

Shadowing the euro: Bulgaria's monetary policy five years on

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1. Introduction

Bulgaria's economic progress in recent years is regarded as determined by the currency board regime introduced in 1997. It seems appropriate, five years on, to weigh up that assumption.

The graphs and analysis which follow support our generally positive view of the then government's decision to accept the IMF's advice on how to manage its monetary policy. But we are well aware that the currency board, now as then, has not been without critics; this report examines the medium-term challenges to a policy of shadowing the Deutsche mark's successor, the euro.

The paper is structured as follows: Section 2 describes the Bulgarian National Bank's (BNB) monetary policy over the past five years, and summarises the results. Section 3 analyses the link between monetary and fiscal policy by outlining changes in the latter after the launch of the currency board, and its increased effectiveness. Section 4 shows the link between the currency board, foreign trade and the balance of payments, highlighting the conditions for balance of payments sustainability with a fixed exchange rate. Section 5 looks at changes in the economy and the banking system in the last five years. Section 6 concludes with some of the medium term challenges facing the currency board.

2. The role of monetary policy

A realistic view

The decade of transition from a centrally planned to a market economy in central and eastern Europe and the former Soviet Union coincided with a change in accepted views on economic policy. The role of central banks, and of monetary policy, in national economic development was seen in a new light. Macroeconomic policy during the 1990s changed significantly, both in theory and in practice. A consensus emerged that the basic goal was to ensure a nominal anchor for controlling inflation and inflationary expectations, in order to support overall economic stability and to create a favourable environment for sustainable long-term growth and wealth creation.² It follows that the broad thrust of monetary policy must, at least to some degree, coincide with overall economic policy.

It was long believed that central banks' monetary policy could influence long-term trends in employment, output and inflation. In other words, the monetary authorities could control both nominal and real variables, thus achieving more than one goal. But both theory and empirical evidence show that pursuing several goals at once, some at odds with each other, does not work. A better approach is to limit monetary policy to achieving price stability within various institutional frameworks.

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² Allsopp and Vines (2000) discuss the consensus on the new economic policy principles formed in the 1990s.

High and volatile inflation rates create uncertainty and affect both the quantity and quality of investment. This has evident consequences for long-term growth and social prosperity. The most pernicious economic consequences are:

- Inefficient allocation of economic resources.
- High and volatile nominal interest rates which direct economic agents to short-term, high-risk activities rather than wealth creation.
- A severely negative overall effect on investment, a determinant of long-term growth.

The social consequences are equally serious. For protection from high inflation an individual needs the kind of specialised knowledge unavailable to the lowest-income groups. Moreover, high inflation leads to a massive, and politically unsanctioned, redistribution of wealth. And for the individual, high and variable inflation hampers household as much as commercial planning.

Table 1 confirms the validity of the above arguments for the Bulgarian economy in the period 1992-2002. High inflation was accompanied by significant skewing of motivators, leading to savings being channelled into high-risk speculative projects, a shortage of investment in the economy, low economic growth, high inflation tax and the involvement of the banking system in highly risky operations.

Table 1
The negative effects of inflation

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Inflation ¹	80	64	122	33	312	548	2	7	11	5	4
Real GDP ¹	-7.3	-1.5	1.8	2.1	-10.9	-6.9	3.5	2.4	5.8	4.0	4.5
Investment ²	16.2	13.0	13.8	15.3	13.5	11.0	13.0	15.1	18.3	20.4	20.8
Inflationary tax rate ³	44.3	39.0	54.9	24.6	75.7	84.6	1.6	6.5	10.1	4.6	3.7
Inflation tax ²	6.6	4.0	5.3	1.8	10.6	10.5	0.2	0.7	1.1	0.6	0.5
Interest rate ⁴	...	...	...	80	300	210	14	14	12	12	10
Interest rate variation ⁵	...	...	...	30	338	277	1	1	1	1	1
Banks' e/r gains ⁶	...	143	237	36	12	316	-9	10	8	12	...

¹ Annual percentage change. ² Share of GDP. ³ Defined as $100 \times [\text{CPI inflation} / (100 + \text{CPI inflation})]$, a measure of inflation tax, bounded between 0 and 100%, on monetary balances held by economic agents. See Masson et al (1997). ⁴ Mean annual short-term lending rate. ⁵ Standard deviation. ⁶ Banks' net exchange rate gains as a percentage of their pre-tax results.

Sources: BNB; National Statistical Institute.

Maintaining low and stable inflation is the biggest contribution monetary policy can make to an overall economic policy aimed at securing high and stable growth and employment.

The currency board

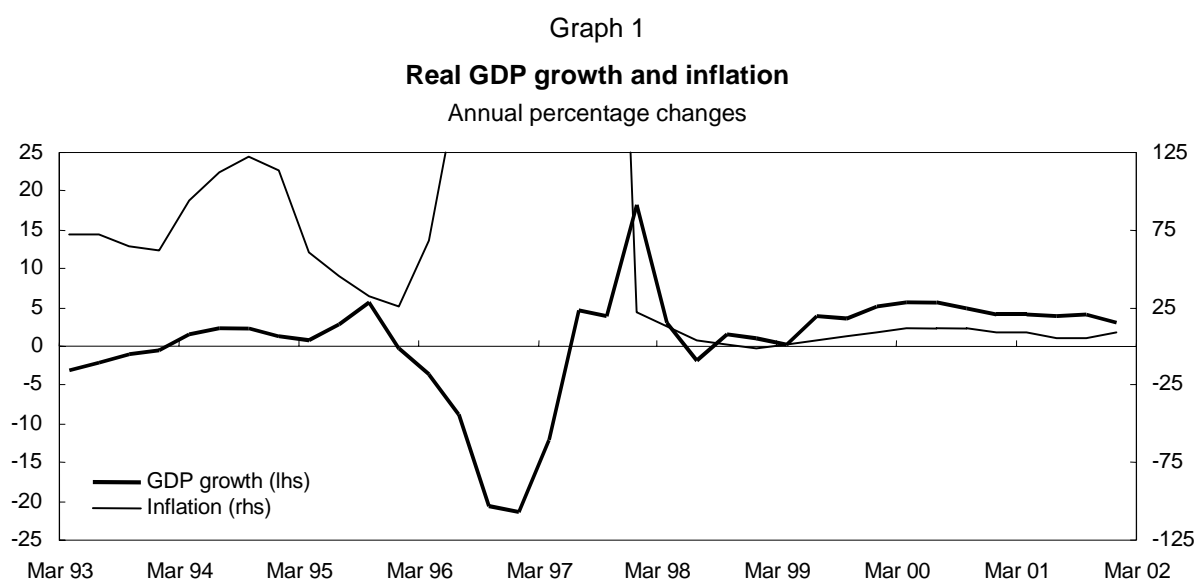
The launch of the currency board in mid-1997 was a move from a situation of multiple central bank goals to the single goal of achieving price stability.³ Apart from the unwavering maintenance of a fixed lev/euro exchange rate, Bulgaria's monetary policy strategy has for five years been based on:

- The BNB's managing board having independence from the government, achieved through a combination of specific legislation, board members' personal integrity and public support.
- Proscription of any direct lending to government.

³ In practice, the BNB's main goal was defined in the same way in both the 1991 and 1997 central bank laws.

- Active encouragement of constant monitoring by economic agents. Policymakers are held responsible for their actions through citizens' ability to freely exchange the national for the reserve currency.
- Clear and transparent mechanisms for the central bank to perform the function of lender of last resort while making its abuse practically impossible.

The consistency, predictability, and clarity of this strategy created the nominal anchor in the economy which Bulgaria so badly needed, and stabilised inflationary expectations. In the post-1997 period, Bulgaria achieved the lowest and most stable inflation rates since the beginning of the economic reform, combined with the highest and most stable output growth (see Graph 1).



Over the period 1998-2002, inflation and real GDP growth rates were comparable with those of other central and eastern European countries (see Table 2).

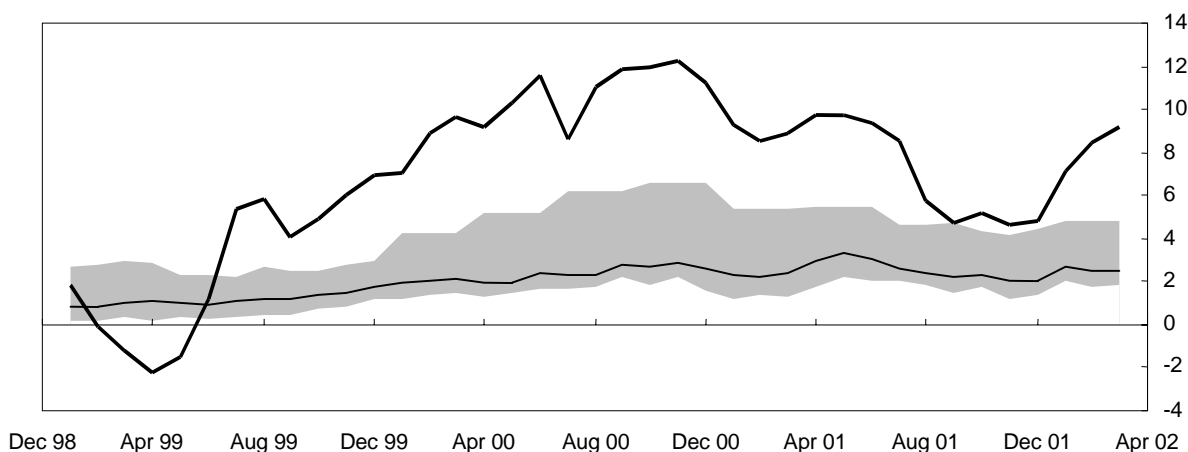
Table 2
Inflation and economic growth

	Inflation				Real GDP growth			
	Average		Volatility		Average		Volatility	
	1991-1997	1998-2002	1991-1997	1998-2002	1991-1997	1998-2002	1991-1997	1998-2002
Bulgaria	237.4	5.4	219.1	3.8	-4.9	4.0	5.7	1.3
Estonia	26.7	4.9	12.7	1.2	1.6	4.4	7.3	2.9
Latvia	20.9	2.6	11.0	0.7	-0.6	4.4	8.7	2.3
Lithuania	58.2	1.3	74.5	0.9	-2.1	2.9	10.3	3.8
Poland	32.2	6.6	16.5	3.4	3.5	3.1	4.8	1.6
Romania	145.0	37.6	100.1	12.4	-1.6	0.1	7.6	4.1
Slovak Republic	17.6	7.7	19.2	4.1	-0.1	2.9	8.3	0.9
Slovenia	66.0	7.8	94.0	0.9	0.8	3.7	5.6	1.3
Hungary	23.2	8.7	5.0	2.6	-0.8	4.4	5.5	0.8
Czech Republic	17.0	3.9	15.8	1.9	0.0	1.2	5.7	2.6

Source: IMF, *International Financial Statistics*.

However, despite the currency board, actual inflation in Bulgaria remains higher than that within the countries participating in European economic and monetary union (EMU). Such differentials are largely determined by differences in the structure and flexibility of the economies concerned. They do not result from monetary factors and do not create permanent inflationary expectations among the public, but they risk causing significant and protracted differentials between Bulgarian inflation and that within the euro area (see Graph 2).

Graph 2
Inflation in Bulgaria and the euro area
 Annual percentage changes



Note: The thick line represents inflation in Bulgaria, and the thin line that in the euro area. The shaded area marks the extent of the inflation rates in the individual countries (excl Greece) in the euro area.

The irreversible fixing of the lev to the euro creates economic conditions identical to those that would prevail if Bulgaria were a member of the euro area. This in turn means that inflation differentials between Bulgaria and the euro area have the same effect on the Bulgarian economy as do differentials between individual member states and overall euro area inflation.

Graph 2 compares inflation rates in the euro area with that in Bulgaria. The differential with the higher-inflation euro-using economies is not that large, despite the long road to convergence they have passed over, and which remains ahead for the Bulgarian economy. One must bear in mind that Bulgarian price levels in the year the currency board was launched were some 25% of those in the European Union: see National Statistical Institute (1999).

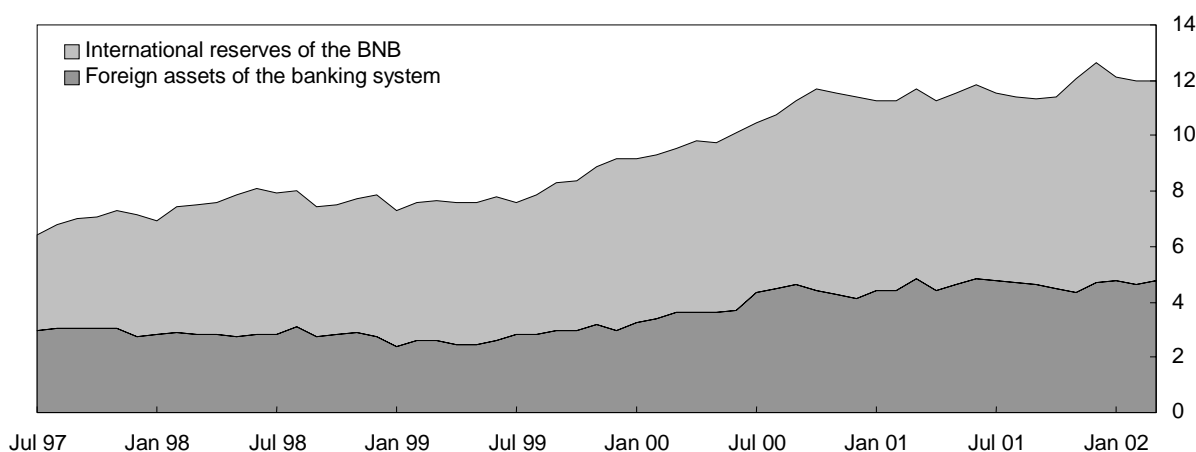
The volume of Bulgaria's international reserves (those of the central bank and those of the banking system) has shown stable growth since the introduction of the currency board, reaching unprecedented levels for the Bulgarian economy (see Graph 3). This often poses the question of whether this is the most effective way of using our resources. Would not investment in domestic assets do more for the Bulgarian economy than accumulating international reserves? International reserves secure four major functions whose benefits for the economy are greater than the lost opportunities to invest in domestic assets:⁴

- Under the existing currency board regime, foreign currency reserves are the nominal anchor determining the supply of bank reserves, banknotes and coins.
- Excess reserves over and above BNB's monetary obligations, including the fiscal reserve, may be viewed as buffers absorbing both external and domestic economic shocks. In this sense international reserves can act as a stabiliser: see Clark (1970).

⁴ For an in-depth discussion on the optimal level of international reserves within an economy, see Flood and Marion (2002) and Lane and Burke (2001).

- Foreign assets are a source of liquidity in foreign currencies, which enable routine government and economic agent transactions.
- International reserves are necessary for the country (the government as well as the private sector), because of the imperfect access of Bulgaria's economy to international capital markets.

Graph 3
International reserves
 In billions of leva



The argument is often voiced that fixed exchange rates, and the concomitant loss of independent monetary policy and flexibility in macroeconomic policy, limit the possibility of using discretionary instruments to cope with external shocks.

The effectiveness of discretionary policies in softening external shocks is highly questionable. Governments should only pursue economic policies that promote sustainable long-term growth, robustness and flexibility. Such policies cannot be influenced by a fixed exchange rate and must take place regardless of central bank monetary policy. They include market and business deregulation and maximum freedom of trade and capital flows.

At the time the currency board was launched, the collapse of confidence in the central bank and its monetary policy pre-empted any possibility of trying alternative strategies to stabilise the economy or to guarantee low inflation.

The limited range of options available in early 1997 is best illustrated by the dynamics of inflation, currency substitution and output growth between 1991 and mid-1997. During this period Bulgaria failed to limit inflation to single digit levels and had the highest and most volatile inflation rates of all accession countries, combined with the lowest average GDP growth rates (see Table 2 above). Moreover, after 1995 there was hyperinflation and falling real GDP, reflecting serious difficulties both in defining the ultimate targets of monetary policy and in its implementation.

The abuse of monetary policy in an attempt to maintain real incomes and employment at an unsustainable level during the period 1991-97 delayed economic reforms. It also undermined confidence in the central bank, above all in its capacity to implement an effective independent monetary policy.

Along with badly formulated goals, the strategy for implementing monetary policy in 1991-97, and the alternatives to a currency board which were subsequently proposed, lacked internal consistency, logic, clarity, and transparency.

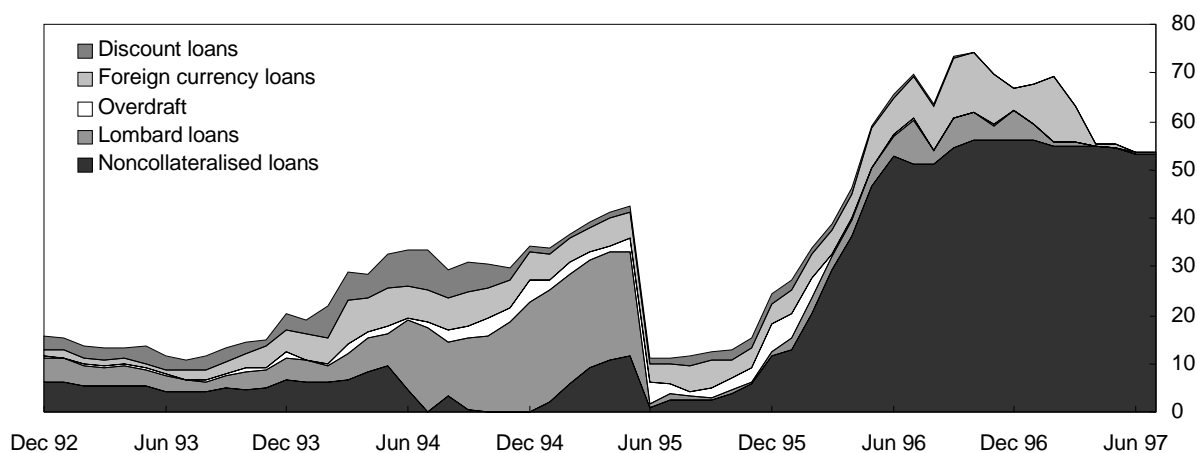
The BNB's policy prior to 1997 was based on:

- managed floating of the exchange rate with no explicit commitment by the central bank to supporting any particular level of the exchange rate - this was inconsistent with achieving price stability;

- an attempt by the central bank to control money supply (initially broad money and, after autumn 1994, reserve money) with no explicit commitment to attaining a certain rate of expansion consistent with the achievement of price stability;
- in contravention of the Law on the BNB, every year between 1991 and 1997 saw direct long-term loans extended to the government (see Table 3 on direct budget financing by the BNB);
- using the lender of last resort function to support insolvent banks.

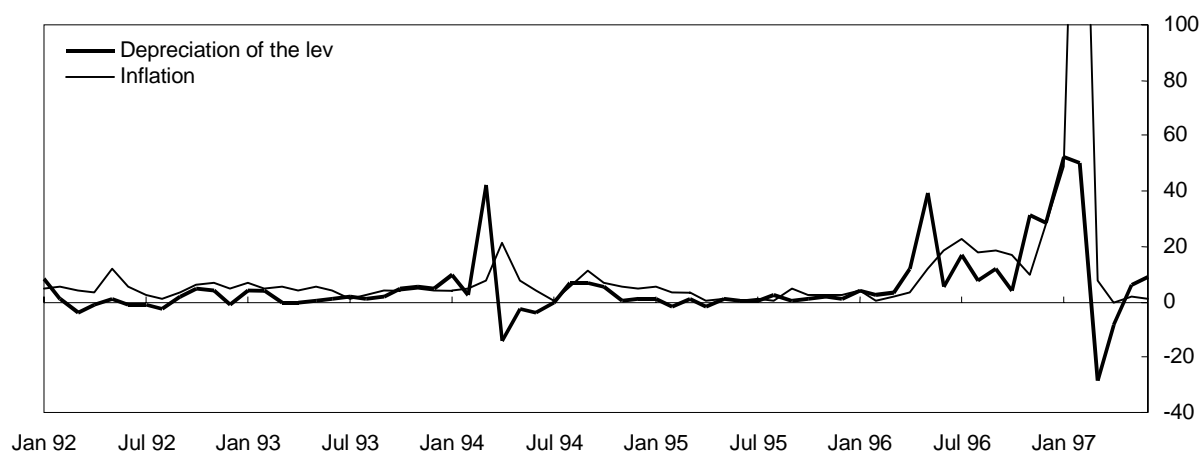
Illegitimate lending to the government was matched by the irresponsible creation of expectations of unconditional support to banks, which were encouraged to take on greater risks (moral hazard). The volumes of last resort financing, the identity of decision-makers, and the conditions and procedures a bank had to fulfil to benefit from the BNB handouts were completely opaque. As if this were not enough, from the start of 1996, almost all lending to commercial banks was uncollateralised (see Graph 4).

Graph 4
Commercial bank refinancing
 In billions of leva



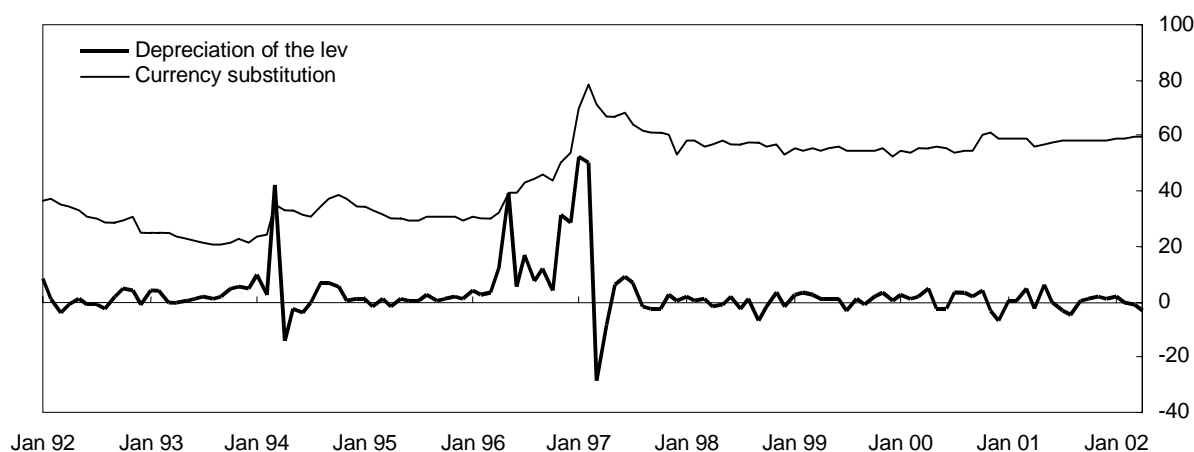
Under these circumstances, economic agents directed their attention to the most transparent and easily monitored variable: the exchange rate. The depreciation of the national currency translated into more expensive imports and inflationary expectations provoking an immediate rise of prices. Inflation rates primarily reflected the expectations raised by the exchange rate dynamics and in turn generated expectations of further depreciation of the exchange rate (see Graph 5).

Graph 5
Exchange rate depreciation and inflation
 In percentages



The large-scale depreciation of the exchange rate led to an irreversible process of currency substitution, further limiting the central bank's ability to control the money supply and inflation (see Graph 6). This process had self-fulfilling dynamics. Exceptionally high interest rates were deployed to try to curb inflation and expectations of further exchange rate depreciation. But the high interest rates were also a signal to economic agents to expect further depreciation of the exchange rate, and an even higher inflation rate. In view of the well known fact that monetary policy works with uncertain and variable lags, the central bank's policy was doomed to transform price instability into financial instability. High nominal interest rates automatically turned many bank loans into non-performing loans. The effect was a never-ending and spiralling demand for support through unsecured central bank refinancing, and a growing danger to the solvency of the entire banking system.

Graph 6
Exchange rate depreciation and currency substitution
 In percentages



Note: The level of currency substitution is measured as the ratio of foreign currency deposits to total bank deposits.

By giving the responsibility for achieving this ultimate goal to a legally and de facto independent central bank, the currency board provides the price and financial stability needed by the Bulgarian economy. It is the best possible monetary policy for the country given the circumstances.

3. Coordination of monetary and fiscal policy

Macroeconomic policy under existing conditions requires coordination and consistency between its major components - monetary and fiscal policy. We define fiscal policy as a long-term strategy for managing public revenue and expenditure and maintaining sustainable levels of government debt.

Interaction between monetary and fiscal policy

The core of monetary policy is managing the government debt issued to finance the budget deficit.⁵ The inability of the central bank to control the size of the portfolio of government debts that it must manage constrains monetary policy. The fiscal authorities, those who set tax rates and government expenditure, determine the size of the debt portfolio: see Sargent (1999).

⁵ According to the general definition, government debt includes both securities issued to finance the budget deficit, and banknotes and reserves issued by the central bank, as they are government obligations to the holders of these instruments.

The central bank's capacity to pursue efficient monetary policy (attaining price stability) is seriously limited where there are huge budget deficits requiring government debt monetisation. The legal independence of the central bank does not therefore per se guarantee that monetary policy will be independent of government.

In practice, the fact that the central bank holds securities (acquired through open market operations) issued by the government is an element of government debt portfolio management, whereby interest bearing government debt (government securities) is swapped for non-interest bearing government debt (banknotes and bank reserves). The introduction of a currency board is in effect a clear statement by the government that it will not finance its expenditure by credit from the central bank. It follows that the stability of the currency board largely depends on the government's ability to control its deficit and debt. Where the government has no access to market funds to finance its deficits, it will resort to issuing non-interest bearing debt and the use of seigniorage, undermining the principles of the currency board. Such considerations show clearly how interdependent are fiscal and monetary policy, and the importance of prudent fiscal policy to sustaining the currency board.

The interaction between fiscal and monetary policy does not allow for their explicit separation.⁶ The credibility of both monetary and fiscal policy is equally important and requires consistent actions over time, a long-term orientation, and a high degree of coordination. The currency board may in this context be considered an explicit commitment to low budget deficits and sustainable government debt levels. Tight fiscal policy coupled with a high degree of government transparency helps to strengthen overall economic confidence.

Table 3 displays deficit financing of the consolidated state budget since the beginning of the transition. During 1991-96 budget deficits averaged almost 7% of GDP, mostly financed by direct central bank lending. This had a strong inflationary effect and seriously impeded the fulfilment of monetary policy goals. After 1997, fiscal policy was oriented towards low budget deficits of around 1% of GDP. In practice, BNB financing reported in the budget represented tranches received under IMF agreements. The mechanism employed to utilise IMF credits was insufficiently transparent with respect to budget deficit financing, and violated the principles of modern central bank operation. IMF tranches ought to have been remitted directly to the Ministry of Finance, and reported as external financing.

Table 3
Budget deficit financing
As a percentage to GDP

	Average 1991-96	1997	1998	1999	2000	2001	2002e	Average 1997- 2002
Budget balance financed from:	-6.9	-2.9	1.0	-0.9	-1.0	-0.9	-0.8	-0.9
Foreign sources	-1.4	0.0	-0.6	1.2	-1.5	-0.3	-1.2	-0.4
Domestic sources, of which:	8.3	2.9	-0.4	-0.3	1.2	0.6	0.2	0.7
<i>Government securities</i>	6.6	3.2	-1.1	-1.3	-1.1	-0.3	0.3	-0.1
<i>BNB - net¹</i>	3.2	3.0	0.8	1.3	1.1	-1.2	-0.5	0.8
<i>Privatisation</i>	0.0	3.1	1.6	2.2	1.3	0.6	1.8	1.8
<i>Other</i>	-1.5	-6.4	-1.7	-2.5	-0.1	1.5	-1.4	-1.8

¹ After 1997, includes loans received under IMF agreements.

Source: Ministry of Finance.

⁶ For details on the interaction between monetary and fiscal policies both in implementing general economic objectives and in establishing institutional and operational procedures, see Laurens and de la Piedra (1998).

The currency board and the fallacy of constrained fiscal policy

A currency board, with its tight constraints on spending, is often seen as limiting governments' freedom of manoeuvre. In contrast, in Bulgaria, the arrangement has in practice afforded the government greater flexibility by increasing rather than diminishing its disposable income (after adjustment for interest payments). There have been adequate funds to support sustained spending on economic and social programmes from 1997 onwards (see Table 4).

Table 4
Government disposable income

	Average 1991-96	1997	1998	1999	2000	2001	2002e	Average 1997- 2002
Budget balance ¹	-6.9	-2.9	1.0	-0.9	-1.0	-0.9	-0.8	-0.9
Revenues ¹	38.7	32.2	39.8	40.7	41.4	40.0	40.5	39.1
Expenditures ¹	45.6	35.1	38.8	41.6	42.4	40.8	41.3	40.0
Interest payments ¹	11.6	8.3	4.3	3.8	4.0	3.7	3.3	4.6
Interest payments ²	25.7	23.7	11.0	9.1	9.6	9.1	7.9	11.7
Expenditures less interest ¹	34.0	26.8	34.5	37.8	38.4	37.1	38.0	35.4
Real GDP ³	-4.6	-6.9	3.5	2.4	5.8	4.0	4.5	2.2

¹ As a percentage to GDP. ² As a percentage of total expenditure. ³ Annual percentage change.

Source: Ministry of Finance.

The currency board contributed helped raise government disposable income in the following ways:

- Interest payments fell due to lower and stable interest rates. Interest payments declined from an average of 26% of total expenditure between 1991 and 1996 to 12% after 1997.
- The tax base grew as a result of relatively high and sustainable economic growth after 1997.
- The share of GDP redistributed by the government increased.⁷ Between 1991 and 1997 government revenue averaged 38.7% of GDP. After 1997 it averaged 39.1%, with a progressive increase in GDP.⁸ Expenditure adjusted for interest payments averaged 34.0% of GDP prior to 1997 and 35.4% after the introduction of the currency board.

Low budget deficits and negative net financing release funds for banks to lend to the private sector. After 1997 a reverse crowding-out effect occurred as a result of reduced credit to government and increased credit to the private sector. Changes to fiscal policy after the introduction of the currency board have had an impact on the dynamics and structure of government debt. The level of debt in

⁷ The authors defend the position that the huge GDP share, which is collected and redistributed by the government, is a positive economic indicator. According to this position the currency board does not limit the government's opportunities to implement its economic and social policies. The issue concerning the amount of income to be collected and redistributed by the government is a subject pending wider public discussion.

⁸ This is likely to reflect also the impact of improved tax collection following the introduction of a currency board. There is no immutable quantitative indicator on tax collection. The indicator used measures the proportion of relative income to projected budget income, and is unreliable due to its tendency to underestimate projected tax revenue. This in turn helps reduce the risk of a higher than projected deficit and increases government discretion within the framework of the budget approved by parliament. Moreover, in case of higher than projected inflation within the budget framework, tax collection automatically increases. Any government tends to project a lower inflation rate, which results in higher nominal income. This gives it greater discretion than actually approved by parliament. This practice ought to end, with budget framework forecasts being more transparent. Furthermore, the government (the Ministry of Finance) should publish and explain the forecast model of macroeconomic indicators used in designing Bulgaria's budget.

absolute and relative terms should be considered in the context of structural changes to the economy and the potential for medium- and long-term debt servicing. The level of sustainable debt is specific, and does not establish a rule that can be applied to other economies operating under different conditions. The level of sustainable debt is impacted by credit history, fiscal sector discipline, and the interdependence of real growth, the budget deficit, and debt payments.⁹ Prior to 1997 the ratios of both foreign and domestic debt to GDP were extremely high and volatile (see Table 5). The high inflation rate prompted devaluation of domestic debt. However, given the strong interdependence between inflation and the exchange rate, combined with a worsening debt structure, the rapid devaluation of domestic debt was offset by the progressive increase in foreign debt.

Table 5
Government debt

	Average 1991-96	1997	1998	1999	2000	2001	2002e
Domestic debt (millions of leva)		2,781	3,102	2,963	1,767	1,861	2,066
<i>Domestic debt as % to GDP</i>	37	16	14	12	7	6	6
Foreign debt (millions of US dollars)		8,744	9,284	9,070	8,970	8,513	8,500
Foreign debt (millions of leva)		15,534	15,551	17,658	18,854	18,892	17,850
<i>Foreign debt as % to GDP</i>	141	89	69	74	70	64	54
Total debt		18,314	18,653	20,622	20,621	20,752	19,916
<i>Total debt as % to GDP</i>	178	105	83	87	77	70	60

Source: Ministry of Finance.

Following the introduction of a currency board the situation changed radically, allowing greater government flexibility. While the debt/GDP ratio gradually decreased, the implementation of a consistent macroeconomic policy helped Bulgaria regain access to international credit markets despite its poor credit history since the early 1990s.¹⁰

Fiscal discipline is not self-generating and is logically associated with the need to improve budgetary procedures. To this end, the number of extra-budgetary funds was reduced from over 1,000 in 1998 to 10 in 2002, and budget entities from approximately 130 in 1997 to less than 30 in 2001. Establishment of a single budget account with the BNB, including budget and extra-budgetary funds, helped improve liquidity management and control. Accumulated fiscal reserves, an indicator of the government's ability to cover its debt payments, could be used in case of emergency (higher than expected expenditure associated with structural reform, interest payments and reduced foreign financing).

The currency board, which entailed restraining public expenditures, was introduced at a time of worsening demographics (a rapidly ageing population). It meant changes needed to be made in the socially sensitive pension and health insurance sectors.

Despite the clear progress made in Bulgaria's public finances, we believe reforms should continue. Low fiscal deficits depend on reduced expenditure, with social expenditure concentrated on what is urgent. Medium- and long-term goals are often neglected. Fiscal policy focuses mainly on taxes, with expected income used as a tight constraint on expenditure. The measures deployed are too conservative and only aimed at stabilising the position. The lack of a clearly defined long-term strategy on public expenditure remains a potential source of fiscal risk.

⁹ See Mussa (2002) for a discussion on the amount and dynamics of Argentina's government debt and the role of this indicator in the collapse of the Argentine currency board.

¹⁰ Bulgaria's poor credit history dates back to the beginning of the 20th century.

4. The currency board, foreign trade and the balance of payments

The central bank's monetary policy strategy has relatively little effect on a country's balance of payments. Other policies and factors determine economic competitiveness, the level of exports and the ability to attract capital. Price stability can only indirectly support economic competitiveness.

The relationship between monetary policy, foreign trade and balance of payments dynamics is determined by exchange rate policy. Generally, a floating exchange rate, which provides greater flexibility vis-à-vis external shocks, is the most appropriate regime to reduce foreign trade volatility. However, it does not necessarily create trade and does not affect long-term trends in foreign trade.¹¹

Although fixed exchange rates do not provide the flexibility inherent in floating ones, they do boost international trade, facilitating the exchange of goods and services by lowering transaction costs: see Rose (2000), Glick and Rose (2002) and Box A on page 6 of this volume. In other words, a fixed exchange rate may have a positive long-term effect on the volume of foreign trade, creating trade between countries with fixed exchange rates.

Quite often, however, fixed exchange rates lead to continuous overvaluation of the real exchange rate,¹² in certain cases affecting export competitiveness,¹³ shifting the effect of trade creation to the import of goods and services. This is one of the factors affecting a country's trade balance deficit, along with the need to attract foreign capital and import investment goods due to low capitalisation and technological backwardness.

The Bulgarian balance of payments since the introduction of the currency board has been characterised by deficits of trade and current accounts and surpluses of services and current transfers. But it is too mechanical, and rather superficial, to suggest that a fixed exchange rate automatically leads to lower export competitiveness and permanent deficits. The following economic factors need to be considered if the dynamics of the Bulgarian balance of payments are to be understood:

- After 1997, Bulgaria liberalised capital movement and integrated itself into global financial markets. This considerably increased its ability to attract capital and finance its current account deficits.
- Privatisation on an unprecedented scale in the same period helped attract foreign capital and paved the way for further capital inflow in the medium and long run.
- The decade of transition to a market economy in Bulgaria was accompanied by the export of human capital: a source of constantly increasing flow of current transfers.¹⁴

The reducing proportion of industry in the economy and increasing proportion of services has led to an ever stronger role for exports of services. Analyses of foreign trade are often based on an old-fashioned, mercantilist view that trade in goods should be in surplus for the country to benefit from it. The following major trends in foreign trade over the last five years merit special attention:

- The fixed exchange rate has had an impact on the geographic structure of foreign trade, shifting trade flows to EU and central European countries at the expense of the CIS. There is potential for further growth in trade with the European Union after the full lifting of customs and tariff constraints (the average-weighted customs rate on imports fell to 7% in 2001 from 8.5% in 2000; the forecast for the average-weighted customs rate for 2002 is for a further fall

¹¹ Theoretically, there could be a special case in which continuous devaluation of the national currency could ensure competitive benefits for the country without affecting producer prices and export prices. In practice, this would last for a very short period, and in the medium- and long-term the continuous devaluation would lower foreign trade and worsen the balance of payments.

¹² Hanke (2002) takes the view that overvaluation of the real exchange rate is impossible under a currency board, ie if the exchange rate of a currency were irreversibly fixed, the only real exchange rate is the fixed exchange rate.

¹³ Usually real exchange rates are evaluated through purchasing power parity (PPP) but this is not the best way to measure the deviation of the real exchange rate from its equilibrium level. For descriptions of the shortcomings of PPP as a measure of the real exchange rate and competitiveness of the economy, see Rogoff (1996).

¹⁴ Here we do not aim to examine the overall effect on the economy in the short and long run from the export of human capital. We focus only on the effect of this process on the balance of payments.

to 6.5%). Accession of central European countries to the European Union will expand the market, potentially increasing demand for Bulgarian goods.

- The change in the geography of trade led to a change in its currency composition. The fixed exchange rate reduced currency risk and transaction costs through the shifting of invoicing and payments from US dollars into euros (see Table 6). The potential of this trend is limited by the fact that most raw materials, metals and chemicals are traded on international markets in US dollars.
- The product structure of foreign trade has changed. Economic stability, along with economic growth and improved investment, has increased the share of investment goods in imports. In the medium to long term, this creates the potential for growth in Bulgaria's export capacity.¹⁵ The share of energy commodities declined as a result of improved energy efficiency and the decreasing shares of processing and heavy industries. Growth of disposable income and easier access to consumer credit after 1997 boosted demand for consumer goods, leading to a rise in their share of imports.¹⁶

Table 6
Currency structure of foreign trade
In percentages

	Exports				Imports			
	1998	1999	2000	2002	1998	1999	2000	2002
US dollar	66	60	60	44	54	49	50	37
Euro	31	37	37	53	42	47	47	60
Other	3	3	3	3	4	4	3	3

Over the period 1995-2002, a persistent trade deficit emerged as a result of the continuous growth in imports of investment and consumer goods. It was counterbalanced to a great extent by the surplus in services and current transfers. After 1997 there has been a substantial increase of investment in the economy. The annual rate of increase of the trade deficit after 1997 has been largely determined by the rate of increase in imports of investment goods. As capital accumulation grows, its marginal return will decline, leading to a fall in the rate of investment and fewer imported investment goods while higher investment levels and capital accumulation will increase Bulgaria's export potential.

An argument in support of the thesis of balance of payments risk is that the current account deficit is financed mainly through privatisation revenue. It follows that once the privatisation potential is depleted, the country would not attract the same amount of foreign investment.¹⁷ This would be the point at which a balance of payments crisis would ensue. But careful analysis of the volume and structure of foreign direct investments shows that after 1997 Bulgaria has attracted sizeable direct investments, predominantly from non-privatisation transactions.

¹⁵ Undoubtedly, this effect depends largely on whether investment goods are used for manufacturing of tradables or non-tradables. In fact, we do not know to which sectors of the economy imported investment goods are channelled. Thus we cannot estimate how export potential grows as a result of higher imports of these goods. Explicitly we assume that investment goods are channelled into tradables manufacturing, given the relatively small domestic market. For a review of the relationship between imported investment goods and export competitiveness, see Mody and Yilmaz (2002).

¹⁶ From early 2001 until the first quarter of 2002 the growth rates of imported consumer goods and consumer credit were almost perfectly correlated. Certainly, this is not a guarantee of causality between households' credit and consumer goods imports. A small cointegration model with error correction for imported consumer goods for the period after 1997 shows that credit to households is a significant explanator for the growth rates of imported consumer goods.

¹⁷ For a description of the factors that determine the movement of capital to transitional economies, see Garibaldi et al (2001).

But when privatisation was halted by the political cycle in 2001, Bulgaria managed to draw the same volume of non-privatisation direct investment despite the political uncertainty. This proves the ability of the economy to attract foreign capital to finance its growing investment needs.

The increase in foreign direct investment will be decisive for balance of payments stability in the medium term. In 1999 Bulgaria managed to achieve (and retain during the next two years) a relatively high level of non-privatisation direct investment: an annual average of \$640 million. However, the growth rate has slowed, which, given sustained investment growth, could pose a genuine risk to balance of payments stability.

Our view is that government policy should not try to stimulate exports through various government programmes, but rather to create the right conditions for direct investment. Such investment will above all be attracted by low and stable tax rates, an efficient administration and judiciary, and a well educated and diligent workforce.¹⁸

Another significant positive effect of foreign direct investment is that it becomes an instrument of a new corporate culture, bringing knowledge and management expertise and a faster transfer of technology to Bulgaria. It is possible that this invisible effect of direct investment is much more important for long-term growth than the visible effect reflected in the balance of payments statistics.

5. The economy and banking system

Many factors determine the structure of the economy and income growth rates. Monetary policy has only an indirect effect through price stability and low real interest rates. Sustainable positive economic growth emerged after 1997 by contrast with the period before. Although the structure of the economy changes relatively slowly, there are clear trends of a decline in agriculture and a growth in services.

A major problem associated with changes in the Bulgarian and global economies was unemployment. In our view, government has no choice but to withdraw faster from economic decision-making. The example of liberal economies with their flexible institutions and efficient markets over the past 20 years has illustrated the speed at which society creates jobs provided that flexible institutions and efficient markets are created (creative job destruction): see Greenspan (1999).

The role of the financial sector and its structure in achieving steady economic growth is indisputable: see Levine (1997). As early as 1911, Joseph Schumpeter advanced arguments based on the hypothesis of the key significance of services related to “mobilisation of savings, evaluation of investment projects, risk management, monitoring management behaviour and facilitating transactions as underlying for technological innovations and generation of economic growth”.

The central bank could underpin the process of establishing an efficient financial infrastructure by:

- maintaining low and stable inflation, resulting in positive real interest rates;
- deregulating financial markets and financial intermediaries;
- encouraging legislation that motivates those who obey the rules and sanctioning those who do not; and
- helping to create conditions for comprehensive monitoring between financial intermediaries and their customers: using market discipline as an efficient sanction.

What has the BNB achieved in this respect since the currency board was introduced in 1997?

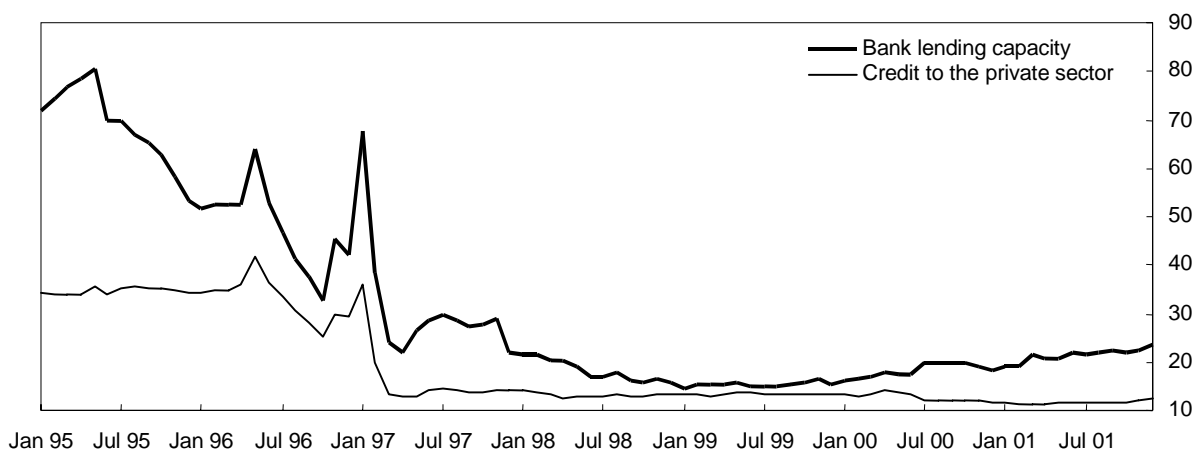
- The BNB has shared in the success of bank privatisation, which has driven the restructuring of the financial sector. Banks of good international reputation currently manage over 85% of the banking system's assets.

¹⁸ A telling example of the inefficiency of programmes to boost exports is D. Cavallo's efforts in 2001 to encourage Argentine exports by applying his “competitiveness plan” which included the introduction of a preferential exchange rate for exporters.

- The BNB has made a significant contribution to capital movement deregulation. The private sector gained access to international money and capital markets.
- The BNB has established modern banking supervision and gained an international reputation for effective banking sector regulation.¹⁹

There are currently 34 banks operating in Bulgaria whose assets are equivalent to 45% of GDP. Analysis of the historical levels of this indicator and comparison with other countries is possible but should be cautiously assessed in light of Bulgaria's financial history and the recent restructuring of banks. The indicator cannot be compared directly with pre-1997 data. The dramatic fall in credit to the private sector in the period following the early 1997 financial crisis reflects to a great extent the lower lending capacity of the banking system (see Graph 7). Commercial banks' lending capacity is defined as the total amount of banking system liabilities (plus retained profit) less minimum required reserves, notes and coins in commercial banks' vaults and equity.

Graph 7
Banking system lending capacity and credit
 As a percentage of GDP



After the introduction of the currency board, commercial banks' lending capacity grew slowly, in line with the foreign currency composition of deposits and movements in the dollar/euro exchange rate. Bank lending to the private sector grew steadily, matching the economy's growth rates and close to the growth rates of lending capacity.

The interest spread between credits and deposits is a traditional measure of efficient bank mediation. High values may indicate inefficiency caused by high operating expenses, weak competition, high non-earning minimum required reserves, and stringent provisioning rules. Since 1999, the spread has gradually narrowed; see Graph 8.

Another trend evolving in the banking system is the change in the asset structure of commercial banks (see Graph 9). Credit to the government has halved, freeing funds for lending to households and companies. Credit to private enterprises grew by 46% in 1999, 40% in 2000, 25% in 2001 and 43% in 2002. The share of credit to public enterprises fell dramatically due to privatisation and the lower share of public enterprises in GDP. The introduction of the currency board gave households access to the

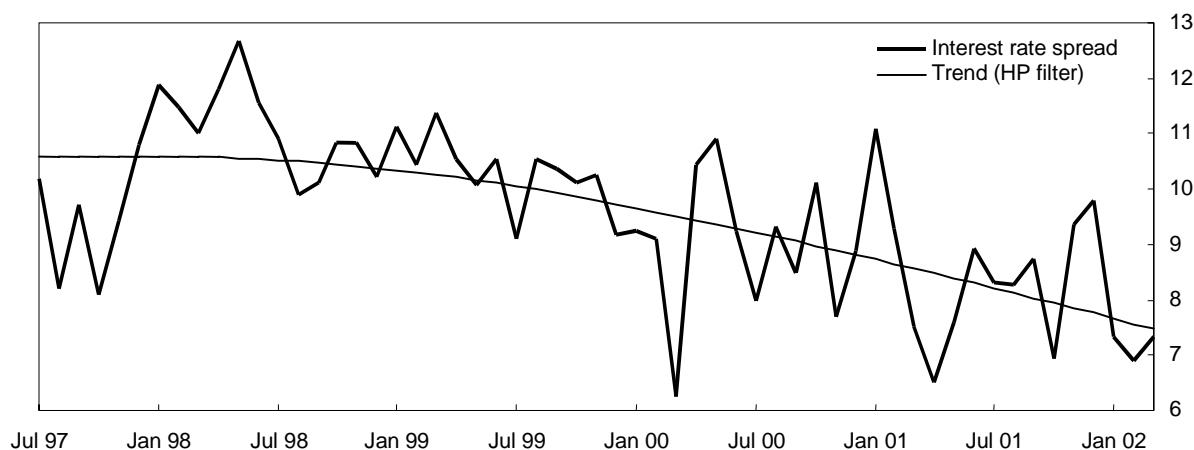
¹⁹ Additional changes in the structure and organisation of the central bank are needed to prepare for the successful incorporation into the European System of Central Banks. There are too many hierarchical levels and a number of divisions with overlapping functions. This leads to low efficiency and poor quality of work, posing additional risks to the institution. The preparation for euro area accession requires profound changes in the central bank's fiscal agent functions, reserve management strategy, transaction procedures with commercial banks and measures to achieve greater convergence of Bulgaria's money and capital markets with those in the euro area.

credit market, and credit to households grew from nothing in mid-1997 to 1.25 billion leva by end-2002.

The share of foreign assets in commercial banks' assets has grown considerably. This was made possible after liberalisation of the rules governing the financial account of the balance of payments and the lifting of restrictions on open currency positions between the lev and the euro.

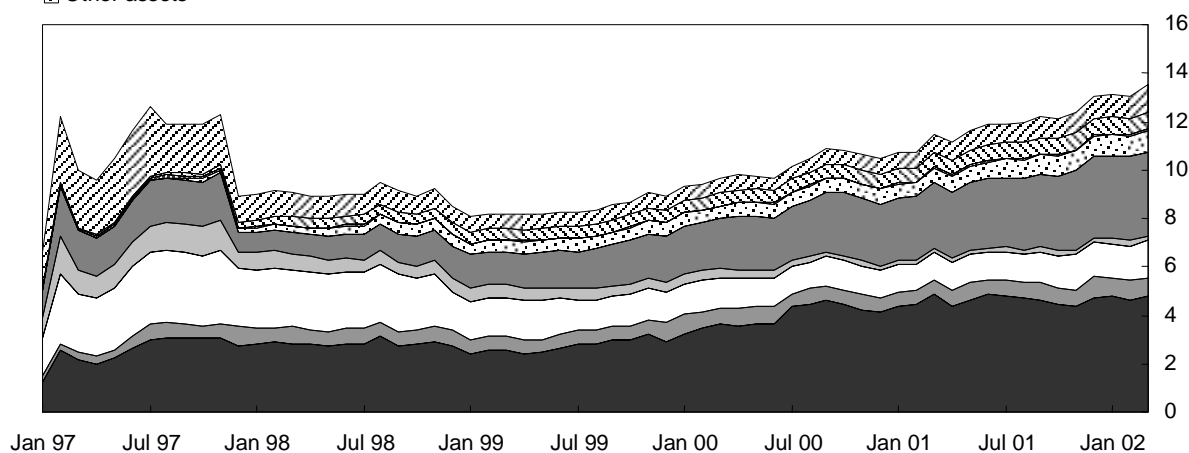
Generally, the high share of foreign assets (38% on average during 2001) is viewed as indicating the banking system's inability to identify profitable investment projects.

Graph 8
Interest rate spread
 In percentages



Graph 9
Commercial bank assets
 In billions of leva

- Foreign assets
- Claims on general government
- Claims on private enterprises
- ▨ Claims on non-bank financial institutions
- ▩ Other assets
- Reserves
- Claims on non-financial public enterprises
- ▨ Claims on households
- ▩ Fixed assets



6. Challenges and recommendations

The currency board helped to promote the price and financial stability the Bulgarian economy needed. In this conclusion, without being exhaustive, some medium-term challenges confronting Bulgarian monetary policy are covered.

Fiscal policy and the central bank

The currency board arrangement requires greater attention to fiscal policy, since the latter must be able to adjust to shocks. This entails precise assessment of risks in its implementation.²⁰ The basis of overall fiscal strategy is implementation and observance of the government budget. Progress has been made, but more is needed.

- Schiller et al (2000) highlight the need to reform the procedure for setting budgets, which remains inefficient. There are overlapping budget lines, and it remains possible to impose changes even after the National Assembly has adopted the budget. The legal framework also appears clumsy and unstable, with an inadequate time frame for implementation to be effective or consistent.
- The budget preparation stage should be adapted to modern budget programming and the relevant ministers properly involved in strategic decision-making.

The budget process does not exhaust the issues confronting fiscal policy. Problems stem from defining the size of government obligations and their dynamics.²¹ Contingent and implicit medium- and long-term fiscal obligations are often neglected.

- The municipalities, which play a key role in the provision of public services in Bulgaria, should not be allowed to default. Given growing social inequality, generally poor management and planning skills or experience, and the inadequate infrastructure (roads and communication, public utilities) there is a serious danger of a spiralling growth in public debt if fiscal policy is decentralised. It is the right strategy only if the functions and responsibilities of municipal and central government budgets are clearly defined.
- Overdue obligations to or by public enterprises could be a source of a quasi-fiscal deficit.²² Obligations to big monopolies (electricity, telecommunications and gas) are also generated by underprivileged groups, raising doubts about whether they will be settled.
- Over the long term, pension and health insurance reform has profound social implications and entails implicit guarantees by the government, which would burden the budget in case of worsening demographics and/or planning mistakes.

Centralisation of government funds at the central bank through the Single Account improves their management and control by the Ministry of Finance. However, there is no clear management strategy linked to well defined government debt management. The target of the government to maintain a fiscal reserve within the central bank equal to annual payments on foreign debt creates unwelcome possibilities for the Ministry of Finance to use these funds to affect monetary conditions in the economy.²³ The design of the Single Account provides an overdraft facility for the government. Admittedly it has never been used. But the right to such an overdraft contravenes sound central banking principles, and we recommend that the government's technical right to central bank finance should be abolished.

²⁰ For a theoretical basis of the assessment of fiscal policy and major risks see Polackova (1998), Hemming and Petrie (2000) and Chalk and Hemming (2000). The budgeting process is reviewed in Schiller et al (2000).

²¹ See Brixi et al (2000) for an assessment of major fiscal risks for Bulgaria.

²² In the new agreement with the IMF, indicative limits of overdue tax and social security obligations are defined for a list of enterprises, their total amount coming to 683 million leva as of end-2001, with a fall of at least 120 million leva projected for 2002.

²³ See Miller (1999) for an in-depth discussion of the positive and negative effects of the presence of government accounts within the central bank.

Central bank credits to the government create uncertainty in the relationship between government and the central bank, constraining the latter's independence. Lending to the government by the central bank is inconsistent with the principles of the Economic and Monetary Union, which requires the abolition of this practice.

The current account

The current account deficit will exist until the economy achieves an optimum level of capital accumulation. In the medium term, balance of payments sustainability will be determined by the growth of foreign direct investment. A slowdown in FDI growth rates, rather than trade balance dynamics, could pose a risk for the sustainability of the balance of payments. The government's priority should be to create an environment for attracting foreign investment rather than to stimulate exports through different government programmes. As noted above, the most effective way of doing this is through tax policy, an efficient administration and legal system, and good-quality human capital.

The banking sector

The significant share of foreign assets in commercial banks' balance sheets reflects a low-risk policy on the part of banks investing in domestic assets. In the medium term, the rapid rate of conversion of banks' foreign assets into domestic ones may increase the risks to national financial stability and monetary policy. It could prompt a rise in loan defaults and inflationary pressure as a result of more credit being raised and increased demand for goods and services.

EU accession

Bulgaria's accession to the European Union and hence participation in Economic and Monetary Union requires a number of strategic, legislative, and functional decisions by the central bank, the government and the National Assembly.

First, we believe that Bulgaria should make a strategic choice as to the exchange rate regime and monetary policy to apply during the transition period following the accession to the European Union but prior to full participation in the monetary union. Since unilateral euroisation is politically unacceptable to both the European Central Bank and the European Commission, the currency board is the best alternative compatible with ERM 2. To devise an alternative monetary strategy may be feasible, but not recommended. There is no reason to tamper with success. It could jeopardise trust in the currency board. The merits of any alternative to the currency board are unclear and uncertain. For example, the introduction of a pegged exchange rate fluctuating within a wide range (15%) would incur a number of potential risks for Bulgaria's financial and price stability.

Second, during the negotiations, Bulgaria committed to initiate changes intended to increase central bank autonomy. These changes concern the central bank's management and budgetary independence as well as its relationships with the Ministry of Finance, and require amendments to the Law on the BNB.

Third, rapid and continuous change, both globally and specifically in European politics, economics and finance, will unavoidably lead to the reform of even such pivotal institutions as the European Commission and the European System of Central Banks. To implement a successful monetary policy, the central bank must therefore be sufficiently flexible and ready to react effectively to such changes.

Conclusion

This paper's analysis of Bulgaria's monetary policy, together with our concluding recommendations, are shaped by practical experience of the Bulgarian economy during the five years since the currency board was introduced, as well as by our personal convictions.

Other conclusions are evidently possible; there are other understandings of the world and of the economy. But this paper is not an academic discussion of the relative merits or truth of different points of view. It is severely practical, and based on experience. And our conclusion is unambiguous: we are firmly convinced that Bulgaria's current monetary policy should be continued until such time as the country is a member of the European Union and integrated into the euro area.

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