western Europe and the US.

2. The Quantitative Framework

In this short exercise, the analytical approach is a blend of art and science. The science part comes from the selection of data pairs/triples, which are examined for their correlations. However, there is no way to translate the correlation coefficients into the effectiveness of policy. That is where the "art" portion comes in. In a subjective and non-quantitative way I assign grades to effectiveness of policy based on the data but also on other subjective criteria. On a scale of 1 (poorest) to 5 (best), each policy objective is rated, and then the unweighted average tabulated. The sum total is the bank's score for its policy success.

I have selected 15 sets of variables, which are examined over the span of the past ten years. Depending on the availability of data and their suitability for analysis, some sets are monthly while others are annual. Likewise, generally most series start in the early 1990s but some begin only in the middle of the decade because I tried to preserve the uniformity of definitions.

Doubtless, one could find other pairs/triples as examples of policy. I believe that the fifteen I have chosen are a good approximation of policy effectiveness. What is more, they probably cover more than the bank can take direct credit for. If so, then the mix is rich and the exercise covers collateral effects of policy transmission in addition to its explicit goals.

3. Policy Yardsticks

The policy effects can be divided into two broad groups. One comprises impact on nominal variables, such as inflation, the currency, or seigniorage. The success of managing these values bears upon the robustness of real flows, such as production, consumption or investment. The latter are implicit goals in themselves, often underlying explicit objectives pursued by the government. The sequence in which I analyze the pairs and triplets is insignificant as all categories are equally weighted.

<u>Inflation targeting</u>

In 1998 the NBP took on direct inflation targeting as its explicit monetary policy objective (heretofore it had been a money supply rule). The historical record is short and includes a period of immediate aftermath of the Russia crisis of 1998.

The actual outturn undershot the goal in 1998 but overshot the target in the subsequent two years. Mindful of criticism that it had made mistakes by being too easy too long, the monetary council made sure it hit the target in 2001, and probably will fulfill the objective this year, too.

Inflation targeting is a difficult exercise. It requires -- at a minimum -- excellent data, good forecasting ability, a healthy banking system, and macroeconomic stability. Considering a very short learning curve by both the bank management and its newly-formed council, I judge the result to be just below average.

<u>Real interest rates</u>

The real cost of money cuts both ways. On the one hand, it measures the effort of the bank to ration loanable funds efficiently. The yardstick through which to judge its effectiveness is the saving-investment equilibrium. But setting the real rate too low could be a sign of undue dependence of the bank on the government wishes.

My measure contains an intellectual flaw. Rather than setting forward-looking rates with forward-looking inflation, I employed backward-looking historical record of inflation against the discount rate. The reason was a lack of reliable data on inflation expectations. In times of stable inflation the mistake is small. However, during periods of rapidly changing momentum of prices, this approach must be treated with caution. Indeed, the early nineties were a period of steady disinflation in Poland. This shows in what appears to be the negative real rate of interest during 1990-1995.

In this context, it is appropriate to shift the weight toward the NBP's record in the latter period. I find the real rate of 7%-11% to be high by regional standards, but necessary to avoid a saving-investment mismatch. In fact, the widening current account deficit, which topped 8% of GDP in the late nineties, could have led to a currency crisis if not stopped by high rates. I give the bank an average note on this score.

<u>Monetary targeting</u>

If money supply rules are difficult to apply in emerging economies, then monetary targeting is even more troublesome. Not only is base money subject to frequent currency substitution, but also the money multiplier is fickle and loan creation difficult to control through the usual channels. In this context, it is fair to expect the NBP to score poorly here.

Indeed, in 1995-2000 all measures of money supply (M0, M1, M2) rose at rates substantially higher than the CPI relative to the inflation-adjusted GDP. One can say that inflation in that period had a strong monetary component to it. But in the past two years, while the behavior of M2 was much improved, its momentum must be judged excessive relative to the sharply lower CPI and GDP. The NBP gets poor marks on money supply control.

<u>Real zloty</u>

One of the key goals of any central bank is the maintenance of a stable and strong value of its legal tender. By that yardstick, the NBP's record over the entire decade is positive. The periods of volatility, overshooting and undershooting of the inflation rate are short and symmetrical. By contrast, the periods of real strengthening of the zloty are pronounced. In all, the zloty is today a strong and viable currency. The bank gets top score for its currency policy.

Currency substitution

Most emerging economies suffer from often feeble faith of their citizens in their domestic currencies. Currency substitution away from the local tender and toward a universal store of value are prevalent. A record of domestic monetization and widening use of home money is a sign of maturity of the financial system. Deeper intermediation assures better control of money by the central bank and immunizes the economy from outside shocks.

The record of Poland in that respect is good. The value of zloty deposits in the banking system grew substantially while that denominated in foreign currencies remained flat. From well over 50% in the early nineties, the ratio of dollar deposits to total deposits fell to about 17%. The NBP deserves a score above average for its contribution to increasing trust in zloty assets and liabilities.

Foreign asset position

It is mercantilist to think that amassing financial resources by the state is its ultimate goal. However, having a healthy long position in foreign liquid assets is a prudent policy. For a still emerging economy, such as Poland, a cushion of reserves is a vital insurance against a possible crisis, and offers a reassurance of debt repayment.

The absolute size of foreign reserves held by the NBP grew from less than $5 billion in 1991 to over $25 billion in 2001. More importantly, in relation to GDP, these reserves now constitute over 17%, a steady rise. The bank deserves a top score in FX reserve accumulation.

Transmission mechanism (1): demand

Policy effectiveness in managing the real cycle is difficult to judge. I have chosen two simple relationships to assess the demand and supply sides. In both cases, it is the transmission channels that are being evaluated here, not the response of agents to real interest rates.

The transmission mechanisms to allocate saving into consumption and investment have been rather poor, irrespective of the level and change of the real rate of interest. This is not surprising. Consumption has been financed largely out of current income, while investment has relied on retained earnings. Notwithstanding the meager demand for loanable funds, it is the (limited) supply that played a crucial role. The monetary transmission channel must be judged inferior in managing the cycle. The NBP received sub par marks in this department.

Transmission mechanism (2): supply

In the case of supply the inflation rate rather than the real interest cost is the yardstick of choice. Presumably, a high and/or volatile rate of CPI would cause output disruptions. Again, it is the transmission mechanism rather than the effectiveness of policy that is being evaluated here.

There is no visible correlation between the real output produced and the retail CPI index change. In fact, in the late nineties, the higher was the inflation, the greater was the rate of output growth. Clearly, Polish companies adjusted to the high inflation environment well. Just like in the case of demand, the supply response of policy must be judged below average.

Monetization ratio (1): domestic assets

One of the clearest signs of central bank's success is the extent to which economic agents use money balances and have access to liquidity. I have chosen three definitions of monetization as yardsticks by which to judge the NBP in this department.

For domestic asset creation I elected to compare loan growth with that of money, both standardized by the size of the economy. The ratio of broad money to GDP rose throughout the decade, from about 30% to less than 50%. However, loan creation fell in relation to GDP until about 1995, only to rise sharply thereafter. Clearly, the early years, which witnessed a laissez-faire approach of the NBP toward the banking system development, saw mismanagement and a large share of bad credits. But a turnaround and privatization changed the state of Polish banking dramatically in the latter years of the decade. All in all, the country's banks are true deposit-taking and credit-extending institutions, a charter still missed in many developing economies. The NBP gets an above-average score here.

Monetization ratio (2): narrow vs. broad money

Another way of looking at central bank monetary effectiveness is to compare the various definitions of nominal money balances. I have chosen to compare the reserve money (high-powered balances or M0) with M1 (which is equivalent to base money plus checkable deposits) and with M2 (which to M1 adds term and saving deposits).

Broadly speaking, the share of M0 in GDP has fallen steadily, that of M1 remained steady and M2 rose consistently. I find these trends to be positive. Given that M0 is mostly cash, its diminishing importance testifies toward a more cash-less way of settling transactions. A rise of M2 signifies a rising use of banking services, both on the liability and asset sides of balance sheets. The banking system has moved cautiously in the right direction of greater reliance on longer maturity of its assets and liabilities. I must credit the NBP with an above-average rate of success under this definition.

Monetization ratio (3): domestic vs. foreign assets

Finally, I have compared the ratio at which the banking system added domestically-denominated assets to those it holds in foreign currencies. I find that the share of domestic asset growth lags that of FX assets substantially. In fact, the share of the former rose at a rate about a third slower than that of the latter. Regrettably, this score deserves a low mark.

Domestic asset creation

Among domestic assets, it is instructive to evaluate loans extended to consumers with those extended to corporates. I find no correlation between the cost of credit and the rate of growth of loans. More importantly, there is little correlation between the business cycle and the propensity to issue corporate loans.

Once the consumer loan boom of the mid-nineties has ended, the banks were singularly unsuccessful in moving toward corporate lending. The rate of growth of lending has been slowing despite lower nominal interest rates. The NBP must be judged below average in banks' effectiveness of domestic asset creation.

Export performance

Export performance is a derivative of the effectiveness of using the exchange rate to manage the business cycle. The zloty (lagged two years) proved not to influence exports in the period under study. The NBP employed a fixed but variable exchange rate until 2000, and hence had real influence upon the zloty.

The unimportance of the currency's value on exports is a testimony's of the NBP's correct policy of maintaining a relatively stable, and strong zloty. In this respect, the institution deserves top marks for its independence and steadfastness.

Fiscal performance

The conventional wisdom has high inflation inhibiting sound fiscal policy. One side effect is the cost of carrying state debt, another is the distortion of planning spending in a longer time frame.

I found no correlation between inflation and the size of the fiscal deficit in relation to GDP. This finding is the more remarkable in that the share of the NBP financing the deficit has been falling, only to disappear entirely in the late nineties. Thus, the inflation tax has stopped to bite. The failure of the NBP to influence fiscal policy has been complete. Not that it had much power to use in the first place … Still, I must rate the bank sub-par in this respect.

Seigniorage

Seigniorage is the monetary rent a central bank extracts from the privilege of being the sole issuer of high-powered money. It consists of the monetary rent proper (generally almost the entire volume of seigniorage) and of interest on direct loans to the banking sector as well as from own financial operations.

High seigniorage is a sign of underdevelopment of central banking in general and private-sector banking in particular. Both the absolute volume of seigniorage and its relation to GDP fell throughout the period. In fact, the rates of decrease have been spectacular. From almost PLN 7 billion in 1990 (all data in constant 1990 prices) revenues from seigniorage fell to about PLN 1 billion a decade later. At the same time, the share of monetary rent in GDP decreased from almost 90% to less than 2% in the same period. I cannot but give top marks to the NBP in the category of seigniorage management.

4. Results and Concluding Thoughts

The tabulated unweighted average of the fifteen categories came out to 3.2 on a scale of 1 to 5. This places the score just above the average. The result is not surprising. By regional standards, the disinflation record must be judged sub optimal but the NBP rightfully gets good marks for macroeconomic stability and no history of major crises.

The bank worked under peaceful conditions in the decade 1990-2000: the government granted it a narrow mandate, it left its policies largely unchallenged, and the attending high economic growth provided for a propitious macro environment. The first decade of the 21st century is bound to be more eventful: the monetary policy council is not popular among politicians, a debate on the accession timing to the monetary union may yet divide the government and the bank, and unsolved economic problems (fiscal position, high structural unemployment) will test the bank's acumen. It is possible that the NBP's charter may change even before Poland joins the euro currency union.

As of 2002 the bank is on the defensive. Its political clout has diminished, and it enjoys none of the Fed's – let alone Bundesbank's – high social acceptance and trust. At least part of its shrunk stature might be ascribed to poor judgment of the bank itself. In the popular imagination the NBP is considered aloof, self-centered, and divorced from reality. The institution, while winning accolades in international rankings and among foreign investors, has failed to win the hearts and minds of ordinary Poles. Now the politicians have found a convenient scapegoat for the economy's and their own failures. It would be ironic and sad if the NBP's independence were to suffer just at a time it is needed most.

This is a shortened version (minus the data and graphs) of a paper presented to the annual meeting of the Polish Institute of Arts and Sciences of America in June 2002.

The Scorecard

Objective/Measure	Score
Inflation Targeting	2
Real Interest Rates	3
Monetary Targeting	1
Real Value of the Zloty	5
Currency Substitution	4
Foreign Assets Position	5
Transmission Mechanism (1): Demand Management	2
Transmission Mechanism (2): Supply Management	2
Monetization Ratio (1): Domestic Assets	4
Monetization Ratio (2): Narrow vs. Broad Money	4
Monetization Ratio (3): Domestic vs. Foreign Assets	2
Domestic Asset Creation	2
Export Performance	5
Fiscal Performance	2
Seigniorage	5
Total, unweighted average	**3.2**