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2nd Joint NBP/SNB Seminar on Exchange Rate Regimes and Monetary Policy, Zurich, May 19-20, 2005

The 2nd Joint Seminar on Exchange Rate Regimes and Monetary Policy of the National Bank of Poland (NBP) and the Swiss National Bank (SNB) was held in Zurich, Switzerland, on May 19-20, 2005. In opening, **Jean-Pierre Roth**, Chairman of the Governing Board of the Swiss National Bank, stated the objective of the seminar, namely to bring together academics and central bankers to discuss theoretical and practical aspects of central banking, and to provide an opportunity for sharing experience and expertise. The main topic of the first seminar day was the choice of the exchange rate regime. As Mr. Roth pointed out, this topic was not only of general importance for a central bank's monetary policy, it was a timely topic given recent IMF calls for more exchange rate flexibility in CIS countries. But regardless of which exchange rate regime a country chooses, it needs to be supported by consistent macroeconomic policies of which monetary policy is only one element, although an important one.

A central bank with extensive experience with different exchange rate regimes is the National Bank of Poland. In the short time since 1990, Poland went successfully through almost all possible exchange rate regimes, gradually moving from a hard peg to pure floating. In his opening lecture, **Jerzy Prusky**, First Deputy President of the National Bank of Poland, reviewed this unique experience, concluding that this evolution of exchange rate regimes was a well-sequenced exit from the exchange rate-based stabilization strategy that Poland had adopted at the beginning of the reform process. Each regime corresponded to a specific stage in the disinflation process, and an inflation targeting-framework was adopted only at the last stage. The next big challenge for monetary policy in Poland will be to combine the inflation targeting framework with the requirements of ERM II in the run up to euro adoption.

Session 1 - Financial Markets, Growth, and the Exchange Rate Regime

That ERM II participation and thus a return to less exchange rate flexibility will indeed be a challenge for the new EU member countries was strongly argued by **Ales Bulir** (IMF). His estimation and simulation of sustainable real exchange rates suggested that the new EU members would either need to tighten fiscal policies or have faster GDP and export growth. Foreign exchange markets by themselves would not provide a good guide for the "fundamentally correct" parities. Foreign exchange markets, however, would be good at sorting out short-run developments. Mr. Bulir provided empirical evidence for the Czech Republic, Hungary, Poland, and Slovakia, showing that liberalized financial markets set the basis for self-correcting liquidity flows, countering short-run deviations of exchange rates from the trend. Moreover, early foreign-exchange market and financial-account liberalization would pay off in terms of market depth and faster adjustment. Mr. Bulir thus argued that short-run volatility of exchange rates under floating should not be a concern for central bankers.

That ERM II is not the only potential challenge in the run-up to euro adoption was pointed out by **Michal Brzoza-Brzezina** (NBP). He showed that interest rate convergence had triggered substantial bank lending booms in former accession countries such as Greece, Ireland, and Portugal. Mr. Brzoza-Brzezina analyzed the potential for such lending booms in the new EU member states and assessed the associated risk for the respective banking sectors. His results suggested that significant increases in bank lending can indeed be expected, but that the magnitudes should be substantially smaller than in earlier cases and tat the risks to the banking sectors seem to be relatively small.

A question rarely asked is whether the choice of the exchange rate regime affects long-term economic growth. The literature on this topic is ambiguous or assumes that no such link exists. Growth, however, is arguably the most important concern of low-income countries. It is thus not surprising that **Philippe Bacchetta**'s (Study Center Gerzensee) presentation about a possible link between exchange rate regime and productivity growth arouse much interest and discussion among seminar participants. Offering preliminary results of his work with Philippe Aghion (Harvard University), Romain Ranciere (CREI and IMF) and Kenneth Rogoff (Harvard University), Mr. Bacchetta argued that for countries with low levels of financial development, fixed exchange rate regimes would lead to higher growth than flexible exchange rates. Moreover, the results further suggested that countries with a low level of technology and a high degree of market regulation may also derive growth benefits from more rigid exchange rate regimes.

Session 2 – Evaluation Exchange Rate Regimes

In recent years, many central banks have begun to develop Dynamic Stochastic General Equilibrium (DSGE) models to be used for policy making. This new generation of macroeconomic models, which incorporate theoretical advances that have been made in international macroeconomics in the late 1980s and 1990s, merge explicit microeconomic foundations with nominal rigidities and market imperfections. The microfoundation allows an analysis of policies in terms of their impact on economic welfare of consumers. Naturally, this has also revived interest in the evaluation of alternative exchange rate regimes. Two such evaluations with DSGE models were presented in the afternoon session.

Jean-Marc Natal (SNB) and **Nicolas Cuche (SNB)**, employing a model that they have developed for the SNB in collaboration with Harris Dellas (University of Bern), analyzed how different types of frictions and shocks affect the ranking of monetary regimes. Particularly, using a generic version of the model, they compared a fixed exchange rate regime with a flexible exchange rate regime under different commonly used monetary policy rules (money targeting, Taylor rule, inflation targeting). Their findings suggested that in general, with monetary policy aiming at price stability, flexible exchange rates perform better than a fixed rate regime. However, a peg might be better when the shocks that an economy faces are mainly domestic or when the main source of nominal rigidity is in the imported goods sector.

How does the picture change if the degree of price flexibility in an economy is not exogenously given but rather dependent on the monetary regime itself? This question was analyzed by **Ozge Senay** (Middle East Technical University, Turkey) and **Alan Sutherland** (University of St. Andrews, UK), who presented a model in which firms chose the optimal frequency of price changes, balancing the benefits and cost of price adjustment. Their findings suggested that flexible exchange rates with inflation targeting yielded the highest welfare, irrespective of whether the degree of price flexibility was exogenously or endogenously determined. However, endogenous changes in the degree of price flexibility can alter the ranking of flexible exchange rates with monetary targeting and fixed exchange rates, depending on the parameters of the model.

Session 3 – Monetary Policy Challenges and Individual Countries

The second day of the seminar started with the presentation of three country cases: Switzerland, the Kyrgyz Republic, and Uzbekistan.

Ulrich Kohli (SNB) reviewed the changes brought to the Swiss monetary environment by the creation of the European Monetary Union. Given the size and economic importance of the euro area for Switzerland, fears existed that the introduction of the euro could adversely affect the volatility of the Swiss franc or harm the SNB's ability to run an independent monetary policy. However, these fears did not materialize and post-euro experience has been rather positive for Switzerland. Mr. Kohli noted that the Swiss franc even seems to reflect economic fundamentals better than before the introduction of the euro. Overall Switzerland seems to be in the best of both worlds: it enjoys the benefits of the existence of the euro and the benefits of having an independent currency.

Even positive economic developments can pose challenges for monetary policy, however, as Nurlanbek **Tynaev**'s (National Bank of the Kyrgyz Republic) presentation showed. After the Kyrgyz National Bank was initially preoccupied with fighting hyperinflation and reversing demonetization, the recent period has been characterized by successful macroeconomic stabilization and structural reforms. Prudent monetary policy aimed at price stability and financial sector reform have strengthened money demand and confidence in banks. As Mr. Tynaev showed, this led to rapid monetization. The Kyrgyz National Bank has so far well managed to accommodate the surge in money demand without jeopardizing hard won price stability.

In October 2003, Uzbekistan made its currency convertible for current account transactions by removing exchange restrictions and multiple currency practices. **Murat Yakubjanov** (Central Bank of Uzbekistan) reviewed this experience and gave an overview of the economic situation in Uzbekistan. He argued that the introduction of convertibility had both negative and positive consequences for Uzbekistan. On the negative side, the required unification of the exchange rate would have led to a substantial devaluation of the national currency, adversely affecting the balance sheets of the banking sector. Moreover, the liberalization of cash transactions would have expanded the shadow economy. On the positive side, convertibility seems to have stimulated economic activity, with strong growth in trade leading to a sharp increase in real GDP in 2004.

Session 4 – Monetary Policy and Inflation

Given that monetary policy decisions have to be made in real time, central banks should be interested in how continuously incoming information influences their latest forecast. **Andreas Fischer** (SNB) presented a new procedure based on factor analysis of daily real-time panels that would allow central bankers to do this. Not only would this procedure provide central bankers any time with the most up-to-date forecast available, it would also allow them to identify whether real or nominal shocks generated the change in the forecast. Mr. Fischer showed how this procedure is currently applied at the SNB and how it can be used to inform and analyze monetary policy decisions.

Conventional wisdom has it that the link between monetary aggregates and inflation has become unstable and that money growth has thus largely ceased to contain much useful information for monetary policy. **Samuel Reynard** (SNB) challenged this wisdom. Presenting empirical evidence for the United States and the euro area, he argued that money demand and the link between money growth and inflation have remained stable if the relevant monetary aggregate is properly defined. As economic theory suggests, it needs to correspond closely to transaction motives. Commonly used aggregates either exclude assets that are available on demand to buy goods and services (like M1) or include assets, like time deposits, which, due to portfolio considerations, can cause instability following financial market disturbances, as it happened with M2 in the U.S. in the early 1990s. Regarding the link between money growth and inflation, arguments that money has become irrelevant in low inflation environments miss the fact that part of money growth fluctuations in the past 20 years reflected money demand adjustments to lower inflation. Adjusting money growth appropriately results in a clear link between money growth and inflation.