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Shadowing the Euro: Bulgaria's Monetary Policy Five Years on

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SUMMARY. BULGARIA'S ECONOMIC PROGRESS IN RECENT YEARS IS REGARDED AS DETERMINED BY THE CURRENCY BOARD REGIME INTRODUCED IN 1997. BASED ON EXPERIENCE OF THE LAST FIVE YEARS THIS PAPER TRIES TO WEIGH UP THE TRUTH OF THAT ASSUMPTION.

IT IS SHOWN THAT CURRENCY BOARD ENSURED THE PRICE AND FINANCIAL STABILITY THE BULGARIAN ECONOMY NEEDED AS A PRECONDITION FOR STABLE AND SUSTAINABLE ECONOMIC GROWTH. 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. THE FISCAL POLICY WAS ORIENTED TOWARD LOW BUDGET DEFICIT. THIS POLICY HAD IN PRACTICE AFFORDED THE GOVERNMENT GREATER FLEXIBILITY BY INCREASING ITS DISPOSABLE INCOME DUE TO REDUCED INTEREST PAYMENTS AND GROWING TAX BASE AS A RESULT OF HIGH ECONOMIC GROWTH. THE FIXED EXCHANGE RATE HAD A POSITIVE EFFECT ON THE VOLUME OF FOREIGN TRADE. PERSISTED CURRENT ACCOUNT DEFICIT, CREATED MAINLY BY IMPORT OF INVESTMENT GOODS, WAS FINANCED BY STABLE INFLOWS OF FOREIGN DIRECT INVESTMENT. REFORMED AND MODERNIZED BANKING SYSTEM PROVIDED SOLID GROUND FOR ROBUST ECONOMIC GROWTH.

SINCE IN THE CHANGING WORLD NO REFORM PROGRAM CAN BE COMPLETE, THE LAST PART OF THE PAPER EXAMINES THE MEDIUM-TERM CHALLENGES TO BULGARIAN CURRENCY BOARD.

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I. 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 the truth of that assumption.

The figures 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 Deutschmark's successor, the euro.

The text is structured as follows: Part II expresses a realistic view of the role of monetary policy illustrated with an analysis of the past five years, and a summary of results. Part III analyzes the link between monetary and fiscal policy by outlining changes in the latter after the launch of the currency board, and its increased effectiveness. Part IV 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. Part V looks at the dynamics of economic activity and the changes in the structure of value added over the last five years. Part VI analyzes the changes in the banking system during the last five years. In conclusion, we outline some of the challenges facing the Bulgarian currency board in the medium term.

II. The Role of Monetary Policy

A Realistic View[1]

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 monetary policy in national economic development, were both seen in a new light. Macroeconomic policy during the 90's changed significantly, both in theory and in practice. A consensus emerged that the basic goal of macroeconomic policy was to ensure a nominal anchor for controlling inflation and inflationary expectations, in order to support overall economic stability and to create a favorable environment for sustainable long-term growth and wealth cre-

[1] We use Lars Svensson's definition of 'a realistic view' of monetary policy. For details, see *Svensson, L.* (2001).

ation.[2] It follows that the broad thrust of monetary policy must, at least to some degree, coincide with economic policy *tout court*.

It was long believed that central banks' monetary policy could influence long-term trends in employment, output, and inflation. In other words, that 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 of several monetary policy goals at once, some of them at odds with one another, does not work. A better approach is to limit monetary policy to achieving price stability within various institutional frameworks.

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.
- Severely negative overall effect on investment, a determinant of long-term growth.

The social consequences are equally serious. To protect himself from high inflation an individual needs the kind of specialized knowledge which is unavailable to the lowest income groups. Moreover, high inflation leads to massive and politically unsanctioned redistribution of wealth. And for the individual, high and variable inflation hampers household as much as commercial planning.

Table 2.1 confirms the validity of the above arguments for the Bulgarian economy in the period 1991–2000. High inflation was accompanied by significant skewing of motivators, leading to savings being channelled into high-risk speculative projects, shortage of investment in the economy, low economic growth, high inflationary tax, and the involvement of the banking system in highly risky operations.

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.

[2] For an in-depth presentation of the consensus on the new economic policy principles formed in the 90s, see *Allsopp, C. and D. Vines* (2000).

Table 2.1

THE NEGATIVE EFFECTS OF INFLATION

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Inflation rate (%)	473.9	79.5	63.8	122.0	32.7	311.6	547.7	1.6	6.9	11.3	4.8
GDP growth (%)	-11.7	-7.3	-1.5	1.8	2.1	-10.9	-6.9	3.5	2.4	5.8	4.0
Investment (share of GDP, %)	18.2	16.2	13.0	13.8	15.3	13.5	11.0	13.0	15.1	15.7	17.7
Inflationary tax rate (%)*	82.6	44.3	39.0	54.9	24.6	75.7	84.6	1.6	6.5	10.1	4.6
Inflationary tax (share of GDP, %)	12.2	6.6	4.0	5.3	1.8	10.6	10.5	0.2	0.7	1.1	0.6
Interest rate**	n.a.	n.a.	n.a.	n.a.	79.8	300.2	209.8	14.1	13.5	12.2	11.7
Interest rate variation***	n.a.	n.a.	n.a.	n.a.	29.5	337.8	276.9	0.6	0.7	1.2	1.3
Net exchange rate gain (share of banks' pre-tax results, %)	n.a.	n.a.	142.9	236.8	35.7	11.8	316	-8.9	9.9	7.9	11.8

* Inflationary tax rate is defined as ITR = [CPI inflation/(100+CPI inflation)]*100, being a measure of inflation tax on monetary balances held by economic agents. This tax rate may vary between 0% and 100%. For detailed presentation, see *P. Masson, M. Savastano and S. Sharma* (1997).

** Mean annual short-term lending rate.

*** Volatility is measured by standard deviation.

Source: BNB and NSI.

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 unwavering maintenance of a fixed BGN/EUR exchange rate, Bulgaria's monetary policy strategy has for five years been based on:

- Central bank managing board 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.
- Active encouragement of constant monitoring by economic agents. Policy makers held responsible for their actions through citizens' ability to freely exchange national for reserve currency.
- Clear and transparent mechanisms for the bank to perform the function of a 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 needed so badly, and stabilized 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 Chart 2.1).

Over the 1998–2001 period, inflation and GDP growth rates were comparable with those of other Central and Eastern European countries (see Table 2.2).

But, despite the currency board, actual inflation in Bulgaria remains higher than that within the countries belonging to the 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 amid the public but risk causing significant and protracted differentials between Bulgarian inflation and that within the eurozone (see Chart 2.2).

[3] In practice, the Bulgarian National Bank's (BNB) main goal was defined in the same way both in the 1991, and the 1997 central bank law.

Chart 2.1

INFLATION AND GDP GROWTH

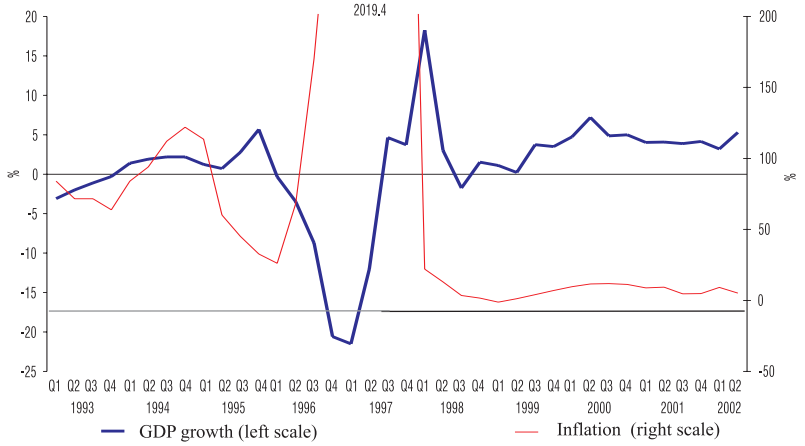


Table 2.2

INFLATION AND ECONOMIC GROWTH, 1998–2001

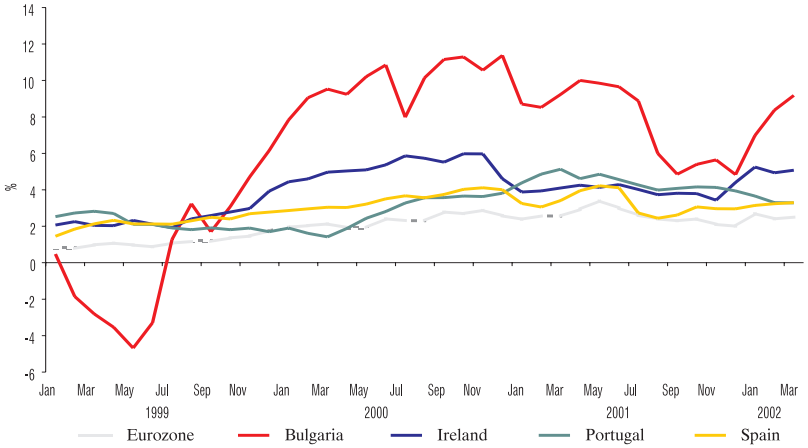
(%)

Country	Inflation		GDP Growth	
	Average	Volatility	Average	Volatility
Bulgaria	5.8	4.3	3.9	1.4
Estonia	5.3	1.1	3.9	3.3
Latvia	2.8	0.7	4.5	2.6
Lithuania	1.6	0.9	2.3	4.2
Poland	7.8	2.5	3.7	1.2
Romania	41.3	10.5	-0.8	4.3
Slovak Republic	8.8	3.8	2.8	1.0
Slovenia	7.9	1.0	4.0	1.3
Hungary	9.6	1.9	4.7	0.4
The Czech Republic	4.5	1.8	0.9	2.8

Source: IMF International Financial Statistic.

Chart 2.2

INFLATION IN BULGARIA AND THE EUROZONE



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

Chart 2.2 shows inflation rates in the eurozone, in Bulgaria, and in three of the countries with the highest inflation rates within the EMU. Bulgaria's inflationary differential is similar in scale to that of the three countries highlighted, 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 EU.[4]

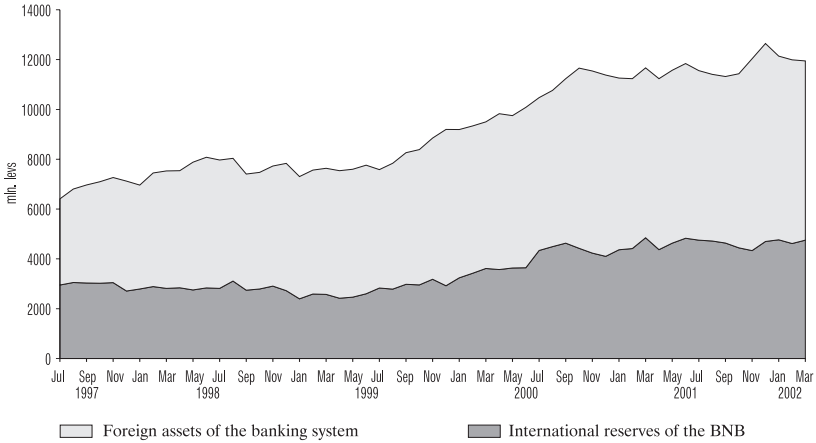
The volume of Bulgaria's international reserves (those of the central bank and those of the banking system) has showed stable growth since currency board introduction, reaching unprecedented levels for the Bulgarian economy (see Chart 2.3). This often poses the question of whether this is the most effective way of using our resources. Would

[4] See NSI, A Program for International Comparison between OECD, Eurostat, other international organizations and national statistics offices.

not investment into 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.[5]

Chart 2.3

BULGARIAN INTERNATIONAL RESERVES



First, under the existing currency board regime, foreign currency reserves are the nominal anchor determining the supply of bank reserves, banknotes and coins.

Second, excess reserves over and above BNB 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 stabilizer.[6]

Third, foreign assets are a source of liquidity in foreign currencies, which routinely enable government and economic agent transactions.

Fourth, 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.

[5] For an in-depth discussion on the optimal level of international reserves within an economy, see *Flood, R. and N. Marion* (2002); and *Lane, P. and D. Burke* (2001).

[6] See *Clark, P.* (1970) on the stabilizing role of international reserves.

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 shock is highly questionable. Government 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 preempted any possibility of trying alternative strategies to stabilize the economy or to guarantee low inflation.

That a limited range of options existed in early 1997 was a fact 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 2.3).

Moreover, after 1995 inflation grew at hyperinflationary rates, while GDP growth was negative.

The figures reflect serious difficulties, both in defining monetary policy ultimate targets, and in the implementation of monetary policy.

The abuse of monetary policy in an attempt to maintain real incomes and employment at an unsustainable level during the period 1991–1997 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 1991–1997, and the alternatives to a currency board which were proposed since, lacked internal consistency, logic, clarity, or transparency.

Table 2.3

INFLATION AND ECONOMIC GROWTH, 1991–1997

(%)

Country	Inflation		GDP Growth	
	Average	Volatility	Average	Volatility
Bulgaria	237.4	219.1	-4.9	5.7
Estonia	26.7	12.7	1.6	7.3
Latvia	20.9	11.0	-0.6	8.7
Lithuania	58.2	74.5	-2.1	10.3
Poland	32.2	16.5	3.5	4.8
Romania	145.0	100.1	-1.6	7.6
Slovak Republic	17.6	19.2	-0.11	8.3
Slovenia	66.0	94.0	0.84	5.63
Hungary	23.2	5.0	-0.75	5.5
The Czech Republic	17.0	15.8	0.01	5.7

Source: IMF International Financial Statistic.

The Bulgarian National Bank's policy prior to 1997 was based on:

- managed floating of the exchange rate with no explicit commitment by the central bank to support any particular level of exchange rate, which 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, which is considered to be 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 3.1 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 unsecured (see Chart 2.4).

Chart 2.4

COMMERCIAL BANK REFINANCING

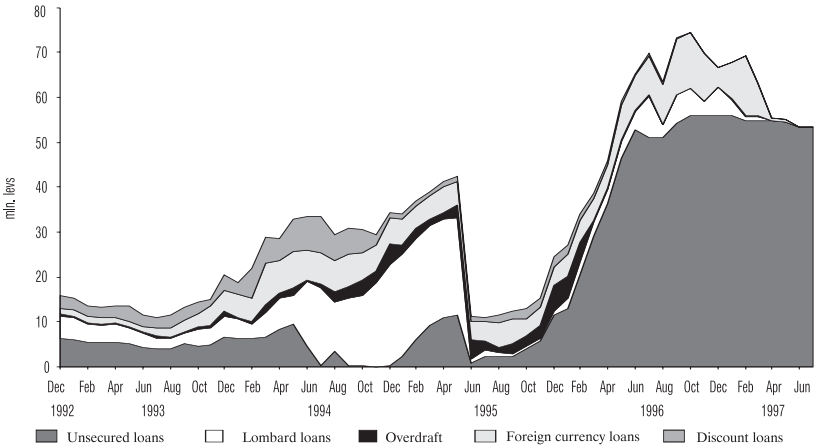
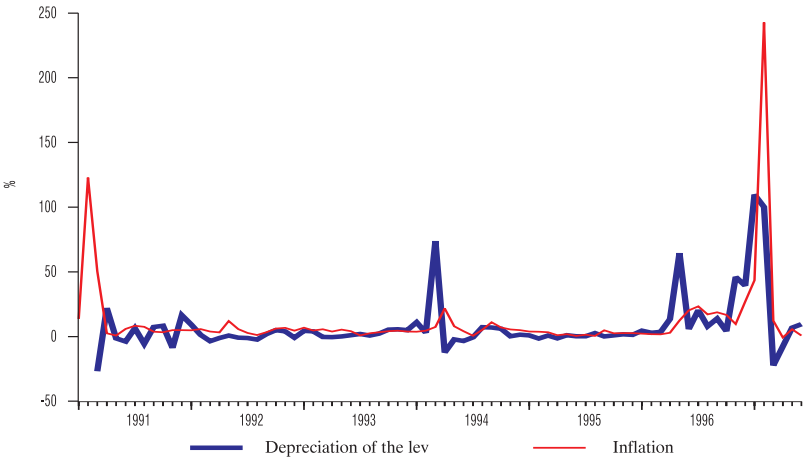


Chart 2.5

EXCHANGE RATE DEPRECIATION AND INFLATION, 1991–1997

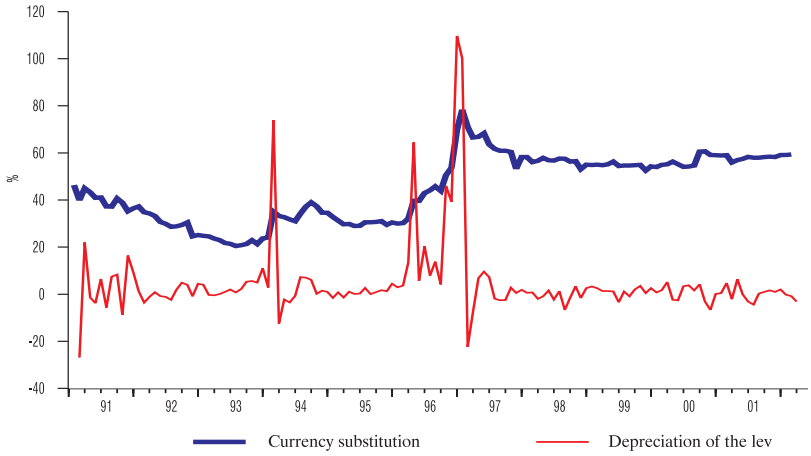


Under these circumstances, economic agents directed their attention to the most transparent and easily monitored variable: the exchange rate. The depreciation of the national currency translated into more expensive imports and inflationary expectations provoking an immediate rise of prices. Inflation rates primarily reflected the expectations raised by the exchange rate dynamics and inflation, in turn, generated expectations of further depreciation of the exchange rate (see Chart 2.5).

The large-scale depreciation of the exchange rate led to an irreversible process of currency substitution,[7] additionally limiting central bank ability to control the money supply and inflation (see Chart 2.6).

Chart 2.6

CURRENCY SUBSTITUTION



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

[7] The level of currency substitution is measured as a ratio of foreign currency deposits to total bank deposits.

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 nonperforming 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.

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.

III. 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 public revenue and expenditure management, and for attaining sustainable levels of government debt.

Interaction between Monetary and Fiscal Policy

The core of monetary policy is to manage the government debt portfolio issued to finance the budget deficit.[8] Monetary policy constraints reflect the inability of the monetary authority (the central bank) to control the size of the portfolio of government debts that they must manage. It is the fiscal authorities, those who set tax rates and government expenditure, which determine the size of the debt portfolio.[9]

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 monetization. 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

[8] 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 obligation to the holders of these instruments.

[9] For more details on the interdependence between fiscal and monetary policies, see *Sargent, T.* (1999).

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 government ability to control its deficit and debt. Where 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*, in practice abolishing the currency board for all practical purposes. Such considerations show clearly how interdependent fiscal and monetary policy is, and the importance of prudent fiscal policy to sustaining the currency board.

The interaction between fiscal and monetary policies does not allow for their explicit separation.[10] The credibility of both monetary and fiscal policies is equally important and requires consistent actions over time, 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 3.1 displays deficit financing of the consolidated state budget since the beginning of transition.

Between 1991 and 1996 budget deficits averaged 6.9% of GDP, the bulk of them financed by direct central bank lending. This had a strong inflationary effect and seriously impeded fulfillment of monetary policy goals. After 1997, fiscal policy was oriented toward 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 utilize IMF credits was insufficiently transparent in 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.

[10] 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, B. and E. G. de la Piedra* (1998).

Table 3.1

BUDGET DEFICIT FINANCING

(share of GDP, %)

Indicators	1991	1992	1993	1994	1995	1996	Average 1991–1996
Budget deficit	-3.6	-5.2	-10.9	-5.7	-5.6	-10.3	-6.9
Financing, net	3.6	5.2	10.9	5.7	5.6	10.3	6.9
Foreign	-1.5	-0.8	-1.2	-0.5	-1.3	-2.8	-1.4
Domestic*	5.1	6.0	12.1	6.3	7.0	13.2	8.3
Government securities	n.a.	2.1	8.3	6.4	8.0	8.3	6.6
BNB, net	n.a.	5.2	3.5	1.5	-0.5	6.4	3.2
Privatization**	0	0	0	0	0	0	0

Indicators	1997	1998	1999	2000	2001	2002***	Average 1997–2002
Budget deficit	-2.9	1.0	-0.9	-1.0	-0.9	-0.8	-0.9
Financing, net	2.9	-1.0	0.9	1.0	0.9	0.8	0.9
Foreign	0.0	-0.6	1.2	-1.5	-0.3	-1.2	-0.4
Domestic	2.9	-0.4	-0.3	1.2	0.6	0.2	0.7
Government securities	3.2	-1.1	-1.3	-1.1	-0.3	0.3	-0.1
BNB, net****	3.0	0.8	1.3	1.1	-1.2	-0.5	0.8
Privatization	3.1	1.6	2.2	1.3	0.6	1.8	1.8

* Reviewed items do not exhaust all sources of domestic financing. Table 3.1 includes only major financing sources, which are closely connected with the coordination of monetary and fiscal policies.

** As of 2000 financing includes external and internal financing and privatization, i.e. the latter is reviewed as a separate item.

*** Forecast data on 2002.

**** After 1997 BNB financing includes loans received under IMF agreements.

Source: Ministry of Finance.

The Currency Board and the Fallacy of Constrained Fiscal Policy

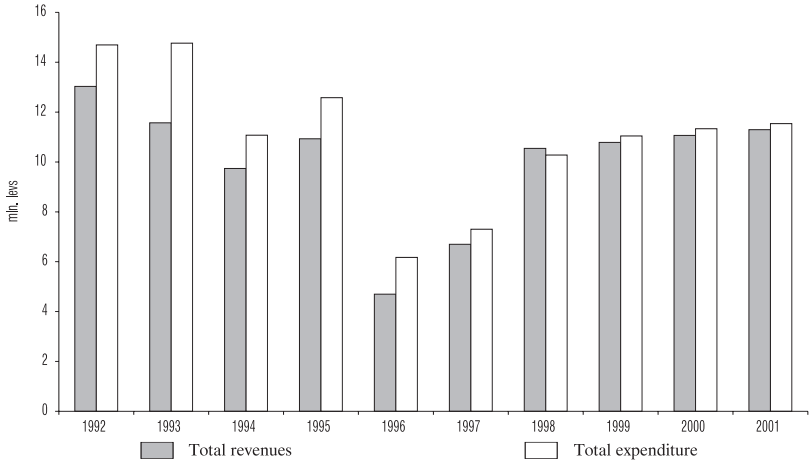
A currency board, with its tight constraints on spending, is often seen as limiting governments' freedom of manoeuvre. The Bulgarian experience over the last five years does not bear this out. On the contrary, the arrangement has in practice afforded the government greater flexibility by increasing rather than diminishing its disposable income. Chart 3.1 shows government revenues and expenditure at current prices[11] for 1992–2001. After adjustment for interest payments, govern-

[11] 2000 is set as a base year, with income and expenditure deflated by average annual consumer price indices.

ment disposable income shows a clear upward trend, with adequate funds to support sustained spending on economic and social programs from 1997 onwards (see also Table 3.2).

Chart 3.1

BUDGET REVENUES AND EXPENDITURE
(in real terms)



The currency board increased government disposable income in the following ways:

- Interest payments fell as a result of lower and stable interest rates. Interest payments declined from an average of 25.7% of total expenditure between 1991 and 1996 to 11.7% 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.[12] Between 1991 and 1997 government revenue averaged 38.7% of GDP. After 1997 it averaged 39.1%, with a progressive increase

[12] The authors defend a 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 government 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 of pending wider public discussion.

in GDP.[13] Expenditure adjusted for interest payments averaged 34% 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 (see Chart 6.3). Changes in fiscal policy after the introduction of the currency board have an impact on the dynamics and structure of government debt. The level of debt in absolute and relative terms should be considered in the context of structural changes in 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, which 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, budget deficit, and debt payments.[14] Prior to 1997 the ratios of both foreign and domestic debt to GDP were extremely high and volatile (see Table 3.3.). 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.

Following the introduction of a currency board the situation changed radically allowing greater government flexibility. While the debt to GDP ratio gradually decreased, the implementation of a consistent macroeconomic policy gave Bulgaria access to international credit markets despite its poor credit history since the early 90s.[15]

[13] 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 higher-than-projected deficit and increase 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 lower inflation rate, which results in higher nominal income and 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.

[14] See *Mussa, M.* (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 Argentinean currency board.

[15] In fact, Bulgaria's poor credit history dates back to the beginning of the 20th century

Table 3.2

GOVERNMENT DISPOSABLE INCOME

Indicators	1991	1992	1993	1994	1995	1996	Average 1991–1996
Budget deficit							
Share of GDP, %	-3.6	-5.2	-10.9	-5.7	-5.6	-10.4	-6.9
Revenues							
Share of GDP, %	40.4	40.5	39.4	41.8	37.3	32.9	38.7
Expenditure							
Share of GDP, %	44.0	45.6	50.3	47.6	42.9	43.2	45.6
Interest payments							
Share of GDP, %	6.3	6.5	9.4	13.5	14.1	19.5	11.6
Share of total expenditures, %	14.3	14.1	18.7	28.5	33.0	45.5	25.7
Expenditures minus interest payments							
Share of GDP, %	37.7	39.1	40.9	34.1	28.8	23.7	34.0
GDP growth, %	-11.7	-7.3	-1.5	1.8	2.1	-10.9	-4.6

Indicators	1997	1998	1999	2000	2001	2002*	Average 1997–2002
Budget deficit							
Share of GDP, %	-2.9	1.0	-0.9	-1.0	-0.9	-0.8	-0.9
Revenues							
Share of GDP, %	32.2	39.8	40.7	41.4	40.0	40.5	39.1
Expenditure							
Share of GDP, %	35.1	38.8	41.6	42.4	40.8	41.3	40.0
Interest payments							
Share of GDP, %	8.3	4.3	3.8	4.0	3.7	3.3	4.6
Share of total expenditures, %	23.7	11.0	9.1	9.6	9.1	7.9	11.7
Expenditures minus interest payments							
Share of GDP, %	26.8	34.5	37.8	38.4	37.1	38.0	35.4
GDP growth, %	-6.9	3.5	2.4	5.8	4.0	4.0	2.1

* Forecast data for 2002.

Source: Ministry of Finance.

Fiscal discipline is not a self-generating process and is logically associated with the need to improve budget procedure. To this end, the number of extra-budgetary funds was reduced from over 1000 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 government ability to cover 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 rationalizing public services, 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 stabilizing the position. The lack of a clearly defined long-term strategy on public expenditure is a potential source of fiscal risk.

Table 3.3

GOVERNMENT DEBT

Indicators	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
Domestic debt (million BGN)	17.4	38.3	111.0	273.7	345.4	1 052.6
GDP (million BGN)	135.7	200.8	298.9	525.6	880.3	1 761.2
Domestic debt/GDP (%)	**13**	**19**	**37**	**52**	**39**	**60**
Foreign debt (million USD)	10 452.6	10 404.9	9 928.0	10 254.2	9 122.6	8 735.9
Foreign debt (million BGN)	228.0	254.8	324.7	677.0	645.0	4 257.4
Foreign debt/GDP (%)	**168**	**127**	**109**	**129**	**73**	**242**
Total debt (million BGN)	245.4	293.1	435.7	950.7	990.4	5 310.0
Total debt/GDP (%)	**181**	**146**	**146**	**181**	**113**	**302**
	1997	**1998**	**1999**	**2000**	**2001**	**2002***
Domestic debt (million BGN)	2 780.5	3 101.7	2 963.3	1 767.2	1 860.5	2 065.8
GDP (million BGN)	17 432.6	22 421.1	23 790.4	26 752.8	29 618.1	33 049
Domestic debt/GDP (%)	**16**	**14**	**12**	**7**	**6**	**6**
Foreign debt (million USD)	8 743.9	9 283.8	9 070.1	8 969.8	8 512.6	8 500
Foreign debt (million BGN)	15 533.5	15 551.3	17 658.3	18 853.7	18 891.6	17 850
Foreign debt/GDP (%)	**89**	**69**	**74**	**70**	**64**	**54**
Total debt (million BGN)	18 314.0	18 653.0	20 621.6	20620.9	20 752.1	19 915.8
Total debt/GDP (%)	**105**	**83**	**87**	**77**	**70**	**60**

* Forecast data for 2002.

Source: BNB.

IV. The Currency Board, Foreign Trade and the Balance of Payments

The monetary policy strategy pursued by a central bank has relatively little effect on a country's foreign trade or its 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 the exchange rate policy.

Generally, a floating exchange rate provides greater flexibility *vis-à-vis* external shocks. It is therefore the most appropriate mechanism if foreign trade volatility is to be reduced. However, it does not create trade and does not affect long-term trends in foreign trade.[16]

Although fixed exchange rates do not provide the flexibility inherent in floating ones, they do boost international trade (i.e. they create trade), facilitating the exchange of goods and services by lowering transaction costs.[17] In other words, fixed exchange rate has a positive long-term effect on the volume of foreign trade, creating trade between countries with fixed exchange rates (see Chart 4.1 for volume of Bulgaria's foreign trade).

Quite often, fixed exchange rates lead to continuous overvaluation of the real exchange rate,[18] in certain cases affecting export competitiveness,[19] 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 capitalization and technological backwardness.

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[16] 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.

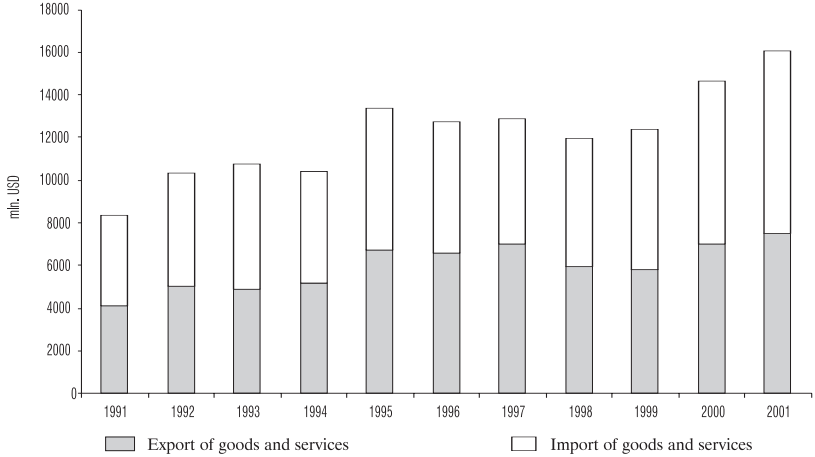
[17] For a more detailed presentation of the effect of trade creation under a fixed exchange rate and monetary union see *Rose, A.* (2000); and *Glick, R. and A. Rose* (2002).

[18] There is a view, strongly defended by Steve Hanke, that overvaluation of the real exchange rate is impossible under a currency board, i.e. if the exchange rate of a currency were irreversibly fixed, the only real exchange rate would be the fixed exchange rate.

[19] Usually real exchange rates and overvaluation are measured through the 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 description of the shortcomings of PPP as a measure of the real exchange rate and competitiveness of the economy see *Rogoff, K.* (1996); and *Driver, R. and P. Westaway* (2001).

Chart 4.1

VOLUME OF FOREIGN TRADE



The balance of payments since the introduction of the currency board is characterized 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:

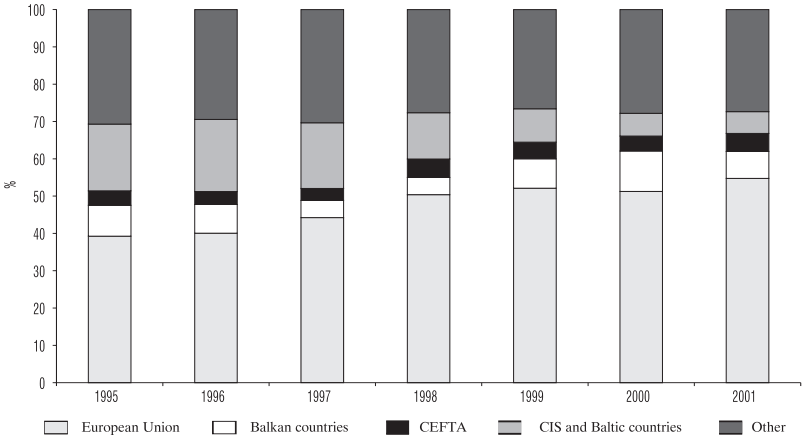
- after 1997, Bulgaria liberalized capital movement and integrated itself into global financial markets. This considerably increased its ability to attract capital and finance its current account deficit.
- privatization on an unprecedented scale in the same period helped attract foreign capital and 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.[20]

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

- the trend towards reducing the proportion of industry in the economy and increasing that of services determines the ever-stronger effect of exports of services.

Chart 4.2

GEOGRAPHIC STRUCTURE OF EXPORTS



Analyses of foreign trade are often subject to an old-fashioned, mercantilist understanding that trade in goods should be in surplus for the country to benefit from it. Over the last five years the following major trends in foreign trade merit special attention:

- the fixed exchange rate has had an impact on the geographic structure of foreign trade, shifting trade flows to European Union and CEFTA countries at the expense of the CIS (see Chart 4.2). There is potential for further growth in trade with the EU 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 average-weighted customs rate for 2002 is for a further fall to 6.5%). Accession of Central European countries to the EU 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 by the shifting of invoicing and pay-

ments from US dollars into euro (see Chart 4.3). 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 (see Chart 4.4). In the medium to long term this creates the potential for growth in Bulgaria's exports capacity.[21] The share of energy commodities declined as a result of the higher 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 the rise in the share of consumer goods in imports.[22]

Chart 4.5 shows the current account and its components for the period 1995–2001. A long-term trade deficit emerged as a result of the continuous growth in investment and consumer goods imports. It is counterbalanced to a great extent (65%) 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 (see Chart 4.6).

As capital accumulation grows, its marginal return will decline, leading to a fall in the rate of investment and fewer imported investments goods while higher investment levels and capital accumulation will increase Bulgaria's export potential.

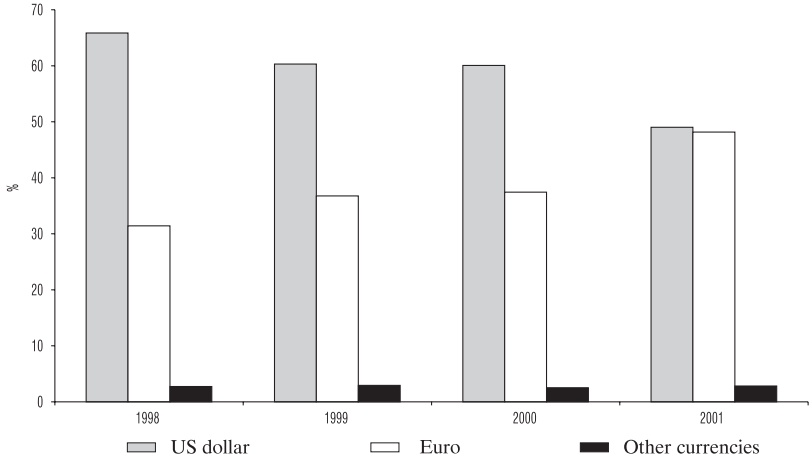
[21] Undoubtedly, this effect depends largely on whether investment goods are used for manufacturing of tradables or nontradables. In fact, we do not know which sectors of the economy imported investment goods are channeled to. Thus we cannot estimate how export potential grows as a result of higher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

[22] From early 2001 until the first quarter of 2002 the correlation between growth rates of imported consumer goods and consumer credit was 1. Certainly, high correlation is not a guarantee for a causality relationship 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 significant for the growth rates of imported consumer goods.

Chart 4.3

CURRENCY STRUCTURE OF FOREIGN TRADE

EXPORT



IMPORT

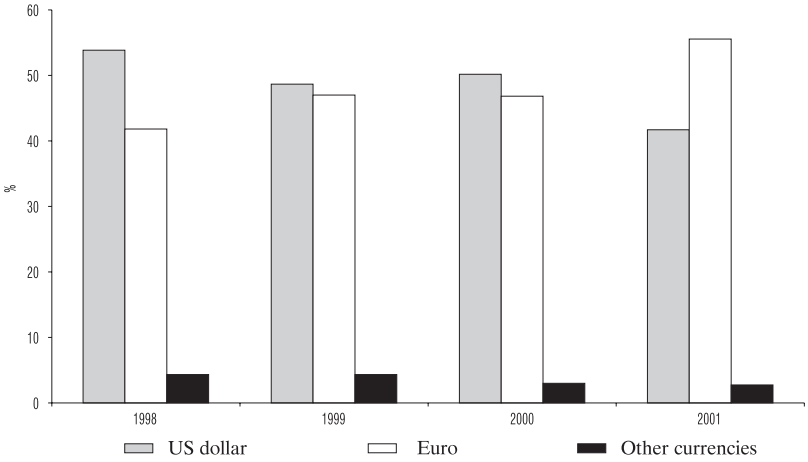


Chart 4.4

PRODUCT STRUCTURE OF IMPORTS

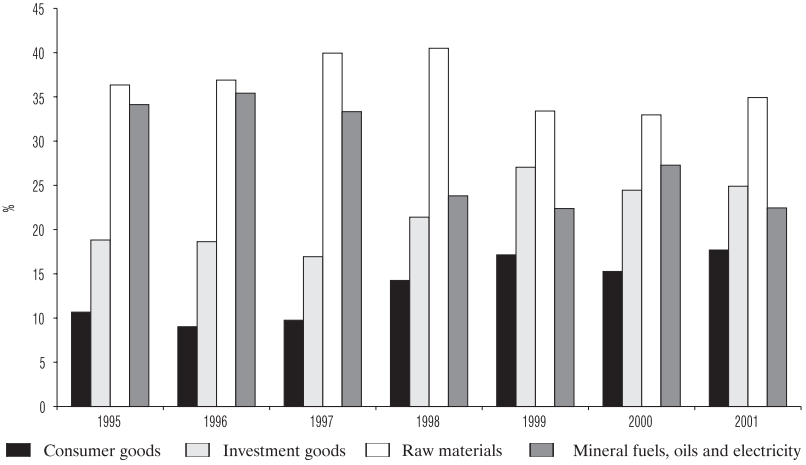


Chart 4.5

CURRENT ACCOUNT DYNAMICS

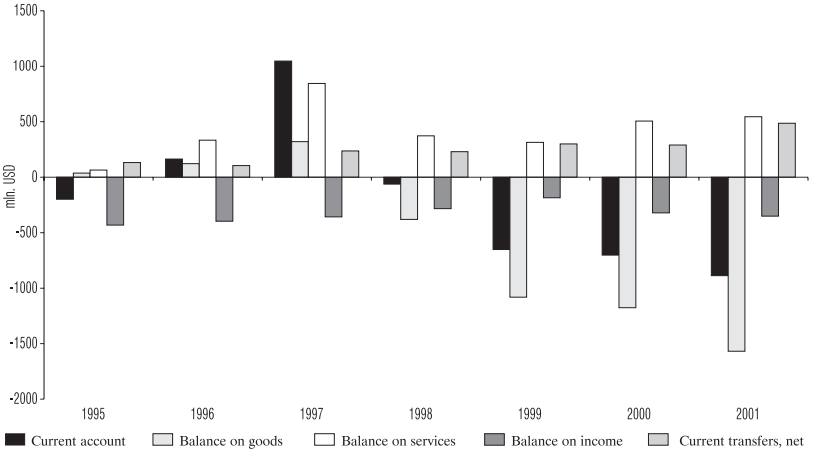
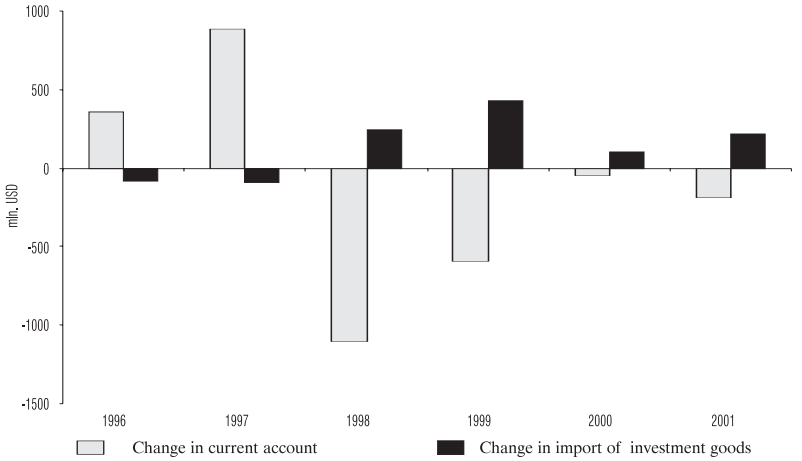


Chart 4.6

CURRENT ACCOUNT DEFICIT AND IMPORT OF INVESTMENT GOODS



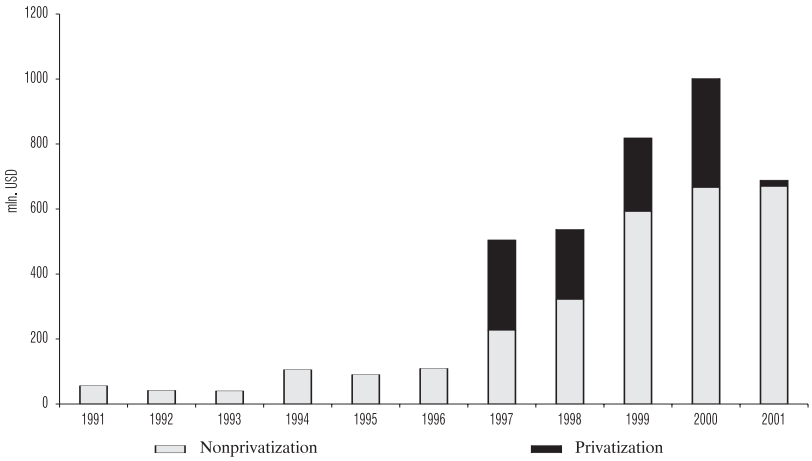
An argument in support of the thesis of balance of payments risk is that the current account deficit is financed mainly through privatization revenue. It would then follow that once the privatization potential was depleted the country would not attract the same amount of foreign investment.[23] This 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 nonprivatization transactions (see Chart 4.7).

[23] For a description of the factors that determine the movement of capital to transitional economies see *Garibaldi, P. N. Mora, R. Sahay and J. Zettelmeyer* (2001).

Chart 4.7

STRUCTURE OF FOREIGN DIRECT INVESTMENT



Experience in 2001, when privatization was halted by the political cycle, indicates that Bulgaria managed to draw the same volume of nonprivatization 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. As evident from Chart 4.7, in 1999 Bulgaria managed to achieve (and retain during the next two years) a relatively high level of nonprivatization direct investment: an annual average of USD 640 million. However, the chart also shows a slowdown in growth rates. Given sustained investment growth, this 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 programs, 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 by a well-educated and diligent workforce.[24]

[24] A telling example of the inefficiency of programs to boost exports are D. Cavallo's efforts to encourage Argentina's exports by applying the so-called 'Competitiveness Plans for Different Sectors,' the introduction of a preferential exchange rate for exporters being part of it.

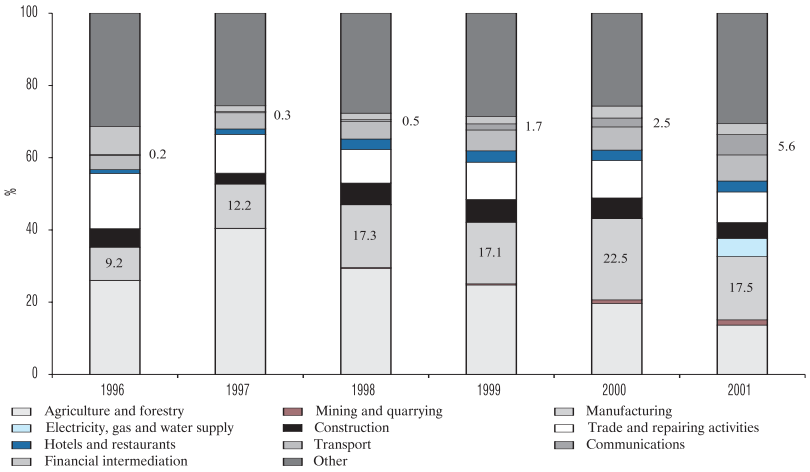
Another significant positive effect of direct foreign investment is that it becomes an instrument of a new corporate culture, bringing knowledge and management expertise and a faster transfer of technology to Bulgaria. It is possible that this invisible effect of direct investment is much more important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

V. The Economic Activity

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 (see Chart 2.1 and Chart 5.2) by contrast with the period before. Although the structure of the economy changes relatively slowly, growth in different sectors and related value added show the emergence of permanent trends.

Chart 5.1

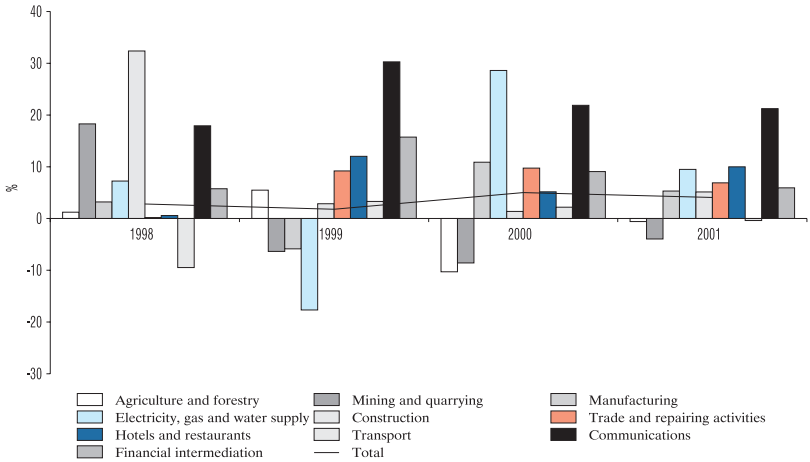
VALUE ADDED BY SECTOR



- The shares of value added in agriculture, forestry, and the extracting industry are progressively declining, although well above the levels reported in developed countries. The share of agriculture and forestry fell from 40.3% in 1997 to 13.7% in 2001. The processing industry stabilized at some 17% but price fluctuations led to short-term growth and decline (see Chart 5.1).
- The share of services (hotels and catering, transport, and communications) grew steadily. Communications grew fastest, from 0.3% in 1997 to 5.6% in 2001, driven by the boom in mobile, international, and internet communications.
- Tourism saw steady growth, its share in value added growing from 1% to 3%.
- Economic stability contributed to financial services growth, their share reaching 3% in total value added.

Chart 5.2

ECONOMIC GROWTH BY ECONOMIC SECTOR



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 soci-

ety creates jobs provided that flexible institutions and efficient markets are created (creative job destruction).[25]

VI. The Financial Sector

The role of the financial sector and its structure in achieving steady economic growth is indisputable.[26] As early as 1911, J. Schumpeter advanced arguments based on the hypothesis of the key significance of services related to "mobilization of savings, evaluation of investment projects, risk management, monitoring management behavior and facilitating transactions as underlying for technological innovations and generation of economic growth."

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

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

What has the Bulgarian National Bank achieved in this respect since currency board was introduced in 1997?

- The BNB shared in the success of bank privatization, which drove the restructuring of the financial sector. Banks of good international reputation currently manage over 85% of the banking system's assets.
- The BNB made a significant contribution to capital movement deregulation. The private sector gained free access to international money and capital markets.
- The BNB established modern banking supervision and gained an international reputation for effective banking sector regulation.[27]

[25] See *Greenspan, A.* (1999).

[26] See *Levine, R.* (1997) on the relationship between financial development and economic growth.

[27] Additional changes in the structure and organization of the central bank are needed to prepare for the successful incorporation into the European System of Central Banks.

There are currently 35 operating banks in Bulgaria whose assets account for 41% of GDP. Analysis of the historical levels of this indicator and comparison with other countries is possible but should be cautiously adjusted by the perspectives of inheritance 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 Chart 6.1). 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.

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 euro/dollar 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 narrowed in absolute terms, though slowly.

A trend evolving in the banking system is the change in the asset structure of commercial banks' (see Chart 6.3). Credit to the government fell by half, freeing funds for lending to households and companies. Credit to private enterprises grew nominally by 46% in 1999, 40% in 2000, and 25% in 2001. The share of credit to public enterprises fell dramatically due to privatization and the lower share of public enterprises in value added. After the introduction of the currency board households gained access to the credit market, and credit to households grew from zero in mid-1997 to BGN 900 million in early 2002.

The share of foreign assets in commercial banks' assets grew considerably. This was possible after liberalization of the rules governing

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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 eurozone accession requires profound changes in the central bank's accounting policies and 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 eurozone.

Chart 6.1

BANKING SYSTEM LENDING CAPACITY AND CREDIT TO THE PRIVATE SECTOR AS A PERCENTAGE OF GDP[28]

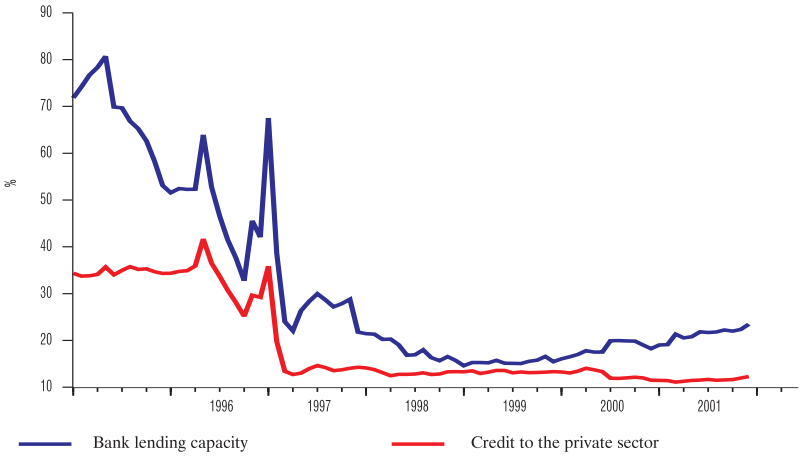
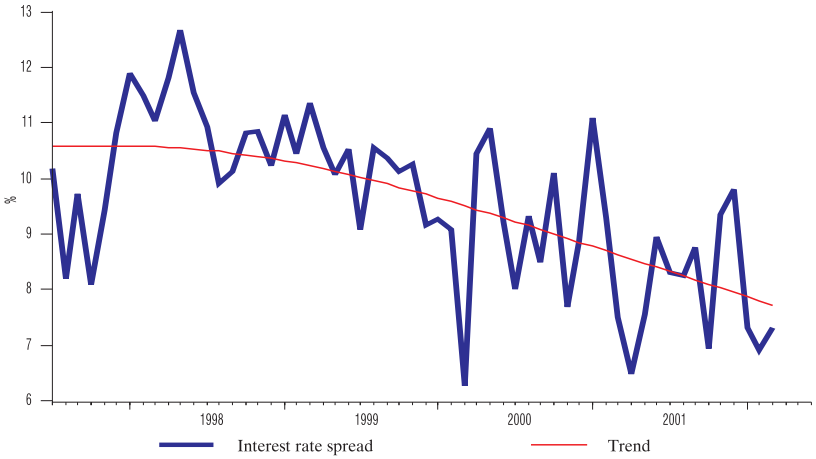


Chart 6.2

INTEREST SPREAD BETWEEN CREDITS AND DEPOSITS

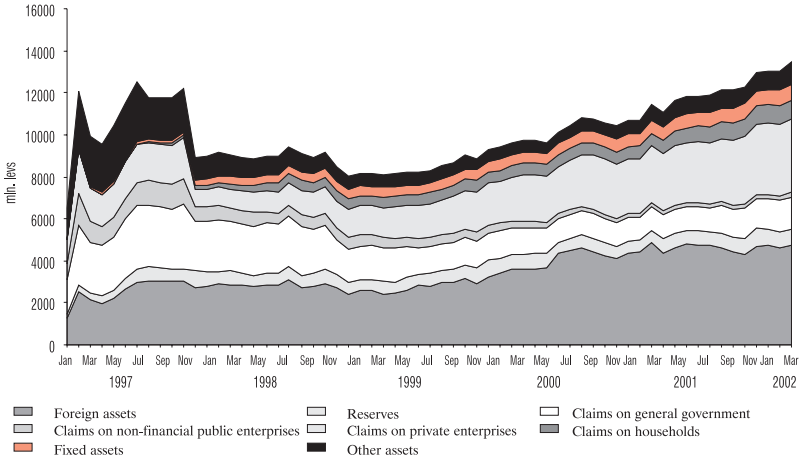


[28] Banking system lending capacity, credit to the private sector and GDP are in real terms.

the balance of payments financial account and the lifting of restrictions on open currency positions between the lev and the euro.

Chart 6.3

STRUCTURE OF COMMERCIAL BANK ASSETS



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

At the same time, a risk would arise in case of a dramatic move from foreign into domestic assets. Financial stability and monetary policy can be discredited by growth in nonperforming loans in the banking system, and inflationary pressure can grow as a result of increased credit resources and general demand for goods and services.

VII. Challenges and Recommendations

The currency board ensured the price and financial stability the Bulgarian economy needed. In conclusion we list, without being exhaustive, medium-term challenges confronting Bulgarian monetary policy:

1. 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.[29] The basis of overall fiscal strategy is implementation and observance of the government budget. Progress has been made, but more is needed.

- The IMF study highlights the need to reform the procedure for setting budgets, which remains inefficient. There are overlapping budget lines, and it is 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*.[30] Contingent and implicit medium and long-term fiscal obligations are often neglected.

- The budgets of 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, the inadequate infrastructure (roads and communication, public utilities) there is a serious danger of a spiralling growth in public debt if fiscal policy is decentralized. 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 quasi-fiscal deficit.[31] Obligations to big monopolies (electricity, telecom, and gas) are also generated by under-

[29] For a theoretical basis of the assessment of fiscal policy and major risks see *Polackova, H.* (1998); *Hemming, R. and M. Petrie* (2000); and *Chalk, N. and R. Hemming* (2001). The state, risks, and necessary changes in the budgeting process are reviewed in *Schiller, Brumby and Tanberg* (2000).

[30] See *Brixi, H. P., S. Shatalov and L. Zlaoui* (2000) on assessment of major fiscal risks for Bulgaria.

[31] 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 BGN 683.1 million as of end-2001 and a fall of at least BGN 120 million is projected for 2002.

privileged 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.

2. Central bank *credits to the government*, which correspond to BNB obligations to the International Monetary Fund. These credits create uncertainty in the relationships 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.
3. Centralization 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.[32]

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.*

4. 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 balance of payments sustainability. The government's priority should be to create an environment for attracting foreign investment rather than to stimulate exports through different government programs. As noted above, the most effective way of do-

[32] See *Miller, J.* (1999); and *Nenovsky, N. and K. Hristov* (2002) for an in-depth discussion of the positive and negative effects of the presence of government account within the central bank.

ing this is through tax policy, an efficient administration and legal system, and good-quality human capital.

5. 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 of loan defaults and inflationary pressure as a result of more credit being raised and increased demand for goods and services.
6. Bulgaria's accession to the European Union and hence to the 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 EU but prior to full membership of the economic and monetary union. Since unilateral euroization is politically unacceptable to both the European Central Bank and the European Commission, the currency board is the best alternative compatible with ERM II. To devise an alternative monetary strategy may be feasible, but not recommendable. There is not reason to tamper with success. It could jeopardize 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 stability and consumer prices.

Second, during negotiations on Chapter 11 (Economic and Monetary Union), 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.

This paper's analysis of Bulgaria's monetary policy, together with our concluding recommendations, are shaped by hands-on 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 a time as the country becomes a member of the EU and is integrated into the Eurozone.

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