



# The wiiw Balkan Observatory

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Monetary Policy and Transition in Southeast Europe





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## *About*

Shortly after the end of the Kosovo war, the last of the Yugoslav dissolution wars, the Balkan Reconstruction Observatory was set up jointly by the Hellenic Observatory, the Centre for the Study of Global Governance, both institutes at the London School of Economics (LSE), and the Vienna Institute for International Economic Studies (wiiw). A brainstorming meeting on Reconstruction and Regional Co-operation in the Balkans was held in Vouliagmeni on 8-10 July 1999, covering the issues of security, democratisation, economic reconstruction and the role of civil society. It was attended by academics and policy makers from all the countries in the region, from a number of EU countries, from the European Commission, the USA and Russia. Based on ideas and discussions generated at this meeting, a policy paper on Balkan Reconstruction and European Integration was the product of a collaborative effort by the two LSE institutes and the wiiw. The paper was presented at a follow-up meeting on Reconstruction and Integration in Southeast Europe in Vienna on 12-13 November 1999, which focused on the economic aspects of the process of reconstruction in the Balkans. It is this policy paper that became the very first Working Paper of the wiiw Balkan Observatory Working Papers series. The Working Papers are published online at [www.balkan-observatory.net](http://www.balkan-observatory.net), the internet portal of the wiiw Balkan Observatory. It is a portal for research and communication in relation to economic developments in Southeast Europe maintained by the wiiw since 1999. Since 2000 it also serves as a forum for the Global Development Network Southeast Europe (GDN-SEE) project, which is based on an initiative by The World Bank with financial support from the Austrian Ministry of Finance and the Oesterreichische Nationalbank. The purpose of the GDN-SEE project is the creation of research networks throughout Southeast Europe in order to enhance the economic research capacity in Southeast Europe, to build new research capacities by mobilising young researchers, to promote knowledge transfer into the region, to facilitate networking between researchers within the region, and to assist in securing knowledge transfer from researchers to policy makers. The wiiw Balkan Observatory Working Papers series is one way to achieve these objectives.

## Monetary Policy and Transition in Southeast Europe

### 1. Factors determining monetary policy strategy

The region of southeast Europe consists of seven countries of which six are low income and one is medium income economy. The average GDP per capita at market exchange rate in 1998 was USD 1,793. The lowest GDP per capita had Albania (USD 1,110 at market exchange rate). The highest living standard in the region had Croatia, with GDP per capita of USD 4,635 at market exchange rate (Table 1). The other five countries (Bosnia and Herzegovina, Bulgaria, Macedonia, Romania and Yugoslavia) have GDP per capita at market exchange rate in a range between USD 1,206 (Bosnia and Herzegovina) and USD 1,690 (Macedonia).

Except Romania, which is a medium size economy, all the other six economies are small. Their national currency areas are unoptimum currency areas. The average number of population within the six small southeast European economies in 1998 was 5.4 million. With Romania, the average number of population was 7.8 million. The smallest country by population is Macedonia (2.1 million) and the largest is Romania (22.5 million). The total GDP of the seven southeast European economies in 1998 was USD 94.92 billion at market exchange rate, which accounts for 0.32% of the value of the world output. Without Romania, which itself accounts for 38.8% of the output of the seven southeast European economies, the total GDP of the other six economies was USD 58.12 billion, and account for only 0,20% of the value of world output in 1998. The average share in the total world output per economy, for the six small southeast European countries, is 0.033%. Even the largest economy (Romania), has a share of 0.126% in the total world output. With such a small size, the region as a whole and particularly, the economies within the region are price takers and shock absorbers (Table 1).

Although small, the seven southeast European economies are quite closed.<sup>1</sup> Average share of export and import of goods was 36.9% of GDP, in 1998. The highest openness had Macedonia, with foreign trade accounting for 85.7% of GDP. The most closed economy was Albania, with foreign trade to GDP of 27.0%. Such small level of openness is unsustainable and cannot lead to high economic growth.<sup>2</sup>

Currently, one of the seven economies (Yugoslavia), is isolated from the international community, one is aid economy (Bosnia and Herzegovina), one is semi-aid economy (Albania), and four out of seven, are fragile transition economies (Bulgaria, Croatia, Macedonia and Romania), dependent on international financial support.

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<sup>1</sup> “While most of the transition countries have liberalized their economies, the Balkan region is still full of barriers and restrictions – some imposed, some self-imposed and some inherited. The consequence has been that the region has continued to experience trade and other real and policy-induced shocks. It has also motivated most of the states in the region to advance either on the path of regional or on that of European integration” – Vladimir Gligorov, “Trade in the Balkans”, The Vienna Institute Monthly Report, No. 12/1997.

<sup>2</sup> In the small high -income economies export and import of goods is higher than the national output. Thus, in Ireland the export and import account for 171.6% of GDP, in Belgium 139.7%, and in Netherlands the export and import account for 108.7% of GDP.

Table 1

**Basic Indicators for Size, Openness, Financial Depth and Currency Substitution  
of the Southeast Europe Economies**

- Year 1998 -

	Albania	Bosnia and Herzegovina	Bulgaria	Croatia	Macedonia	Romania	Yugoslavia	Total	Total - Romania
Population in million	3.40	3.30	8.31	4.60	2.10	22.50	10.70	54.91	32.41
Nominal GDP in bn USD at market exchange rate	3.77	3.98	12.20	21.32	3.55	36.80	13.30	94.92	58.12
GDP per capita at market exchange rate	1,110	1,206	1,468	4,635	1,690	1,635	1,243	1,729	1,793
Share of GDP in world output in % at market exchange rate	0.009	0.013	0.044	0.073	0.012	0.126	0.045	0.324	0.198
Total trade (Export + Import of goods) in million USD	1,020	2,798	8,923	13,386	3,044	19,000	7,700	55,871	36,871
Share in total world trade in%	0.009	0.026	0.083	0.126	0.028	0.178	0.072	0.524	0.346
Share of total trade in GDP in%	27.00	70.20	73.30	62.80	85.70	51.60	57.90	58.85	63.43
M1 to GDP in %	19.70	3.75	10.40	9.70	8.40	5.10	7.60	10.50	10.70
M2 to GDP in %	42.50	18.91	26.70	40.10	13.90	21.80	10.20	26.70	26.80
Foreign currency deposits to M1 in %	45.0	423.6	107.9	264.9	45.8	127.9	463.7 <sup>/*</sup>	107.6 <sup>/**</sup>	107.5 <sup>/**</sup>
Foreign currency deposits to M2 in %	20.9	80.3	42.1	64.2	27.3	29.7	347.8 <sup>/*</sup>	42.5 <sup>/**</sup>	42.6 <sup>/**</sup>

- Coefficients M1 to GDP, M2 to GDP, foreign currency deposits to M1, foreign currency deposits to M2, are calculated based on the 12 month average for the money supply.

\*/ Including frozen (blocked) foreign currency deposits.

\*\*/ Average is calculated without including Yugoslavia.

Financial markets in all seven southeast European economies are very shallow. Also, there is an evidence for a very high currency and asset substitution. The main indicator for financial market depth, M2 to GDP rate, is low. Thus, the average rate of M2 to GDP for the seven southeast European countries was 26.7% in 1998. The lowest rate of M2 to GDP had Yugoslavia (10.2%) and Macedonia (13.9%). The rate of financial depth, although reached 42.5% in Albania and 40.1% in Croatia, was half of the one in the matured market economies. Furthermore, the share of the narrowest definition of M1 in GDP is very low also, which is measure for the degree of monetization of the economy. Average M1 to GDP rate, was 10.5%, which is half of the monetization in the matured market economies. Except Albania, where the rate of monetization (19.7%) approached the standard level, in other six southeast European countries it is below 10%. The lowest M1 to GDP rate have Bosnia and Herzegovina (3.7%) and Romania (5.10). The low monetization simultaneously is an indicator for high currency substitution.

Asset and currency substitution is widespread within the seven southeast European countries.<sup>3</sup> Currency substitution occurs when assets denominated in foreign currency are used as means of payment, while asset substitution occurs when assets denominated in foreign currency serve as store of value. As an indicator for currency substitution we use the rate of foreign currency deposits to the narrowest definition of money supply – M1. For asset substitution we use the indicator: the share of foreign currency deposits in the broader definition of money supply – M2. These indicators can be misleading, however. Foreign currency in circulation, in some of these countries, is a major component of currency and asset substitution, but it is unmeasured. Thus, we are constrained to foreign currency deposits, which can be measured. The figures for currency and asset substitution are presented in Table 1. The rates of currency and asset substitution within the seven southeast European countries are one of the highest within the transition economies. The average rate of currency substitution (foreign currency deposits to M1) is 107.6%. This means that on one unit national currency on average there is one unit foreign currency, which is used as means of payments. The ratio of currency substitution ranges between 45 percent (Albania 45.0%, Macedonia 45.8%) and 265% percent (Croatia). Bulgaria and Romania have currency substitution rates of 107.9% and 127.9%, respectively. The average rate of asset substitution (foreign currency deposits to M2) is 42.5%, which presumes that on each unit of savings in national currency, there is almost half unit of savings in foreign currency. The leading asset substitution countries are Bosnia and Herzegovina, Croatia and Bulgaria, with rates of 80.3%, 64.2% and 42.1%, respectively. The asset substitution is less dominant in Albania (20.9%), Macedonia (27.3%) and Romania (29.7%). Yugoslavia is excluded from this analysis because there is no reliable figure for foreign currency deposits. Namely, in the available figures for foreign currency deposits, frozen foreign currency deposits are included also, although the repayment of these deposits is government liability.

High currency and asset substitution, as a consequence have high volatility of the velocity of money supply. In such circumstances monetary growth targets are inefficient method for controlling the inflation. There is no correlation between money supply growth and inflation growth. Neither narrow, nor broad definition of money supply can not be used as an indicator for future inflation.

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<sup>3</sup> Currency and asset substitution (dollarization), the holding by residents of a significant share of their assets in foreign-currency-denominated form, is a common feature of developing and transition economies. It is a response to economic and political instability and high inflation, and to the desire of domestic residents to diversify their asset portfolios. In countries experiencing high inflation, dollarization is typically quite widespread, as the public seeks protection from the cost of holding assets denominated in domestic currency. But remarkably, the increase in dollarization in some Latin American and Asian countries has continued and even accelerated in recent years following successful stabilization. – See: “Exchange Rate Arrangements and Economic Performance in Developing Countries”, World Economic Outlook, October 1997, pp. 78-97.

## 2. Monetary policy stance

The seven southeast European countries do not pursue the same monetary policy strategy as a tool for bringing down and controlling inflation. Four of them (Bosnia and Herzegovina, Bulgaria, Croatia and Macedonia) are pursuing rule based monetary policy with a deutsche mark as an anchor. The money supply is an endogenous variable in this monetary policy rule. The monetary approach to the balance of payment gives a useful framework for an exchange rate targeting model (For a collection of the seminal papers in this area, see Frenkel and Johnson, 1978). The key characteristics and assumptions for this monetary policy rule are retained as follows: first, asset market equilibrium lies at the center of the model, where the asset in question is money and where the demand for money function at least in the anchor currency country is stable, and the supply of money is determined by the monetary authorities.

The exchange rate targeting monetary policy rule can be expressed by the following equation (Stevenson, Muscatelli and Gregory, 1988, pp. 265-281):

$$e = m - m^* - \lambda y + \lambda y^* - \rho^* r^* + \rho r \quad (1)$$

where:  $e$  is the nominal exchange rate;  $m$  is nominal money demand;  $y$  is real income;  $r$  is interest rate;  $\lambda$  and  $\rho$  are parameters; and  $*$  denotes world variables (variables in anchor currency country).

The central feature of the exchange rate targeting monetary policy strategy is that the exchange rate is determined in the money market of the two economies: domestic and anchor currency country, and in particular by the relative money supplies, the exchange rate being the relative price of two monies. The Central Bank in an exchange rate targeting strategy by accepting that the exchange rate is an intermediate target, simultaneously accepts that it will not implement monetary policy that is independent from the anchor currency country. This means that the money supply in the domestic country becomes endogenous variable determined by the money supply in the anchor currency country in order to keep the stability of the exchange rate. Thus, the price stability (inflation) in domestic country is determined by the money supply growth in anchor currency country (Kool, Tatom, 1994).

The other three southeast European economies (Albania, Romania and Yugoslavia) opted for a monetary policy rule based on money growth target (monetary targeting strategy). This monetary policy strategy is using money supply as an instrument to maintain price stability. The Quantity theory of money provides an analytical framework for implementation of this strategy. The simple Quantity Theory's equation of exchange is:

$$P = M (V/Y) \quad (2)$$

where:  $P$  denotes the price level;  $M$  is domestic money stock;  $Y$  is real output and  $V$  is the velocity of money. According to the Quantity theory,  $V$  and  $Y$  are determined independently, and, more importantly, both are independent of the money stock. The real output ( $Y$ ) is determined by the supply side of the economy – the amount and productivity of the labor force, capital equipment, land and technology – and velocity  $V$  is stable. Then the theory implies that changes in the money supply will be fully reflected in the price changes. In a dynamic context, this means that changes in domestic monetary growth will be fully reflected in changes in the inflation rate (money is neutral in its effect on real output).

Table 2

### Exchange Rate Regime and Monetary Policy Strategy

Country	Exchange rate regime				Monetary strategy			
	1995	1996	1997	1998	1995	1996	1997	1998
Albania	Floating exchange rate				Money growth target			
Bosnia and Herzegovina	...		Irrevocably fixed exchange rate against deutsche mark		...		Currency board	
Bulgaria	Floating exchange rate		July 97 irrevocably fixed exchange rate against deutsche mark		Money growth target		July 97 currency board	
Croatia	De facto target band vis-à-vis deutsche mark				Exchange rate target			
Macedonia	De facto target peg to deutsche mark				Exchange rate target			
Romania	Floating exchange rate				Money growth target			
Yugoslavia					Money growth target			

The long-run neutrality of money on output is installed into expectations-augmented Philips curve:

$$\pi_t^e = \alpha(m - m^*)_{t-1} + \delta(y - y^*)_{t-1} \quad (3)$$

where:  $\pi_t^e$  is the expected rate of inflation in period t, m is money supply,  $m^*$  denotes money demand, y is current output,  $y^*$  is potential output (full employment output), t-1 is previous period, and  $\alpha$  and  $\delta$  are parameters that determine the slope of the curve. The expected rate of inflation depends on two factors: a) the gap between the current and potential growth (unemployment), and b) the gap between the equilibrium growth rate (demand for money) and current growth rate of money. The higher the gap between the equilibrium rate of growth and current growth rate of money supply the higher is the expected rate of inflation in period t. Hence, contrary to the exchange rate targeting strategy, price stability in the domestic country, in the monetary targeting strategy, is determined by the growth rate of domestic money supply. In case a country opted for an independent monetary policy, then the monetary targeting strategy is linked with a floating exchange rate regime.

Three key preconditions, important for practical implementation of the monetary targeting strategy are: existence of stable and predictable money demand; existence of strong and predictable relationship between money supply and price level; and strict control over the money supply from monetary authorities. Except the last assumption, the other two preconditions do not exist in any of the seven southeast European countries, due to the high currency and asset substitution, which is reflected in very unstable money demand. Thus, the current growth rate of money supply can not be used as an indicator for future inflation. Although the first two assumptions were not fulfilled and the third assumption was partly fulfilled, Albania, Romania and Yugoslavia choose monetary targeting rule as a strategy for controlling the inflation.

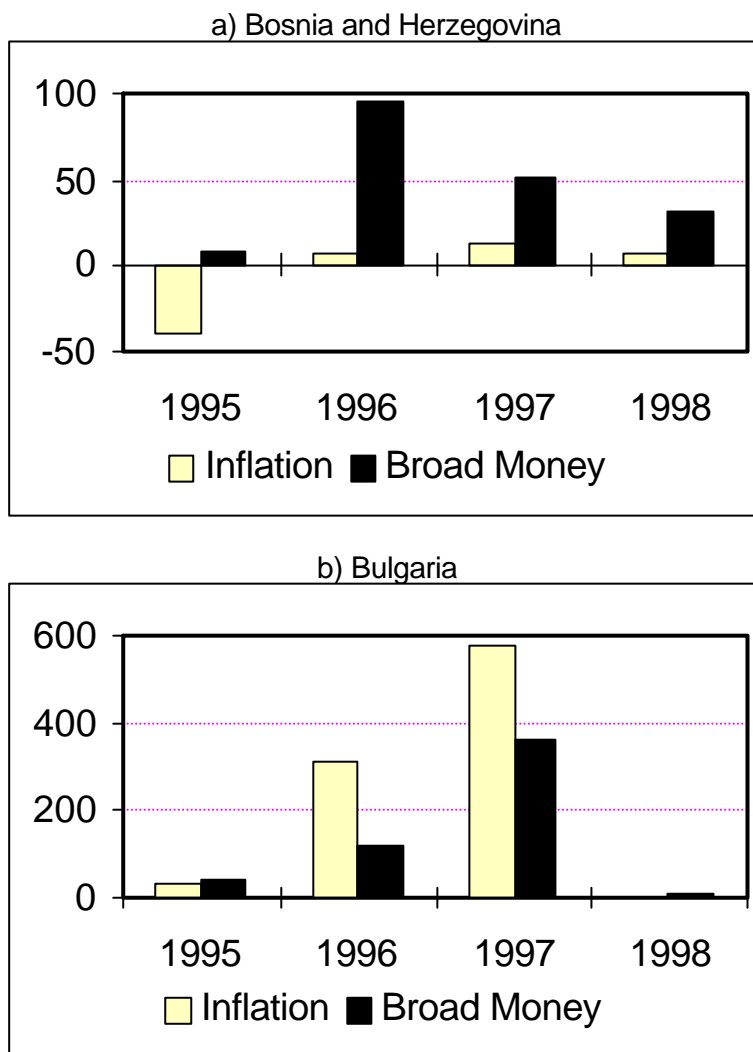
Thus in 1998 the following monetary policy strategies were prevailing in the seven southeast European countries: exchange rate targeting strategy in four countries, of which in two – Croatia and Macedonia, fixed but adjustable exchange rate against deutsche mark served as an intermediate target, in the period 1995-1998. In the other two countries – Bosnia and Herzegovina and Bulgaria, irrevocably fixed exchange rate against deutsche mark, since mid 1997 has been adopted as intermediate target. Furthermore, in these two countries a currency board has been introduced as a mechanism of money supply issuance due to the inability of national central banks to control monetary growth on long-run. The third group of countries, consist of Albania, Romania and Yugoslavia, which in the

analyzed period (1995-1998), were pursuing monetary targeting strategy in combination with floating exchange rate regime.<sup>4</sup>

Figure 1

### Monetary Framework: Money Supply and Inflation

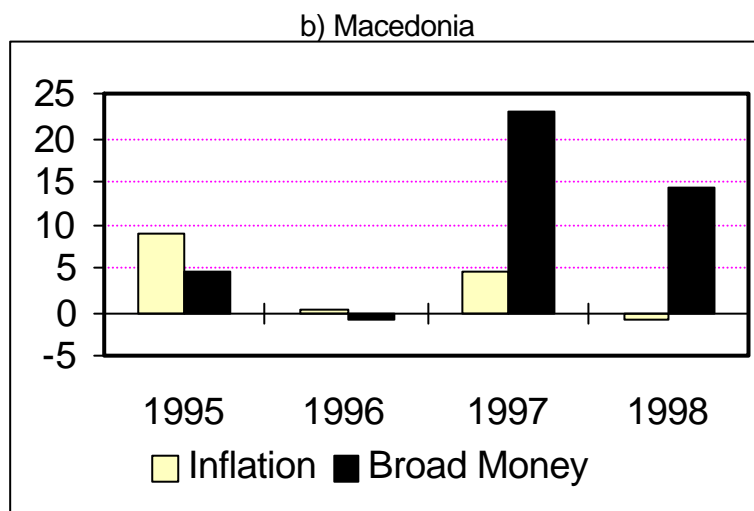
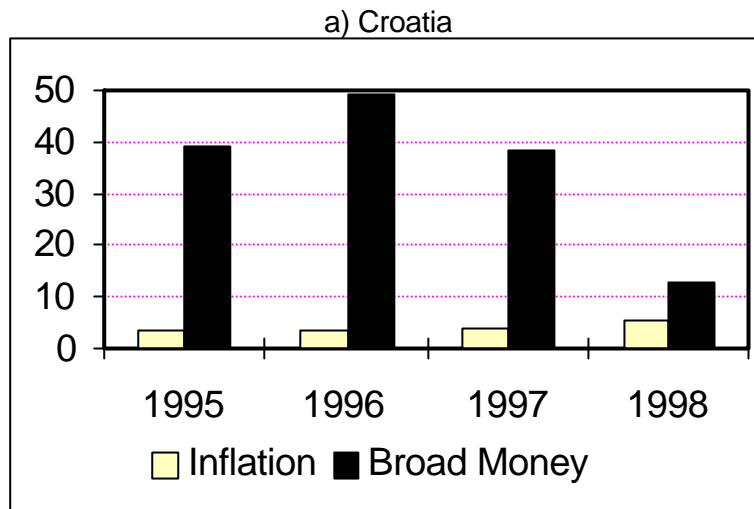
#### I. Currency Board: Money Supply Growth Rate and Rate of Inflation



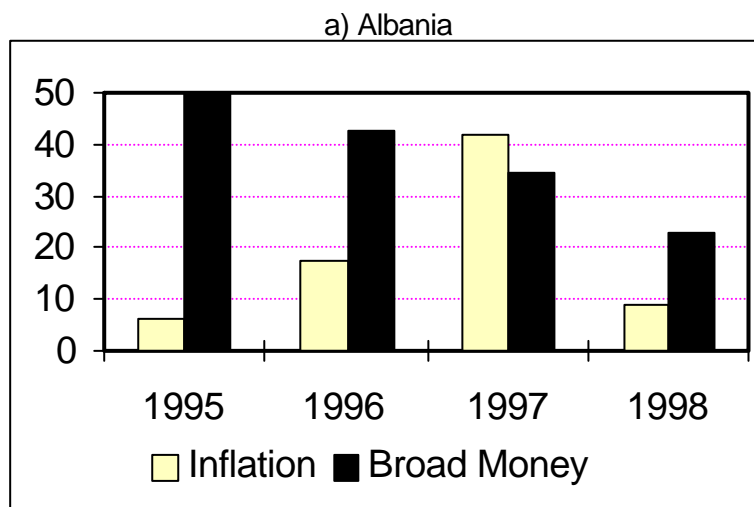
<sup>4</sup> Yugoslavia in the analyzed period formally proclaimed fixed exchange rate regime of its national currency against deutsche mark. But, market exchange rate, through which the foreign exchange transactions have been executed was permanently overshooting the proclaimed fix exchange rate. Furthermore, the Central Bank has not defended the announced exchange rate. Thus, de facto, floating (permanently depreciating) exchange rate regime has been in place.



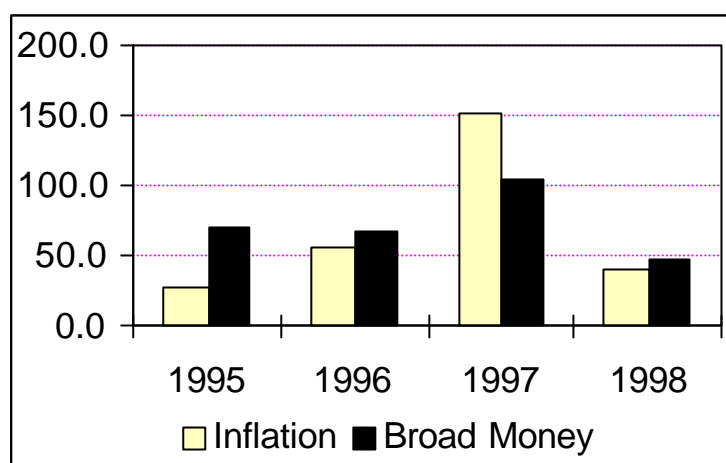
## II. Exchange rate target: Money Supply Growth Rate and Rate of Inflation



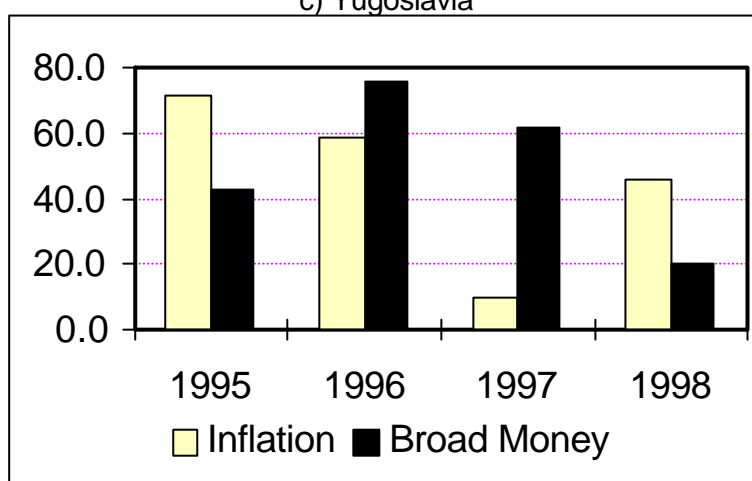
## III. Money growth target: Money Supply Growth Rate and Rate of Inflation



b) Romania



c) Yugoslavia



The main messages from Figure 1 are the following:

1. There is very weak correlation between money supply and inflation in all seven countries due to unstable money demand. Thus, the money supply growth rate can not be used as an indicator for future inflation. Furthermore, monetary based stabilization would be inefficient and money growth targets can not coordinate the decision making process of economic agents.
2. Exchange rate targeting strategies were very efficient in bringing down and controlling the inflation, regardless the money supply has been controlled by the national monetary authorities or by the currency board mechanism. Thus, in two countries that conduct exchange rate targeting strategy, based on fixed but adjustable exchange rate against deutsche mark, the achieved rate of inflation is equal to the industrial countries level (average rate of inflation was 4.1% in Croatia and 3.2% in Macedonia), in last five years. After the adoption of currency board, the rate of inflation in Bosnia and Herzegovina and Bulgaria, converged to the industrial countries inflation rates, also (rate of inflation of 5.8% and 1%, respectively, in 1998).
3. By accepting exchange rate targeting strategy, the Central Banks of four southeast European countries, subordinate their monetary policies, especially the issuance of money supply, to the exchange rate objective. They are unable to target any other nominal variable

on a lasting basis, especially in the presence of capital mobility. But, there is an important difference between the countries that are implementing currency board and countries that are pursuing pure exchange rate targeting strategy. The former, by adopting irrevocably fixed exchange rate of national currency against deutsche mark as intermediate monetary policy target, give up from the usage of the exchange rate as means for balance of payment adjustment and instrument to neutralize external shocks. Although policymakers in Bosnia and Herzegovina and Bulgaria do not dispose with alternative devices that can be used for balance of payments adjustment and for neutralizing asymmetric demand and supply shocks, they adopted currency board mechanism, based on irrevocably fixed exchange rate, as automatic mechanism for money supply issuance. Furthermore, at the period of introduction, the fundamental equilibrium exchange rate (FEER) of their national currencies was unknown.<sup>5</sup> In the year of introduction of currency board, the prevailing exchange rate did not refer to the economy, which was regarded as being in external and internal equilibrium. To the contrary, the introduction of a currency board system in Bulgaria occurred in a period of very high internal and external imbalances (hyperinflation, huge current account and fiscal deficits). In Bosnia and Herzegovina currency board was established after four and a half years of war and totally destroyed economy. The only means for balance of payments adjustment in these two countries are expenditure reducing policies and deflationary and recessionary effects on domestic output during the period of correction, which can take a long time if the degree of wage and price flexibility is limited.

The other two countries (Croatia and Macedonia) adopted fixed but adjustable exchange rate as an intermediate target. This means, that although the exchange rate is used as nominal anchor, it can still be used as means for equilibrating the balance of payments, when disequilibria is caused by fundamentals, in order to prevent the short term costs of deflationary effects reflected in domestic output during the correction period. Of course, the changes of exchange rate can not be substitution for expenditure reducing policies and structural reforms.

4. The monetary targeting strategy appeared as an inefficient strategy for bringing down and controlling the inflation. The inflation in this group of countries remained two digit. The average inflation rate in the countries with monetary growth target was 44.7% in the period 1995-1998, ranging from 18.5% in Albania, to 46.5% in Yugoslavia, and 69.2% in Romania. Furthermore, Central Banks in these countries do not succeed to establish control over the money supply growth in long run. Monetary growth in all three economies remained high, and average rate was in a range between 37.3% in Albania and 72.8% in Romania, for the period 1995-1998.

5. The monetary authorities which pursued exchange rate targeting strategy established firm control over the monetary growth and regained credibility of monetary policy. This lead to the reduction of currency and asset substitution in these economies, although it still

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<sup>5</sup> The fundamental equilibrium exchange rate (FEER) is the exchange rate that is consistent with macroeconomic balance in medium-term, meaning the simultaneous achievement of internal and external balance. Internal balance implies acceptance of the historically determined wage rate and achievement of a level of effective demand such as to sustain the potential full-employment output consistent with the control of inflation. External equilibrium is defined in terms of a sustainable value of the current account balance. The medium term in this context means the period needed for output to return to potential and for changes in competitiveness to be reflected in trade volumes, which would appear to be in the range of four to six years. See: John Williamson, "Estimates of FEERs", in John Williamson, Editor, "Estimating Equilibrium Exchange Rates, Institute For International Economics, Washington, September 1994, pp. 177-244; and Tamim Bayoumi, Peter Clark, Steve Symansky, and Mark Taylor, "The Robustness of Equilibrium Exchange Rate Calculations to Alternative Assumptions and Methodologies", in John Williamson, Editor, "Estimating Equilibrium Exchange Rates, Institute For International Economics, Washington, September 1994, pp. 19-59.

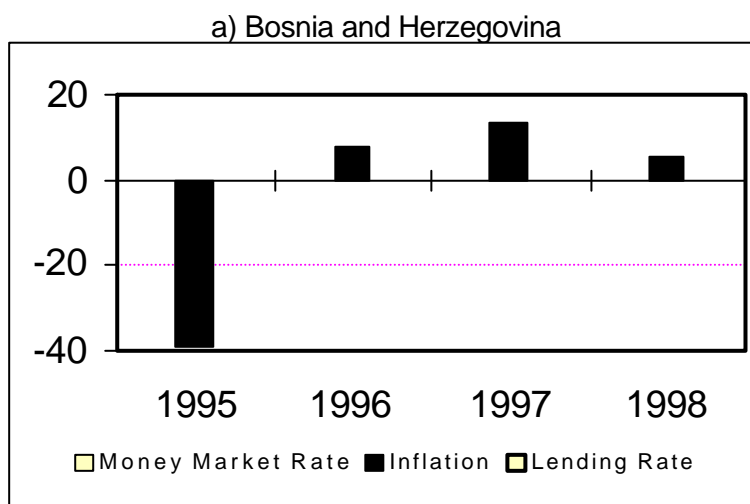
remains high. Due to the remonetization, the money supply growth rates were much higher than the rate of inflation in the four southeast European countries with exchange rate target. Thus the growth rate of broad money – M2, was almost ten times higher than the inflation rate in Croatia during the period 1995-1998. In the same period, in Macedonia, monetary growth was three times higher than the inflation rate. After the introduction of currency board, the money supply growth in Bosnia and Herzegovina was four times higher than the rate of inflation, and in Bulgaria, growth rate of money supply was overshooting the rate of inflation by ten times.

6. As an anchor currency deutsche mark has been adopted, in all cases where the exchange rate was used as an intermediate target. Thus, the monetary policy in domestic countries was dependent on the monetary policy in Germany. Since 1<sup>st</sup> of January 1999, monetary policy in these countries, through the irrevocably fixed exchange rate of the deutsche mark against the Euro, has become dependent on the monetary policy of the European Central Bank (ECB). The adoption of the deutsche mark as an anchor currency was based on three key factors: first, all these countries have the most intensive trade and financial links with EU countries, and especially with Germany, second, the demand for money, for deutsche mark, currently for the Euro is stable, and third, monetary policy in Germany, and currently in Euroland is oriented towards price stability and is credible. Thus, by the exchange rate targeting strategy, the four southeast European countries are importing the credibility of the European Central Bank. The desire to “borrow” credibility and low inflation reputation of the Bundesbank and ECB was the main criteria for adopting either fix but adjustable or irrevocably fixed exchange rate regime. Other criteria were less important.

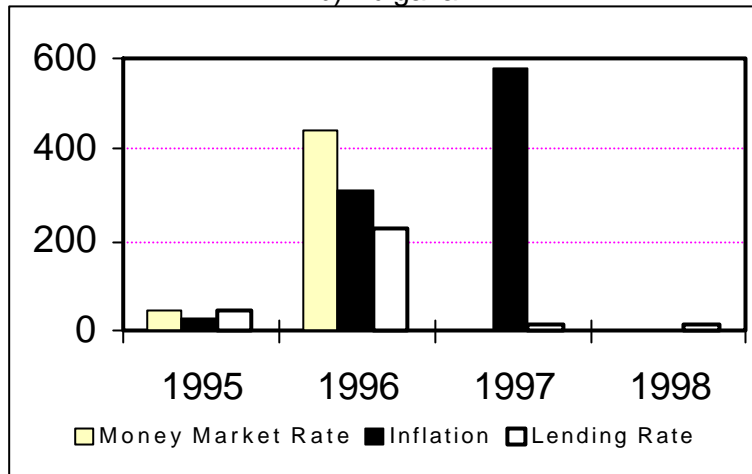
Figure 2

### Monetary Framework: Interest Rates and Inflation

#### I. Currency Board: Money Market Rate, Lending Rate and Inflation Rate

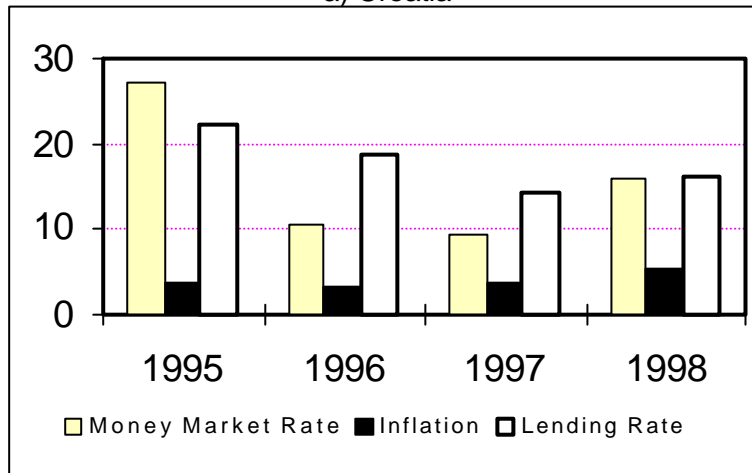


b) Bulgaria

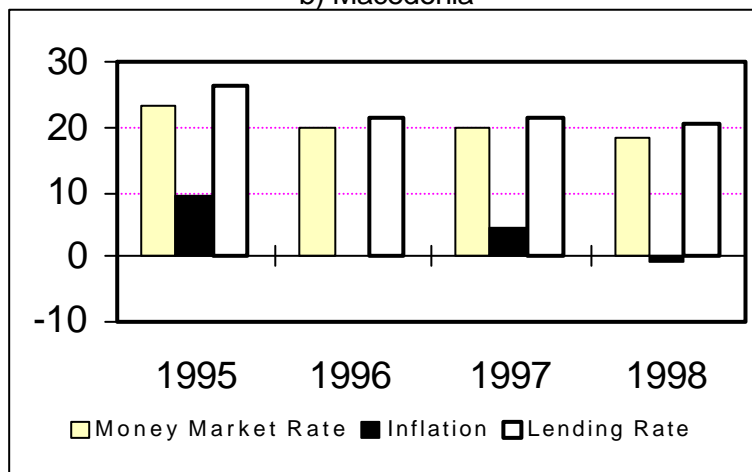


**II. Exchange rate target: Money Market Rate, Lending Rate and Rate of Inflation**

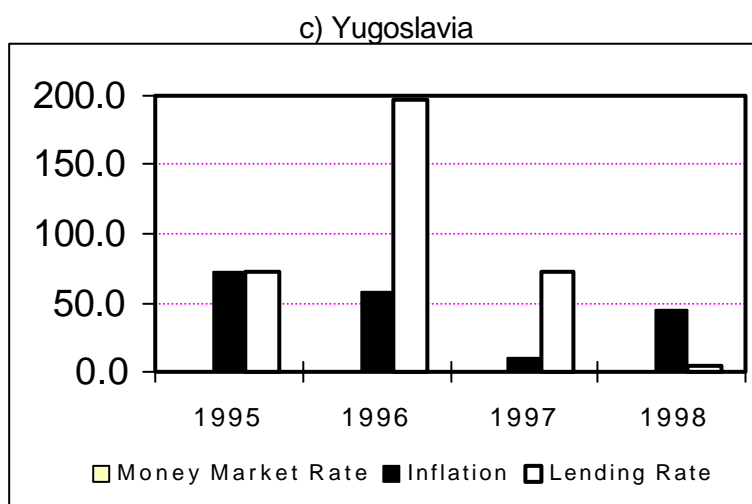
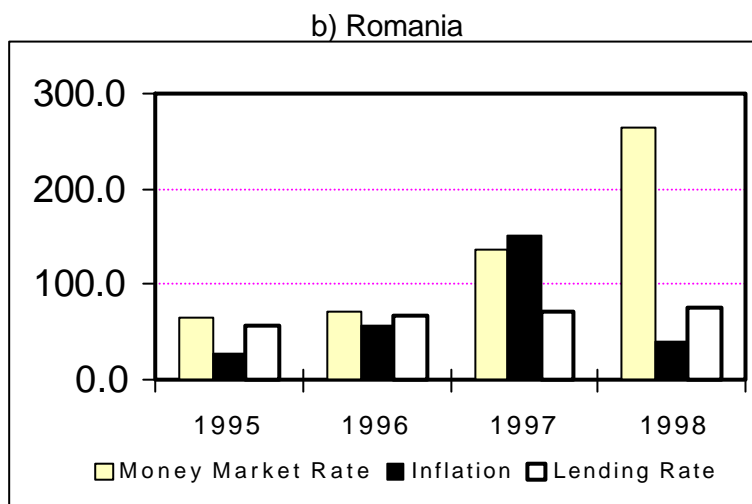
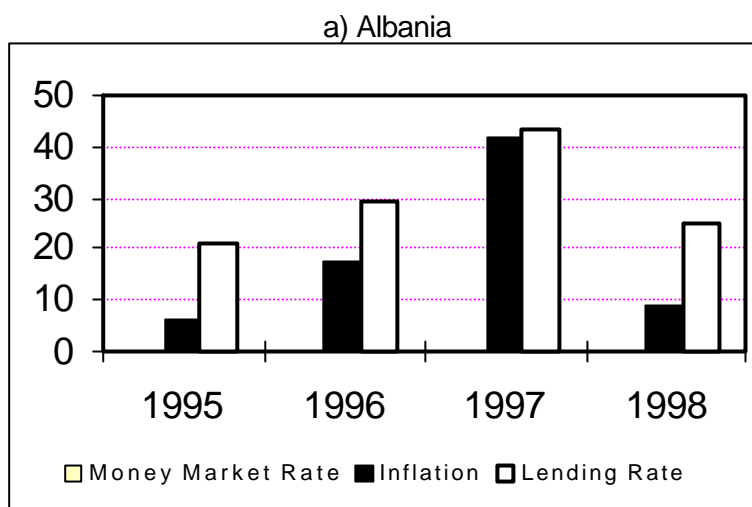
a) Croatia



b) Macedonia



### III. Money growth target: Money Market Rate, Lending Rate and Rate of Inflation



High interest rates were the primary tool for defeating and controlling the inflation. The reduction of interest rates was possible after the confidence was restored and the low rates of inflation became permanent. In cases where the interest rates were reduced before the permanent defeat of inflation, it reappeared at higher level. That was mainly the

case in three southeast European countries that were pursuing monetary targeting strategy. Stop and go monetary policy in these countries produced high and variable inflation, which was connected with high economic and social costs.<sup>6</sup> The pace of reduction of interest rates in four southeast European countries, conducting exchange rate targeting strategy, mainly was determined by the need to keep exchange rate peg and the scope of net capital inflow.<sup>7</sup> Furthermore, the monetary policies based on exchange rate target produced higher interest rate volatility on money market, which was the cost for exchange rate stability. The priority was given to maintain the exchange rate peg, and interest rates were subordinated to this goal. Excessive money market volatility has been achieved in cases of huge capital inflows and outflows, in order to defend the exchange rate peg.<sup>8</sup>

Table 3

### Real GDP And GDP Per Capita At Market Exchange Rate

(For real GDP indices, 1989=100)

Country	1995		1996		1997		1998	
	GDP	GDP per capita	GDP	GDP per capita	GDP	GDP per capita	GDP	GDP per capita
Albania	80.9	757	88.2	840	82.0	692	88.6	1,110
Bosnia and Herzegovina	...	686	...	866	...	1,012	...	1,206
Bulgaria	79.7	1,558	71.6	1,184	66.6	1,224	69.0	1,468
Croatia	67.3	4,000	71.4	4,422	76.0	4,348	78.1	4,635
Macedonia	67.8	2,228	68.3	2,206	69.3	1,856	71.4	1,690
Romania	84.8	1,565	88.2	1,539	82.1	1,533	76.1	1,635
Yugoslavia	44.2	1,852	46.8	1,299	50.3	1,479	51.6	1,243

Growth performance of the southeast European countries was very poor, regardless of the monetary policy regime. At the end of 1998, the region as a whole, and each country in particular did not reach the pre-transition level (1989) of GDP. Closest to the pre-transition level of GDP were Albania (88.6%) and Croatia (78.1%). The GDP level in Yugoslavia, in 1998, was only half of its pre-transition level. In Bulgaria, Macedonia and Romania, the GDP level in 1998, in comparison to their pre-transition level was 69.0%, 71.4% and 76.1%, respectively (Economic Commission For Europe, 1999, No. 2, p. 65). The countries (Croatia and Macedonia), that during the whole analyzed period (95-98) were pursuing exchange rate targeting strategy, achieved average annual growth of 3.2%. While growth rate in Macedonia has been permanently accelerating, growth rate in Croatia in 1998 decelerate. The average growth rate of the three southeast European countries that have been pursuing monetary targeting strategy in the period 1995 -1998, reached to 3.6%. In Albania the average growth rate was 5.5% and was volatile. There was no growth in the analyzed period in Romania, whereas, the average growth in Yugoslavia was 5.5%, with decelerating trend which started in 1998. In Bulgaria, before the introduction of currency board, due to the financial crisis and high price instability the growth was negative. The contraction of output continued in 1997 when the currency board was adopted. In 1998 the growth was restored and it reached 3.5%.

<sup>6</sup> "Inflation is a disease, a dangerous and sometimes fatal disease, a disease that if not checked in time can destroy a society." – Milton Friedman and Rose Friedman, "Free to Choose: A Personal Statement", Harcourt Brace Jovanovich, 1980, p. 253.

<sup>7</sup> Net capital inflow is equal to capital inflow minus capital outflow.

<sup>8</sup> The consequence of the choice of exchange rate regime is the change in the distribution of short term volatility between the foreign exchange market and the short term money market. – Mills, Wood, 1993, p.5)

Structural and institutional reforms are very important for restoring growth, on long term base, in the region. In Yugoslavia they even have not been started. In the other six countries, the structural reforms were almost halted since 1997 due to the turmoil in emerging markets and recently due to the Kosovo crisis which severely hit the seven economies of southeast Europe. The strength of commitment to market supporting institutional reforms was very weak. The Kosovo crisis has highlighted the critical importance of the capacity of the state to enforce laws and curb corruption, to collect taxes, to regulate banks and financial markets, to implement bankruptcies, to promote enterprise restructuring and effective corporate governance, and to build the social foundations for a well-functioning market economy. These are the key challenges of the next phase of transition and they remain at the top of the agenda for all countries of the region.

The transition indicators presented in Table 4 for the southeast European countries show a significant slow pace of overall progress towards well-functioning market economy. Furthermore, there are more frequent instances of backtracking on previously implemented reforms. In the area of privatization, the small-scale privatization is virtually complete, but the large-scale privatization has been sluggish, while the privatization or closure of large loss-making enterprises remains a major challenge.

Constrained by poor corporate governance and weak financial discipline, enterprise reform has continued to lag behind other dimensions of structural reforms. Unprofitable enterprises continue to receive support through “soft budget constraints”, including weak enforcement of bankruptcy and tolerance of tax, electricity and water supply arrears. Corporate governance and lack of competition remain key obstacles to enterprise restructuring and sustainable growth. Perhaps the most damaging aspect of weak corporate governance has been the lack of transparency and accountability evident in enterprises across the region. However, weak corporate governance and weak financial discipline, not only constrain progress in fiscal and financial sector reform, but also expose seven southeast European countries to economic instability, putting the hard-won gains of the transition process at a risk.

Financial sector remains shallow, underdeveloped and weak. The banking sector is fragile, and is characterised by a lack of financial intermediation. Due to weak lending practices, bad loans are major problem for all seven countries. Securitization and development of capital markets is still weak.

The tasks in the area of structural reforms – promoting sound corporate governance and enterprise restructuring, deepening and effectively regulating financial markets, strengthening the fiscal system, building and adequate social safety net and fostering the rule of law – are of such magnitude and complexity that they cannot be completed overnight. Although rules, procedures and organizations can often be set in place rather quickly, the capacity of institutions to change expectations and shape behaviour – hence their effectiveness – can be developed only over the long term. Effective structural reforms require investments in the development of individual skills (human capital) and accumulation of experience by learning and doing to alter entrenched patterns of behaviour and practices within society. As a result, the time needed for these reforms is substantially longer than the time required for the policy reforms and redistribution of state-owned assets associated with the first phase of transition (EBRD, Transition Report 1998, p. 23).



Table 4

### Progress in Transition in Southeast European Countries

- Transition Indicators for 1998 -

	Population (millions, 1997)	Private sector share of GDP in %, mid- 1998 (FBRD estimate)	Enterprises			Markets and trade			Financial institutions	
			Large-scale privatisation	Small-scale privatisation	Governance & enterprise restructuring	Price liberalisation	Trade & Foreign Exchange System	Competition Policy	Banking Reform & Interest Rate Liberalisation	Securities Markets & non- Bank Financial Institutions
Albania	3.2	75	2	4	2	3	4	2	2	2-
Bosnia and Herzegovina	4.1	35	2	2	2-	3	2	1	2	1
Bulgaria	8.3	50	3	3	2+	3	4	2	3-	2
Croatia	4.5	55	3	4+	3-	3	4	2	3-	2+
Macedonia	2.0	55	3	4	2	3	4	1	3	2-
Romania	22.5	60	3-	3+	2	3	4	2	1+	2

Source: European Bank for Reconstruction and Development, "Transition Report 1998", P.26.

1 Is the lowest progress.

4+ Is highest progress.

## 2. Euroization

The southeast European countries belong to Europe not only normatively but also economically. The European Union is the largest trading partner for the region as a whole and for each particular country. Trade with EU-15 accounts for 30.7% of the regions' GDP or 53.8% of total world trade of the region. Albania is the most dependant country on EU. It exchanges with EU 64.1% of its total world trade (23.1% of GDP). The medium-size Romania, exchanges with EU 64.1% of its total world trade (33.1% of GDP). Trade with EU accounts for half of the total trade of Bulgaria and Croatia. The other three countries (Bosnia and Herzegovina, Macedonia and Yugoslavia) exchange with EU between 39.0% and 42.0%, of their total world trade (Table 5).

The importance of the EU for the region can be proved also from the ratio – the value of trade turnover with the EU per capita. This ratio for the region as a whole was USD 551 (Euro 488 – value of trade with the EU per inhabitant). The value of this ratio is considerably higher than the one for Moldova and Ukraine. It is about Euro 190 higher than the ratio in the CIS, where the value of trade with the EU per inhabitant is less than Euro 400. Just for comparison, in the Czech Republic, Estonia, Hungary and Slovakia, this figure oscillates from Euro 1,300 to 2,300 per inhabitant. In Poland, Latvia, and Lithuania, the amount is around Euro 700-900 per inhabitant (Butorina, 1998). Regarding the value of trade with the EU per inhabitant, the southeast European countries can be classified in three groups. The first group includes only Croatia, with trade with EU per inhabitant above Euro 1,000 (Euro 1,386). The second group consists of three countries (Bulgaria, Macedonia, Romania) with volume of trade with EU of around Euro 500 per inhabitant. The third group is comprised of Albania, Bosnia and Herzegovina, and Yugoslavia. Their volume of trade with EU is around Euro 250 per inhabitant.

Contrary to the high trading and economic links with EU, there is small volume of trade within the countries of southeast Europe. For many southeast European countries the other southeast European countries are not important trading partners. Furthermore, for almost no southeast European country is another southeast European country the main trading partner. In rare cases, for some southeast European countries the other southeast European countries are not trading partners at all (Gligorov, 1997, p. 3).<sup>9</sup>

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<sup>9</sup> Instead of the seven countries of southeast Europe in our analysis, Gligorov is considering ten countries consisting the Balkans: Slovenia, Croatia, Bosnia and Herzegovina, Albania, Macedonia, Romania, Bulgaria, Greece and Turkey. His findings about the trade within the region are following: "For many Balkan countries the other Balkan countries are not important trading partners. In Table 1 a lot of zeros can be observed. They do not always represent an absolute absence of trade but rather levels that are so low (much lower than 1%) that they are not worth mentioning. From this it follows that currently the Balkans are not a trade creating region...For some Balkan countries the other Balkan countries are not trading partners at all." – Vladimir Gligorov, "Trade in the Balkans", The Vienna Institute Monthly Report, No.12/1997.

Table 5

### Openness Toward the World and the EU In 1988

	Share of total trade in GDP in %	Share of total trade with EU in GDP in %	Share of total trade with EU in total world trade in %	The value of total world trade turnover per capita in USD	The value of trade turnover with EU per capita in USD	The value of trade turnover with EU per capita in Euro
Albania	27.0	23.2	85.8	300	257	229
Bosnia and Herzegovina	70.2	27.5	39.1	703	275	245
Bulgaria	73.3	36.6	50.1	1,074	538	480
Croatia	62.8	33.5	53.3	2,910	1,552	1,386
Macedonia	85.7	36.0	42.0	1,449	608	543
Romania	51.6	33.1	64.1	844	542	484
Yugoslavia	57.9	22.5	39.0	720	280	250
Total	58.8	31.6	53.8	1,017	547	488
Total - Romania	63.4	30.7	48.4	1,137	551	492

The main message of Table 5 is that the prosperity of the southeast European region, and of each country within the region, depends on the developments in the EU. The EU is the largest market and is locomotive for the growth in the region. Close trade relationships with EU do not allow the countries in the region to pursue different macroeconomic policy and especially monetary policy than the one in their main trading partner. Monetary policy has to be subordinated to the monetary policy of the ECB, taking in mind that all southeast European countries are small and do not represent an optimum currency area. Even the region as a whole is not an optimum currency area. As such the countries in the region cannot conduct independent monetary policy.

In such circumstances, the only possible simple rule for conducting monetary policy is exchange rate targeting. This is the only efficient monetary policy rule that can maintain internal and external balance consistent with the potential growth and low inflation.<sup>10</sup> Furthermore, exchange rate targeting as monetary policy rule will produce swift convergence of the economic performances of southeast European countries to the ones in EU. However, in the process of designing the exchange rate targeting strategy, the monetary authorities should have in mind the following factors:

1. At least for a decade, due to the diminishing returns on capital and low starting base, growth potential in the countries of southeast Europe will be much higher than the growth potential in EU.

<sup>10</sup> "An efficient rule for monetary policy is one that minimizes a weighted sum of output variance and inflation variance." – Laurence Ball, "Efficient Rules for Monetary Policy", John Hopkins University, January 1997, p. 3.

2. Complete large scale restructuring in the countries of the region will take place. This means that fundamentals of the economies, which in long-run depend on exchange rate regime and real exchange rate will be considerably changed.<sup>11</sup>
3. Economic growth is expected to be accelerated by broad liberalization and opening of the countries in the southeast Europe and their integration in EU. The empirical evidence overwhelmingly proves the links between openness and economic growth. According to the empirical evidence the economies have grown faster on average after liberalization and their global integration, in both the short and long run. The regional integration between small and developing economies lead to slower growth, especially in short run.<sup>12</sup> Due to this, the acceleration of growth and maintaining the stability in the region requires its' integration in EU.
4. Reduction of the currently high currency and asset substitution due to the regained credibility of monetary policy will considerably increase the money demand in the countries of the region in medium term. This will lead to high growth of money supply, which will not only overshoot the inflation, but also considerably overcome the monetary growth in EU.
5. By excessively high interest rates, even overvalued exchange rate can become an equilibrium exchange rate. The lower current growth than the potential growth will be the outcome. The interest rates will fall down, and exchange rate will remain stable, only if nominal wages are altered. With sufficient wage and price flexibility, the decline in prices (deflation) will lead to lower nominal wages and increased international competitiveness. If wages and prices are not very flexible downwards, this will require considerable time and considerable duration of the recession and longer-term lower current growth than the potential (De Grauwe, 1992, p. 42).<sup>13</sup>

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<sup>11</sup> "We examine the mean-reverting properties of real exchange rates, by comparing the unit root properties of a group of international real exchange rates with two groups of international real exchange rates. Strikingly, we find that while the international real rates taken as a group appear mean reverting, the intranational rates are not. This is consistent with the view that while nominal shocks may be mean reverting over the medium term, underlying real factors do generate long-term trends in real exchange rates." – Tamim Bayoumi and Ronald Macdonald, IMF Staff Papers, Vol. 46, No. 1, March 1999.;

"This section develops a model of real exchange rate determination that allows for both real and nominal factors to play a role in the short run. In the long run, however, only real factors – the "fundamentals" – influence the equilibrium real exchange rate." – Sebastian Edwards, "Real and Monetary Determinants of Real Exchange Rate Behavior: Theory and Evidence from Developing Countries", in John Williamson, Editor, Estimating Equilibrium Exchange Rates, Institute for International Economics, September 1994, Washington, p. 62.

<sup>12</sup>For more details see: Athanasios Vamvakidis, "Regional Trade Agreements or Broad Liberalization: Which Path Leads to Faster Growth?", IMF Staff Papers, Vol. 46, No. 1, March 1999, pp. 42-68.; Maurice Schiff and L. Alan Winters, "Dynamics and Politics in Regional Integration Arrangements: An Introduction", The World Bank Economic Review, Vol. 12, No. 2, May 1998, pp. 177-195.; Raquel Fernandez and Jonathan Portes, "Returns to Regionalism: An Analysis of Nontraditional Gains from Regional Trade Agreements", The World Bank Economic Review, Vol. 12, No. 2, May 1998, pp. 197-220.

<sup>13</sup> "In any given situation there is an equilibrium rate corresponding to each rate of interest and level of effective demand, and any rate of exchange, within very wide limits, can be turned into the equilibrium rate by altering the rate of interest appropriately. Moreover, any rate of exchange can be made compatible with any rate of interest provided that money wages can be sufficiently altered. The notion of the equilibrium exchange rate is a chimera. The rate of exchange, the rate of interest, the level of effective demand and the level of money wages react upon each other like the balls in Marshall's bowl, and no one is determined unless all the rest are given." – Joan Robinson, "The Foreign Exchanges", In Joan Robinson, Essays in the Theory of Employment, Oxford: Basil Blackwell, London, 1947, p. 103.

All these factors are against adopting irrevocably fixed exchange rate as intermediate exchange rate target and currency board as automatic issuance mechanism in the seven southeast European countries. If these factors are neglected and currency board is adopted, inflation will be under control, but there is a risk the economic growth to be below the potential growth. In the previous part of this analysis we presented evidence that fixed but adjustable exchange rate, as intermediate monetary policy target is as efficient in controlling the inflation as currency board. Furthermore, this strategy does not undermine the economic growth, although it allows changes of the exchange rate in rare cases, justified by fundamentals (real factors), only. Thus, in short run through the relation called uncovered interest rate parity, the exchange rate peg will be maintained. In long run, through the relative prices of goods, exchange rates will be determined by fundamentals (C. J. Neely, 1994, p. 24).

The basic mechanism through which the exchange rate peg will be maintained will be capital inflow and outflow determined by the interest rate changes on the domestic money market. The interest rates will regulate the contribution of domestic credits to the monetary growth. Due to the interest elasticity of the money demand (unstable money demand) in the countries in the region, by a relatively small changes in interest rates, domestic money demand can be equalized to the money demand in the anchor currency country.

Thus, when there will be a pressure for exchange rate appreciation, the national Central Bank will increase the liquidity on the domestic money market. This will lead to reduction of the money market interest rates, which will destimulate the capital inflow. Contrary, capital outflow will be stimulated. Reduced interest rates, simultaneously, will increase the contribution of domestic credits to the money supply growth, on one side, and they will lead to an increase in the money demand, on the other side, due to the high interest elasticity of the income velocity of money.

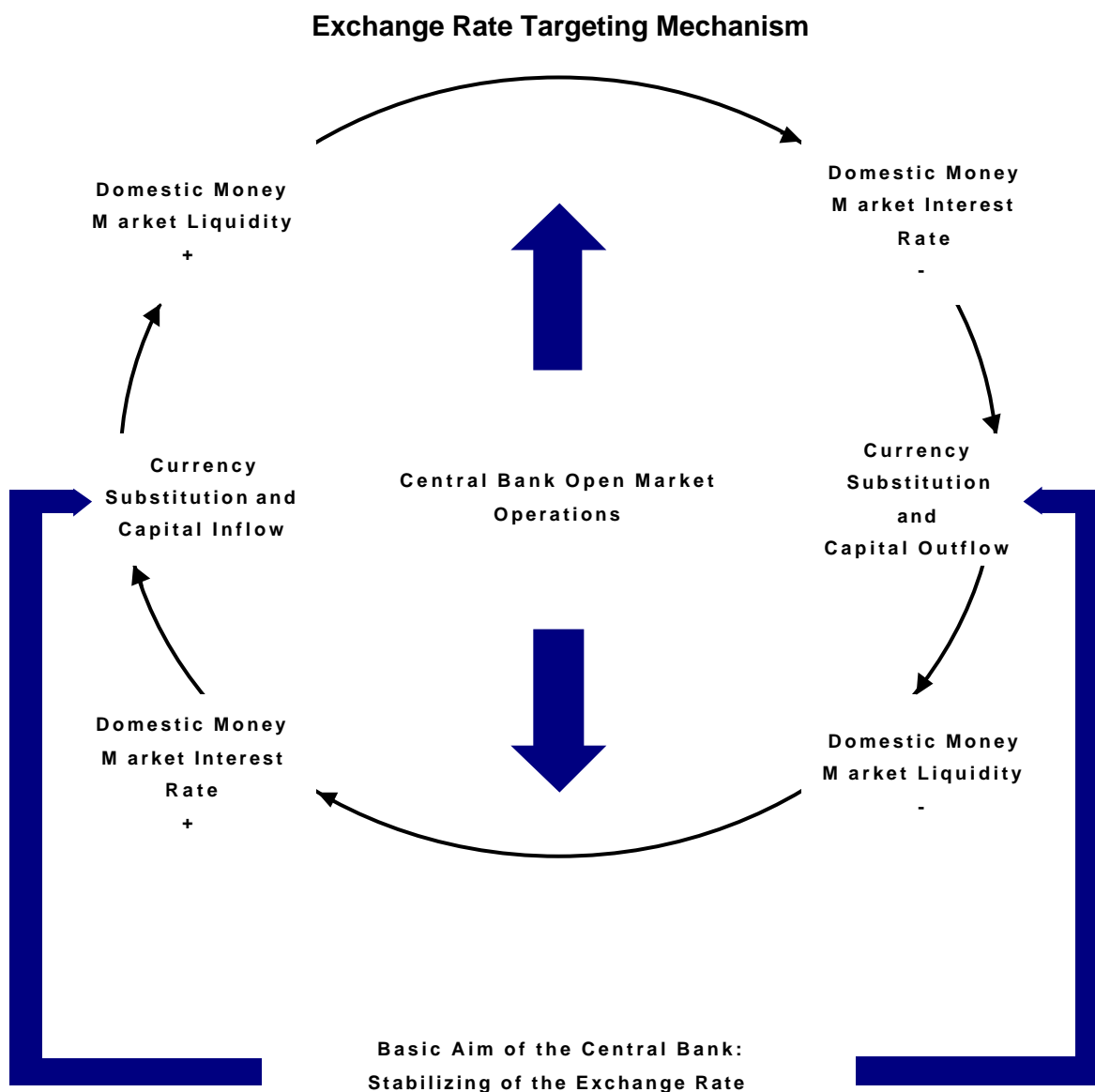
The reaction of the national Central Bank in the seven southeast European countries will be opposite in the case if there is a pressure for exchange rate depreciation. In that case the Central Bank will reduce the liquidity on the domestic money market, which will lead to the interest rates increase. This will encourage the capital inflow and discourage the capital outflow, which will restore the balance at the foreign exchange market at the current exchange rate. Simultaneously, increased interest rates will reduce the contribution of domestic credits to the monetary growth and reduce the money demand due to the interest rate sensitivity of the velocity.

Hence, the stability of the exchange rate will be automatically maintained, which would be reflected in the low and stable inflation. The cost is higher volatility of the money market interest rates. The monetary authorities will be obliged to follow this monetary policy rule which ensures stability of the exchange rate through the very simple mechanism the strict implementation of which can be very easily checked. Shocks to the economy cannot, therefore, put pressure on exchange rate, but will automatically be translated into variations in net foreign holdings of the Central Bank, and hence will influence money aggregates and monetary growth (Whitley, 1994, pp. 252-253).

The anchor currency for the seven southeast European countries should become the Euro, immediately, due to their close economic links to the EU and their strong will to join this economic and political integration. This requires, all seven southeast European countries, immediately to join the present version of the current exchange rate mechanism of EU countries, known as ERM2, to which Denmark and Greece belong. But, each southeast European country cannot unilaterally change its exchange rate. Once the exchange rate is fixed, future changes can occur only if the agreement with the monetary

authorities within EU is reached.<sup>14</sup> Through such mechanism, misuse of the exchange rate changes will be prevented. Expenditure reducing policies and structural reforms will be preferred instead of the exchange rate changes. The latter will be used as means of last resort, in order to prevent the deflationary effects on the output, in cases when it is justified by fundamentals.

Figure 3



In order to implement efficient and strict rule based monetary policy, in all seven southeast European countries, new institutional arrangements for the monetary system will be adopted immediately. They have to secure full independence of Central Banks identical to the independence of the European System of Central Banks. The national Central Banks should dispose with full institutional and functional independence. The former means that through the institutional arrangements for the election process of the

<sup>14</sup> “To help new applicants adapt, they have to join the present version of the exchange rate mechanism, known as ERM2, to which Denmark and Greece belong. But the new comers would have scope to change their exchange rate, in agreement with the Euro countries”. – Pedro Solbes Mira, EU commissioner for economic and monetary affairs, The Financial Times, 1999, p. 12.

governor of the Central Bank, the term of office of the governor, and the relations of the Central Bank with the Government, the Ministry of Finance and the Parliament, the independence of the Central Bank is guaranteed. The latter means that the Central Bank is fully independent in selecting the monetary policy strategy for maintaining price stability, in setting up the intermediate target and in unlimited usage of the monetary policy instruments, including the changes of interest rates. Also, it will be prohibited, through the institutional arrangements, government deficits to be monetized.

Such monetary policy rule connected with full central bank independence will ensure swift convergence of the monetary performances in southeast European countries to the monetary performances in the EU countries. Thus, economically speaking, through the regime of fixed but adjustable exchange rate of their national currencies against the Euro, the seven southeast European economies will become in de facto monetary union with Euroland. The monetary policy in the countries in the region will be closely linked with the monetary policy of ECB. The temporal deviations from the monetary union with Euroland will occur in the periods of the exchange rate changes, in case they are justified by fundamentals and agreed with the ECB. High labor mobility and wage flexibility will be the main instruments for neutralizing the external shocks and equilibrating current account of the balance of payments in the medium term. In exceptional cases, the changes of the exchange rate can also be used for neutralizing strong external shocks, if an agreement with ECB is achieved. Once the structural reforms are completed, and the real exchange rate becomes mean-reverting, irrevocably fixed exchange rate regime will be adopted. This will definitely mean, that the country is qualified to introduce the Euro as its national currency.

Joining the ERM2 of the southeast European countries will mean starting a process of economic and political integration in the region and particularly their integration in EU. In general, the process of the integration in EU has to be driven by the political conviction that an integrated region will be safer, more stable and more prosperous than a fragmented region out of Europe. In this sense, the euroization could become an important symbol of political and social integration of the region in Europe. It could serve as a catalyst for high economic growth and employment.

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## **A P P E N D I X:**

Main economic indicators for:

- Albania
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Macedonia
- Romania
- Yugoslavia

### Basic Economic Indicators for Albania

	1995	1996	1997	1998
Population (in mln)	3.20	3.20	3.30	3.40
Nominal GDP (in USD bn)	2.4	2.7	2.3	3.8
Rates of real GDP growth	13.3	9.1	-7.0	8.0
Rates of inflation Dec./Dec.	6.0	17.4	42.1	8.7
Current account deficit (in USD mln)	36.6	-62.4	-256.1	-65.0
Total import of goods (in USD mln)	679.8	922.0	693.5	811.7
Total export of goods (in USD mln)	204.8	243.7	158.6	208.0
Total import of goods from EU (in USD mln)	n.a.	641.2	538.0	684.0
Total export of goods in EU (in USD mln)	n.a.	179.3	128.0	191.5
Stock of M1 - end of period (Dec.) (in ALL mln)	59.253	90.405	91.667	83.729
Growth rates of M1 Dec./Dec.	52.8	52.6	1.4	-8.7
Stock of M2 - end of period (Dec.) (in ALL mln)	84.779	120.646	162.222	199.263
Growth rates of M2 Dec./Dec.	49.7	42.3	34.5	22.8
Total foreign currency deposits - end of period (Dec.) (in ALL mln)	20.080	33.906	36.326	40.263
Money market interest rates - end of period (Dec.) in %	...	...	...	...
Weighted lending interest rates - end of period (Dec.) in %	21.0	28.8	43.0	25.0
Exchange rate against USD, end of period (Dec.) (ALL/USD)	94.2	103.1	149.1	140.6
Exchange rate regime	floating			
Fiscal deficit as % of GDP	-10.2	-12.8	-12.9	-10.4

Source: Bank of Albania

### Basic economic indicators for Bosnia and Herzegovina

	1995	1996	1997	1998
Population (in million)	2.90	3.20	3.30	3.30
Nominal GDP in USD bn	1.99	2.77	3.34	3.98
Rates of real GDP growth	...	...	...	...
Rates of inflation Dec./Dec. - Federation	-39.5	7.7	13.4	5.8
Current account deficit (in USD mln)	-570	-1.306	-1.468	-2.005
Current account deficit as % of GDP	-26.4	-39.3	-33.0	-33.7
Total import of goods (in USD mln)	1.082	1.882	2.119.8*	2.247.8*
Total export of goods (in USD mln)	152	336	410.2*	549.6*
Total import of goods from EU (in USD mln)	...	...	854.26	949.57
Total export of goods in EU (in USD mln)	...	...	180.86	277.11
Stock of M1 end of period (Dec.) (in mln convertible marka)	56.4	354.0	251.68	309.99
Growth rates of M1 Dec./Dec.	333.8	527.7	-28.90	23.17
Stock of M2 end of period (Dec.) (in mln convertible marka)	394.7	774.7	1.178.16	1.546.96
Growth rates of M2 Dec./Dec.	8.8	96.2	52.10	31.30
Total foreign currency deposits - end of period (Dec.) (in mln convertible marka)	334.4	413.6	916.92	1.228.02
Money market interest rates - end of period (Dec.) in %	...	...	...	...
Lending interest rates - end of period (Dec.) in %	...	...	...	...
Exchange rate against USD, end of period (Dec.)**	143.3	155.5	179.2	1.658
Exchange rate regime			Currency board; KM1=DEM1	
Fiscal deficit as % of GDP	-0.3	-3.5	-1.1	...

\* Partners country's data

\*\* In mid-1997 the convertible marka was introduced as new currency.

Until the introduction of the KM, the official rate of the Bosnian Dinar was 100 per DEM.

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### Basic Economic Indicators for Bulgaria

	1995	1996	1997	1998
Population (in mln)	8.41	8.36	8.33	8.31
Nominal GDP (in USD bn)	13.1	9.9	10.2	12.2
Rates of real GDP growth	2.1	-10.9	-6.9	3.5
Rates of inflation Dec./Dec.	32.9	310.8	578.5	1.0
Current account deficit (in USD mln)	-25.6	81.8	445.7	-375.6
Total import of goods (in USD mln)	5.224	4.703	4.518	4.623.5
Total export of goods (in USD mln)	5.345	4.890	4.913	4.299
Total import of goods from EU (in USD mln)	2.097	1.780.3	1.860.6	2.325.3
Total export of goods in EU (in USD mln)	2.012	1.912.4	2.135.9	2.136.8
Stock of M1 end period (Dec.) (in BGL mln)	107,885	236,627	2,290,316	2,826,129
Growth rates of M1 Dec./Dec.	39.6	119.3	867.9	23.4
Stock of M2 end period (Dec.) (in BGL mln)	571.304	1,244.569	5,750.728	6,328.788
Growth rates of M2 Dec./Dec.	39.3	117.8	362.1	10
Total foreign currency deposits-end of period (Dec.) (in BGL mln)	158.763	661.291	2,624.087	2,584.126
Money market interest rates-end of period (Dec.) in %	44.01	442.19	1.58	2.86
Lending interest rates-end of period (Dec.) in %	42.39	227.25	11.83	13.11
Exchange rate against USD, end of period (Dec.) (BGL/USD)	70.7	487.35	1776.5	1675.1
Exchange rate regime	floating	floating	1997, July currency board	currency board
Fiscal deficit as % of GDP	-5.7	-10.5	-3.1	1.1

Source:

- 1) IFS June 1999
- 2) Web site of the Central Bank of Bulgaria
- 3) Deutsche Bank Research, table for Republic of Bulgaria

### Basic Economic Indicators for Croatia

	1995	1996	1997	1998
Population (in mln)	4.7	4.5	4.6	4.6
Nominal GDP (in USD bln)	18.8	19.9	20.0	21.3
Rates of real GDP growth	6.8	6.0	6.5	2.3
Rates of inflation (Dec./Dec)	3.7	3.4	3.8	5.4
Current account deficit (in USD mln)	1,451.5	1,147.5	2,342.6	1,542.9
Total import of goods (in USD mln)	7,900.7	8,235.9	9,434.6	8,773.4
Total export of goods (in USD mln)	4,632.7	4,545.7	4,210.3	4,612.7
Total import of goods from EU (in USD mln)	4,663.9	4,625.4	5,411.5	4,979.7
Total export of goods in EU (in USD mln)	2,671.9	2,302.6	2,074.2	2,161.1
Stock of M1 (end of period, in HRK mln)	8,234.9	11,368.9	13,731.4	13,531.4
Growth rates of M1 (Dec./Dec)	24.0	38.1	20.8	-1.5
Stock of M4 (end of period, in HRK mln)	24,623.0	36,701.1	50,742.0	57,340.3
Growth rates of M4 (Dec./Dec)	39.3	49.0	38.2	13.0
Total foreign currency deposits (end of period, in HRK mln)	14,099.4	21,817.5	31,278.1	37,970.9
Money market interest rates (end of period, in %, daily market)	27.1	10.4	9.4	15.8
Lending interest rates (end of period, in %, total average on credits in HRK)	22.3	18.5	14.1	16.1
Exchange rates against USD (end of period)	5.3161	5.5396	6.3031	6.2475
Exchange rate regime	De facto target band vis-à-vis Deutsche Mark			
Fiscal balance (as % of GDP)	-0.7	-0.3	-1.0	0.5

Source: National Bank of Croatia

### Basic Economic Indicators for Macedonia

	1995	1996	1997	1998
Population (in mln)	2.0	2.0	2.0	2.1
Nominal GDP (in USD bn)	4.5	4.4	3.7	3.5
Rates of real GDP growth	-1.2	0.8	1.5	2.9
Rates of inflation (Dec./Dec)	9.2	0.2	4.5	-1.0
Current account deficit (in USD mln)	221.34	288.15	275.64	290.31
Total import of goods (in USD mln)	1,424.60	1,463.95	1,588.99	1,722.16
Total export of goods (in USD mln)	1,204.81	1,147.44	1,201.43	1,322.05
Total import of goods from EU (in USD mln)	690	630	659	694
Total export of goods in EU (in USD mln)	408	490	462	584
Stock of M1 (end of period, in MKD mln)	12,521	12,143	13,985	15,178
Growth rates of M1 (Dec./Dec)	19.1	-3.0	15.2	8.5
Stock of M2 (end of period, in MKD mln)	18,703	18,490	22,724	26,003
Growth rates of M2 (Dec./Dec)	4.8	-1.1	22.9	14.4
Total foreign currency deposits (end of period, in MKD mln)	4,238	3,848	5,940	7,436
Money market interest rates (end of period, in %)	23.3	20.0	19.7	18.1
Lending interest rates (end of period, in %)	26.5	21.6	21.6	20.5
Exchange rates against USD (end of period)	38.1522	41.2702	54.8697	51.7373
Exchange rate regime	Pegged exchange rate against Deutsche Mark			
Fiscal deficit (as % of GDP)	1.2	2.5	1.8	2.1*

\* Preliminary data

Source: National Bank of the Republic of Macedonia, Statistical Office of the Republic of Macedonia

### Basic Economic Indicators for Romania

	1995	1996	1997	1998
Population (in mln)	22.68	22.61	22.57	22.50
Nominal GDP (in USD bn)	35.5	34.8	34.6	36.8
Rates of real GDP growth	7.1	3.6	-6.6	-5.5
Rates of inflation Dec./Dec.	27.8	56.9	151.4	40.6
Current account deficit (in USD mln)	-1.800	-2.600	-2.500	-2.900
Total import of goods (in USD mln)	11.300	12.500	12.400	10.700
Total export of goods (in USD mln)	9.400	9.600	9.800	8.300
Total import of goods from EU (in USD mln)	5.700	6.500	5.922	6.829
Total export of goods in EU (in USD mln)	4.900	5.400	4.768	5.358
Stock of M1 - end of period (Dec.) (in ROI mln)	6.771.000	10.749.000	17.942.000	21.115.000
Growth rates of M1 Dec./Dec.	57.6	58.6	66.9	17.7
Stock of M2 - end of period (Dec.) (in ROI mln)	17.107.000	30.316.000	62.145.000	92.525.000
Growth rates of M2 Dec./Dec.	70.1	67.4	104.9	48.8
Total foreign currency deposits - end of period (Dec.) (in ROI mln)	3.953.000	7.086.000	17.681.000	30.200.000
Money market interest rates - end of period (Dec.) in %	...	71.7	138.8	264.0
Weighted lending interest rates - end of period (Dec.) in %	59.3	69.9	72.2	77.4
Exchange rate against USD, end of period (Dec.) (ROI/USD)	2.578.0	4.035.0	8.023.0	10.951.0
Exchange rate regime	floating			managed float
Fiscal deficit as % of GDP	-2.6	-3.8	-3.6	-4.1

Sources: IFS

Monthly Bulletin of the Ministry of Finance of Romania - June, 1999

Deutsche Bank research

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### Basic economic indicators for Yugoslavia

	1995	1996	1997	1998
Population (in million)	10.56	10.62	10.68	10.70
Nominal GDP (in USD bn)	19.6	13.8	15.8	13.3
Rates of real GDP growth	6.5	5.8	7.4	2.6
Rates of inflation Dec./Dec.	...	58.7	9.4	46.0
Current account deficit (in USD mln)	...	-1.900	-2.100	-1.900
Current account deficit as % of GDP	...	13.8	13.3	14.3
Total import of goods (in USD mln)	...	4.100	4.800	4.800
Total export of goods (in USD mln)	...	1.800	2.700	2.900
Total import of goods from EU (in USD mln)	...	...	2.000	1.900
Total export of goods in EU (in USD mln)	...	...	1.200	1.100
Stock of M1 in million dinars end of period (Dec.)	3.256.10	5.495.30	9.148	10.773.30
Growth rates of M1 Dec./Dec.	33.7	68.8	66.5	17.8
Stock of M2 in million dinars end of period (Dec.)	4.198.70	7.360.50	11.927.70	14.384.50
Growth rates of M2 Dec./Dec.	42.6	75.3	62.1	20.6
Total foreign currency deposits - end of period (Dec.) in million dinars	22.902.40	23.866.50	27.467	50.491.10
Money market interest rates - end of period (Dec.) in %	...	...	...	...
Weighted lending interest rates - end of period (Dec.) in %	73.49	196.68	71.77	4.09
Exchange rate against USD, end of period (Dec.)	4.7424	5.1322	5.9123	10.0308
Exchange rate regime	...	...	...	...
Fiscal deficit as % of GDP	...	...	...	...

Sources:

1. Deutsche Bank Research, March 1999, table for Federal Republic of Yugoslavia
2. "Bilten Narodne banke Jugoslavije XXII godina - br.2 \* Februar 1999"