The Role of the Currency Board in Bulgaria's Stabilization

Bulgaria's latest stabilization program, which included the introduction of a currency board, marked the end of a period of economic turmoil and near-hyperinflation. What accounts for its success?

Anne-Marie Gulde

AFTER SEVERAL failed stabilization attempts, Bulgaria introduced a currency board on July 1, 1997. Controversial and difficult to implement because of Bulgaria's serious structural problems, the currency board has been a crucial factor in the success of the country's latest stabilization program. Combining a traditional, rule-based exchange arrangement with legal and structural measures that addressed pressing banking sector and fiscal issues, it was well designed for the task at hand—credible but flexible enough to allow Bulgaria to tackle a systemic banking crisis.

Initial conditions

In late 1996, Bulgaria was in the midst of a banking crisis and entering a period of hyperinflation. Support for the government was declining and popular protest calling for new elections was widespread. In view of the failure of the country's earlier stabilization programs, a perception was developing that, to be credible, a renewed stabilization attempt would require a visible, rule-based system, such as a currency board. Nevertheless, the economic and financial problems confronting Bulgaria seemed insurmountable at first.

Macroeconomic and structural setting. The depth of the macroeconomic crisis was daunting. On an annual basis, inflation had soared to almost 500 percent in January 1997 and surpassed 2,000 percent in March. The causes of the rapid acceleration of inflation included liquidity injections to support the country's weakening banking system, continued central bank financing of the budget deficit, and—increasingly important—faltering confidence in the Bulgarian lev, which reduced domestic money demand. In an effort to soften the currency's depreciation—from lev 487 to lev 1,588 per US$1 in the first quarter of 1997—the central bank depleted its international reserves; remaining reserves covered less than two months of imports. At the same time, falling output and growing tax evasion caused tax revenues to plummet, from almost 40 percent of GDP (annualized) to 14.7 percent of GDP in February 1997. To finance the fiscal deficit, the government issued treasury bills with successively shorter maturities and higher interest rates. Real output, which had grown in 1994 and 1995, contracted by more than 10 percent during 1996.

Structural problems were equally severe. A banking crisis had been smoldering since at least 1995. A 1996 review found that out of 10 state banks, which accounted for more than 80 percent of banking sector assets, 9 had negative capital, and more than half of the state banks' portfolios were nonperforming. Half of

the private banks, including the country's largest and best known, were also technically bankrupt. Rumors about the state of the banking sector led to several runs on banks.

A first round of bank closures in May 1996 was limited to a subset of the institutions known to be weak and was therefore not sufficient to restore confidence in the banking sector. The situation continued to deteriorate, and the Bulgarian National Bank (BNB) placed nine more banks in conservatorship in September 1996. In all, banks accounting for about one-third of Bulgaria's banking system had been shut down. The BNB announced that this second round of closings would be the last and that it would keep remaining banks open. Thus, when banking sector problems intensified, the BNB's hands were tied; it reacted by injecting liquidity through its Lombard window and repurchasing government bonds—actions that fueled inflation.

Policy discussions and constraints. There was growing awareness that a visible and credible departure from past policies would be necessary to restore any semblance of normality to the economy. In addition, stabilization would require measures to prevent financial indiscipline, reduce the government's overwhelming debt-service burden, and increase the lev's attractiveness, as well as strong official commitment to reforms and widespread public support.

In November 1996, an IMF mission initiated the first discussion with the Bulgarian authorities and major interest groups—including all political parties and trade unions, foreign donors, journalists, and academics—on the merits of a currency board. The idea aroused considerable debate.

Proponents felt that a currency board offered an ideal solution to the problems of high inflation, lavish central bank lending to banks, and excessively high interest rates on government debt. Under the currency board, the central bank would lose its discretion to act, and inflation and real interest rates would drop toward the levels of those in the country issuing the anchor currency. The more credible policy environment would provide a better framework for stability and growth. Experience in countries that had adopted currency boards—Argentina, Estonia, Hong Kong SAR, and Lithuania—supported these arguments.

Critics did not dispute the potential advantages of a currency board arrangement but argued that Bulgaria did not meet the necessary preconditions. Most important, Bulgaria's banking sector was bigger and plagued with more problems than the banking sectors of most other countries that had adopted currency boards, and the need for lender-of-last-resort lending could not be ruled out. In addition, temporary access to central bank overdrafts was thought to be necessary to deal with strong seasonal fluctuations in fiscal revenues and to cover the redemption of bond issues. Finally, international reserves were low and a currency board might require a large up-front devaluation.

Given the complexity of the issues and the country's political problems, the decision to go for the currency board was finalized only when a new government took office in the spring of 1997. The preparation and design phase—which was protracted because of the many political and technical uncertainties—included a full evaluation of the banking sector to minimize the potential disruptions from an unexpected worsening of the banking crisis. Supporting measures—in particular, a significant strengthening of the central bank's banking-supervision capabilities—were also designed.

The near-hyperinflation of late 1996 and early 1997—although difficult and costly—helped ensure the viability of the currency board. By reducing the real value of domestic debt, which had initially been a threat to a balanced budget, it made fiscal management without recourse to the central bank possible. Furthermore, it gave banks breathing room by rapidly devaluing their domestic currency liabilities while increasing the real value of the dollar-denominated government bonds they held.

What is a currency board?

A currency board combines three elements: a fixed exchange rate between a country's currency and an "anchor currency," automatic convertibility, and a long-term commitment to the system, often made explicit in the central bank law. The main reason for countries to consider a currency board is to demonstrate that they are pursuing an anti-inflationary policy.

A currency board is credible only if a country's central bank holds sufficient official foreign exchange reserves to cover at least its entire monetary liabilities, thereby assuring financial markets and the public at large that every domestic-currency bill is backed by an equivalent amount of foreign currency in the official coffers. Demand is higher for a "currency-board currency" than for currencies without guarantees because holders know that, rain or shine, their liquid money can easily be converted into a major foreign currency. Were it to come to such a testing of the system, its architects contend, automatic stabilizers would prevent any major outflows of foreign currency.

The mechanism works through changes in the money supply, which lead to interest rate changes, which, in turn, encourage funds to move between the domestic and the anchor currency. This is essentially the same mechanism that operates under a fixed exchange rate, but the exchange rate guarantee implied in the currency board rules ensures that the necessary interest rate changes and the attendant costs for the economy will be comparatively lower.

The obvious advantages of a currency board are economic credibility, low inflation, and low interest rates. But currency boards can prove limiting, especially for countries that have weak banking systems or are prone to economic shocks. With a currency board in place, the central bank can no longer serve as a lender of last resort for banks in trouble. At most, it is limited to acting as an emergency fund that is either set aside at the time the currency board is introduced or funded, over time, out of central bank profits. Another disadvantage is that, with a currency board arrangement, it is not possible to use financial policies—that is, adjustments of domestic interest or exchange rates—to stimulate the economy. Instead, economic adjustment can be achieved only through wage and price adjustments, which can be both slower and more painful.

Design and implementation

Currency board arrangements differ significantly from country to country. (See Baliño and others, 1997.) The key features of a currency board that need to be decided upon at the outset of the planning process include the peg currency, the exchange rate, the organizational structure, and the operating principles and instruments.

In Bulgaria, there were heated discussions about the choice of anchor currency. Some advocated the U.S. dollar, noting its widespread use in informal transactions and as a store of value, while others supported the deutsche mark as more consistent with the country's trade structure and conducive to greater integration with the European Community. The final decision—in favor of the deutsche mark—was made in the late spring of 1997.

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The decision on the exchange rate—lev 1,000 to DM 1—was not reached until June 5, 1997. However, because market participants knew that the BNB's foreign reserves would have to cover its monetary liabilities, they were not taken by surprise. The market rate on May 31, 1997, was lev 922.41 per DM 1.

Early in the discussions, it was decided that transparency would be greatest under the Bank of England model. The BNB was reorganized into three departments—issue, banking, and banking supervision. Full accounts for all departments are published monthly.

The issue department holds all of the BNB's monetary liabilities—banknotes and coins, and deposits from banks and other nongovernmental parties, the government, and the banking department. The BNB is required to have sufficient foreign exchange and gold assets at all times to cover these liabilities in full. The issue department is required to issue and redeem monetary liabilities for the peg currency at the official exchange rate on demand and without limit. Its accounts must be published weekly to ensure adherence to the currency board rules.

Because of the problems facing Bulgaria's financial sector, a separate banking department was established, and the currency board has "excess coverage"—that is, more foreign exchange than needed to cover the central bank's monetary liabilities. The banking department deposits these supplemental funds, which can be used to make collateralized loans to commercial banks in the event of an acute liquidity crisis, in the issue department. The banking department also holds all other assets and claims on the central bank, including outstanding long-term loans to the government and long-term deposits by commercial banks, and acts as the fiscal agent for Bulgaria's relations with the IMF. Banking department claims and liabilities other than those related to IMF drawings, lending to commercial banks, and changes related to the deposit of central bank profits will not be added to during the operation of the currency board.

The BNB law had to be changed to provide a legal basis for the new currency board. The law was drafted by a committee composed of the BNB's legal department, the ministry of justice, and the prime minister's cabinet. Following up on other consensus-building measures by the authorities, in April 1997, the IMF sponsored a seminar on currency boards for Bulgarian parliamentarians. The BNB law, passed by the parliament on June 5, took effect on July 1, 1997.

In addition, measures to address likely stress factors were incorporated into the BNB law and the stabilization program. Two measures were designed to end large-scale monetary financing of the budget. First, the new law allows onlending of IMF credits to stabilize the budget, although strict safeguards and transparency requirements apply. Second, a fiscal reserve account was created to help make any short-term central bank financing of the budget unnecessary, and all central government deposits and the accounts of the 12 major extrabudgetary funds were consolidated in this account. The balance in the fiscal reserve account—held in the BNB's issue department and fully covered by foreign reserves—represents the funds available to the government at any given time. Maintaining a minimum balance in the account, as required under Bulgaria's IMF-supported program, provides assurance of the government's ability to honor its budgetary commitments and is therefore an important stabilizer.

To increase confidence in the banking system, the currency board plan provided for the possibility of banks' receiving limited but sizable assistance (about $300 million, or one-fifth of Bulgaria's foreign reserves at the inception of the currency board) through the banking department. Banking laws and prudential regulations were strengthened. In addition, the BNB embarked on a major technical assistance program, coordinated by the IMF and supported by the European Union and the United States Agency for International Development (USAID), to enhance banking supervision. Finally, the authorities recapitalized one large state bank and pledged to renew efforts to privatize the remaining state banks and improve the operating environment for banks.

Reorganization and transition issues

The final task was to ensure a smooth transition. This was complicated by the fact that new BNB management took office in May 1997 and had only two months to familiarize itself with the principles of a currency board arrangement and make final decisions. In early June, a number of issues still required urgent attention.

Restructuring the country's foreign exchange reserves in line with the peg to the deutsche mark was a priority. Before the currency board plan, reserves had been composed of a wide variety of instruments and currencies, including gold

and other precious metals, a variety of foreign currencies held in bank accounts, and bonds and other investments. Given the necessity of safeguarding the value of the country's foreign exchange holdings, the country decided the best choice was deutsche mark–denominated assets.

The BNB's accounts had to be separated to fit into the currency board structure. An ad hoc committee consisting of the deputy governor in charge, the head of the accounting department, and IMF advisors developed the final accounting framework. On June 30, 1997, the BNB prepared a closing balance on the basis of the former accounting framework, and the currency board's opening balance on July 1, 1997, reflected the new structure.

Management of the government's domestic debt was another challenge. To avoid wide swings in liquidity, the ministry of finance agreed to avoid making large injections of liquidity on days when, because of the earlier bunching of debt issues, large repayments would fall due. A committee of managers from the ministry of finance and the BNB was to consult regularly on this issue. To smooth implementation, a special treasury bill issue was scheduled for June 30 to absorb an exceptionally large liquidity injection that day.

The final issues had to do with logistics. To reassure the public, the BNB and its branches needed to have available an adequate supply of deutsche mark banknotes. Given that the deutsche mark had not previously been used with any frequency in Bulgaria, the BNB had to acquire the cash from abroad and send it in time to the distribution points, all of which was successfully accomplished.

Implementation experience

The introduction of the Bulgarian currency board went smoothly and—in line with appreciating pressure on the lev before the actual shift took place—with no attempts to "test the system." In about 1,500 cash transactions, the BNB bought more than DM 3 million while selling less than DM 1,000. The BNB was also a large net purchaser of deutsche mark in the interbank market. The total increase in reserves after the first day came to more than DM 40 million.

Under the currency board, Bulgaria reduced annual inflation to 13 percent by mid-1998 and to 1 percent by the end of 1998 while rebuilding foreign exchange reserves from less than $800 million to more than $3 billion—more than six months of imports (see table). The BNB basic interest rate, which had been above 200 percent at the height of Bulgaria's economic crisis, fell to 5.2 percent by the end of 1998. Retail interest rates moved close to German levels as soon as the currency board was introduced. Since inception of the currency board, no bank has had to be supported through the banking department. Because of bottlenecks other than the monetary arrangement, the resumption of growth to date has remained moderate, but Bulgaria's stabilization was not disrupted by Russia's crisis of mid-1998, despite close economic ties between Bulgaria and Russia.

Bulgaria's experience highlights the power of a credible, rule-based system to rapidly change perceptions and economic behavior. But it also underscores three cautionary lessons. First, a currency board requires more preparation than other stabilization programs, and preparation of a different kind. Because the changes can be time-consuming, a currency board may not be possible in countries that have not met the preconditions. Second, because of the legal changes required to implement a currency board, broad parliamentary support is needed. Bulgaria was able to garner support for its currency board because near-hyperinflation had made clear the need for radical solutions and because it had taken pains to build a consensus well in advance of the plan's inception. Third, a currency board is but one element of a stabilization program. Although it will, if properly designed, contribute to eliminating macroeconomic imbalances, its long-term survival depends equally on the implementation of appropriate supporting measures. F&D

Macroeconomic indicators before and after Bulgaria's adoption of a currency board

(percent)

		First quarter			
	1995	1996	1997	1997	1998
Real GDP growth	2.1	–10.9	...	–6.9	3.5
Inflation[1]	32.9	310.8	2,040.4	578.5	1.0
Fiscal balance (percent of GDP)	–6.4	–13.4	–52.1	–2.1	1.3
Bank financing of fiscal balance	4.9	14.5	40.7	–3.2	–0.3
Growth in reserve money	50.5	92.4	780.0	780.0	9.8 [1]
Growth in real broad money	5.1	–45.4	–75.3	–32.3	2.8
BNB credit to banks (percent change in monetary liabilities)	–7.8	122.4	67.5	4.5	–36.6
Foreign reserves including gold (million dollars)	1,546.0	781.0	826.0	2,474.0	3,056.0
In months of imports	2.9	1.6	1.7	5.1	6.1
Nominal interest rate differential[2]	19.4	116.6	128.6	0.03	0.38
Exchange rate (lev/U.S. dollar)	70.7	487.4	1,021.9	1,776.5	1,675.1
Exchange rate (lev/deutsche mark)	49.3	313.4	946.9	1,000.0	1,000.0

Source: IMF.
[1] Twelve-month change, end of period.
[2] End-of-year differential between three-month deposit rates in Bulgaria and Germany.
... Indicates data not available.

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Reference:

Tomás Baliño, Charles Enoch, Alain Ize, Veerathai Santiprabhob, and Peter Stella, 1997, Currency Board Arrangements: Issues and Experiences, *IMF Occasional Paper 151 (Washington: International Monetary Fund).*