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OF ECONOMIC TRENDS AND POLICIES IN SERBIA

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Analytical and Notation Conventions

Values

The data is shown in the currency we believe best reflects relevant economic processes, regardless of the currency in which it is published or is in official use in the cited transactions. For example, the balance of payments is shown in euros as most flows in Serbia's international trade are valued in euros and because this comes closest to the measurement of real flows. Banks' credit activity is also shown in euros as it is thus indexed in the majority of cases, but is shown in dinars in analyses of monetary flows as the aim is to describe the generation of dinar aggregates.

Definitions of Aggregates and Indices

When local use and international conventions differ, we attempt to use international definitions wherever applicable to facilitate comparison.

Flows – In monetary accounts, the original data is stocks. Flows are taken as balance changes between two periods.

New Economy – Enterprises formed through private initiative

Traditional Economy - Enterprises that are/were state-owned or public companies

Y-O-Y Indices – We are more inclined to use this index (growth rate) than is the case in local practice. Comparison with the same period in the previous year informs about the process absorbing the effect of all seasonal variations which occurred over the previous year, especially in the observed seasons, and raises the change measure to the annual level.

Notations

CPI – Consumer Price Index

Cumulative – Refers to incremental changes of an aggregate in several periods within one year, from the beginning of that year.

H – Primary money (high-powered money)

IPPI – Industrial Producers Price Index

M1 – Cash in circulation and dinar sight deposits

M2 in dinars – In accordance with IMF definition: cash in circulation, sight and time deposits in both dinars and foreign currency. The same as M2 in the accepted methodology in Serbia

M2 – Cash in circulation, sight and time deposits in both dinars and foreign currency (in accordance with the IMF definition; the same as M3 in accepted methodology in Serbia)

NDA – Net Domestic Assets

NFA – Net Foreign Assets

RPI – Retail Price Index

y-o-y - Index or growth relative to the same period of the previous year

Abbreviations

CEFTA – Central European Free Trade Agreement

EU – European Union

FDI – Foreign Direct Investment

FFCD – Frozen Foreign Currency Deposit

FREN – Foundation for the Advancement of Economics

GDP – Gross Domestic Product

GVA – Gross Value Added

IMF – International Monetary Fund

LRS – Loan for the Rebirth of Serbia

MAT – Macroeconomic Analyses and Trends, publication of the Belgrade Institute of Economics

NES - National Employment Service

NIP – National Investment Plan

NBS – National Bank of Serbia

OECD – Organization for Economic Cooperation and Development

PRO – Public Revenue Office

Q1, Q2, Q4, Q4 – 1st, 2nd, 3rd, and 4th quarters of the year

QM – Quarterly Monitor

SBS – Serbian Bureau of Statistics

SDF – Serbian Development Fund

SEE – South East Europe

SEPC – Serbian Electric Power Company

SITC – Standard International Trade Classification

SME – Small and Medium Enterprise

VAT – Value Added Tax

From the Editor

Serbia's main problem at present is its high and ever-rising inflation. Like inflation around the world, it was caused by hikes in the prices of oil and food, but is now spreading to other products. Spending must be cut if inflation is to be reined in and the only remaining area in which this can be done is public spending. And here lies the incertitude; promises made during the election campaign were very generous where public spending was concerned (see Box 1, Section 7, Fiscal Flows and Policy). If the new government keeps those populistic promises, there is a very real danger of inflation running out of control.

Inflation in Serbia is high – in the three months ending with May, it amounted to some 12% annually. When inflation in the first five months is extrapolated to the whole of 2008, the rate again is over 12%. And this does not include the high rise in the prices of oil products at the end of May. Comparison with countries in the region shows that Serbia, along with Bulgaria, has the highest inflation rate; higher than Romania, Hungary, Croatia, Slovenia, etc. (see Table 3-5, Section 3, Prices and the Exchange Rate). But, in order for the rise in costs to translate into inflation, there must be a high growth of demand to accomodate it. As is evident in the developed economies, if there is no high demand, inflation rises only marginally. The very high growth of demand at end-2007, caused by the high growth of public spending and significant growth of credit, spilled over into 2008 and fuelled the inflation initially triggered by the rising costs.

Fortunately, the growth of wages is slower than inflation and, in real terms, they are now rising at a lower rate (see Table T4-5, Section 4, Employment and Wages). As a result, unit labor costs have been reduced (see Graph T5-3, Section 5, Economic Activity) and there is no inflationary pressure from that side. But, unless inflation is energetically curbed, we will all soon be demanding that our wages be adjusted to the (expected) high inflation, and prices and wages could spiral. Once the expectation is shaped that high inflation lies ahead, it will be necessary to strongly decelerate economic activity and growth of employment in order to cut the rate. This lesson on the high cost of reducing inflation once it takes off comes directly from the experiences of the developed countries with their high inflation in the 1970s.

Agflation, the growth of food prices, is something new in the world, and high food prices will be with us for years to come. As noted at the end of 2007 (see *QM* 10), rising food prices are a major trigger of inflation in Serbia, and have been so in the first five months of 2008. The view set out in *QM* 10 that Serbia's food prices were rising at a faster pace than in comparable countries in the broader region (see Table T3-5, Section 3), has now been amply confirmed. Together with Bulgaria, Serbia recorded the highest rise in food prices in 2007, overtook Bulgaria and took a commanding lead in the first four months of 2008, whether viewed as the inflation of food prices or their relative growth compared to total inflation. The latter shows that the high rise in these prices is not the result of total high inflation and that it is a manifestation unto itself as it signficantly exceeds total inflation (see Table T3-5, Section 3). The comparatively highest rise in food prices in Serbia suggests the existence of lower competiveness in production and retail, i.e. of some kind of monopoly.

Core inflation, the growth of a narrower group of prices that are not under state control, is also high and gathering pace. The NBS has taken responsibility for this inflation and has set the bands within which it will be maintained: 4% to 8% in 2007, and 3% to 6% in 2008. May's y-o-y core inflation of 9.2%, however, was considerably above the NBS's upper limit. In the first five months of 2008, the rate was already 3.7% and, if there is a repeat of the preceding period, it would reach an annual 9.2%. The problem, however, is that core inflation accelerated in April and May at an annual rate of 14.2%, indicating that it could reach a double-digit figure in 2008.

The rise in food prices had a crucial impact on the growth of inflation (the prices of oil products and electricity are not included in core prices) this year too, making a contribution of some 50%. What is new is that the prices of non-food products have now started rising appreciably, indicating that the initial rise in costs is spilling over into all prices. The prices of non-food

products rose at a rate of 4% to 6% in 2007, only to leap in April by a whole 10% at a comparable annual level. The inflation in the prices of non-food products reached 5.8% relative to April 2007, and is a problem, even if it is the only segment within the NBS's purview.

The threatening avalanche of inflation must be stopped. The NBS is attempting to do so by aggressively raising its interest rate – from 10.75% in January to 15.7% at end-May. What remains to be done is to rein in spending, in particular public, but *the fiscal risks will remain high in the second half of 2008*. In the first four or five months of the year, fiscal spending was reasonable in spite of the May elections. A minimal fiscal deficit was recorded in April and early May, in contrast to the huge deficits of 5% to 7% of GDP in the run-up to previous elections (2003, 2006 and 2007).

The caretaker government has adoped a Memorandum on the Budget and Economic Policy for 2009, with projections for 2010 and 2011. This paper, like the one preceding it, proposes a sound economic policy. Public spending should be reduced relatively by 3.6 percentage points of GDP, meaning that there would be a shift from the anticipated deficit of 1.7% in 2008 to a fiscal surplus of 1% of GDP in 2010 and 2011 (see Section 7). This would be achieved through the slower growth of wages and pensions. But, like last year, the problem is how to realize this policy, since the authorities as a rule succumb to pressures for increasing public spending when the budget is being adopted. This time, the pressures will be even stronger as demands were voiced in the election campaign and will probably be a part of the negotiations on forming the new government.

Among the promises made during the campaign were that the average pension amount to 70% of the average wage, and that pensions henceforth be indexed to the rise in wages. This would cost an additional €250-300 mn in the second half of 2008 (or 0.8% of GDP) and an additional €1 bn (2.5% of GDP) in 2009. This would be more than enough to create a major budget deficit and spur inflation. There were also extreme demands to cut VAT by one-third, and reduce the fiscal burden on wages from the present 64% to 35%-40%, which would imply a major reduction of public revenue by some 5-6 percentage points of GDP. This is a proposal that does not merit any serious consideration.

Hence, viewed from the broader perspective, the new government will be facing the following challenges: on the one hand, a high rate of inflation which requires a significant slowing of spending if it is to be curbed. On the other hand are the campaign promises to increase public spending and cut taxes, moves that would doubtless further spur inflation. Any short-lived benefit to the government and a part of the population from the growth of spending would be cancelled out by high inflation, as well as the huge cost entailed in reining it in. The new government should be at least responsible enough to look farther than one year ahead.

Causing a bigger problem – high inflation - does not resolve another that has been present for a long time, the huge current account deficit, and merely sweeps it under the carpet. This problem has become serious as, in contrast to previous years, capital inflows in Q1 2008 were barely enough to offset the deficit (see Section 6, Balance of Payments and Foreign Trade). The vacillation with regard to EU accession could further reduce the capital inflow and lead to a balance of payments crisis accompanied by an abrupt drop in the value of the dinar. The budget would be the "collateral damage" of insufficient capital inflows, primarily the absence of major privatizations in 2008, as it would have to turn to borrowing to cover its deficit in the second semester of the year.

Fiscal adjustment, i.e. the relative reduction of public spending and the realization of a fiscal surplus, is pivotal for the medium-term stability of the Serbian economy and, by extension, for faster economic growth and the growth of employment. The Spotlight articles in this issue deal with certain aspects of fiscal adjustment. The analysis of a hitherto neglected facet of local government finances in Serbia in Spotlight on:1 brings out that major problems could arise at this level owing to the high growth of their spending and the resultant fiscal deficits at local level. In addition, their scope for borrowing and, hence, spending, will be increased when the planned restitution of municipal and city property is carried out. The situation will require far better monitoring and control of public finances at local level in the future, to pre-empt them from becoming the main source of the consolidated fiscal deficit. The issue of pensions is a painful one in many countries, and as seen above, will be a very vexing one for the new Serbian government. Spotlight on: 2 analyzes one aspect of the reform of the pension system, namely the introduction of mandatory private pension funds, and primarily discusses the cost of introducing such a system in Serbia.

TRENDS

1. Review

Q1 2008 ended with heightened internal and external imbalances, reflected in high inflation and a high deficit in current transactions, neither of which are news in the Serbian economy. It can therefore be said that the macroeconomic movements recorded in the quarter were mostly a carry-over from the preceding quarter. What is concerning, however, is that the monetary authorities' persistent raising of the reference interest rate in order to curb inflation has not yet produced the desired results. The dilemma that remains after this issue of *QM* is: did the measures implemented fail to rein in inflation this time, or did they prevent the development of an even more unfavorable situation?

Of the positive macroeconomic movements in Q1, the high economic growth, acceleration of exports, sustainable real growth of wages – somewhat lower than the growth of economic activity – and moderately restrictive monetary policy, can be singled out. Besides the high inflation and current account deficit, on the negative side were the sluggish activity on the financial markets and the major drop in the Belgrade Stock Exchange indices.

This time, too, it is hard to say which macroeconomic movements were entirely positive or entirely negative. Economic growth in Q1 was high, but economic activity slowed down slightly. The recovery of agricultural production following the 2007 drought will probably mask the slowing trend of the rest of the economy until the end of 2008. The acceleration of export growth in Q1 did not come about because of the better competitiveness and higher demand for Serbian products, but because of the removal of exogenous hindrances. Specifically, the modernization of a blast furnace at US Steel Serbia was completed in Q4 2007, and iron and steel exports apparently singlehandedly accelerated total exports in Q1. The real growth of wages was at relatively low y-o-y rates, though Q1 wages were comparable to the strongly hiked wages in Q1 2007. Fiscal policy in Q1 was moderately restrictive, but will be severely challenged until the end of the year.

Nor were the negative trends completely uniform. The high inflation in Q1 was dictated by hikes in the prices of only two groups of products – food and energy – while other prices did not rise at even nearly the same rate, at least not in Q1. The current account deficit in the quarter was still offset by capital revenues so that the balance of payments retained a small surplus in spite of the major deterioration. The fall on the stock exchange coincided with similar, though somewhat lesser falls, on exchanges in neighboring countries as the result of the global financial crisis. Hence, in this case too, a measure of caution must be exercised when interpreting the unfavorable trend.

There are indications that domestic demand, after the effects of the fiscal expansion in Q4 2007 petered out in January and February, and slowed considerably in March and April. Along with the mentioned slowing of the real growth of wages and moderately restrictive fiscal policy, an additional reason was probably the slower growth of credit, in particular its most dangerous segment – cash and consumer loans.

The Trends section opens with a review of the international environment, which is gaining increasing importance since global movements, oil and food prices, have a major impact on the Serbian economy. Most macroeconomic indicators show that Serbia has become very similar to other countries in the region, whose experiences and problems can help to gain a better insight into our own situation.

Slightly slower economic activity characterized global economy, but the outlook after Q1 was far more optimistic than at the beginning of the quarter. The crisis that broke out in the US hit the world economy less than expected. The reason for the world economy's resilience was the increased participation of the developing countries, above all China and India, over the past 20 or so years in which these two countries have been recording exceptionally high economic growth rates. Global inflation hit a nine-year high in Q1. Oil prices retained a high growth rate and, according to the latest figures, have exceeded the $130 a barrel mark. The risks of a financial crisis have increased in East Europe and the surrounding region, primarily due to major external imbalances.

Inflation in Serbia ran at a high 11.8% annually. This rate in Q1 was contributed to by both supply- and demand-side factors. *On the supply side* were the higher prices of oil products, electricity, food and agricultural produce. On *the demand side,* inflation was spurred by the huge fiscal expansion at the end of 2007, and the continuing credit boom. Core inflation in Q1 stood at an annual 5.8%, with the highest rises being recorded by the prices of foods calculated in this indicator. Q1, however, also saw a rise in the prices of the non-food part of core inflation. Both total and core inflation accelerated strongly in April, and the trends observed in Q1 became more evident. Although the April inflation too was for the most part due to supply-side factors – the high increase in the prices of agricultural produce and food, now the non-food segment of core inflation is recording a concerningly high rise. The dinar weakened against the euro in Q1, depreciating in nominal terms by some 5% up to mid-March. It gained in strength from that time to end-April as the result of the NBS raising the reference interest rate and changing regulations on the make-up of the reserve requirement, only to fall sharply in the week before the elections. The exchange rate recovered following the elections.

Registered employment with artificial persons continued to decline between September 2007 and March 2008, while data on the number of entrepreneurs in March 2008 is not yet available. The steepest drop in employment was recorded in the manufacturing industry, followed by hotels and catering and transport. Employment in the public sector was mostly stable, while the number of registered jobless continued to fall. As both formal employment and unemployment declined, the size of the non-active population grew. The real growth of wages slowed appreciably – 5.2% in Q1 as against 14.6% for the whole of 2007. April wages were slightly higher than in Q1, but still in concert with economic growth – their real growth was 5.5%. The highest rise in gross wages in Q1 was recorded in the hotel and catering sector, and the steepest fall in financial intermediation. In April, however, this trend was reversed. The growth of wages in the public sector slowed relative to 2007, and unit labor costs in the economy, excluding government and the agriculture, continued on a y-o-y declining trend.

Economic activity retained a high growth rate in Q1. *QM* estimates GDP growth at some 7.6%. Domestic demand was the main driver of growth in the quarter, with services in the lead, and, with the recovery of exports and the agriculature, Q1 also saw an acceleration of material production growth. The real growth of wages and increase in credit slowed in Q1 which, coupled with the moderate fiscal policy, augurs a deceleration of domestic demand in the quarters ahead. Based on this, *QM* expects a slowdown in the part of the economy that relies on domestic demand. The high growth of the agriculture in 2008, estimated at about 10%, and the part of production relying on exports will most probably have the opposite effect. Analysis of unit labor costs in euros shows that the economy's international competitiveness has not diminished. Industrial production in Q1 was 6% up on the same period last year, but the March figures indicated a slowdown, which continued into April.

Serbia's balance of payments worsened in Q1. After a longer period (the last 14 quarters with the exception of Q1 2007) in which foreign exchange reserves grew strongly, there was a major slowdown and the growth amounted to only €29.3 mn. This indicates a change in the trend and a possible threat to the balance of payments, primarily because of the significant growth of the current account deficit and uncertainty as to the sustainabiliy of further capital inflows. Exports recovered somewhat in Q1 following the major slowdown in the second semester of 2007. The

growth of imports slowed, but these changes in the export and import trends are insufficient to cut back the trade deficit. According to NBS data, the current account deficit in Q1 stood at a high 15.4% of GDP. The figures released show a smaller current account deficit than recorded in Q4 2007, but this was solely the result of a change in the methodology used by the NBS, not of any real improvement in current transactions.

Fiscal policy in Q1 2008 was moderately restrictive. The real level of consolidated public revenue was up 6.5% on the same period last year, while the real level of consolidated public expenditure was 6% higher than in the same quarter of 2007. As a result of these revenue and expenditure movements, a surplus of 3.4 bn dinars was recorded, approximately 0.5% of quarterly GDP. The relatively favorable movements in public finances in early 2008 can partly be ascribed to seasonal factors: high revenues were recorded in Q1 based on high expenditures in Q4 2007, while expenditure in Q1 was below-average. Data on the execution of the Serbian budget in April and the first half of May indicates that fiscal expansion was minimal, in contrast to the run up to elections in late 2003, 2006 and 2007. Nonetheless, fiscal policy will be facing major challenges up to the end of 2008.

Monetary policy attempted to be more restrictive to respond to the high inflation. In Q1, the NBS repeatedly raised the reference interest rate, by a total of 4.5 percentage points. But, since the dinar depreciated and inflation remained high, no great measure of restrictiveness was achieved. The trend of accelerated M2 growth established in 2007 halted in Q1, while its real 12-m growth continued to slow. The monetary growth in Q4 was the result of the growth of net foreign exchange reserves and the growth of credit to the non-government sector. Credit to the non-government sector slowed in Q1, with banks granting a new €614 mn in loans to companies and households, approximately the same amount as in Q4 2007. Four-fifths of the new credit to households was for housing, while consumer and cash loans became more infrequent. Companies continued borrowing abroad, taking a new €590 mn in loans. Banks found sources for new credits in the funds released from their deposits with the NBS, new foreign exchange savings and capital increases. They invested less in repo instruments, a new €116 mn. Primary money fell in Q1 as the result of the increase in the government deposit with the NBS and sterilization through the repo market.

There was a steep fall in the volume of trading on the domestic stock exchange. Compared to the preceding quarter, the value of trade in shares and the number of transactions plunged by 50.5% and 40.5% respectively, while the volume and trading in FFCD bonds fell by some 49% and 45% respectively. The Belgrade Stock Exchange indices fell to their annual minimums and lost between 19% and 25% in value. The fall, both in Serbia and on stock exchanges in neighboring countries, was the upshot of the global financial crisis and investors' increased aversion to risk. The steeper fall on the Belgrade Stock Exchange is an indication that the political instability had an additional adverse effect on the negative trend. All domestic investment funds recorded lower values of investment units, but fell less in terms of percentage than the Stock Exchange indices in the same period. The monetary policy pursued by the NBS raised the nominal yields on 2w repo operations by as much as 450 bp in Q1, and an additional 125 bp in early Q2, so that the reference rate stands at 15.7%. In late Q1, this growth pulled up real yields on repos from the negative zone, measured both with respect to inflation and the euro/dinar exchange rate. Another consequence of the raising of the NBS reference interest rate was the parellel movement of the average yield curve on FFCD bonds. As in Q4, the curve remained inverted, with shorter maturity bonds having higher yields.

Serbia: Selected Macroeconomic Indicators, 2004–2008[1)]

	Annual Data				Quarterly Data				
					2007				2008
	2004	2005	2006	2007	Q1	Q2	Q3	Q4	Q1
Prices and the Exchange Rate					**y-o-y[2)]**				
Retail Price Index - total	10.1	16.5	12.7	6.8	5.8	4.7	6.5	9.1	11.3
Retail Price Index - core inflation[3)]	7.9	14.8	10.3	3.9	4.7	3.0	2.9	4.6	6.4
Real fx dinar/euro (avg. 2005=100)	100.5	100.0	92.1	98.4	86.2	86.3	83.2	80.8	82.5
Nominal fx dinar/euro (period average)[4)]	72.62	82.92	84.19	79.97	79.98	81.07	80.03	78.81	82.65
Economic Growth					**y-o-y, real growth[2)]**				
GDP (in billions of dinars)	1,431	1,747	2,042	2,393	…	…	…	…	…
GDP	8.4	6.2	5.7	7.5	8.1	7.5	7.2	6.9	7.6
Non-agricultural GVA	7.5	6.3	7.9	9.5	8.9	9.5	9.0	10.0	7.9
Industrial production	7.1	0.8	4.7	3.7	4.8	5.2	3.5	0.4	6.0
Manufacturing	9.7	-0.7	5.3	4.2	8.5	4.9	3.3	-0.1	4.4
Average net wage (per month, in dinars)	14,108	17,478	21,745	27,785	25,103	27,165	28,019	30,855	30,007
Registered Employment (in millions)	2.047	2.056	2.028	1.998	2.002	1.999	1,997	1,995	1.989
Fiscal data	**in % of GDP**				**y-o-y, real growth**				
Public Revenues	41.2	42.1	42.4	42.1	15.2	8.4	7.9	6.2	6.5
Public Expenditures	40.0	39.7	42.7	42.8	11.0	7.1	11.3	10.5	5.5
					in billions of dinars				
overall fiscal balance (GFS definition)	17.5	11.5	-36.5	-43.0	1.7	18.2	-8.8	-54.2	3.4
Balance of Payments					**in millions of euros, flows**				
Imports of goods	-8,302	-8,286	-10,093	-12,858	-2,829	-3,098	-3,236	-3,695	-3,489
Exports of goods	2,991	4,006	5,111	6,444	1,383	1,594	1,731	1,736	1,666
Current account	-2,197	-1,805	-3,137	-4,994	-1,186	-806	-1,346	-1,656	-1,165
in % GDP[5)]	*-11.1*	*-8.6*	*-12.6*	*-16.7*	*-18.4*	*-11.3*	*-17.5*	*-19.3*	*-15.4*
Capital account[5)]	2,377	3,863	7,635	7,635	1,161	1,233	1,705	2,027	1,218
Foreign direct investments	773	1,248	4,348	1,942	614	-5	539	795	729
NBS gross reserves (increase +)	229	1,857	4,240	941	-191	407	465	260	29
Monetary data[6)]					**in millions of dinars, e.o.p. stock[2)]**				
NBS net own reserves[6)]	103,158	175,288	302,783	400,195	327,997	348,471	361,861	400,195	420,508
NBS net own reserves[6)], in mn of euros	1,291	2,050	3,833	5,051	4,021	4,410	4,589	5,051	5,109
Credit to the non-government sector	342,666	518,298	609,171	842,512	666,007	732,402	786,873	842,512	908,598
FX deposits of households	110,713	190,136	260,661	381,687	293,195	307,783	336,109	381,687	410,836
M2 (y-o-y, real growth, in %)	10.4	20.8	30.6	27.8	35.4	30.7	29.7	27.8	26.2
Credit to the non-government sector (y-o-y, real growth, in %)	27.3	28.6	10.3	24.9	15.2	17.8	19.1	24.9	22.0
Credit to the non-government sector, in % GDP	23.9	29.6	28.6	35.0	30.5	32.6	33.0	35.0	36.9
Financial Markets									
BELEXline (in index points)[7)]	1,161	1,954	2,658	3,831	4,220	4,456	4,431	3,831	3,068
Turnover on BSE (in mil. euros)[8) 9)]	423.7	498.8	1,166.4	2,004.4	529.4	644.8	386.7	443.5	210.8

Source: FREN.

1) For more details (monthly series) see web page www.fren.org.yu.

2) Unless otherwise indicated.

3) Core inflation measures the price movements of goods and services that are not under administrative control, but formed freely on the market.

4) Calculation based on twelve-month averages for annual data and three-month averages for quarterly data.

5) In Q1 2008, NBS changed Balance of Payments methodology. Due to this change, there is a drop in current account deficit, and an decrease in the capital account. Q1 has seen a year-on-year worsening of the current account deficit. For a more detailed explanation, see Textbox 1 in Section 6:

6) NBS net own reserves = NBS fx reserves, net - (foreign deposits of commercial banks + government foreign deposits). For details see Trends' section Monetary Flows and Policy.

7) Index value at the last day of the given period

8) Total turnover on Belgrade Stock Exchange, includes turnover of stocks and FFCD bonds.

9) Dinar amounts for stocks turnover are converted into euros using the average exchange rate for the given period.

2. International Environment

Global economy continued to slow. The IMF revised its estimate of global economic growth in 2008 downward by 0.4%, to 3.7%. The US economy recorded low growth in Q1, but the figures were nonetheless encouraging, given the even less favorable forecasts. Q1 reduced the likelihood of the US economy entering a deep recession. Economic growth in the euro zone was above average, primarily due to the extremely high growth of the German economy. Japan also saw unexpected high growth, which was caused by high demand from other Asian countries. The above-average growth in the euro zone and Japan, however, is unlikely to continue at a similar pace. The risk of a financial crisis has increased in East Europe and the neighbouring region. Global inflation reached a nine-year high in Q1. Oil prices continued to rise at a high rate, and, according to latest data, have crossed the $130 a barrel threshold.

Table T2-1. World: Economic Growth and Inflation, 2005–2008[1)]

	Real GDP growth							Inflation			
	over a year ago			over previous period, seasonally adjusted annual rate (saar)				over a year ago			
	2005	2006	2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2007	Q3 2007	Q4 2007	Q1 2008
	in %										
World total	3.2	3.6	3.4	3.9	4.4	2.7	2.5	2.4	2.3	3.5	4.0
of which:											
USA	3.5	2.9	2.2	4.0	4.9	0.6	0.6	2.7	2.5	4.0	4.1
Canada	2.9	2.8	2.5	3.4	2.9	0.8	0.0	2.2	2.6	2.4	1.8
Japan	2.7	2.2	2.1	0.5	1.3	3.7	3.3	-0.1	-0.1	0.5	1.0
China	10.2	11.1	11.4	15.7	8.9	9.1	10.5	3.6	4.2	6.6	8.0
India	8.4	9.4	8.7	9.6	8.4	5.3	8.2	6.3	5.8	5.5	5.8
Euro area	1.5	2.9	2.7	1.4	3.1	1.4	3.0	1.9	1.9	2.9	3.4
Germany	1.1	3.1	2.6	1.0	2.7	1.1	6.3	2.0	1.4	3.1	3.1
France	1.2	2.2	1.9	1.3	3.2	1.4	2.6	1.3	1.5	2.5	3.3
UK	1.9	2.8	3.1	3.4	2.7	2.4	1.6	2.6	2	2.1	2.4
Italy	0.1	1.9	1.7	0.4	1.7	-0.8	1.6	1.9	1.9	2.6	3.3
Russia	6.4	6.7	8.1	10.0	7.4	13.0	-3.0	8.1	7.8	11.5	12.9
Bulgaria	5.5	6.0	6.1	...	4.5	6.9	…	4.7	11.1	11.2	12.4
Romania	4.1	6.9	6.0	5.6	5.7	6.6	…	3.8	5.5	6.7	8.0
Hungary	4.1	3.8	1.3	0.2	0.8	0.4	1.2	8.6	7	7.1	6.9
Croatia	3.8	5.0	5.6	6.6	5.1	3.7	…	2.1	2.9	4.9	5.9
FYR Macedonia	3.8	4.0	…	...	…	…	…	...	…	…	…
BIH	5.0	…	…	...	…	…	….	0.3	0.9	4.5	6.5
Serbia	6.2	5.7	7.5	7.6	7.5	6.9	7.6	4.8	6.6	9.1	11.3

Source: Eurostat, JPMorgan, National Bank of Bulgaria, National Bank of Romania, National Bank of the Republic of Macedonia, National Bank of Croatia.
[1)] Rates shown for Serbia, Macedonia, Bosnia-Herzegovina, and Croatia are y-o-y rather than seasonally adjusted annual.

World

The IMF again revises global 2008 growth downwards…

The slowing of the US economy and the problems faced by the financial sector have had an adverse impact on the global economy. The IMF revised its forecast of the global economic growth rate downwards by 0.4%, to 3.7%. A slowdown of the US and European economies is expected, while the developing countries will probably grow at a slower, but still satisfactory, pace.

Global inflation continues to rise

Global inflation peaked in March at a nine-year high of 4.1% annually. In most countries, the inflation rate is outside the comfort zones set by central banks. Unlike the US, where interest rates have been aggressively pushed down, the rest of the world is generally seeing interest rates remaining at the same levels or increasing slightly, due to the danger of inflation.

Prices of raw materials and oil rise, contributing to inflation

Prices of raw materials are on the increase. The prices of almost all raw materials have risen over the previous year, with the trend continuing. Oil has crossed the $130 a barrel threshold, while the agricultural products index has risen by about 60% annually. As there is a time lag between any rise in prices of these products in the market and its transfer to the retail sector, inflation is set to continue in the coming quarter. The US financial crisis and the cut in the Federal Reserve's rate have contributed to a depreciation of the dollar, which, together with the feeble response by raw material suppliers to increased demand, resulted in such a steep growth in raw material prices.

Problems that originated in the real estate market may have had an adverse impact on the real sector, but their influence on financial markets could have been devastating. A meltdown was averted when Bear Stearns was bought, from the verge of going under, by JP Morgan, with the Fed's help. Had Bear Stearns actually gone bankrupt, the entire financial system would have become unbalanced. Ratings of other companies would have been brought into question, which could have spread panic and frozen credit markets, with consequences that can only be speculated about.

Developing countries record high growth rates…

Economic growth in the developing countries, although somewhat slowed by the US crisis, remained high. These countries do not face a drastic slowing of economic growth. Rather, they are threatened by inflation due to the rising prices of raw materials and food. Growing food prices are a particular threat to the poorer countries. The rising prices of raw materials have, however, improved the exporting nations' terms of trade and strengthened their national currencies. On the other hand, these countries have diversified their production base, with the manufacturing industry now holding a greater share in their exports; this means company revenue is now higher than before, when the bulk of exports was made up of raw materials. These countries now face a lower risk of their economies contracting if raw material prices start falling across the world's markets. In addition, the volume of trade among developing nations has increased, and reduced demand on the part of developed countries has not had the adverse impact seen during previous crises. The emerging economies of China, India, Russia, and Brazil continued growing aggressively.

United States

The risk of a deep recession fades

Standing at an annual 0.6%, US GDP growth in Q1 was identical to that recorded in Q4 2007.[1] The US economy continued to grow at a low pace, although some forecasts had already put it in recession before the data was published. Economic growth nonetheless dropped markedly – from 3% in 2006 and 2.2% in 2007 to 0.6% in Q1 2008.

Reduced construction activity, coupled with lower investment and personal consumption, has been slowing real growth. Construction has had an adverse impact on growth primarily because of conditions in the credit market that drove the total sum of loans down. Additionally, construction of office buildings, which had seen very high growth rates in late 2007, fell by 6.2% in Q1. Besides construction, personal consumption is also responsible for this Q1 result. The sale of cars and customer goods dropped by 6% in Q1. The financial situation has worsened loan terms and reduced solvency, while the Fed's measures, accompanied by an aggressive reduction in the reference interest rate (to the current 2%) have failed to fully normalize the situation.

Core inflation is outside Fed's comfort zone

Growing oil prices have boosted inflation, although they have also acted to push down demand. Total inflation at the annual level stood at 3.9% in April. Total y-o-y inflation amounted to 4.1% in Q1. Core inflation stood at 2.4% in Q1, above the upper limit of the Fed's 1% to 2% comfort zone. The reference rate will in all likelihood remain at 2% for some time, as its further reduction would contribute to inflation more than it would help economic growth, given the volatility of oil prices.

The trade deficit returns to normal levels

The one area that has seen positive developments over a considerable period – due to the weak dollar – is the trade deficit. The deficit amounted to under 5% in Q4 2007, as much as one percent lower than in 2006. The often-cited problem of the imbalance of US consumption and exports is slowly being corrected through a combination of lower consumption and the weaker dollar. The total deficit amounted to $178.9 bn in Q1; both imports and exports, however, slowed together at the end of the quarter, but March's deficit fell by $3.5 bn relative to February.

Unemployment slipped from 5.1% to 5%. The labor market situation, closely monitored of late because of its ability to clearly indicate the start of a recession, was also better than expected. Non-farm payrolls dropped by a mere 20,000, although forecasts had indicated a possible fall of over 100,000. The unemployment rate and payrolls confirm the US economy's diagnosis: weakness, but still no recession. The risks of a deep recession faded significantly following Q1.

1 Source: JPMorgan, seasonally adjusted annual rate – SAAR. All GDP growth rates mentioned in this section are expressed using this rate.

Financial meltdown avoided as Bear Stearns tottered on the edge of bankruptcy

The single most important event in the US economy in the previous quarter was probably the unprecedented fact of a well-known investment bank, Bear Stearns, facing bankruptcy. Had Bear Stearns actually gone under, this would have wreaked havoc across all financial markets. Warren Buffet, the world's richest man and most prominent fund manager, said the effects of a bankruptcy would have been something America had never seen before. The Bear Stearns episode was resolved with a great deal of skill, but fears of bank insolvencies are still present. As a part of losses are off-balance-sheet, the total bank losses incurred through investing in structural financial derivatives linked to the real estate market are still unknown. The rescue of Bear Stearns may also send the wrong signal to financial markets and lead to a renewed increase in the number of risky operations.

As far as forecasts go, the fundamental questions are still whether or not a recession is in the offing. It is unclear how long the current slowdown of the US economy will last, or how deep it will be, though recessions in recent US history have been short and mild. Most economists think that a future recession, if it does indeed happen, will be neither serious nor long. But, as usual, every recession is a different story, which makes forecasting difficult.

A contraction of the real estate market has usually preceded US recessions

Eight out of ten US post-World War II recessions were preceded by a fall in the real estate market. Rising interest rates were generally accompanied by falling housing loans, house prices, and consumption. The current situation is different, as housing loans had been financed using structural derivatives, and were easier to obtain since regulation was cut back. This led not only to continuing granting of credits and rising house prices, although interest rates too went up: the whole process was also accompanied by personal spending that created an illusion of wealth in the midst of growing real estate prices. The IMF, however, expects real estate prices to drop by between 14% and 22% in the 2007-2009 period as stocks of unsold houses are high, while prices are still above the long-term trend.

Results of fiscal instruments face the test

Another question is to what extent fiscal policy can help personal consumption and stimulate growth in the current conditions, as the US government apparatus is relatively small, meaning there is not too much space for fiscal measures. Tax deductions, through rebate checks sent by the US government to members of the public, will boost spending; the question is, though, by how much. High fuel prices will partly annul these effects of fiscal discounts, since the rebates will, for the most part, be spent on fuel. It is very likely that demand will thus not be stimulated as expected, unlike in previous situations when similar fiscal measures were used.

Euro Zone

An unexpected jump in euro zone growth…

Q1 GDP growth in the euro zone stood at 3.0%, an unexpected acceleration after the low (1.4%) Q4 2007 growth. The surprising rise was primarily caused by Germany's high economic growth. It stood at 6.3% at the quarterly level, due to strong industrial production and investment growth – the mild winter favored construction. In addition, consumption did not see the expected drop, but, rather, recorded growth. However, stocks have grown significantly, which is why economic growth is not expected to continue at the same pace.

...but the acceleration is in all likelihood only temporary

The acceleration of euro zone economic growth in Q1 is most likely only temporary. The effects of the US financial crisis have carried over into most euro zone countries. Spain and Italy recorded low economic growth in Q1, while the acceleration of Germany's growth will probably prove to be short-lived. Economic growth in the euro zone is expected to amount to some 1.7% annually, a significant slowdown relative to the 2.7% in 2007.

EU economies will not see the kind of low growth recorded by the US

Still, the downturn in the euro zone economies in 2008 will not be as severe as that experienced by the US. The US crisis spilled over into West Europe through strong trading channels, but the trend of ever-growing trade with East Europe, Asia, and the Middle East diversified the direct impact on European economies. The greatest part of the US crisis' negative impact on euro zone countries is reflected in the problems faced by the financial sector. Banks' capital base has been weakened by derivative investment in the US real estate market; in consequence,

credit terms have worsened, and credit margins have risen, which worked to reduce domestic demand. European companies rely on issuing shares to secure financing less than they do on bank loans; thus the financial crisis has had much deeper and far-reaching consequences on the US economy than on European banks. Along with a reduction in the supply of housing loans, a correction in real estate prices is likely in European countries where these have recently been above their historic trends. The influence of financial sector troubles and rising energy prices has weakened the confidence of both consumers and executives, as well as their propensity to spend and invest.

Inflation is significantly above the ECB target band

Total inflation is still high, although it dropped from 3.6% in March to 3.3% in April. This is still far above the 2% comfort zone set by the ECB. Inflation has fallen for the first time since last summer, but major risks still remain. Real inflation trends in March and April are difficult to identify, as core inflation accelerated in March, partly also because Easter this year also fell in March. Having seen a rise associated with Easter (hotels, restaurants, resorts), prices returned to normal after the holiday; core inflation thus dropped from the 2% seen in March to 1.6% in April, in part due to the opposite effect of the early Easter.

The ECB kept its reference interest rate at 4%, admitting falling consumer and business confidence, but cited high inflation as the reason why it was not cutting the rate, as the risk of inflation rising outweighed that of recession. There is a risk of a chain reaction to high inflation developing: unemployment is at its lowest level since the early 1990s, while demands for higher wages, supported by trade unions, are gathering pace – especially in Germany. Inflation is expected to fall to below 3% as a consequence of comparison with the higher base from the second half of 2007 and the expected slowdown in economic activity.

Trade remains relatively balanced. The trade deficit amounted to €10 bn, which is negligible given the volume of the euro zone countries' foreign trade. March data is still unavailable, but a slowdown in both imports and exports is expected, along with the growth of a slight deficit, which is expected to reach €7 bn in March.

The ECB insists on the transparency of off-balance-sheet losses

According to forecasts, euro zone economic growth is expected to continue slowing down, which is attributable to the effects of the US crisis manifesting themselves with a short lag. Growth will slow down additionally if the euro continues to appreciate, oil prices keep rising, and the US slides into a deeper recession. On the other hand, if oil and food prices stabilize, and domestic demand and the labor market prove more resilient than forecast, growth will soon return to its potential long-term level. The ECB is right to stimulate transparency of banks' losses caused by investment in the US real estate market. As soon as all the losses are recorded in profit and loss accounts, an efficient risk measurement system will be restored, thus cutting losses caused by excessive aversion to risk.

Fiscal policy may prove a much more significant anti-cyclical instrument in the EU than in the US, as the government sector is much larger and social policy a greater concern (providing a safety net). Most West European countries cut their fiscal deficits in 2007. The total deficit dropped by almost 1 percent, to 0.6% of GDP; the greatest contribution to this was made by structural and fiscal changes in Germany and Italy, while France's deficit remained at a high 2.4%. The upper deficit limit is 3%, under the last convention (the Stability and Growth Pact). Thus there is space for an anti-cyclical policy; a renewed increase in the fiscal deficit is expected, with a view to reversing slower economic growth. France, Italy, and Greece will not be able to exploit these anti-cyclical measures to their fullest extent, as their deficits are already close to the 3% limit.

East, Central-east, and South-east Europe

East Europe faces the risk of a financial crisis similar to the one that hit Asia in 1997

The IMF has stated that the risk of a financial crisis in East Europe is higher than that encountered by other developing countries. Domestic demand far outstripped productivity throughout 2007, which caused the growth of the current account deficit. A wealth of credit has boosted inflation,

which has not only been spurred by growing fuel prices, but also by rising demand. The fiscal policies pursued by several countries made the situation worse, as pensions and public sector salaries were raised.

High economic growth in the region is spurred primarily by loans granted by foreign banks, and could well be jeopardized if these loans were to dry up. If growth were fostered by FDIs, like in East Asia, the risk of a financial crisis would be far lower, since FDIs cannot flee a country, unlike foreign *bank* loans. It is estimated that about $1 trillion has been invested in East Europe by foreign banks.

The region's current account deficits have increased; its banks are highly indebted abroad; competitiveness has fallen; and share and real estate prices have seen aggressive growth. These factors call to mind the 1997 Asian crisis, which saw short-term capital quickly flee countries that faced exchange rate problems; this led to a financial crisis. If banks were to start withdrawing *foreign bank loans* due to the US financial crisis, the consequences on East European countries could be serious. The question is how quickly and to what extent could foreign loans flee the region? There are several risks that could lead to a withdrawal or reduction in the volume of cross-border loans:

(1) Banks risk a rise in their losses due to investment in the US in the future. A quick withdrawal of loans is not very likely, since banks that are significantly exposed to investment in volatile US derivatives generally do not invest in East Europe (excepting only German banks). Serbia faces a low risk in this regard, since its loans mainly come from Austrian and Italian banks. Credit terms are nevertheless likely to get stricter, since they have already become more restrictive across the euro zone since the start of the crisis.

(2) Competitiveness in the region has been reduced by falling productivity and the policy of fixed exchange rates, even with high deficits. This brings investors' fundamental motives into question and raises the risk of a cutback in foreign bank loans.

(3) Unlike with previous oil crises, about half of all petrodollars are nowadays invested in East European countries. A fall in oil prices would also reduce these inflows.

(4) In this situation, fiscal policy should be the strongest instrument; notwithstanding, most Eastern European countries are implementing policies that actually increase risk. Pensions and public sector salaries should not be hiked to increase domestic demand. Additionally, regulation of the banking sector should be vigilant, while banks' capital bases should be strong enough to withstand possible losses due to these risks. Serbia's fiscal policy may easily run foul of the IMF recommendations because of the political situation, as has already happened so far.

Asia – Japan

Japan sees surprisingly high growth due to Asian countries' strong external demand

Japan has so far proved impervious to the effects of the current financial crisis, and has been exhibiting a trend of economic growth different to that of other developed countries. Economic growth was above-average in Q1 (3.3%), primarily due to growing exports and investments, but the coming quarter is set to see a slowdown. The main channel for the effects of the US financial crisis to spill over into Japan is exports. A slowdown in Japanese exports to the US and Europe is expected. Asian countries' demand will nonetheless keep Japanese exports at a high level, since this region absorbs nearly half of Japan's export trade, while the US and EU account for only about one-third. As long as economic growth does not slow in this group of Asian developing nations, Japan will do well.

but, like in the euro zone, a slowdown is expected

A second risk factor that will probably slow Japan's economic growth in Q2 is domestic demand. Rising prices have reduced personal consumption, share prices have been falling, and this in turn reduced banks' credit activity and increased margins.

The situation in Japan is partly alleviated by the low level of investment by domestic banks into risky US financial derivatives, as well as by the fact that the issuance of construction permits has been normalized, leading to a rise in housing investment.

China

China remains the champion of the global economy

The most important developing country, China, recorded a robust growth of 10.5% in Q1; a reduction in external demand and exports was offset by rising domestic demand. However, China, like most Asian developing countries, has seen powerful domestic demand, coupled with rising prices of food and raw materials, fuelling inflation growth. Foot-and-mouth disease among pigs additionally reduced food supply, which in turn led to further rises in food prices. Inflation ran at an annual rate of 8.7% in February, but dropped to 8.3% in March. There is now a real danger of inflation spilling over into wages.

Foreign direct investment in China saw record levels in 2007, but the credit crunch in the developed countries is expected to produce a drop in 2008. The main factor affecting a possible slowdown of China's economy is export to the US and Europe; still, this risk has been greatly reduced by the rise in the volume of trade among Asian countries.

Currencies and Commodities

Oil prices rise at breakneck speeds

Oil prices again broke all records, rising to over $130 a barrel in May. The weakness of the US dollar, geopolitical tensions (especially in Nigeria), and falling stocks have driven the price up, although demand is falling. If demand continues to decline due to high prices and slowing economies, oil prices can be expected to fall to below $100 a barrel[2] over the next two years.

The dollar can continue to fall in the short run, despite its already low standing against the euro (1.55), but, as the Fed will probably refrain from lowering its reference rate again, its trend will most likely be upward over the coming period. Several factors could contribute to a rise in the dollar: if the euro zone economy slows, the ECB may decide to lower interest rates by late 2008. The US current account deficit is falling, and, with the global economy slowing, US investors will likely return capital to the US. According to BNP Paribas forecasts, the average euro/dollar exchange rate in 2008 will be 1.37.

Box 1. Crisis in the Financial Markets

In mid-2007, the US mortgage loans market fell into a serious crisis, which before long spread to the entire financial market and ended up spilling over into the real sector. How did this happen, what are the consequences of the current credit crunch, and what are the forecasts?

There was no change in US home prices in real terms between 1953 and 1995. But between 1995 and 2006 they grew by almost 70%. This is just one of a number of indicators that a price bubble was involved, which formed for three reasons. *First*, it developed together with the stock market bubble (which first appeared in the 1990s, and burst in 2001). This second bubble caused a significant rise in housing demand, as many sought to spend their stock-market-derived wealth. The *second* reason, which also boosted demand, is that substantial sums of money were transferred from financial markets into the real estate market when the stock market bubble burst in 2001.

The *third* reason is even more complex. Major deregulation of the US financial market was carried out in the second half of the 1990s. Among other things, the state substantially re2 duced the regulation of the mortgage lending sector. This made it possible for mortgage companies (such as, for instance, Countrywide Financial) to take far greater risks when lending,[1] which they used to increase the volume of loans granted to unreliable borrowers – the so-called *sub-prime* mortgages.[2] Mortgage lending to this category of households rose from 5% of total mortgage lending in 2002 to 25% in 2005. Combined with another risky mortgage loan category – the "Alt-A" loans[3] – these accounted for about 40% of the total loan volume.[4] Evidently, these loans drastically increased housing demand and pushed prices up.

Mortgage companies also entered into such risky operations thanks to financial market deregulation: they never intended to make money from granting loans, opting rather to sell them immediately to banks on the secondary market. Also due to deregulation, banks had, in the meantime, invented numerous new financial instruments – derivatives, whose value depended on that of other securities. In this particular

1 Regardless of whether the loans were intended for housing purchases, or involved a house as collateral.
2 Borrowers with a debt/revenue ratio of more than 55%, or a debt/house value ratio of more than 85%.
3 Loans where the borrower has failed to provide all relevant information about his creditworthiness.
4 A special problem with these loans is that the terms of many of them included a clause whereby the interest rate was allowed to rise generally only 2 years after granting, which made them even more difficult for borrowers to repay.

case, banks borrowed by issuing *mortgage-backed securities* (MBSs), where debt repayment was guaranteed by income banks should have derived from the mortgage loans they had purchased.

The story does not, however, end here: banks often used these assets to enter into very risky operations in the financial market.[5] The repeal in 1999 of the Glass-Steagall Act, one of the cornerstone pieces of legislation that had governed the US financial market ever since the 1930s, made possible much greater linking of commercial banks (e.g. shared ownership, even mergers) with other financial institutions – investment banks, various venture funds, mortgage companies, etc. Numerous conflicts of interest arose, since banks had an interest in engaging in risky deals as these were exactly what they had been deriving their income from.[6]

However, the whole system could not escape the fact that its foundation – mortgage loans – was extremely shaky. When the initial unreliable borrowers began defaulting (over the second half of 2006 and first half of 2007), banks' ability to service their own debts could not but evaporate. The value of MBSs plummeted. In addition, the early 2000s saw financial markets expand to include a large number of other derivatives, of which many depended partly or wholly on MBSs – their value fell too. These securitization chains – issuance of securities depending on other securities, which in turn depend on still other securities – spread the risk across the entire financial system.[7] A collapse in one of its segments had to have an impact on the entire system.

Further growth forecasts are not particularly favourable. The extent of the impact of this crisis on the financial system is apparent from the fact that financial institutions have already written down some $200 bn from their portfolios, while write downs of an additional $400 to $800 bn have been estimated. Dozens of financial institutions have gone bankrupt, including several leading ones, such as Bear Stearns, which was bought out by JP Morgan with the Fed's support. Countrywide Financial, the US's largest mortgage company, narrowly avoided bankruptcy when a group of banks granted it an emergency $11-bn-loan on 16 August 2007. The crisis has had a much greater impact on the US than the rest of the world, but Europe has not been completely spared. The Swiss bank UBS recently wrote down some €30 bn, while the British government nationalized Northern Rock, one of the country's largest banks, to prevent its collapse.

As for the US real estate market, estimates put its losses by the end of 2008 at about $7 trillion (slightly under 50% of US GDP). The sale of new housing units is currently at its lowest level in 17 years. By way of comparison, sales in April 2008 were 42% lower than in April 2007, in spite of average prices, as measured by the Case-Shiller index, falling by 14.1% over the same period – the largest yearly drop since the index was introduced in 1988. It is highly likely that prices have still not returned to normal. It is estimated that over 2.5 mn people will lose their homes: they cannot even sell their properties to repay their debts, as house prices are now far below the amount of their debts. In view of the importance of the construction sector to the economy as a whole, this will continue having serious consequences. In addition, the general insecurity in the market, and banks' limited ability (and willingness) for renewed lending to the economy, have brought the US to the brink of recession. A quick recovery is not certain, since the extent of financial sector write downs is still unknown.

In view of the importance of the US economy, this crisis points to a potentially enormous problem: although the current devaluing of the dollar is good on the one hand, since it may correct the US balance of payments deficit, it could also lead to a loss of confidence in the dollar as the global reserve currency. If this were to happen suddenly (as opposed to continuing gradual diversification of foreign currency reserves in favour of the euro), such an event – with many parties attempting to dispose of hundreds of billions of dollars at the same time – could trigger a very serious crisis, especially if global political instability is borne in mind.

To avoid these situations in the future, what is probably needed is a renewed effort to strengthen the regulation of financial markets and reduce the potential for conflicts of interest; this calls for measures to eliminate, or at least reduce, collusion between financial regulators and financial institutions. Incentive schemes for executives are also ripe for reform: as things stand now, they are rewarded on the basis of short-term performance, e.g. quarterly profits. For instance, Angelo Mozilla, CEO of Countrywide Financial, received several hundred million dollars in various benefits over the past decade, in spite of having brought his company to the edge of bankruptcy. The same is true of James Cayne, former CEO of Bear Stearns – the only difference being that Cayne actually bankrupted his firm. Finally, mathematical risk assessment models also need to be re-evaluated. These risk-metrics models have obviously been less than successful in predicting risks, as they did not even foresee the possibility of the current crisis.

5 For instance, lending to hedge funds, which are still completely beyond the scope of any regulation, and very risky.
6 The Glass-Steagall Act had been introduced to, among other things, prevent such conflicts of interest.
7 The BIS estimates put the nominal value of just one of these instruments – collateralized debt swaps (CDSs), invented as late as the end of the 1990s – at $45 trillion in June 2007.

3. Prices and the Exchange Rate

Inflation remained high in Q1 (11.6% annualized), although less so than in Q4 2007. The high inflation rate in Q1 was contributed to by both supply- and demand-side factors. On the supply side, overall price growth was affected by the rising prices of oil products (due to high crude oil prices), electricity, and food and agricultural products (albeit lower in Q1 than in the preceding quarter). On the demand side, inflation was spurred by the soaring fiscal expansion in late 2007, as well as the continuing credit boom. Core inflation also slowed in Q1 (to an annualized 5.8%), mostly because of the decelerating rate of growth of food prices that are part of the core inflation. A mild acceleration was, however, seen in the non-food component of core inflation. In April, a significant acceleration was recorded in both total and core inflation. The April price growth was mostly caused by supply-side factors, particularly the rising prices of agricultural and food products. Nevertheless, the non-food component of core inflation also grew significantly in April. The dinar weakened against the euro in Q1, with a nominal depreciation of about 5% recorded by mid-March. Following the NBS's introduction of new measures (raising the reference interest rate and changing the make-up of the reserve requirement), the dinar strengthened against the euro from mid-March to late April, only to drop sharply in the week immediately before the elections. The exchange rate has since seen a post-election recovery.

Although high in Q1, inflation is nonetheless somewhat lower than in the preceding quarter

Over the first three months of 2008 inflation, reached a total of 2.8%, or 11.6% annually. This rate is similar to that recorded in the last quarter of 2007 (Table T3-1), but at the same time significantly higher than in the first quarter of last year (when annual inflation stood at only 5.1%, Graph T3-3). After a mild slowdown in January and February, inflation again accelerated in March. The monthly inflation rate over the first two months stood at 0.9%, while price growth in March was a high 1.2%. The average y-o-y inflation rate in Q1 2008 stood at 11.3%, as against the previous quarter's 9.2%.

Table T3-1. Serbia: Retail Price Index and Core Inflation, 2005–2008

	Retail Price Index				Core Inflation			
	base index (avg. 2005 =100)	y-o-y growth	monthly growth	3m moving average, annualized*	base index (avg. 2005 =100)	y-o-y growth	monthly growth	3m moving average, annualized*
2005								
Dec	107.6	17.6	2.2	22.5	106.3	14.6	0.9	18.6
2006								
Mar	110.0	14.4	0.3	9.1	108.1	11.7	0.8	7.0
Dec	114.7	6.6	0.1	2.1	112.5	5.8	0.0	1.2
2007								
Mar	116.1	5.6	0.8	5.1	112.4	4.0	0.1	-0.4
Jun	119.5	5.1	0.6	12.0	113.4	2.7	0.5	3.7
Sep	122.6	7.4	0.8	10.9	115.9	3.4	1.0	9.4
Oct	123.3	8.5	0.6	10.9	116.7	4.0	0.7	11.4
Nov	124.7	8.8	1.1	10.4	117.5	4.5	0.7	9.7
Dec	126.3	10.1	1.3	12.6	118.6	5.4	0.9	9.5
2008								
Jan	127.5	10.7	0.9	14.2	118.9	5.7	0.3	7.7
Feb	128.3	11.3	0.7	12.2	119.6	6.5	0.6	7.1
Mar	129.8	11.8	1.2	11.6	120.3	7.0	0.6	5.8
Apr	131.2	12.0	1.1	12.3	121.7	8.1	1.2	9.7

Source: SBS.
* Moving averages of monthly price increases for three months, annualized (e.g., the value for March was obtained through annualization of the average of monthly price increases in January, February and March).

Both supply- and demand-side factors contribute to inflation in Q1

The relatively high inflation rate in Q1 2008 can be explained by both supply- and demand-side factors. As for the former, price growth over the first three months was primarily affected by the rising prices of oil products and electricity, as well as the continuing high growth of prices of food and agricultural products (Table T3-2). These four types of products make up some

40% of the retail price index; their contribution to inflation growth in Q1 stood at almost 75%. When these products are excluded, the rest of the retail price index in Q1 saw a relatively modest growth of 1.2%, or 5.1% annually. The fact that the greatest part of the price rises by far was concentrated in just four groups of products shows that the inflation in Q1 was still primarily a consequence of supply-side factors.

On the supply side, the greatest contribution was made by oil prices…

The rising prices of oil products are directly triggered by the high crude oil prices in the world's markets. Despite a possible recession in the United States and an overall downturn in global economic growth, oil prices in the world's markets remain very high and continue to rise. For instance, the price of Brent crude passed the $100 a barrel mark in early March, only to break the $130 a barrel barrier in May. Prices of Ural crude, the type of oil most relevant to the prices of oil products in Serbia, also passed the $100 a barrel mark in March, then dropped briefly, only to continue to rise again. Even taking into account the dollar/dinar exchange rate, a significant increase in the price of oil is evident – some 10% in Q1 (Graph T3-4).

…followed by rising electricity prices…

The price of electricity was hiked in March, which also spurred inflation from the cost (i.e. supply) side. It went up by 3.5%, and made a contribution of slightly under 10% to the total price growth in the first quarter.

…as well as the relatively high growth of prices of agricultural and food products

Finally, Q1 2008 saw a high growth of prices of agricultural and food products (though, admittedly, lower than in the previous quarter) – a consequence of global price growth trends for this group of products, the poor results of Serbia's agriculture in 2007, and the low degree of competition in the Serbian food industry and retail trade.

Table T3-2. Serbia: Retail Price Index, Contribution to Growth by Selected Components, 2008

	Share in RPI	Contribution to RPI growth in Q1 2008	Contribution to RPI growth in April 2008
		in %	
Total	100.00	100.0	100.0
Goods	72.46	90.6	83.8
Agricultural products	3.35	16.5	14.7
Industrial products	69.11	71.3	66.7
Industrial food products	19.93	17.5	62.2
Bread and pastry	2.11	3.9	26.1
Fresh meat	2.10	2.0	2.9
Milk and dairy products	3.39	4.3	3.4
Vegetable fats	1.03	0.4	12.1
Beverages	4.42	5.2	4.2
Industrial non food products	41.22	49.0	-1.8
Electricity	7.20	9.6	0.0
Liquid fuels and lubricants	9.39	29.7	-7.2
Services	27.54	9.4	16.2

Source: SBS.

On the demand side: Q4 2007 fiscal expansion and continuing credit growth

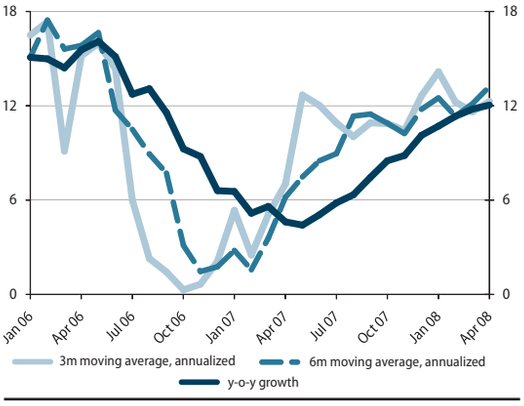
As for demand-side factors, note must be made of the robust fiscal expansion beginning in late 2007, as well as the continuing credit growth. The Q4 2007 consolidated fiscal deficit stood as high as 7% of quarterly GDP. Such high government spending accommodated the cost impact and contributed to inflation growth through rising domestic demand (reflected in a worsening of the trade deficit and/or rising inflation). Growing domestic demand was also spurred by the credit expansion, which amounted to some 35% at the y-o-y level in Q1. The growth of loans to households stood at some 40% at the y-o-y level over the same period.[1]

The weakening dinar also contributes to price growth

In addition to these factors, the dinar's weakening against the euro exerted additional pressure on price growth. From early January to mid-March, the dinar lost some 5.5% of its value against the euro (Graph T3-12).

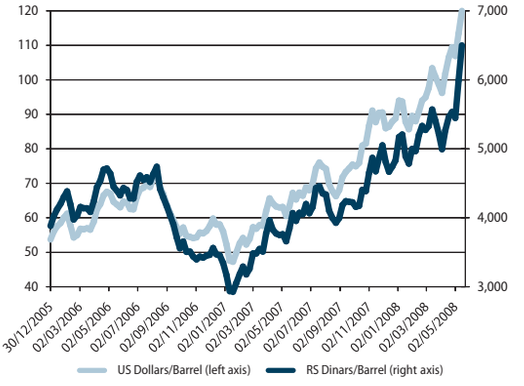
1 For more details see Section 8, Monetary Flows and Policy.

Graph T3-3. Serbia: Retail Price Index (in %), 2006–2008



Source: SBS.

Graph T3-4. World: Oil Prices (Ural), in USD and RSD, 2005–2008



Source: Energy Information Administration, U.S. Department of Energy.

The inflation rate again high in April…

Inflation grew by a high 1.1% in April, which seems to indicate that the trend of its mild slowing, recorded over the first two months of 2008, was brought to a halt in March and reversed in April. Year-on-year inflation (in relation to April 2007) stood at 12.0%.

…due to large increases in food prices...

The high April inflation was primarily the consequence of supply-side factors. The greatest contribution was made by food and agricultural products, with these two groups accounting for as much as three quarters of the April inflation (Table T3-2). Prices of agricultural products rose by 4.3% in relation to March, while those of industrial food products grew by 3.4%. The April inflation was also contributed to by the rising prices of services, primarily transportation and education and culture. Unlike Q1, April saw a decrease in the prices of oil products (a reflection of the temporary drop in crude oil prices, Graph T3-4), which to an extent dampened the April inflation.

…which are now by far the highest in Serbia in relation to comparable countries…

The extremely high growth of food prices in April again drew attention to the fact that food prices in Serbia continue to grow more quickly than those in the region and Europe. Food price growth in Serbia was among the highest of all European countries, with only Bulgaria recording slightly higher increases. In 2008, however, food price growth in Serbia accelerated additionally, to levels setting it apart from all comparable countries. It went up by as much as 9.2% over the first four months of 2008 (Table T3-5). When the relative growth in the prices of food in relation to those of other products is taken into account, the situation in Serbia differs greatly from that in other countries (last two columns in Table T3-5). The relative growth in the prices of food in relation to prices of other products making up Serbia's consumer price index amounted to as much as 7.0% over the first four months of 2008; by way of comparison, the relative growth of food prices remained below 3% in all other countries. Although the steep rise in Serbia is affected by factors also evident in other countries in the region (global trends of higher prices for agricultural and food products, and the poor showing of agriculture in 2007),[2] it is nonetheless unusually high. The most probable reason is the low level of competition in Serbia, i.e. the underdeveloped domestic market structures in the food industry and the retail sector.

…probably as a consequence of the low level of competition in the food industry and retail sector

Core inflation in Q1 decelerates relative to the previous quarter…

Core inflation amounted to 1.4% over the first three months of 2008, or an annual 5.8% (Table T3-1). Although relatively high, this rate still represents a significant slowdown in relation to the last quarter of 2007, when core inflation stood at 2.3%, or as much as 9.5% annually (Graph T3-7). This somewhat lower quarterly rate was the result of a temporary downturn in core inflation seen in January (0.3% at the monthly level); it rose again slightly, however, in February and March (0.6%). The y-o-y core inflation rate stood at 6.4% in Q1, whereas it had been 4.6% in the previous quarter. The higher y-o-y rate is a result of comparison with the low Q1 2007 base.

2 See *QM10*, Box 1 in Section 3, Prices and the Exchange Rate.

Table T3-5. Europe: Food Prices and Consumer Prices Increases, Selected Countries (in%), 2007–2008

	Food and Non-alcoholic Beverages Prices, increase in %		Consumer Prices, increase in %		Increase in Consumer Prices excluding Food and Bevg. Prices		Food Prices Increase defleated with Increase in Consumer Prices excl. Food Prices	
	Dec 07/Dec 06	Apr 08/Dec 07	Dec 07/Dec 06	Apr 08/Dec 07	Dec 07/Dec 06	Apr 08/Dec 07	Dec 07/Dec 06	Apr 08/Dec 07
Serbia	**18.4**	**9.2**	11.0	4.6	**7.1**	**2.1**	**10.5**	**7.0**
Bulgaria	21.1	6.6	11.6	4.3	8.7	3.6	11.4	2.9
Hungary	13.0	4.7	7.4	3.1	6.0	2.7	6.5	1.9
Slovakia	7.2	4.2	2.5	2.1	1.5	1.6	5.6	2.5
Greece	4.3	3.8	3.9	1.8	3.8	1.4	0.5	2.4
Romania	9.4	2.9	6.7	2.8	5.1	2.7	4.1	0.1
Slovenia	12.0	2.8	5.7	2.0	4.4	1.9	7.2	0.9
France	3.2	2.8	2.8	1.4	2.7	1.1	0.5	1.7
EU	**5.7**	**2.5**	**3.2**	**1.5**	**2.7**	**1.3**	**2.9**	**1.2**
Germany	5.7	2.4	3.1	0.4	2.8	0.1	2.8	2.3
Croatia	10.7	2.4	5.8	1.8	3.7	1.5	6.8	0.9
Poland	7.9	2.4	4.2	1.7	3.3	1.5	4.4	0.9
Euro area	4.8	2.3	3.1	1.3	2.8	1.1	2.0	1.3
Czech Republic	11.2	1.8	5.5	3.5	4.3	3.9	6.7	-2.1
Spain	6.6	1.0	4.3	1.5	3.6	1.6	2.9	-0.7

Source: Harmonised Index of Consumer Prices, Food and non-alcoholic beverages; Eurostat, Croatian Bureau of Statistics, SBS

…primarily due to the somewhat lower growth rate of food prices

The slowdown in core inflation in Q1 was a consequence of the slower growth of the food prices that make up core inflation. Although food products contributed most to core inflation in Q1 (Table T3-6), their growth was still significantly less marked than in the previous quarter. The food component of core inflation saw growth of as much as 20% annually in the previous quarter, while in Q1 this fell to below 10% annually (Graph T3-8). On the other hand, there was a mild increase of the non-food component of core inflation in Q1 – a consequence of the rising prices of beverages, construction materials and transportation services.

Table T3-6. Serbia: Core Inflation, Contribution to Growth by Selected Components, 2008

	Share in Core Inflation	Contribution to Core Inflation growth in Q1	Contribution to Core Inflation growth in April
		in %	
Core inflation	100.0	100.0	100.0
Goods	76.6	74.7	76.4
Industrial food products	30.9	40.4	55.6
Cereals	1.3	11.6	6.1
Fresh meat	3.9	6.7	5.2
Milk and dairy products	2.9	13.3	6.2
Vegetable fats	2.1	1.9	22.7
Beverages	8.3	17.0	7.1
Industrial non food products	38.0	17.3	13.8
Services	23.4	25.3	23.6

Source: SBS.

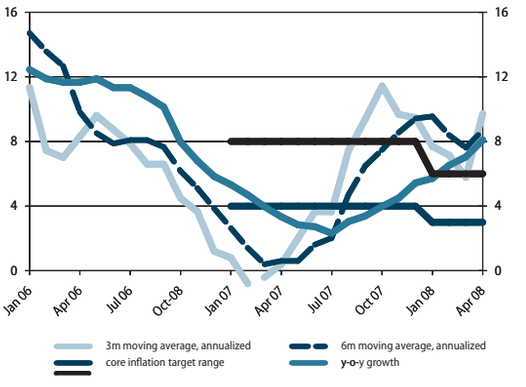
April sees core inflation accelerate strongly as a result of new increases in food prices …

Core inflation accelerated strongly in April as a result of new hikes in the food prices, but also due to a significant growth of the non-food component of core inflation. The depreciation of the dinar over the first three months of 2008 certainly contributed to the acceleration of core inflation (Graph T3-12). It is also highly likely that high oil product prices are spilling over into core inflation, which grew by 1.2%, its highest rate since November 2005. The y-o-y core inflation rate in April stood as high as 8.1%, far above the upper limit of the NBS target band (between 3% and 6%). It needs to be noted that the trend of slowing core inflation, apparent since late 2007, has been reversed, judging by the movements in quarterly core inflation averages (Graph T3-7).

…but also due to higher growth in the non-food components of core inflation

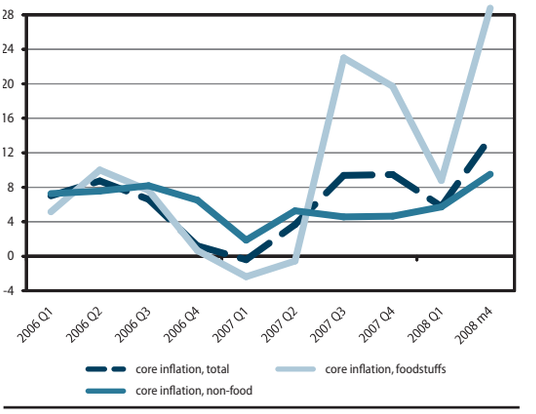
The non-food component of core inflation recorded very high price growth in April. It had recorded growth rates of between some 4% and 6% annually in previous four quarters; in April, however, growth of this component approached the level of 10% (Graph T3-8). The highest growth of all non-food components of core inflation was recorded by prices of textile products, construction materials, as well as transportation (probably linked to the rising oil prices), education and cultural services. The acceleration of the non-food component of inflation is probably the consequence of the dinar's weakening in Q1 and high demand spurred by the fiscal expansion in late 2007.

Graph T3-7. Serbia: Core Inflation (in %), 2006–2008



Source: SBS.

Graph T3-8. Serbia: Core Inflation and Components (annualized rates, in %), 2006–2008



Source: *QM*.
Note: Minor errors may appear in this Graph due to lack of sufficiently detailed data.

The NBS continues imposing anti-inflation measures

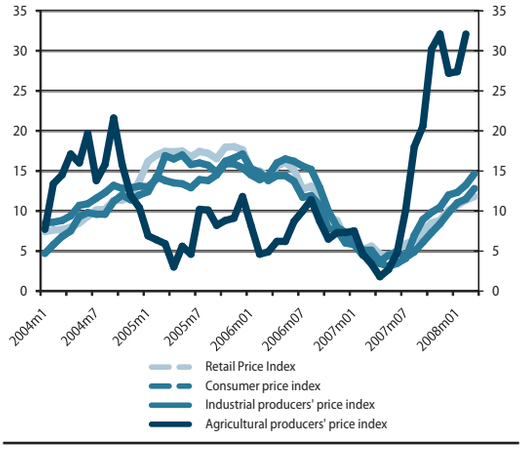
For its part, the NBS continued implementing measures aimed at curbing inflation and reducing it to the projected level. At a sitting of its Monetary Board 24 April, the NBS again decided to raise its reference interest rate, this time to 15.25%. To recall, the NBS had already raised the rate in mid-March, from 11.5% to 14.5%.[3]

The NBS has repeatedly shown its commitment to maintaining low inflation, and *QM* believes it will continue taking steps to that end. But if inflation is really to be curbed, fiscal policy must be supportive – i.e. government spending needs to be moderated. The government recorded a small surplus in Q1 2008, which is a positive step from the point of view of curbing inflation, but it remains to be seen what spending policy the new administration will adopt.

The industrial producers' price index recorded high growth in Q1…

…while other price indices remained at the high level of the preceding quarter

Graph T3-10. Serbia: Selected Price Indices, 2004-2008 (Y-o-y growth)



Source: SBS.

As for other price indices, Q1 saw an acceleration of growth of the industrial producers' price index, as well as a stabilization of the cost of living index and the agricultural producers' price index. Industrial producers' prices grew by an average monthly rate of 1.7% in Q1 (Table T3-9), or as much as 21.9% annualized. This rate stood at 12.7% in the preceding quarter. The y-o-y rate of growth of the industrial producers' price index was 11.8% in Q1, as against 8.5% in the preceding quarter. On the other hand, the cost of living index slowed somewhat in Q1 in relation to the preceding quarter. This index recorded a monthly average growth of 1.0% in Q1, or 12.6% annualized, slightly lower than the rate recorded in the preceding quarter (15.0%). The trends are similar with agricultural

3 See Box 1 in Section 8, Monetary Flows and Policy.

producers' prices, which grew at an average monthly rate of 2.2% in the first two months of 2008, equal to the preceding quarter's rate. However, y-o-y growth rates for agricultural products are still exceedingly high, standing at some 30% (Graph T3-10).

Table T3-9. Serbia: Comparative Price Growth, Selected Indices, 2005–2008

	Retail Price Index			Consumer Price Index		Industrial Producers' Price Index		Agricultural Producers' Price Index	
	base index (avg. 2005 =100)	y-o-y growth	monthly growth	y-o-y growth	monthly growth	y-o-y growth	monthly growth	y-o-y growth	monthly growth
2005									
Dec	107.6	17.6	2.2	17.1	1.6	15.4	0.4	11.8	1.0
2006									
Mar	110.0	14.4	0.3	13.8	0.6	14.4	0.6	4.9	1.1
Dec	114.7	6.6	0.1	6.0	0.1	7.3	-0.2	7.3	1.1
2007									
Mar	116.1	5.6	0.7	4.2	0.4	5.1	0.6	3.4	-0.5
Jun	119.5	5.1	0.6	3.5	0.4	4.9	0.7	4.8	2.8
Sep	122.6	7.4	0.8	8.9	1.8	6.1	0.8	20.6	3.1
Oct	123.3	8.5	0.6	9.8	0.5	7.3	0.8	30.2	4.7
Nov	124.7	8.8	1.1	10.5	1.6	8.4	1.2	32.1	2.6
Dec	126.3	10.1	1.3	12.0	1.5	9.8	1.0	27.2	-0.6
2008									
Jan	127.4	10.7	0.9	12.3	0.8	11.0	2.6	27.4	2.4
Feb	128.3	11.3	0.7	13.3	0.6	11.5	0.7	32.1	1.9
Mar	129.8	11.8	1.2	14.6	1.6	12.8	1.7	...	...

Source: SBS.

The Exchange Rate

The dinar depreciates against the euro by a nominal 5.5% until mid-March…

From early January to mid-March, the dinar depreciated some 5.5% in nominal terms against the euro (Graph T3-12). The downward trend was reversed in mid-March, but the Serbian currency's weakening over Q1 2008 appears to have had an impact on total inflation. When the exchange rate in real terms is considered, the dinar depreciated by 2.6% in Q1 (Table T3-11, Graph T3-13).

Although January saw a record volume of interbank trading (€3,664 million), the daily volume of foreign currency trading between banks from mid-February dropped to as little as one-tenth of its previous average (total interbank trading in February amounted to some €1,300 million, dropping to just €400 million in March).

…but has seen further growth from mid-March to late April, as the NBS measures take effect

After several successive hikes of the NBS reference interest rate, coupled with a change in regulations governing banks' reserve requirements (calling for 10% of the reserve to be kept in dinars from 17 May),[4] the NBS moves led to an increased supply of foreign currency in the market, a reversal of the dinar's downward trend, and its renewed appreciation against the euro. The dinar strengthened against the euro from mid-March to late April by slightly under 5% (Graph T3-12).

The dinar weakens again in the run-up to the elections, only to recover afterwards

However, as the elections approached and political uncertainty increased, the dinar began to weaken again. The daily exchange rate thus again exceeded 83 dinars for 1 euro. After the elections the exchange rate stabilized, and the dinar again rose slightly in value (Graph T3-12). It may also be that the dinar's drop in April was due to the fact that the effects of the change in the reserve requirement may have somewhat dissipated.

The dinar's strengthening from mid-March to late April should contribute to dampening price growth. But since the dinar later again weakened, and the non-food component of core inflation accelerated its growth in April, it is still too early to tell whether the dinar's appreciation has had the desired effect.

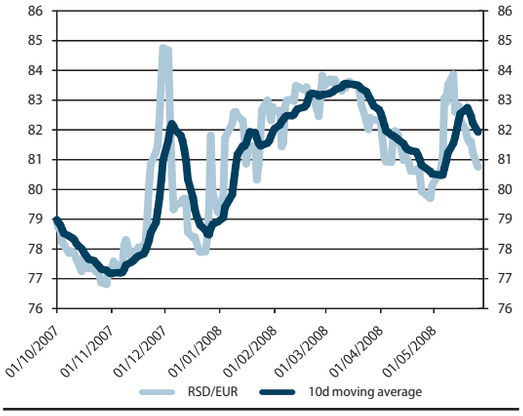
4 See Box 1 in Section 8, Monetary Flows and Policy.

Table T3-11. Serbia: Dinar/Euro Exchange Rate, 2005–2008

	Nominal				Real			USD/EUR Rate[6]
	exchange rate (FX)[1]	base index[2] (avg.2005 = 100)	y-o-y index[3]	cumulative index[4]	real FX[5] (avg.2005 = 100)	y-o-y index[3]	cumulative index[4]	
	monthly exchange rate							
2005								
December	85.9073	103.6	109.3	109.3	97.4	94.9	94.9	1.1861
2006								
March	87.1033	105.0	107.9	101.4	97.0	96.4	99.6	1.2013
June	86.7609	104.6	105.1	101.0	94.4	93.6	96.9	1.2677
September	83.0621	100.2	98.3	96.7	90.0	89.7	92.5	1.2748
December	78.7812	95.0	91.7	91.7	85.4	87.7	87.7	1.3210
2007								
March	80.8968	97.6	92.9	102.7	87.0	89.7	101.9	1.3246
June	81.1665	97.9	93.6	103.0	85.6	90.7	100.3	1.3420
September	79.3999	95.8	95.6	100.8	81.8	90.9	95.8	1.3884
October	77.6627	93.7	96.0	98.6	79.9	90.8	93.6	1.4227
November	79.1979	95.5	100.3	100.5	81.1	95.1	95.0	1.4689
December	79.5669	96.0	101.0	101.0	80.7	94.6	94.6	1.4563
2008								
January	81.8460	98.7	102.7	102.9	82.0	95.8	101.5	1.4719
February	82.9685	100.1	104.5	104.3	82.8	96.9	102.6	1.4755
March	83.1319	100.3	102.8	104.5	82.8	95.2	102.6	1.5516
April	81.0287	97.7	100.6	101.8	80.1	92.7	99.2	1.5770

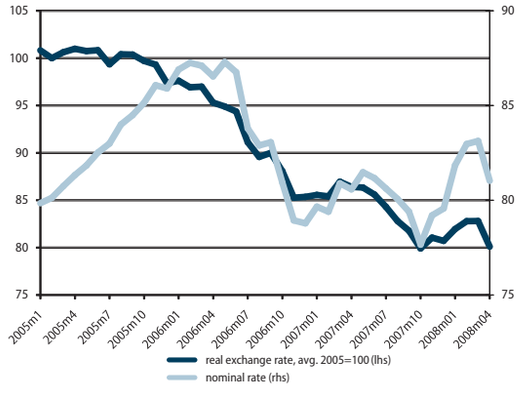
Source: NBS, Eurostat
1) Month average, official daily NBS mid rate.
2) Ratio of fx in column 1 and average fx in 2005.
3) Ratio of fx in column 1 and fx for the same period in previous year.
4) Cumulative is the ratio of given month and December of previous year.
5) Includes Euro area inflation. Index calculation: RE=(NE/p) x p*
RE - real fx index
NE -nominal fx index
p - Serbia RPI index
p* -Euro area CPI index
6) Period average.

Graph T3-12. Serbia: Dinar/Euro Daily Exchange Rate, 2007–2008



Source: NBS.

Graph T3-13. Serbia: Nominal and Real Dinar/Euro Exchange Rate, 2005–2008



Source: NBS, Eurostat.

4. Employment and Wages

Registered employment in legal entities kept falling between September 2007 and March 2008, with the sharpest drop recorded in the manufacturing industry. The number of employees in the public sector was mainly stable, while data on the number of entrepreneurs is still unavailable. Since the number of registered unemployed persons kept falling, and therefore both formal employment and unemployment are declining, the formally inactive population is growing. Nonetheless, the Labor Force Survey, which monitors both the formal and informal labor markets, shows an increase in total employment. We hypothesize that these diverging trends in the two surveys (RAD and LFS) occur because the LFS takes into account the informally employed. Namely, part of the labor force made redundant in socially owned enterprises and not absorbed by the private sector has moved into the informal economy. Real wage growth decelerated strongly – in Q1 it stood at 5.2% relative to 14.6% for the whole of 2007. Wages in April were slightly above the average due to previously negotiated pay rises in the public sector. Public sector wages, however, have slowed down dramatically relative to 2007, while the deceleration is somewhat slower in the economy. Overall, there seems to be no wage indexation to compensate for inflation as yet.

Registered Employment

Employment in legal entities kept falling

Registered employment in legal entities continued to fall, based on the preliminary data for the period between September 2007 and March 2008 (column 2, Table T4-1). To recall, data on employment with entrepreneurs is released twice a year[1], when figures on the number of employees in legal entities are adjusted as well. Consequently, because of the unavailability of data, this issue of *QM* monitors only unadjusted employment in legal entities.

Table T4-1. Serbia: Registered Employment, 2003–2008

	Total no. of employed (employees and entrepreneurs)	Employees in legal entities	Entrepreneurs			Total no. of employees
			Total	No. of entrepreneurs	No. of employees with entrepreneurs	
	1 (=2+3)	2	3 (=4+5)	4	5	6 (=2+5)
			in thousands			
2003						
March	2,046	1,628	418	198	220	1,848
September	2,036	1,595	441	202	239	1,834
2004						
March	2,065	1,601	464	208	255	1,856
September	2,037	1,560	477	210	267	1,827
2005						
March	2,070	1,557	513	228	285	1,842
September	2,067	1,536	531	230	300	1,836
2006						
March	2,032	1,496	536	228	308	1,804
September	2,019	1,447	572	242	330	1,777
2007						
March	2,004	1,438	566	239	327	1,765
September	2,001	1,428	573	245	328	1,756
2008						
March	1,989	1,416	573	245	328	1,744

Source: SBS Semi-annual Report on the Employed and Wages RAD-1/P; Additional Survey to the Semi-annual RAD-1 Report; Semi-annual Report on Small Businesses and Their Employees RAD-15.
Notes:
1) By registered employment, we refer to the formal economy, i.e. those employees with employment contracts and for whom social security contributions are being paid.
2) Data on employees in legal entities are uncorrected data for January 2008 and data on entrepreneurs and their employees are from September 2007. These are the most recent data available.
Notes by column:
1) The total number of employed (employees and entrepreneurs) includes those employed by legal entities (enterprises, organizations, institutions) - Column 2, and small businesses i.e. entrepreneurs - Column 3 (including store owners, self-employed professionals, etc., and those working for them). Employees of the Ministry of Defense of Serbia, and the Serbian Ministry of Internal Affairs are not included.
2) Employees in legal entities (companies, organizations, institutions).
3) Owners of small businesses and self-employed persons (entrepreneurs) and their employees (Column 4 + Column 5).
4) Owners of small businesses and self-employed persons (entrepreneurs).
5) Employees of small businesses (entrepreneurs).

1 In March and September.

The sharpest drop in employment in legal entities occurred in the manufacturing industry, followed by hotels and restaurants, and the transport sector

The sharpest drop in employment in legal entities persisted in the manufacturing industry, where the number of jobs was cut by 13,000, or 3%, between September 2007 and January 2008 (Table P-5 in the Appendix). Employment also declined appreciably in agriculture and construction over the same period, which can be attributed to seasonal fluctuations. In the hotels and restaurants sector, 2,000 jobs, or 9% within the sector, were lost, and 3,000 jobs were terminated in the transport sector, which reduced employment in this sector by around 3% (Table P-5 in the Appendix).

The highest increase in employment occurred in education

The highest increase in employment of around 4,000 jobs, or 3%, was observed in education (Table P-5 in the Appendix). The rise in this sector is also confirmed by the data on the number of employees financed out of the republican budget (Table T4-2). It is not clear what caused such a large increase in the number of employees in education over the past two years, since a drop could have been expected due to demographic aging and planned retrenchments in the sector.

Table T4-2. Serbia: Employees in Legal Entities, Disaggregated, 2003–2008

	Employees in legal entities						
	Public sector						
	From the budget			Public enterprises		**Public sector - total**	**Other[1)]**
	Administration - all levels	Education and culture	Health and social work	National public	Local public		
	1	2	3	4	5	6	7
	in thousands						
2003							
March	60	116	147	129	54	506	1,122
September	62	114	147	127	55	505	1,090
2004							
March	63	117	147	125	57	509	1,092
September	63	116	148	124	57	508	1,052
2005							
March	63	119	148	122	61	513	1,044
September	61	117	147	112	61	498	1,038
2006							
March	60	118	141	105	61	485	1,011
September	58	117	138	102	60	475	972
2007							
March	58	121	138	100	59	476	962
September	59	120	139	100	58	476	952
2008							
Mart	60	124	140	99	58	481	935 [2)]

Source: SBS.
Note: Those employed in the Ministry of Defense and the Ministry of the Interior, even though financed from the budget do not enter the total balance of the employed persons presented in this table. Their numbers are estimated at around 80,000, and they add another 4% to the total number of employeed in Serbia. The data on their exact numbers and wages are not published by the SBS because of national security concerns.
Footnotes:
1) Private, socially-owned and mixed ownership enterprises (without entrepreneurs). This column is not disaggregated further due to data availability limitations. The number presented in column 7 is calculated by subtracting the total number of employees in public enterprises and those financed from the budget from the total number of employees in legal entities from the Table T4-1.
2) The number of employees in column 7 for March 2008 was obtained by subtracting the number of public sector employees in March from the total number of employees in January 2008. Therefore, this number should be used more as an indicator of employment trends in the rest of economy than the final number of employees in March 2008.

The number of employees in the public sector was mostly stable, except for a rise in education and a continuous decline in national public enterprises

Apart from the employment growth in education, the number of employees in the public sector was largely maintained at the same level. Only in national public enterprises has a continuous decline in employment been recorded since 2003, when *QM* started observing the series. Between September 2007 and March 2008, employment in national public enterprises fell by around 1,000 employees, or around 3%, while in the past five years employment in this sector declined by a total of 30,000 jobs, or around 30%. This, in *QM*'s view, can be attributed to restructuring and privatization of non-core activities in certain public enterprises.

Table T4-3. Serbia: Administrative and Real Unemployment, 2004–2008

	Administrative number of unemployed 15-64 (NES)	Administrative unemployment rate 15-64 (NES & RAD, SBS)[1)]	Number of unemployed 15-64 (LFS, SBS)	Unemployment rate 15-64 (LFS, SBS)[2)]
	1	2	3	4
2004				
March	…	26.0	…	…
September	842,775	23.9	664,002	19.5
2005				
March	884,111	25.0	…	…
September	897,724	25.3	718,773	21.8
2006				
March	920,031	26.6	…	…
September	914,564	26.6	691,877	21.6
2007				
March	913,299	26.7	…	…
September	808,200	24.5	585,472	18.8
2008				
March	795,081	24.2 [3)]	..	..

Source: National Employment Service (NES); Labor Force Survey (LFS), SBS.
Notes:
1) Population aged 15-64 is considered working-age population.
2) RAD survey and LFS are equally official sources of data and they both come from SBS, but LFS is the only source of internationally comparable data on the labour market sectors and indicators.
Footnotes:
1) The SBS unemployment rate stems from dividing the number of unemployed with the total active population, where the active population consists of the total number of employees from the SBS statistics (column 1 in Table T4-1), the number of unemployed 15-64 from the NES statistics (column 1 in this table) and the number of agricultural workers from the LFS.
2) Labor Force Survey is conducted in October each year (once per year), thus the September data are in fact October data for that year.
3) In order to calculate this unemployment rate we used the number of agricultural workers from LFS 2007.

The administrative number of unemployed continued declining

The administrative number of unemployed kept falling between September 2007 and March 2008. Since administrative employment has been falling at a slower pace, the unemployment rate has also declined from 24.5 to 24.2.[2] We note here that the administrative number of the unemployed in column 1 of Table T4-3 exceeds the number of the unemployed according to the Labor Force Survey (LFS) (column 3, Table T4-4) because a number of employees in the informal sector and of the economically inactive population (e.g. housewives) register as unemployed persons in order to acquire various benefits. Administrative unemployment was falling at a pace similar to that before the break of the series in the previous six-month period (March–September 2007), which occurred owing to a legislative change that abolished the right to health insurance through the National Employment Service (Table T4-3, column 1).

Since both registered employment and recorded unemployment were falling, the formal labor force shrank, and the inactive population expanded

It should be emphasized here that a cut in the administrative unemployment rate presented in column 2 of Table T4-3 does not imply a rise in employment, since registered employment was also falling, as shown in column 1 of Table T4-1. The drop in both these segments of the working-age population indicates that the formal labor force (comprising the registered employed and unemployed) has been shrinking, while the inactive population is expanding. It is necessary to bear in mind that, by using administrative definitions, all unregistered employees as well as farmers and unpaid family members are also included in the inactive population.[3]

Box 1. Is Employment in Serbia Going Up or Down? Diverging Trends of the RAD Survey and the Labor Force Survey

The SBS monitors employment data in two ways:

(1) The employment data presented in Table T4-1 of each QM issue is received from the Monthly Report on the Employed and Wages RAD-1, the Semi-annual Report on the Employed and Wages RAD-1/P, the Additional Survey to the Semi-annual RAD-1 Report and the Semi-annual Report on Small Businesses and Their Employees RAD-15. While the RAD-1 survey monitors developments

2 To calculate that unemployment rate we use data on employment from January 2008 which is the most recent available data.
3 For a more detailed explanation, see Box 1 of this section of *QM*.

regarding employment in the legal entities sector on a monthly basis, RAD-1/P (the survey adjusting monthly data on employment in legal entities) and RAD-15 (which records entrepreneurs and their employees) are carried out twice a year – in March and September.[1] Therefore, in Table P-4 in the Analytical Appendix, we regularly monitor monthly, unadjusted developments in employment with legal entities, but are not in a position to do the same for entrepreneurs. Employment in legal entities is estimated in the RAD surveys on the basis of a national sample of companies, while the number of entrepreneurs and their employees is derived from the health insurance registration forms. In that manner, only the registered employed are covered[2].

(2) The Labor Force Survey (LFS) is conducted according to the internationally harmonized methodology of the International Labor Organization and is the only internationally comparable source of data on labor market contingents and indicators in Serbia. The LFS is conducted once a year, in October, and data on the employment status of the population is obtained from interviews with a national sample of households. Since the employment status of respondents is decided on the basis of personal statements regarding their engagement on the labor market, the total number of employees under the LFS also includes the informally employed[3], farmers and unpaid family members, as well as those employed in the Serbian Ministry of Defense and the Ministry of the Interior. Due to the broader capture based on the economic definition of employment status (any paid work lasting for at least one hour in the reference week) – it is not surprising that the number of employed according to the LFS is by around 600,000 higher than the number of the registered employed according to the RAD surveys (column 3, Tables T4-4a and T4-4b).

So, when referring to the registered number of the employed, we refer to the formal economy, i.e. employed persons who have employment contracts and whose incomes are subject to the payment of taxes and social security contributions. The employed in the "gray" economy are included in a separate statistical survey – the Labor Force Survey (LFS), also conducted by the SBS. The LFS is the only survey which provides a complete picture of labor market trends because it takes into account all the population segments earning an income and contributing to total GDP, but since it is conducted only once a year, QM uses the RAD survey in order to monitor some labor market trends more regularly. However, a very significant step toward better understanding of labor market trends in Serbia has been made by the SBS, as it will conduct the LFS twice in 2008, and plans to make it a quarterly survey from 2009.

In tables below data from the RAD survey (Table T4-4a) is compared with the data from the LFS (Table T4-4b) for 2006 and 2007, as well as the difference between these two years for each segment, in order to explain the general labor market trends[4]:

Table T4-4a. Serbia: Formal Labor Market Stock 2006–2007

	Total population 15-64	**Active population**			**Inactive population 15-64**
		Total	Employed (RAD)	Unemployed (NES)	
	1	2(=3+4)	3	4	5(=1-2)
			in thousands		
Sep-06	4,976	2,934	2,019	915	2,042
Sep-07	4,976	2,809	2,001	808	2,167
Difference 07-06	-	-125	-18	-107	125

Source: SBS - Population estimates 2006, RAD surveys; National Employment Service (NES).
Notes by column:
1) SBS official working-age population estimate for the observed year. 2007 population estimates have not been published yet.
2) All registered employed and unemployed.
3) Total number of employed is made up of all registered employees, regardless of their age. Because of data availability limitations, we cannot separate working-age employees from the total number of employees. However, we believe that this methodological imprecision is negligible.
4) This number in fact represents all unemployed individuals between the age of 15 and 65 registered with the National Employment Service (NES).
5) Inactive population represents the difference between the total number of working age population and registered active population.

1 Therefore we present data in Table T4-1 only for March and September each year.
2 This number does not include farmers, unpaid family members or employees of the Serbian Ministry of Defense and the Ministry of the Interior.
3 This number includes unregistered workers in registered companies as well as employees of unregistered companies.
4 In Tables T4-4a and T4-4b we compare September and October of the same year for the two surveys, as they are not conducted in the same month.

Table T4-4b. Serbia: Total Labor Market Stock 2006–2007

	Total population 15-64	Active population (15-64)			Inactive population 15-64
		Total	Employed	Unemployed	
	1	2(=3+4)	3	4	5(=1-2)
			in thousands		
Oct-06	5,049	3,209	2,517	692	1,840
Oct-07	4,908	3,110	2,526	584	1,798
Difference 07-06	-141	-99	9	-108	-42

Source: SBS - Labor Force Survey. Notes by column:
1) Working-age population published in the LFS differs from the working age population of 5.033 million registered in the 2002 Census and used to choose the sample of households. The existing difference, which occurred when the population weight was applied on the sample, lies within the allowed statistical error range of ±2.5%.
2) All employed and unemployed according to the Labor Force Survey.
3) Employed individuals include self-employed, employed workers and supporting household members. Employed workers refer to individuals who work for an employer and were duly remunerated (payments in money or in kind), for at least one hour in the respective week, as well as the persons who were employed and were absent from work in the observed week, regardless of their formal status in the labor market. Supporting household members are the persons rendering help, i.e. service to other household members in running family business or agricultural household and are not remunerated for their work.
4) Unemployed are considered those individuals which, in the observed week, neither held a paying job nor were temporarily absent from a job they would resume, and under the condition that the following criteria were met: (a) they had taken active steps over the four weeks prior to the survey to find employment and would be able to start within two weeks if offered a job; (b) they did not actively seek employment over the past four weeks since they had already found a job they would start after the survey week was over or, at the latest, within three months of the survey.

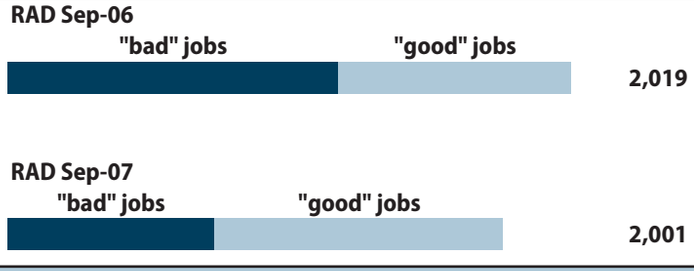
Table T4-4a, therefore, presents the formal situation on the labor market, while Table T4-4b reflects a realistic picture, since it includes informal employment and excludes "fake" unemployment.

Tables T4-4 show that while the data from the RAD surveys shows a decline in total formal employment between 2006 and 2007 (column 3, Table T4-4a), the LFS shows that total employment in the same period increased (column 3, Table T4-4b). Although there are significant differences in the data collection practices of these two surveys, as noted at the beginning of the Box, it is still a challenge to explain how such diverging trends came about. Namely, while employment under the RAD surveys fell by 18,000 between September 2006 and September 2007, under the LFS the employment of working-age persons went up by 9,000 in the same period. In an attempt to answer this question, we arrived at the following hypothesis:

Restructuring of The Labor Market in Transition

The labor market in Serbia can be verifiably divided into two sub-markets: (a) a market for "good" jobs and (b) market for "bad" jobs. The group of "good" jobs includes jobs maintained or created in the public sector and in privatized and new privately owned companies, while "bad" jobs include jobs in socially owned companies slated for privatization and work in the informal economy, which has partly spilt over into the entrepreneurial sector as well. In the previous years, the RAD Survey registered a high percentage of "bad" jobs in socially and state-owned enterprises. However, because of enterprise restructuring and privatization, the RAD Survey has been registering ever fewer "bad" jobs each year, while "good" jobs in the formal sector did not grow at a pace that would enable them to compensate the elimination of "bad" jobs in socially owned companies;[5] hence, the total employment monitored by the RAD has gone down. This process is illustrated by the hypothetical example on Graph T4-4c:

Graph T4-4c. Serbia: Stylized Illustration of Formal Labor Market

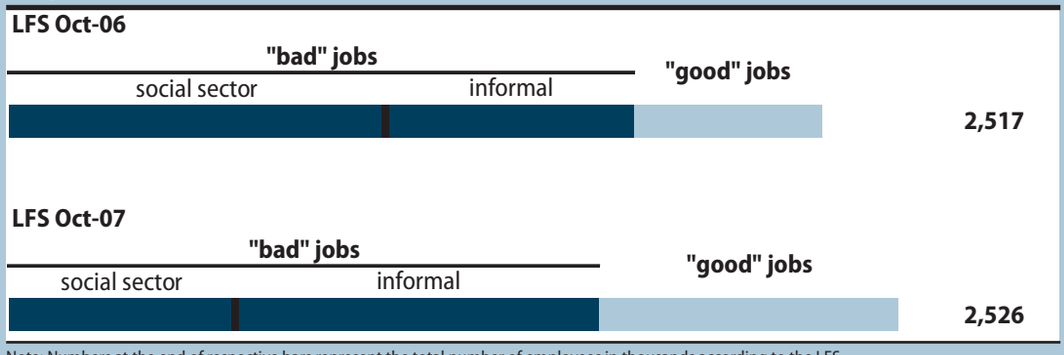


Note: Numbers at the end of respective bars represent the total number of employees in thousands according to the RAD survey.

5 It is not realistic to expect to replace each "bad" job with a "good" one during transition, and it is not adequate either to equalize bad and good jobs, which is done by the statistics. Restructuring the composition and quality of the labor market is a time consuming process.

We assume that a substantial number of individuals who lost "bad" jobs in socially owned companies spilt over into the informal labor market, since the part of the labor market with "good" jobs was not able to absorb them. It is possible that these individuals have already worked in the informal economy, as it often happened that they, although formally employed, were on unpaid leave and had to find another source of income. So, when they lost their formal jobs, these individuals were statistically re-registered as employed in the informal sector, which is hypothetically illustrated in Graph T4-4d (the black delimiter moved to the left over time, although the total number of "bad" jobs has remained the same).

Graph T4-4d. Serbia: Stylized Illustration of Total Labor Market



Note: Numbers at the end of respective bars represent the total number of employees in thousands according to the LFS.

Since the LFS monitors both formal and informal jobs, while the RAD monitors *only* formal employment, we believe that *this* explains why total employment according to the LFS is going up, while declining according to the RAD.

Although it is possible to conclude based on the presented analysis that employment in the informal sector is going up, it should be borne in mind that a number of individuals who held two jobs (e.g. one with unpaid leave in a socially owned company and the other in the informal economy) has exited the statistics of employment in socially owned companies, but has remained in the informal sector, so that "bad" jobs exited the RAD survey but stayed in the LFS. Therefore, despite the fact that their actual status in employment has remained unchanged, these individuals are now covered by only one survey. It is important to note here that we are by no means saying it does not matter to the individual whether he is employed in the formal or informal economy, or that this has no impact on the quality of his life; we are just saying that his employment status in the LFS has remained unchanged.

In addition to the opposite trends in the movements of the numbers of employees, there is also a divergent trend in the movement of the number of the working-age inactive population. According to the formal data[6] the working-age inactive population is growing, while according to the LFS it is falling (Tables T4-4a and T4-4b), a trend that can also be observed in the light of the presented hypothesis. Although formal data shows an increase of the working-age inactive population, this can be interpreted as the movement of employees from socially owned enterprises into the informal sector, and even as an increase of employment in the informal sector. This would explain the fact that the LFS shows a decrease in the working-age inactive population while the RAD Survey shows an increase of the same segment of the population.

Finally, we underscore that the presented hypothesis is preliminary and cannot be proved because of the unavailability of data on the quality of registered jobs. Its purpose is to "scratch" the surface of relatively static data on the labor market and indicate that the labor market in Serbia is quite turbulent and susceptible to strong internal fluctuations between different segments of the working-age population.

6 Data from the RAD Survey, the 2002 Census and the National Employment Service.

Wages

Real wage growth decelerated substantially in Q1

Real wage growth in Q1 2008 decelerated substantially relative to the entire previous year. The average monthly gross wage in Q1 grew y-o-y by 5.2% in real terms, which was almost four times lower than in Q1 2007 when the growth amounted to 18.5% (Table T4-5). However, this reduction of the real y-o-y index of gross wages is in part also a consequence of the comparison with the extremely high wages in Q1 2007.

Table T4-5. Serbia: Average Monthly Wage and Real Y-o-y Wage Indices, 2004–2008

	Average Monthly Wage				Average Gross Monthly Wage Index[2]	
	Total labour costs[1], in dinars	Net wage, in dinars	Total labour costs, in euros	Net wage, in euros	nominal	real
	1	2	3	4	5	6
2004	24,234	14,108	334	194	123.7	111.4
2005	30,142	17,478	364	211	124.4	107.1
2006	37,493	21,745	445	258	124.4	111.3
2007	45,723	27,785	572	347	121.9	114.6
2005						
Q1	26,134	15,140	326	189	121.8	105.1
2006						
Q1	33,258	19,284	382	221	127.3	111.0
Q2	36,447	21,126	420	243	123.5	108.1
Q3	37,882	21,986	455	264	122.3	109.7
Q4	42,387	24,585	533	309	124.9	116.6
Dec	48,686	28,267	618	359	128.1	120.9
2007						
Q1	41,319	25,103	517	314	124.2	118.5
Q2	44,684	27,165	551	335	122.6	118.6
Q3	46,108	28,019	576	350	121.7	114.1
Q4	50,781	30,855	644	392	119.8	108.2
Dec	56,736	34,471	713	433	116.5	104.1
2008						
Q1	49,291	30,007	596	363	119.3	105.2
April	53,474	32,562	660	402	122.2	105.5

Source: Serbian Bureau of Statistics (SBS).
Footnotes:
1) Total labor costs include employer's total average expense per worker, including all taxes and social security contributions. TLCs amount to around 164.5% of the average net wage.
2) Gross wage indices are equal to total labor cost indices, because the average TLC is larger than the average gross wage by a fixed 17.9%.

Wages in April were slightly above the Q1 average

Wages in April grew slightly above the average for Q1 in both nominal and real terms, which can be attributed to the already negotiated public sector wage increases envisaged for May, but rescheduled for April because of the elections (Table T4-5). Despite the fact that a leap in wage growth can be observed in some activities, total real growth was not so strong at all, which can be attributed to inflation that was higher in April than in Q1[4].

There is still no indexation of wages to prices

Real deceleration of wage growth in the first four months of 2008 is indicates that wages are still not indexed to prices. The nominal growth has remained constantly high (19.3% in Q1 relative to 19.8% in Q4 2008), but inflation makes it lower in real terms.

Unit labor costs declined on a y-o-y basis

Unit labor costs[5] (ULC) in Q1 2008 declined on a y-o-y basis: 43.4% in Q1 2008 relative to 44.7% in Q1 2007 (column 2, Table T4-6), while, after agriculture and general government are excluded, they fell in Q1 2008 to 39.1% from the 40.8% in Q1 2007 (column 3, Table T4-6).[6] A seasonal increase was also observed in ULC in Q1 relative to Q4 2007 (columns 2 and 3, Table T4-6), which occurred because production fell in Q1 but was not followed by a wage reduction of the same extent.

4 For more details, see Section 3, Prices and the Exchange Rate, in this issue of QM.
5 Expressed as a share of total labor costs in GDP (column 2, Table T4-6) and a share of total labor costs in GVA from which agriculture and general government have been excluded (column 3, Table T4-6).
6 For more details on labor costs see section 5 "Economic Activity" in this issue of QM.

Table T4-6. Serbia: Labor Costs and Real Y-o-y Wage Bill Indices, 2004–2008

	Labour Costs			Wage Bill Index[4]	
	Wage bill, in 000 din[1]	Unit labour cost (GDP)[2]	Unit labour cost (GVA)[3]	nominal	real
	1	2	3	4	5
2004	534,294,604	38.6	41.7	123.4	111.2
2005	661,108,425	38.8	40.2	123.7	106.6
2006	805,517,464	40.0	39.3	121.8	109.1
2007	963,461,574	41.9	38.9	119.6	112.4
2005					
Q1	143,108,218	40.8	40.7	121.5	104.9
2006					
Q1	180,227,329	41.9	40.2	125.9	109.9
Q2	196,486,925	39.6	38.9	121.0	106.0
Q3	203,348,767	38.6	38.7	119.3	107.1
Q4	225,454,442	40.0	39.3	121.4	113.3
2007					
Q1	218,080,843	44.6	40.5	121.0	115.4
Q2	235,889,439	42.8	38.5	120.1	116.2
Q3	242,064,617	40.4	38.0	119.0	111.6
Q4	267,057,815	40.2	38.0	118.5	106.9
2008					
Q1[4]	257,889,706	43.4	39.1	118.3	104.3

Source: Serbian Bureau of Statistics (SBS).
Note: The presented data suffer from methodological imprecisions because SBS does not collect data on wages with entrepreneurs. This is why the values in Table T4-6 should not be observed in nominal terms, but rather their general trends should be followed as realistic indicators of wage mass movements.
Footnotes:
1) The wage bill is an inferred value representing the multiple of the total number of employed and the average total labor cost, including all taxes and social security contributions. Data on employment and wages with legal entities are from SBS, whereas the average wage of the employed with entrepreneurs was gauged from the taxing authorities data.
2) Wage bill participation in total GDP.
3) Wage bill participation in GVA, without agriculture and government.
4) Gross wage indices are equal to total labor cost indices, because the average TLC is larger than the average gross wage by a fixed 17.9%.
5) We used employment data from January 2008 in order to infer the wage bill for Q1 2008.

Real growth of gross wages in the economy decelerated in Q1

When observed by sector, real gross wage growth in the economy slowed down in Q1. Besides fisheries and agriculture, which have a strong seasonal component, the highest y-o-y wage growth of 10% was recorded in the hotels and restaurants sector, followed by trade – 9.4%. While real wages in trade remained at a high level in April too, in the hotels and restaurants sector they declined on a y-o-y basis by 3.6%. Real wages in financial intermediation in Q1 fell by 6.6% y-o-y, only to recover in April, when their growth was 6.8% (Table T4-7). In fisheries, there was a huge leap in real wages of 65.2% in April, which we are not able to explain, since this sector is susceptible to strong seasonal fluctuations.

Table T4-7. Serbia: Average Gross Wages by Activities, Y-o-y Real Indices, 2005–2008

The highest growth in the hotels and restaurants sector in Q1 was followed by a fall in April; a steep fall occurred in financial intermediation, which recovered in April

	2005	2006	2007	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Apr 2008
Total	106.8	111.3	114.6	110.9	108.0	109.7	116.4	118.6	118.6	114.2	108.2	105.2	105.5
Agriculture, forestry and water works supply	112.2	114.7	107.6	118.3	115.7	112.4	112.4	110.2	105.6	108.2	106.3	113.0	114.1
Fishing	116.2	92.6	86.7	105.5	70.8	93.6	100.5	78.8	63.6	101.5	103.0	118.0	165.2
Mining and quarrying	100.4	113.5	118.5	108.9	114.5	115.5	115.1	135.4	121.1	111.3	106.4	91.9	100.5
Manufacturing	109.1	113.7	111.6	114.4	110.9	113.8	115.8	114.9	114.7	109.7	106.8	108.3	103.3
Electricity, gas and water supply	104.1	106.3	118.7	104.0	99.4	107.1	114.9	143.0	117.7	110.1	103.8	82.4	100.1
Construction	104.5	112.9	117.2	108.7	111.0	112.7	119.4	123.9	126.0	112.9	106.1	108.7	106.0
Wholesale and retail trade, repair	111.6	114.5	113.1	114.2	113.9	112.0	117.9	118.7	115.1	113.5	105.1	109.4	109.6
Hotels and restaurants	108.3	109.5	112.9	112.0	111.0	106.4	108.6	112.0	114.7	115.6	109.2	110.0	96.4
Transport, storage and communications	104.2	108.5	108.9	110.0	111.0	104.0	109.1	108.5	111.9	108.4	106.9	105.8	105.5
Financial intermediation	110.5	112.4	109.1	112.9	111.5	113.9	111.3	112.9	111.4	105.2	106.7	93.4	106.8
Real estate, renting activities	111.6	103.4	119.6	101.5	99.1	105.8	107.3	122.0	120.8	116.6	119.0	105.2	93.7
Public administration and social insurance	105.0	109.2	111.3	112.6	104.3	107.6	112.5	111.5	118.3	113.2	102.2	98.3	105.3
Education	108.2	108.9	114.3	114.9	103.5	105.0	112.0	111.9	118.5	116.3	110.5	110.2	111.4
Health and social work	100.0	108.5	123.9	101.4	102.3	104.9	125.5	125.5	130.8	127.2	112.0	105.6	102.9
Other community, social and personal service	102.6	105.0	107.4	105.2	100.7	103.1	111.0	106.2	111.7	110.6	101.0	102.1	95.3

Source: Serbian Bureau of Statistics (SBS), RAD-1 Survey.

Table T4-8. Serbia: Gross Wages in Public Sector 2004–2008, Y-o-y Real Indices

	From the budget			Public enterprises		Other[1)]	Serbia average
	Administration - all levels	Education and culture	Health and social work	National public	Local public		
	1	2	3	4	5	6	7
2004	107.4	107.7	110.9	107.9	113.4	113.7	111.4
2005	105.9	106.0	100.8	100.5	103.0	106.9	107.1
2006	109.1	107.2	109.4	110.8	102.9	113.7	111.3
2007	111.1	114.7	123.8	116.7	105.0	114.1	114.6
2005							
Q1	106.7	101.3	104.0	100.4	106.6	110.5	105.1
2006							
Q1	111.5	111.1	102.2	108.9	97.0	115.0	111.0
Q2	102.2	100.8	103.1	109.6	102.8	111.3	108.1
Q3	108.0	104.2	105.0	108.4	102.7	112.4	109.7
Q4	110.5	106.4	98.2	103.4	98.8	116.0	107.5
2007							
Q1	111.5	112.6	125.4	129.8	113.8	117.3	118.5
Q2	118.6	119.2	131.5	118.9	104.5	117.4	118.6
Q3	114.1	116.7	127.5	112.5	104.1	112.5	114.1
Q4	100.1	110.3	111.0	105.8	97.4	109.0	108.2
2008							
Q1	99.2	109.5	105.6	94.3	98.5	107.2	105.2

Source: SBS.
Footnotes:
1) Column 6 includes private, socially-owned and mixed ownership enterprises (without entrepreneurs).
2) Column 6 represents the value for each time period inferred from difference between the total wage bill and the public sector wage bill, which is then divided by the number of employees in the economy (column 7, Table T4-2).

In the public sector, wage growth decelerated in Q1

In the public sector real wage growth decelerated. The highest y-o-y gross wage growth in this sector was recorded in education, and amounted to 10.2% (Table T4-7), or 9.5% for budget-financed salaries (Table T4-8), which can be explained by strong pressures from the teachers' trade unions for pay rises. The high y-o-y gross wage real growth in education continued in April as well: 11.4% (Table T4-7). In the health sector, the y-o-y real wage growth was almost two times lower than in education and amounted to 5.6% (Tables T4-7 and T4-8). In the public administration, the gross wage in Q1 2008 declined by 0.8% in real terms on a y-o-y basis (Table T4-8).

In public enterprises real gross wages in Q1 fell

In public enterprises real gross wages recorded a y-o-y fall – in national enterprises the drop was 5.7%, while in the local ones it stood at 1.5% (Table T4-8).

Volatility of public sector wages was much higher than in the economy

We noted that the volatility of wages in the public sector was much higher than in the economy (Table T4-8). Some parts of the public sector (e.g. national public enterprises) – attained a real wage growth level of around 30% in Q1 2007, while in Q1 2008 that growth was slightly negative (column 4 of Table T4-8), representing a difference between wage growth indices of more than 30 percentage points. By way of comparison, in the same period the real y-o-y increase in gross wages in the economy was lower by around 10 percentage points (column 6, Table T4-8). This high volatility of public sector wages can be explained by strong pressures from trade unions, which result in one-time pay rises, followed by a period of stagnation before the authorities give in to new pressures. This indicates that the duration of the current downward trend in real public sector wages cannot be foreseen.

In the economy – a more balanced descending trend in real wage growth. Has the labor market become more flexible?

Last year, a much more balanced descending trend in real wage growth was recorded in the economy: from 17.3% in Q1 2007 to 7.2% in Q1 2008 (column 6, Table T4-8). Such a trend shows that wages in the economy are more rapidly adjusting to price increases, but that the recorded drop in real wages remains significant, and that wages are still not indexed to prices. The fact that there is no indexation potentially shows that the labor market has become more flexible, and that in deciding on pay rises employers also take into account economic expectations which are considerably lower for 2008 (in Serbia and in the world alike) relative to the previous two years of high economic growth. However, since inflation is accelerating from month to month, it is necessary to monitor a longer series of developments on the labor market to establish with certainty whether wages will ultimately be indexed to prices.

5. Economic Activity

Economic activity continued growing at a high rate in Q1 2008, with an estimated y-o-y GDP growth in the quarter of about 7.6%. Domestic demand remained main driving force behind the economic growth, with services leading the field, but a recovery in exports and agriculture also led to an acceleration in the growth of material production. Q1 saw a slowdown in the growth of wages and credit in real terms; coupled with a moderate fiscal policy, this indicates a downturn in domestic demand over the coming quarters. Based on this, a slowdown can be expected in the segment of economic activity that relies on domestic demand. The high growth of agriculture, estimated at some 10% in 2008, will probably work in the opposite direction – as will growth of the part of the economy relying on exports. An analysis of euro unit costs indicates that the economy has not lost competitiveness at the international level. Industrial production was up 6% in Q1 relative to the same period last year, but the March data already indicates a slowdown.

Gross Domestic Product

GDP growth in Q1 estimated at 7.6%...

According to *QM*'s preliminary estimates, based on the available economic activity data and using SBS methodology,[1] the y-o-y real GDP growth in Q1 is estimated at a high 7.6% (Table T5-1). This was higher than in Q4 by about one-half of a percentage point. However, the growth of non-agricultural GVA, which *QM* considers to be a reliable measure of economic activity as the agriculture is subject to exogenous influences, slowed in Q1 relative to Q4 2007. According to the estimates, the real y-o-y growth of non-agricultural GVA in Q1 was about 7.9%,[2] some two percentage points lower than in Q4 2007. This picture will probably remain the same until the end of 2008 – high activity in the non-agricultural sector of the economy, inherited from 2007, will probably decrease, but high agriculture growth[3] will work in the opposite direction: in brief, GDP growth rates will probably be the result of the sum of two diverging trends – high growth of agricultural production and slowing of non-agricultural GVA.

...while non-agricultural GVA rose by 7.9%

Table T5-1. Serbia: Gross Domestic Product, 2004–2008[1)]

	Y-o-y indices								Base index	GDP share
	2005	2006	2007	2007				2008	(jan-mar)$_{08}$/ (jan-mar)$_{02}$	2007
				Q1	Q2	Q3	Q4	Q1[2)]		
Total	106.2	105.7	107.5	108.2	107.6	107.5	106.9	107.6	141.8	100.0
Taxes minus subsidies	110.2	99.8	108.8	112.7	106.6	111.3	105.6	107.0	159.3	15.5
Value Added at basic prices	105.5	106.8	107.3	107.5	107.8	106.9	107.2	107.8	139.2	84.5
Non agricultural Value Added	107.3	107.9	109.5	108.9	109.6	109.5	110.0	107.9	145.2	89,2[3)]
Agriculture	95.1	99.8	92.0	94.9	92.8	91.3	91.0	106.0	96.3	10,8[3)]
Manufacturing	99.9	105.6	104.8	109.4	104.9	104.6	101.6	104.4	116.6	15,7[3)]
Construction	102.0	107.7	109.1	128.8	110.6	102.6	101.2	100.1	148.6	3,5[3)]
Transport, storage and communications	123.4	129.3	124.0	117.7	122.6	125.1	129.4	120.0	279.3	15,1[3)]
Wholesale and retail trade	122.0	110.3	119.3	121.5	119.3	118.1	118.9	110.0	234.1	12,7[3)]
Financial intermediation	117.4	117.2	120.3	119.2	120.0	119.9	121.9	118.0	235.6	8,4[3)]
Other	102.1	100.5	101.0	99.1	101.6	101.4	101.8	101.0	107.1	33,7[3)]

Source: SBS.
1) In constant prices in2002.
2) QM estimate.
3) Share in VA.

1 The methodology used in estimating GDP is based on the estimate of real growth in GVA for individual economic sectors according to the production principle, and their subsequent summing up, with the addition of the tax component. The modifications relative to the SBS are partly related to the indicators on the basis of which sectoral growth is estimated and which, in some cases, we consider to be more reliable indicators of actual growth in particular sectors (e.g. cement production in the construction industry). Likewise, since we have fewer available indicators than the SBS, we include proxies into our estimate, which are not an integral part of the official methodology, and conduct even more in-depth analyses of trends in particular sectors, as well as an analysis of demand.

2 For more on movements in non-agricultural GVA see Box 1, "An assessment of the economic activity trend in 2007".

3 Agriculture is in 2008 compared to an extremely low 2007 base, which was due to drought. Current estimates indicate that the agricultural season will be average, which will on its own cause a growth of some 10% in agriculture. These estimates are conservative, meaning that agriculture could see even higher growth in 2008.

Services growth is slowing…

The first quarter has, therefore, seen high economic growth; the structure of this growth, however, significantly differs from that in Q4 2007. If the economy is divided into two segments – services and material production – it becomes apparent that services slowed in Q1, while material production saw quicker growth.[4] The economy is observed through this lens since services are still under the dominant influence of domestic demand, while material production, although it too is influenced by domestic demand, is also affected by exogenous factors.[5] The real y-o-y growth of services still exceeded material production in Q1 (9% in relation to 5.2%); however, services growth in Q4 2007 amounted to as much as 13.5%, while industrial production recorded a y-o-y fall of 2.4% in the same quarter.

…while material production is picking up pace

These trends of slowing services and accelerating material production will, in all likelihood, continue into the coming quarters since there are indications that domestic demand growth is set to decline. Any slowdown in the growth of domestic demand will primarily bring about a deceleration in the growth of services. On the other hand, a further acceleration is expected in exports and high agricultural growth in 2008, due to comparison with the low 2007 base, which means that material production will most probably retain – or possibly even accelerate – its pace of growth, notwithstanding the slowdown in domestic demand.

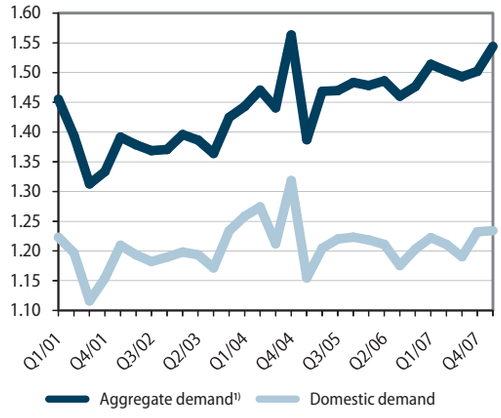
When viewed by sector, the most significant slowdown in Q1 was recorded in the wholesale and retail trades. *QM* estimates their growth at about 10% in Q1 (Table T5-1), much lower than the y-o-y real growth of 18.9% seen in Q4 2007. The y-o-y growth of transport, storage and telecommunications is estimated at some 20%, which is also significantly lower than in Q4 2007 (29.4%). In this case, however, the slowdown is believed actually to be a consequence of methodological issues encountered in monitoring this diverse sector, and *QM* believes that such a major slowdown never really occurred.[6]

Agriculture is expected to see high growth in 2008

On the other hand, estimates of agriculture growth over the whole of 2008 stand at a high 10%, while *QM*'s estimate of its y-o-y growth in Q1 put it at about 6%. Although any conclusions about the agriculture are difficult to draw based solely on Q1, it is already almost certain that there will be no repetition of last year's poor season, when the agriculture dropped by 8%. Industrial production growth also accelerated in Q1 in relation to Q4 2007, but data from as early as March indicate a certain slowdown.

Domestic demand was very high in Q1…

Graph T5-2. Serbia: Aggregate and Domestic Demand Ratio to GDP, 2001–2008



Source: QM based on SBS data.
1) Aggregate demand = domestic demand + export.

…but its Q4 acceleration has ceased

Domestic demand, viewed at the quarterly level, remained very high in Q1, although its strong Q4 2007 acceleration has ceased (Graph T5-2). A further slowing of the growth of domestic demand is anticipated over the coming period, as Q1 fiscal policy was not been expansive, and credit growth and wage increases fell in real terms. The continuing high domestic demand in Q1 is probably a consequence of a spill-over of the effects of the expansive fiscal policy in December 2007. This assumption is further borne out by the available monthly industrial production and retail indicators, which slowed substantially in March, after recording high growth rates in January and February.[7] March also saw a slowdown in imports. The movements in the observed indices show that a major reduction in domestic demand occurred

4 Services – wholesale and retail trade, transport, storage and telecommunications, financial intermediation, hotels and restaurants, real estate operations, and other services. Material production – agriculture, industrial production, and construction.
5 Exogenous factors have the greatest impact on agriculture and construction.
6 For more details see Box 1, "An assessment of the economic activity trend in 2007".
7 The retail index for March shows year-on-year growth in volume of retail, at constant prices, of a mere 2.9%, a figure not seen for the previous five years. This points primarily to a substantial drop in household demand.

as early as March, as the effects of the expansive December fiscal policy apparently petered out. A similar effect was evident with other extraordinary increases in domestic demand, most frequently caused by fiscal expansion in the run up to elections.

Exports have recovered

The first quarter saw a recovery in exports, after their growth slowed down substantially in Q3 and, especially, in Q4 2007. The slowdown apparent over the second half of 2007 was still not so much the consequence of a drop in export demand as that of exogenous supply-side influences (the refurbishment of No. 2 Blast Furnace at US Steel Serbia, administrative constraints on cereal exports, etc).[8] The gradual removal of exogenous barriers in Q1 – more specifically, the recovery of production at US Steel Serbia – had a positive impact on both export recovery and an increase in total production.

Unit labor costs fall appreciably

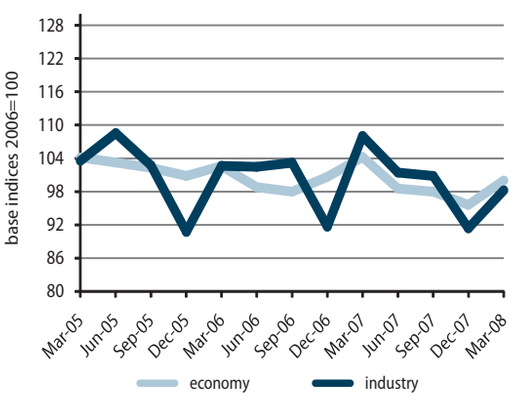
Dinar unit labor costs (ULCs) recorded a y-o-y drop, while euro ULCs remained approximately the same as in Q1 2007. The drop in dinar ULCs was caused by a high increase in productivity and a slowdown in real wage growth. Accelerating inflation in Q1 did not translate fully into wage growth, which caused ULCs to fall. Graph T5-3 shows ULC costs in the economy (excluding the government sector and agriculture) and industry. The disturbance seen in Q1 2007, when ULCs shot up due to high real wage growth, was completely offset by the end of 2007 by slowing real wage growth; ULCs are now, seasonal fluctuations notwithstanding,[9] following a multi-year downward trend (Graph T5-3).

Competitiveness does not fall

Euro ULCs are an indicator of the international competitiveness of Serbia's economy as they define the largest domestic cost component (labor costs) in relation to value added. *QM* calculates euro ULCs for the manufacturing industry, which accounts for by far the greatest share of tradable products, and, separately, for the economy as a whole.[10] It must be emphasized that this analysis records only relative changes in competitiveness (ULCs) in relation to the 2004 average, and that it is not the aim to state whether or not Serbia's economy is competitive in the global market.

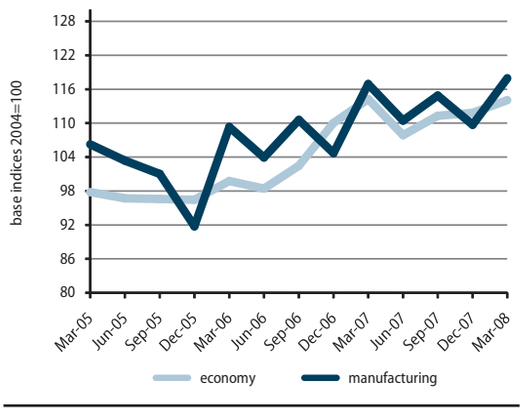
Euro ULCs grew by between 10% and 15% between 2004 and 2007 (Table T5-4), which can serve to quantify the fall in competitiveness suffered by the Serbian economy over this period. Throughout 2007, and in Q1 2008, euro ULCs remained at the level seen in early 2007. With all the reservations that have to be expressed in relation to such an analysis, the movements in euro ULCs over the 18 months or so indicate that Serbia's economy is managing to utilize market mechanisms – increasing productivity and slowing wage growth – to offset the negative impact on competitiveness of the long-term trend of dinar appreciation.

Graph T5-3. Serbia: Real Unit Labor Cost in Economy and Industry, 2005–2008



Source: QM based on SBS and NBS data.

Graph T5-4. Serbia: Real Unit Labor Cost in Euro, Economy and Manufacturing, 2005–2008



Source: QM based on SBS and NBS data.

8 For more details see Section 6, Balance of Payments and Foreign Trade, in this issue of QM.

9 As shown in Graphs T5-3 and T5-4, Q1 has seen ULCs record seasonal growth in relation to Q4 2007, due to the seasonal reduction in economic activity not accompanied by a fall in wages. The y-o-y drop in dinar ULCs can be clearly seen when spikes in ULC values from Q1 2007 and Q1 2008 are compared.

10 Excluding the government sector and agriculture.

The second conclusion ensuing from the analysis of euro ULCs is that the coming quarters will most probably see a full recovery of high export growth following the slowdown in the second semester of 2007. The reasons for the slowdown were exogenous in nature; as ULCs indicate that the competitiveness of the Serbian economy has not declined in the meantime, the removal of the exogenous factors is expected to result in exports again reaching the growth rates recorded in the first half of 2007.

Box 1. An Assessment of the Real Economic Activity Trend in 2007

The most frequently used measure of an economy's activity is its gross domestic product. It represents the total production of goods and services by a nation's economy in a period of time, most often a quarter or a year. Sometimes, however, economic activity trends cannot be expressed solely by using GDP. Agricultural production is strongly influenced by exogenous factors, and may not necessarily follow the trend set by the rest of the economy. This was the case in 2007, when the drought caused a drop in agricultural production of 9% in relation to 2006, while the rest of the economy saw high growth rates.

Non-agricultural GVA grew much more rapidly than GDP in 2007

The SBS estimates real GDP growth in 2007 at 7.5%[1] (Table T5-1), while the estimated growth of non-agricultural GVA was substantially higher, standing at 9.5%. Graph T5-5 shows movements in GDP and non-agricultural GVA by quarters.

Graph T5-5 reveals that non-agricultural GVA growth accelerated from the start of 2007, a trend opposite to that of GDP. Some caution must be exercised with regard to this result as the methodology used by the SBS to calculate quarterly GDP can, in some cases, fail to accurately describe the movements in economic activity.

Problems remain in measuring economic activity

A problem present in 2007, relating to monitoring the heterogeneous sector of transport, storage and telecommunications, persists. Graph T5-6 shows the official quarterly growth data for this sector, which stood at an extremely high 24%, mainly due to the enormous growth of telecommunications, especially cellular telephony. It is noteworthy, however, that the sector's growth trend, when viewed by quarter, is completely divergent from the rest of the economy (Graph T5-6), with its y-o-y real growth standing at 17.7% in Q1, only to accelerate to as much as 29.4% by Q4. The rest of non-agricultural GVA slowed its y-o-y growth from 7.5% in Q1 to 6.5% in Q4 2007.

Telecommunications probably recorded lower growth than indicated by the official data

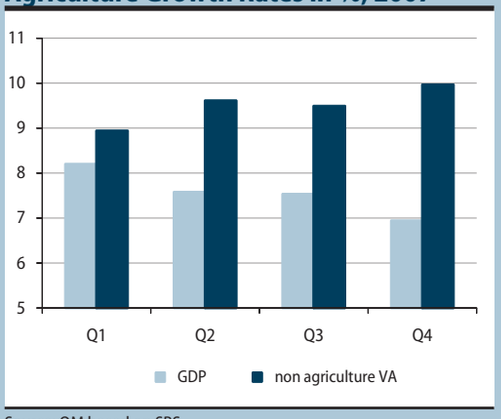
The methodology used to estimate cellular telephony growth is based on measuring the number of "pulses" (units of accounting used by telephone networks), without deflating their value in case of their price changes. Competition in the field of cellular telephony grew in 2007. Along with an increase in the volume of traffic – precisely recorded by the SBS – came a drop in the real value of an average pulse, which was not, however, included in the average estimate of the growth of the transport, storage and telecommunications sector. If the changes in the value of cellular telephony pulses were to be factored in, the sector's growth would be more in tune with the trend recorded by the rest of the economy, and would not produce an impression of an acceleration in non-agricultural GVA from the beginning of the year.

Economic growth in 2007 was slightly lower than officially published

In view of the above, *QM* believes that total 2007 economic growth needs to be slightly corrected downward (we estimate GDP growth in 2007 at about 7.2%). In addition, our analysis,[2] carried out by correcting indicators we consider inadequate, and including certain indirect indicators, led to the conclusion that the actual growth of economic activity was extremely high in 2007, but still somewhat lower than the official figure (with non-agricultural GVA growing by between 8.5% and 9%) – and that the current trend involves a mild slowdown from Q1 to Q4, rather than the acceleration recorded by official statistics (we estimate that non-agricultural GVA slowed from 9% in Q1 to some 8.5% in Q4). Bearing all this in mind, the actual growth of non-agricultural GVA in Q1, which *QM* estimates at about 8%, was in fact in line with the trend of economic activity established in 2007.

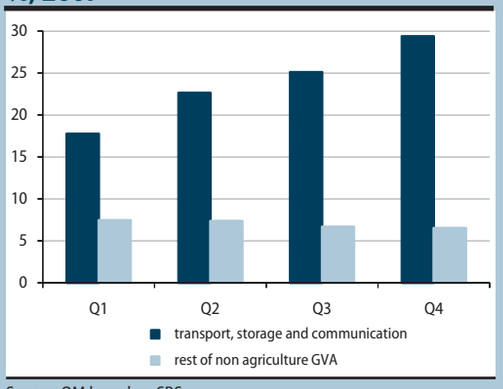
1 The data published is subject to revision.
2 Our analysis takes into account a greater number of indirect indicators, as well as movements in aggregate demand, which are not used by official statistics in estimating GDP.

Graph T5-5. Serbia: GDP and Non Agriculture Growth Rates in %, 2007



Source: QM based on SBS.

Graph T5-6. Serbia: Transport, Storage and Communications GVA and the Rest of Non Agriculture GVA, Growth Rates, in %, 2007



Source: QM based on SBS.

Industrial Production

Industrial production sees its growth accelerate

The growth of industrial production accelerated in Q1 relative to Q4 2007. Its y-o-y growth amounted to 6% in Q1, as opposed to 0.4% in Q4 2007 (Table T5-7). The highest y-o-y growth, of 12%, was recorded by production and distribution of electricity, gas and water; this was, however, caused by comparison with the low electricity production in early 2007 due to the unseasonably warm winter. Manufacturing also accelerated appreciably, with its growth standing at 4.4% relative to the same period last year. Mining and quarrying recorded a y-o-y growth at the level of total industrial production – 6%.

Table T5-7. Serbia: Industrial Production Indices, 2005–2008

	Y-o-y indices								Share
	2005	2006	2007	2007				2008	2007
				Q1	Q2	Q3	Q4	Q1	
Total	100.8	104.7	103.7	104.8	105.2	103.5	100.4	106.0	100.0
Mining and quarrying	102.1	104.1	99.4	102.1	101.4	99.2	95.6	106.0	6.0
Manufacturing	99.3	105.3	104.2	108.5	104.9	103.3	99.9	104.4	75.8
Electricity, gas, and water supply	106.6	102.2	102.8	94.2	108.7	106.5	104.3	112.0	18.2

Source: SBS.

Seasonally adjusted indices confirm high industrial production growth in Q1

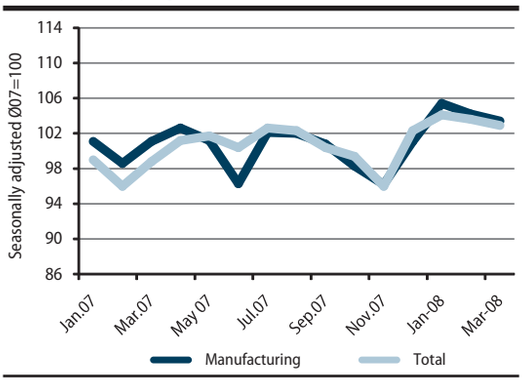
Seasonally adjusted indices also confirm an acceleration of industrial production in Q1 in relation to Q4 2007 (Table T5-8). But the strong acceleration that started in November 2007 was halted in January 2008 and industrial production is now on a mild downward trend.

Manufacturing grows by 4.4%

Manufacturing saw a robust y-o-y growth rate of 4.4% in Q1, an acceleration of 4.5 percentage points relative to Q4 2007. This speeding up in Q1 was affected by the recovery of basic metal production (Table T5-9) when the refurbishment of No. 2 Blast Furnace at US Steel Serbia was completed. However, the growth of the rest of manufacturing also accelerated in Q1.

Table T5-9 shows the sub-sectors with highest share in the growth of industrial production recorded by manufacturing. With the exception of the production of basic metals, it is noticeable that the growth of most of the observed fields with high shares slowed in relation to Q4 2007,

Graph T5-8. Serbia: Industrial Production, Seasonally Adjusted Indices, 2007–2008



Source: SBS.

while the rest of manufacturing accelerated substantially. It is also interesting to note that before 2007 industrial growth occurred thanks to growth in sectors with high shares in manufacturing that had the greatest number of successful privatizations, while the rest of manufacturing was recording a constant decline. These trends brought about an increase in the specialization of Serbia's industrial production.

The situation has now changed markedly; since 2007, the rest of manufacturing has been seeing higher growth than the rest of industry. It is important to emphasize that the total growth index of the manufacturing industry is now to a greater degree caused by trends common to the entire sector, rather than being the sum of diverging trends of high growth in successful areas and drops in less successful ones.

Table T5-9. Serbia: Sub-Sectors with Highest Share in Manufacturing in 2007, 2005–2008

	Y-o-y indices								Share
	2005	2006	2007	2007				2008	2007
				Q1	Q2	Q3	Q4	Q1	
Manufacturing	99.3	105.3	104.2	108.5	104.9	103.3	99.9	104.4	100.0
Total-selected sectors	106.5	108.3	103.8	109.7	104.0	102.0	99.9	104.0	67.3
Food and beverages	104.6	105.3	105.8	112.2	107.7	104.2	100.6	101.7	30.1
Chemicals and chemical	103.8	108.3	105.0	105.6	95.3	104.1	115.0	112.6	13.0
Basic metals	121.8	122.7	98.0	115.1	108.7	92.2	78.9	108.6	10.2
Non-metal mineral products	97.7	106.6	100.3	123.4	98.0	91.9	90.6	87.8	5.2
Coke and refined petroleum products	97.7	106.6	100.3	81.0	93.5	110.2	105.8	105.4	4.4
Rubber and plastic products	109.2	95.8	108.0	105.0	111.0	107.5	108.1	102.1	4.4
Other	83.9	98.9	105.1	105.9	106.8	106.2	99.8	105.2	32.7

Source: SBS.

Energy production leads the field

When industrial production is observed by use (Table T5-10), the greatest y-o-y rise in Q1, 10.2%, was seen by energy, which was only to be expected, given the fact that the winter was somewhat colder than in the previous year. Production of consumer goods saw a y-o-y drop, which was, nevertheless, lower than the decline recorded in Q4; production of intermediate and investment goods recorded a slight y-o-y growth in Q1.

The production of all individual groups of products saw positive movements in Q1 relative to Q4 2007 (all rows shown in Table T5-10 either saw their y-o-y growth rise, or their fall decelerate in relation to Q4).

This bears out the previously stated assumptions: (1) that convergence in the movements of various fields of industrial production, first apparent in 2007, continues; and (2) that the acceleration in the growth of industrial production seen in Q1 was not primarily caused by the recovery in basic metals, but rather by a trend common to all of the industry.

Table T5-10. Serbia: Components of Industrial Production, 2005–2008

	Y-o-y indices								Share
	2005	2006	2007	2007				2008	2007
				Q1	Q2	Q3	Q4	Q1	
Total	100.6	104.7	103.7	104.8	105.2	103.5	100.4	106.0	100.0
Energy[1)]	103.9	102.5	101.2	93.0	104.9	105.6	103.0	110.2	26.6
Investment goods[2)]	74.2	90.0	105.4	97.1	99.1	117.8	103.3	106.5	6.0
Intermediate goods[3)]	104.9	106.7	104.9	113.6	108.4	102.4	95.7	106.0	30.4
Intermediate goods without basic metals	101.5	101.3	107.3	113.1	108.3	105.9	101.5	105.1	22.6
Consumer goods[4)]	101.6	112.0	107.1	122.4	109.1	102.3	97.2	99.4	37.0
Consumer goods without food industry	96.3	128.3	109.2	138.7	111.4	99.3	91.8	95.8	14.2

Source: SBS.
1) Extraction of coal, crude oil, natural gas, electricity and water supply.
2) Manufacture of metal products excluding machines (sections 281,282 and 283 Classification of Activities), manufacture of machines and equipment (excluding electric), manufacture of office machinery and computers, radio TV and communications equipment, precision and optical instruments, manufacture of motor vehicles and trailers, manufacture of other transport equipment.
3) Mining of metal and non-metallic ores, stone quarrying; manufacture of textile yarns and fabrics, wood and cork products (except furniture), cellulose, paper and paper products, rubber and plastic products, chemical products (except pharmaceuticals and home chemicals products), petrochemicals, construction materials, basic metals, sub-sector of metal goods production except machines (sectors 284, 285, 286 and 287), electric machines and appliances, and recycling sub-sector.
4) Food industry products, tobacco products, clothing, leather products and footwear, publishing products, pharmaceutical products and home chemicals products, furniture and various other products.
5) Share in total industrial production.

Construction

Construction sees high levels in Q1…

Construction activity in Q1 remained at a level similar to that recorded in the same period the previous year. This is an indication of the very high level of construction activity, as very high growth due to favorable weather conditions was recorded in Q1 2007. As construction retained a similar level in Q1, although there were fewer working days than in the same period the previous year, the conclusion is that it actually accelerated markedly in Q1 when compared with Q4 2007. However, due to the sector's pronounced seasonal character, Q1 (like Q4) was marked by construction activity significantly lower than in Q2 or Q3. In view of this, a definitive conclusion on the movements in construction will have to wait for the results in the coming quarters.

…similar to those recorded in the first quarter of 2007

Of the several disharmonious indicators used to describe construction trends, we consider the cement production index as the most reliable (Table T5-9).[11] Cement production up 0.1% in Q4 2007 relative to the same period in 2006.

Table T5-11. Serbia: Cement Production, 2001–2008

	Y-o-y indices				
	I quarter	II quarter	III quarter	IV quarter	total
2001	89.5	103.5	126.9	148.1	114.2
2002	83.6	107.9	115.6	81.6	99.1
2003	51.1	94.4	92.7	94.4	86.6
2004	118.8	107.4	98.5	120.1	108.0
2005	66.1	105.0	105.8	107.4	101.6
2006	136.0	102.7	112.2	120.2	112.7
2007	193.8	108.9	93.1	85.0	104.4
2008	100.1	…	…	…	…

Source: SBS.

As for other construction indicators published by the SBS, the value of construction works reported for Q4 was nominally higher by 12.9%, or by 8.5% at constant prices, relative to the same period the previous year. The number of workers on construction sites fell by 0.4%, while the y-o-y growth of work hours was 0.4%.

11 The correct indicator would be cement consumption, but this information is unavailable at the quarterly level. Research shows that cement production is relatively reliable in approximating consumption.

6. Balance of Payments and Foreign Trade

Serbia's balance of payments worsened in Q1 2008. After a long period (the last 14 quarters, with the exception only of Q1 2007) that saw robust foreign currency reserve growth, a major slowdown in growth (a mere €29.3 mn) was recorded in Q1. This points to a change in the trend, and the fact that the balance of payments may be in jeopardy, primarily because of the continuing high growth of the current account deficit, and uncertainty as to the sustainability of future capital inflows. Exports recovered somewhat in Q1 after significantly slowing in the second half of 2007. Import growth has decelerated, but the changes to export and import trends are still not sufficient to drive the ever-growing trade deficit down. According to NBS data, the Q1 current account deficit amounted to a high 15.4% of GDP. Though this figure was lower than in Q4 2007, the apparent reduction was due solely to changes in NBS methodology rather than any actual improvement in current account.

The balance of payments deteriorates in Q1

According to data released by the NBS, the current account deficit amounted to €1,165 mn (or 15.4% of estimated quarterly GDP). This value indicates a y-o-y worsening of the current account of 27.7%, caused primarily by deterioration in the balance of goods and greater outflows of factor transfers abroad, as well as the weak y-o-y growth of current transfers. The deterioration in the current account deficit was somewhat offset by the 10.9% growth of the capital and financial account.

The current account deficit keeps growing (27.7% y-o-y)…

The balance of goods deficit worsened (23.0% y-o-y), and amounted to €1,823 mn, a consequence of continuing strong import growth (21.8%) and insufficient export growth (20.4%).[1] Registered imports of goods in Q1 amounted to €3,489 mn (46.2% of estimated quarterly GDP), while exports stood at €1,666 mn (22.0% of estimated quarterly GDP); the goods deficit in % of GDP stood at 24.1% (as against 23.0% in Q1 2007). The coverage of imports by exports deteriorated in relation to 2007, and amounted to 47.7% (50.1% in 2007). Considering the low ratio of coverage, and the nearly equal growth rates of exports and imports, a further worsening of the trade deficit can be expected –leading to a deterioration of the current account deficit as well.

…and reaches a high 15.4% of GDP

Imports continue growing (21.8%) while export growth (20.4%) slows in relation to 2007

The net factor transfer deficit (€88 mn) increased in Q1 at the y-o-y level, primarily due to expenditure on interest paid abroad. This is a logical consequence of the growth of Serbia's private debt. Interest expenditure amounted to €201 mn (as against €149 mn in Q1 2007), of which the government paid €72 mn. Interest revenue amounted to €40 mn, bringing net interest expenditure to €161 mn.

At 24.1% of GDP, the goods deficit is being covered by current transfers (remittances), which amount to 9.2% of GDP

Current transfers (€694 mn, or 9.2% of quarterly GDP) helped to offset the negative trade balance. These transfers remain high, primarily due to the endemically high level of remittances (€508 mn). Year-on-year current transfers grew slightly (5.2% at the y-o-y level), while remittance inflows remained at the level seen in 2007. In addition, Serbia received a total of €46 mn in foreign donations.

1 The corrected NBS data on imports and exports (f.o.b.) calculated in accordance with IMF methodology was used in the analysis of the balance of payments (Balance of Payments Manual, Fifth Edition, IMF: http://www.imf.org/external/np/sta/bop/BOPman.pdf), whereas SBS data was used to analyze imports and exports. The SBS data differs methodologically from NBS data; hence the discrepancies in the imports and exports figures and growth rates.

Table T6-1. Serbia: Balance of Payments, 2005–2008[1)]

	Old methodology	New methodology	
	Q1 2007	Q1 2007	Q1 2008
	flows, cumulative from the beginning of the year, in millions of EUR		
CURRENT ACCOUNT	-1186	-911	-1165
Balance of goods	-1445	-1482	-1823
Exports of goods	1390	1383	1666
Growth rate (12-m, in %)	*34.6*	*33.9*	*20.4*
Imports of goods	-2829	-2865	-3489
Growth rate (12-m, in %)	*32.2*	*33.9*	*21.8*
Balance of services	6	-35	51
Income, net	-106	-55	-86
o/w: interests	-106	-108	-161
Current transfers inkluding grants	360	661	694
ERRORS AND OMISSIONS	-165	98	-54
CAPITAL AND FINANCIAL ACCOUNT	1351	813	1218
Foreign direct investment (FDI)	614	666	729
Other investments	547	147	489
Medium and long-term loans, net	534	515	440
Extraordinary debt and interest repayment[2)]	-143	-143	0
Other[3)]	156	-225	49
o/w: NBS Reserves, net[4)], **(increase -)**	191	229	-29
MEMORANDUM ITEMS			
NBS reserves excl. com. banks deposits[5)]	276	314	-188
		in % of GDP	
Exports of goods	21.5	21.5	22.0
Imports of goods	-44.4	-44.4	-46.1
Balance of goods	-23.0	-23.0	-24.1
Balance of services	-18.4	-14.1	-15.4
GDP in euros [6)]	6,449	6,449	7,573

Source: Table P-5 and P-6 in Analytical Appendix.
1) Original US dollars monthly data are converted to euros using monthly averages of official daily NBS mid rates.
2) Includes extraordinary repayment of principal and interests on WB and IMF loans.
3) Includes short term trade credits, portfolio investments, unpaid imports of oil and gas, short-term loans, other assets and liabilities and gross reserves of commercial banks, NBS Reseves.
4) Excluding IMF tranches. According to the new methodology of the NBS foreign reserves are included in financial balance.
5) Gross NBS reserves excl. com. Banks deposits .
6) For the stated period. GDP 2007,2008, QM's estimate.

Box 1-2. Changing Balance of Payments Methodology

Changed BOP methodology decreases current account deficit by approximately 4% of GDP

In its efforts to adjust balance of payments indicators with IMF methodology (IMF BoP Manual, 5th Edition),[1] the NBS has changed its methodology in a way that precludes direct comparison with the balance of payment data published so far (i.e. up to end 2007), as both current and capital account methodologies have been changed. The NBS plans to disclose details on how the balance of payments methodology has changed. In relation to the previous methodology, the change has toned down the acute current account deficit. However, regardless of which methodology is used, the trend of deterioration remains.

The changes relate to (a) *treatment of current transfers* – inflows of foreign exchange from exchange offices, inflows and outflows of remittances, and withdrawals of funds from household foreign exchange accounts and non-resident accounts; and (b) *recording of other capital inflows* – primarily new foreign currency savings and repayment of FFCD bonds due.

The inflow of funds through purchase of foreign currency from exchange offices is no longer shown as a separate item, although this category is still monitored and registered. Instead, part of these inflows is recorded as remittance inflows, while another part is recorded as export of services – revenue from tourism.

1 http://www.imf.org/external/np/sta/bop/BOPman.pdf

New foreign currency savings, thus far shown as a separate item in the capital account, have since January 2008 been recorded in the current account as remittance inflows.

Under the new methodology, changes to non-residents' foreign currency accounts, so far shown in the current account, are now registered in the capital account as cash and foreign currency account.

Payments of FFCD are no longer recorded separately – the part remaining in household foreign currency accounts is neutral for the purposes of the balance of payments, while the part paid out in cash in foreign currency is treated as remittance outflows.

Grants are included in current transfers under the new methodology.

The level of NBS foreign currency reserves is now also calculated differently. In addition to inter-currency exchange rates changes of the reserves, which the NBS had been taking into account when adjusting for foreign currency reserve movements, the new methodology, as recommended by the IMF, includes corrections for changes in the value of securities that are part of the foreign currency reserves, as well as changes in the global price of monetary gold.

All these methodology changes made the current account appear higher (i.e. the current account deficit lower), while the capital balance was reduced by approximately the same amount.

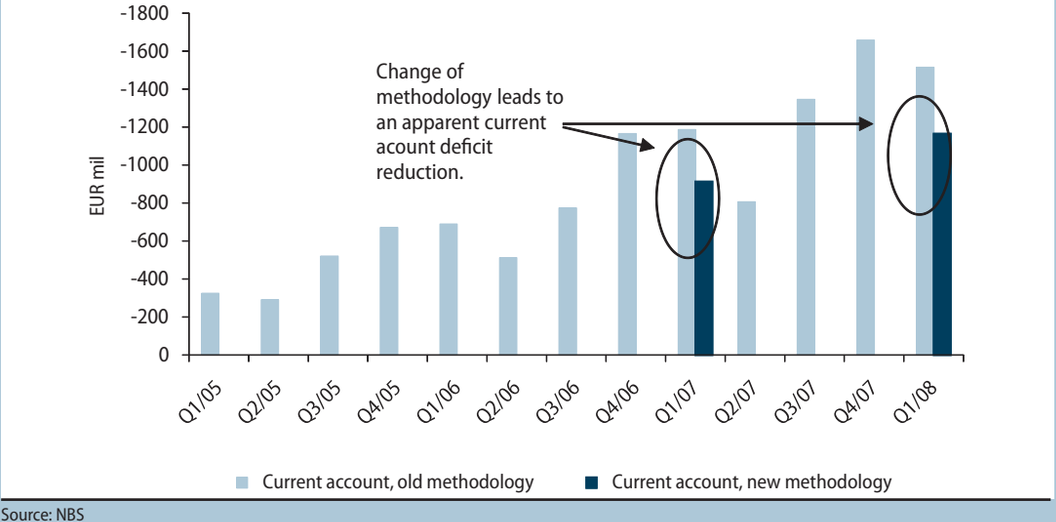
According to available 2007 and 2008 data, compiled according to the fifth edition of the IMF BoP Manual, the Q1 2008 current account amounted to €1,165 mn, a deterioration of 27.7% (y-o-y change), and stands at 15.4% of GDP, which gives the impression of a drop in the share of the current account deficit in GDP in relation to the previous year.

The changes in methodology, however, imply that the current account deficit has been shown as lower in accounting terms. Under the previous methodology, the Q1 2007 current account deficit was €1,186 mn, while under the new methodology the deficit stood at €912 mn. The difference, caused by the methodological changes, means a reduction in the Q1 2007 deficit by €274 mn, or some 4.2% of quarterly GDP.

With this in mind, it may be assumed that, if the old methodology had been used, the published current account deficit would probably have reached the worryingly high figure of 20.0% of GDP in Q1, after the already high levels of 16.7% of GDP in 2007 and 19.1% in Q4 2007 (Table T6-3).

In essence, current account is worse than one year ago. The current account apparently has seen improvement but only by application of different accounting rules, in accordance with IMF methodology; the question here is how other countries akin to Serbia – especially with similarly high foreign currency savings – prepare their balances of payment, and whether there are any differences.

Chart T6-2. Serbia: Current Account Deficit, 2005–2008



Source: NBS
Note: Q1 2008. according to old methodology, QM's estimate.

Foreign borrowing and FDIs continue to offset the current account deficit

The capital and financial account recorded growth (10.9%) and amounted to €1,218 mn, which is still sufficient to offset the current account deficit. The good performance of the capital account was caused by significant FDI inflows, as well as continuing large-scale foreign borrowing, especially on the part of the private non-banking sector (Table T6-4).

High FDIs - €712 mn

The level of FDI inflows in Q1 (€729 mn) should be taken with a grain of salt, as they include the privatization purchase price for the DDOR insurance company (€187 mn), signed in 2007, as well as the advance payment for the privatization of RTB Bor, which was later rescinded, and the funds paid back. The question that should be considered here, in view of the interruption in privatization and the expectations produced by political uncertainty, is: how much FDI inflows can be expected over the coming two to three quarters? The high level of FDI inflows in Q1 was still caused by investment inertia, rather than being an indicator of medium-term sustainable FDI inflow.

Portfolio investments have fallen in volume. Strong inflows of these investments were recorded in 2007 (to the tune of €672 mn for the whole of 2007, or €206 mn in Q1 2007); however, 2008 saw the trend reverse, as assets were withdrawn from the Serbian capital market (-€43 mn), which is attributable to both the increased political instability and the financial turmoil in the US and Europe. Such investor behaviour is in line with the global trend of asset withdrawals from emerging markets over the past two quarters.

Net foreign borrowing continues albeit at a slower pace

Net borrowing abroad has continued, although inflows have been less marked than in Q1 2007. Net direct borrowing abroad by companies has been growing steadily, to the level of €590 mn (growth of 23.7%), with over 80% of these loans registered as long-term liabilities. Q1 long-term company borrowing (i.e. exceeding two years) amounted to €976 mn; at the same time, companies repaid liabilities to the tune of €502 mn.

Direct borrowing of the corporations in Q1 stands at €590 mn

Banks have reduced their liabilities by €387 mn

The banking sector made a major effort to reduce its liabilities in Q1 (€387 mn), primarily those arising from short-term loans. This was mainly a consequence of the high liquidity in the banking sector, robust foreign borrowing by companies, as well as strong recapitalizations carried out in 2007, which was in turn caused by NBS measures.

In addition, the financial and capital account also recorded growth in this quarter due to growing trade loans (€79 mn), as well as exceedingly high inflows of foreign currency cash and deposits with local banks (€274 mn, up 210% on Q1 2007).

The NBS's foreign currency reserves grew only slightly in Q1 (€29 mn); the slowdown is a warning sign of a possible balance of payments gap in the short term.

Serbia's Foreign Debt

In relation to Q1 2007, the foreign debt rises by €3.1 bn…

Serbia's total foreign debt stood at €17,957 mn in March 2008 (58% of GDP), an increase of €168 mn relative to end-2007. In relation to GDP, the total foreign debt declined by 1.6 percentage points over the same period. At the y-o-y level, it grew by €3.1 bn, or 1.2 percentage points of GDP.

The public foreign debt stood at €6,035 mn (Table T6-3), a drop of €95 mn relative to December 2007.

According to data released by the Ministry of Finance, some 16.5% of the public foreign debt is dollar-indexed. Bearing in mind this debt structure, and in view of the fact that the private sector generally borrows in euros and Swiss francs, the marked appreciation of the euro against the dollar over the course of 2007 has not had a significant impact on the total volume of foreign debt.

…primarily due to robust foreign borrowing by companies

The pronounced growth of private foreign borrowing continued. In March 2008, the private foreign debt stood at €11,922 mn, or 38.5% of GDP (up 5.5 percentage points on March 2007). What was most apparent in Q1 was the high volume of corporate borrowing, while banks reduced their liabilities over the same period. Direct borrowing by companies accounted for 66% of the total private debt in December 2007; by late March 2008 its share had risen to 71.2%.

As for the rise in the long-term debt, it will be seen to be the exclusive consequence of borrowing by companies. The total long-term private debt amounts to €10,883 mn, of which 75.6% is owed by companies. Robust foreign borrowing by companies continued at the pace that marked 2007, so that the total long-term debt rose in spite of banks' efforts to repay their long-term liabilities in Q1 2008. The long-term company debt now stands as high as €8.22 bn, an increase of €652 mn relative to end-2007.

The short-term debt fell relative to December 2007, the consequence of a reduction in banks' short-term debts by some €400 mn. At the same time, short-term company borrowing rose by €146 mn. After this increase, the short-term company debt now stands at slightly above the March 2007 level (i.e. €270 mn), a reversal of last year's trend of falling short-term company debt.

Table T6-3. Serbia: Foreign Debt, 2005–2008

	2005	2006	2007				2008
			Mar	Jun	Sep	Dec	Mar
			stocks, in EUR millions, at the end of period				
Total foreign debt	13,064	14,884	14,858	15,689	16,361	17,789	17,957
(in % of GDP)	*61.9*	*59.8*	*56.8*	*57.3*	*57.5*	*59.6*	*58.0*
Public debt	7,714	6,420	6,241	6,253	6,210	6,130	6,035
(in % of GDP)	*36.5*	*25.8*	*23.9*	*22.8*	*21.8*	*20.5*	*19.5*
Long term	7,630	6,363	6,185	6,197	6,157	6,096	6,003
o/w: to IMF	732	185	0	0	0	0	0
Short term	84	57	56	56	53	34	32
Private debt	5,350	8,464	8,617	9,436	10,151	11,659	11,922
(in % of GDP)	*25.3*	*34.0*	*33.0*	*34.5*	*35.6*	*39.1*	*38.5*
Long term	4,156	7,263	7,669	8,532	9,152	10,372	10,883
o/w: Banks debt	1,260	2,929	2,906	2,704	2,628	2,801	2,660
o/w: Enterprises debt	2,895	4,334	4,763	5,828	6,524	7,571	8,223
Short term	1,194	1,201	948	904	999	1,287	1,039
o/w: Banks debt	924	942	701	808	875	1,163	770
o/w: Enterprises debt	271	259	247	96	123	124	269
Foren debt, net [1], (in% of GDP)	38.5	23.6	23.1	23.5	24.0	27.3	27.1

Source: NBS
1) Total foreign debt excluding NBS reserves.

Exports

Merchandise exports accelerate, thanks to a recovery in bulky exports

The y-o-y growth of merchandise exports accelerated in Q1 2008 (20.5% against 15.2% in Q4 2007). This was caused by the gradual recovery of bulky exports,[2] which recorded a growth of 1.9% in Q1 after a 19.4% drop in Q4 2007. Exports of the two most important components of bulky exports – iron and steel, and non-ferrous metals – recovered, while exports of fruit and vegetables and cereals remained low. When bulky exports are excluded, the rest of exports maintained a stable growth of around the high 30% mark (Table T6-4).

2 Bulky exports: iron and steel, non-ferrous metals, fruit and vegetables, and cereals and cereal products.

Table T6-4. Serbia: Merchandise Exports, Growth Rates, 2007–2008

	Exports share in 2007 (%)	2008	2007				2008
		Q1	Q1	Q2	Q3	Q4	Q1
	u %	mil.euros	y-o-y growth rate (%)				
Total	100.0	1,676	34.6	29.8	27.3	15.2	20.5
Bulky exports	29.7	463	36.1	29.1	19.4	-17.4	1.9
Iron and steel	12.5	220	61.5	29.1	9.7	-20.6	3.6
Non ferrous metals	7.9	125	11.9	18.6	17.6	-21.5	4.5
Fruits and vegetables	5.3	65	30.3	59.2	29.7	17.1	13.9
Cereal and cereal products	3.9	53	26.6	23.2	40.7	-35.3	-19.1
Underlying exports	70.3	1,213	33.9	30.1	31.5	31.7	29.6
Core	32.7	549	30.9	35.2	28.6	24.0	23.5
Clothes	5.1	89	31.6	31.0	28.1	19.4	15.5
Miscellaneous manufactured articles,n.e.s.	4.3	77	6.0	17.1	34.2	39.4	50.7
Manufactures of metals, n.e.s.	4.8	76	76.6	60.5	33.1	24.7	26.9
Rubber products	3.3	57	16.2	17.9	4.8	0.0	3.3
Electrical machinery, apparatus and appliances	3.6	63	77.6	81.2	66.7	48.8	50.9
Organic chemicals	3.0	47	42.8	71.4	46.3	30.4	7.9
Plastics in primary forms	2.2	40	-7.4	8.2	8.3	13.6	34.4
Footwear	2.3	41	34.9	18.1	10.9	11.2	15.8
Paper, paperboard and articles of paper pulp	2.0	33	12.3	35.6	23.0	21.0	21.4
Non-metal mineral produce	2.1	28	55.3	32.0	28.1	22.4	10.3
Other	37.6	664	36.7	26.0	34.2	38.7	35.0

Source: SBS.

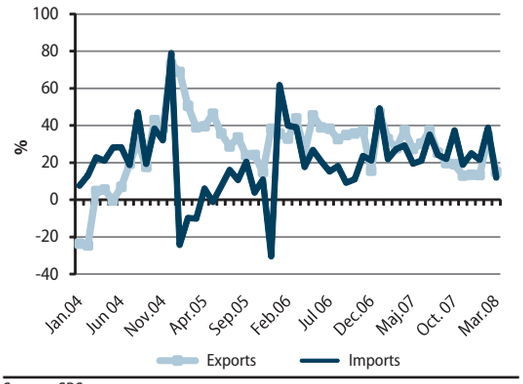
Iron and steel exports pick up

The greatest contribution to total merchandise exports was made by iron and steel exports (with a growth of 3.6% as against -20.6% in Q4 2007). The recovery in these exports was mainly due to the completion of the refurbishment of No. 2 Blast Furnace at US Steel Serbia, which started in the second half of 2007. The reduction in iron and steel exports over the second semester of 2007 because of the work will likely cause an overestimate of y-o-y growth rates in the second half of 2008. A more realistic view of iron and steel export trends will be possible only in 2009.

Exports of non-ferrous metals recover as well

Exports of non-ferrous metals also made a significant contribution to the acceleration of total exports (4.5% in relation to -21.5% in Q4 2007). Copper and aluminium make up most of the non-ferrous metal exports.[3] When trends in these exports are considered with this in mind, two conclusions can be drawn: (1) a strong recovery of copper exports took place in Q1 2008 (10.3% as against -33.7% in Q4 2007); and (2) aluminium exports dipped over the same period (-4.7% in relation to 6.3% in Q4 2007). There can be no doubt that the recovery in copper exports is linked to the rise in global demand, indicated by a y-o-y leap in copper prices of 30%, while falling aluminium exports can be explained by opposite trends and the drop in the price of this metal by about 2.5%.

Graph T6-5. Serbia: Exports and Imports, Y-o-y Growth Rates, 2004–2008



Source: SBS.

Exports of fruit and vegetables slowed slightly at the y-o-y level in Q1 2008 (14.2% in relation to 17.1% in Q4 2007). This export component has not seen stable growth since November 2007, and it can be said with certainty that it has exhibited a fair amount of volatility over the last five months. After growth of these exports slowed over the last two months of 2007, there ensued an acceleration in January and February 2008, bringing a return to the usual high pace of growth. However, March brought a y-o-y drop, which was the principal cause of the slight quarterly slowdown.

3 Between 95% and 98%.

Cereal exports continue to fall

Cereal exports continued on a downward y-o-y trend (-19.2% in relation to -35.3% in Q4 2007). The fall was due to the extension of a government decree temporarily banning cereal exports. As the exceptionally dry season resulted in a sharp drop in agricultural production, on 3 August 2007 the Serbian government banned exports of certain types of cereals. The decree was modified three times, most recently being extended to 15 June 2008. There were two main aims behind the extension of the administrative measure: (1) to prevent inflation from accelerating by ensuring regular supply of the market with domestic foodstuffs; and (2) to prevent livestock numbers from dropping due to rising fodder prices.

Underlying exports record stable and high growth

Underlying exports, making up some 70% of total merchandise exports, kept growing at a very stable and high y-o-y rate (29.6%, as against 31.7% in Q4 2007). As for their structure, a barely noticeable deceleration of the *Core* category was recorded, while the *Other* category maintained its trend of high and stable growth.

Serbia's *Core* exports continued growing at a high rate, with a slight deceleration (23.5% in relation to 24.0% in Q4 2007). *QM* does not consider this slowdown significant; it was probably the consequence of random variations. None of the products making up this category exhibit any indications of a y-o-y drop. The highest y-o-y growth was recorded by electrical machinery (50.9%), various finished products (50.7%), primary plastic materials (34.4%), and metal products (26.9%). The lowest growth over the same period was recorded by organic chemicals (7.9%) and rubber products (3.3%).

Growth of exports of the broad range of products that make up the *Other* category slowed (35.0%, as against 38.7% in Q4 2007). However, it cannot be concluded that there was a slowdown when comparing these figures with the y-o-y growth rates recorded over the first three quarters of 2007. Therefore, the *Other* category can be said to retain a high and stable pace of growth.

The EU remains the most important export market

The European Union has traditionally been Serbia's key foreign trade partner, absorbing some 56% of total merchandise exports (Table T6-6). A sizeable portion of Serbian exports go to just four countries, Italy, Bosnia-Herzegovina, Germany, and Montenegro; exports to these countries account for some 45% of total exports. This indicates a relatively high degree of geographical concentration of exports, which could pose a threat to their stability, as well as to the sustainability of the foreign trade deficit.

Table T6-6. Serbia: Exports by Destination, 2007–2008

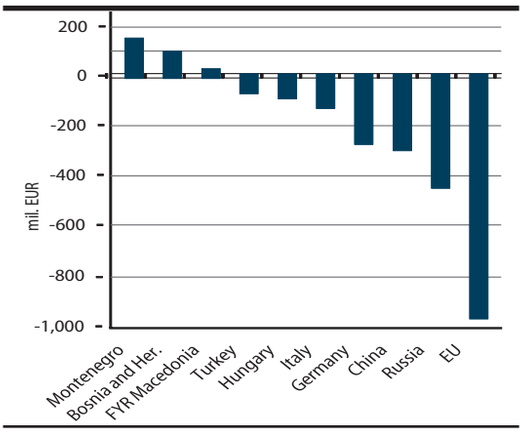
	Q1 2007	Q1 2008	Q1 2007	Q1 2008	Q1 08 /Q1 07
	share of total, %		mil.euros		%
EU	60.6	56.1	843	940	11.6
Italy	14.5	12.2	201	205	1.8
Bosnia and Herzegovina	10.9	11.2	151	188	24.6
Germany	11.0	10.9	153	183	19.2
Montenegro	8.6	10.4	120	175	46.3
Russia	4.1	5.9	57	99	72.6
Slovenia	4.9	5.0	68	85	23.7
FYR Macedonia	4.3	4.6	60	78	28.9
Austria	3.7	3.8	51	63	23.0
Croatia	3.7	3.6	52	61	18.6
France	3.6	3.5	50	59	17.0
Other countries	30.7	28.7	427	481	12.7

Source: SBS.

The greatest contribution to overall exports[4] in Q1 2008 was made by exports to Russia (21.7%), Germany (15.8%), Italy (10.0%), and Hungary (8.2%); the highest growth was recorded by exports to Bosnia-Herzegovina (64.2%), Spain (58.5%), Britain (55.2%), and Hungary (51.5%).

4 We calculate contribution to export growth as the share of growth of exports to a particular country, expressed in %, in overall export growth.

Graph T6-7. Serbia: Foreign Trade Balance by Countries, Q1 2008



Source: SBS.

Serbia's economy recorded surpluses in trade with Montenegro, Bosnia-Herzegovina, and Macedonia, while the largest deficits were in trade with Russia, China, and Germany.

Imports

Merchandise import growth slows

The first quarter of 2008 saw a deceleration in y-o-y merchandise import growth (22.8% in relation to 26.7% in Q4 2007, Table T6-8). The slowdown is all the more apparent if energy imports are excluded from total imports because of their pronounced volatility. Thus, when energy imports are excluded, import growth in Q1 was 20.3% in relation to 26.7% in Q4 2007. The deceleration in total merchandise import growth was mainly the consequence of a sharp downturn in imports of capital goods, while the slight drop in non-durable consumer and intermediary goods had a barely noticeable impact.

Table T6-8. Serbia: Imports, Y-o-y Growth Rates, 2007–2008

	Imports share in 2007 (%)	2008	2007				2008
		Q1	Q1	Q2	Q3	Q4	Q1
	in %	mil.euros	y-o-y growth (%)				
Total	100.0	3,613	32.9	24.4	27.8	26.7	22.8
Energy	17.4	788	14.3	-3.0	7.0	26.8	32.5
Intermediate products	36.4	1,201	36.3	34.0	31.0	17.0	16.2
Capital products	25.8	850	55.1	34.8	41.9	39.3	19.5
Capital products excluding road vehicles	17.6	557	66.0	33.1	32.6	38.9	9.3
Durable consumer goods	3.8	133	29.6	35.0	42.2	32.0	31.3
Non-durable consumer goods	14.2	517	25.0	21.3	18.8	29.6	26.6
Other	2.5	124	29.6	12.7	37.4	24.5	32.4
Imports excluding energy	82.6	2,825	38.6	31.2	32.6	26.7	20.3

Source: SBS.

QM's standard division of the structure of total merchandise imports is based on EU *economic classification*. In accordance with this approach, overall merchandise imports are disaggregated into imports of energy, intermediate goods, capital goods, durable consumer goods, non-durable consumer goods, and other goods. In addition, when analyzing imports, energy imports are excluded because of their high volatility. Also, motor vehicle imports are excluded from capital goods to obtain a clearer view of trends in this important category of imports.

Imports of capital goods decelerate significantly

The most marked change apparent in Q1 2008 was the undeniable and drastic slowdown in the y-o-y growth of capital goods imports (19.5% in relation to 39.3% in Q4 2007, Table T6-8). In addition, it is important to note that the effect of this deceleration is even more pronounced if motor vehicle imports are excluded from imports of capital goods (9.6%, as against 38.9% in Q4 2007). The slowdown in the growth of imports of capital goods was caused by the slower growth of imports of engines (2.0% in relation to 101.7% in Q4 2007), general-purpose industrial machinery (2.5% relative to 35.7% in Q4 2007), and electrical machinery and appliances (25.5%

in relation to 45.0% in Q4 2007), but also a reduction in imports of metal-processing machinery (-1.1% in relation to 71.9% in Q4 2004), office data-processing equipment (-16.4%, as against 37.5% in Q4 2007) and telecommunications equipment and devices (-25.5% relative to 29.5% in Q4 2007). *QM* surmises that the slowdown in imports of capital goods was the result of faltering investments.

Imports of consumer goods slow slightly but nonetheless remain high

A slight contribution to the y-o-y slowdown in total merchandise imports was also made by *imports of non-durable consumer goods* (26.9% in relation to 29.6% in Q4 2007). However, even this pace of imports of these products is undoubtedly high.

The low pace of imports of intermediate goods continues

Imports of intermediate goods slowed slightly (16.2% in relation to 17.0% in Q4 2007), while their pace remained very low, after the pronounced slowdown in Q4 2007. This retention of the low pace of imports of intermediate goods can most probably be ascribed to inertia from the previous quarter, when a slowdown in these imports was decisively impacted by the refurbishment of No. 2 Blast Furnace at US Steel Serbia, trends in the non-ferrous metals market, and the slowdown in growth of the rest of industrial production. As imports of intermediate goods did not react to the acceleration of industrial production recorded in Q1 2008, it seems that there is a time lag in this area.

Year-on-year *imports of durable consumer goods* slowed slightly (31.3% in relation to 32.0% in Q4 2007). Due to the low share of these products in total imports, the slowdown had almost no effect on the slowdown in growth of total imports.

Only energy imports accelerate

Finally, the only component of imports whose y-o-y growth has accelerated is *energy imports* (32.5%, as against 26.8% in Q4 2007). The acceleration is not the consequence of the y-o-y acceleration of imports of oil (33.7% in relation to 34.2% in Q4 2007) and its record prices in the world's markets, but rather that of an acceleration in imports of other sources of energy (24.2% in relation to 15.8% in Q4 2007), mainly natural gas, coke, electricity and liquid heating fuel. Monthly movements in the imports of energy show marked volatility, also evidenced by the respective y-o-y growth rates in January, February, and March of 35.3%, 86.5%, and 1.5%.

More than half of all Serbian imports come from the EU

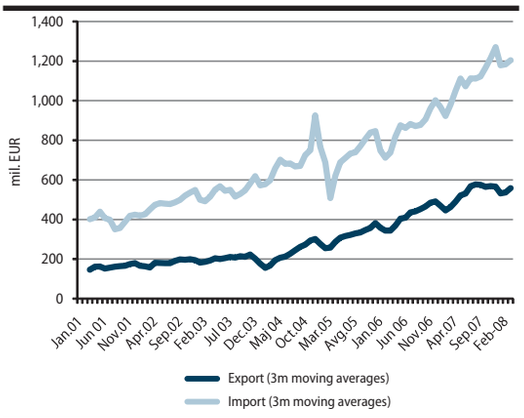
Most imports in Q1 2008 came from Russia, Germany, Italy, and China (Table T6-9), and made up 45.5% of all merchandise imports. From articles published in the past several issues of *QM*, it can be seen that the structure of imports by country has not changed significantly. These four countries have been Serbia's principal sources of imports for the past four years, excepting only the last quarter of 2007, when Slovenia took the place of China. The European Union remains Serbia's key foreign trade partner, accounting for 52.8% of all merchandise imports.

Table T6-9. Serbia: Imports by Origin, 2007–2008

	Q1 2007	Q1 2008	Q1 2007	Q1 2008	Q1 08 /Q1 07
	share in %		mil.euros		%
EU	52.6	52.8	1,568	1,916	22.2
Russia	16.7	17.6	497	638	28.3
Germany	10.7	11.6	319	421	32.1
Italy	9.1	9.2	270	335	24.0
China	7.2	7.1	214	259	21.4
Hungary	3.5	4.3	103	156	51.5
France	3.2	3.5	95	126	32.8
Slovenia	3.8	2.7	113	99	-12.3
Bosnia and Herzegovina	2.0	2.7	60	99	64.2
Bulgaria	2.4	2.6	72	94	31.9
Romania	2.9	2.6	87	94	8.3
Other countries	38.6	36.0	1,152	1,308	13.6

Source: SBS.

Graph T6-10. Serbia: Imports and Exports, 3m Moving Averages, 2001–2008



Source: SBS.

In Q1 2008, imports from Bosnia-Herzegovina (64.2%), Spain (58.5%), Britain (55.2%) and Hungary (51.5%) recorded the fastest growth, while imports from Russia had the highest y-o-y growth (€140.8 mn), and contributed by 21.7% to the growth of total merchandise imports. A significant impact on the growth of imports from Russia was made by the high price of oil in the global market.

Although a significant increase in exports began in early 2004, the stable and undoubtedly high growth of merchandise imports has been leading to a continuous increase in the foreign trade deficit. This fact can be illustrated by the widening gap between the export and import curves (Graph T6-10).

7. Fiscal Flows and Policy

In Q1 2008, fiscal policy was moderately restrictive. The real level of consolidated public revenue was by 6.5% higher relative to the same period of the previous year, while the real level of consolidated public expenditure was up 6% on the same quarter of 2007. As a result of these movements in revenue and expenditure, a surplus of 3.4 bn dinars was generated, the equivalent of approximately 0.5% of quarterly GDP. Fiscal developments indicate that the fiscal expansion in Q4 2007 was discontinued in Q1. The relatively favorable developments in public finances in early 2008 were in part a result of seasonal factors. Namely, revenue in Q1 was high because of the high spending in Q4 of the previous year (VAT, excises), while the expenditure level was below the average. Data on the execution Serbia's budget in April and the first half of May indicates that fiscal expansion was minimal, unlike during the election campaigns in late 2003, 2006 and 2007. Still, fiscal policy will be severely challenged up to the end of 2008.

Social and Political Circumstances of Relevance to the Pursuance of Fiscal Policy

Social and political circumstances for the conduct of fiscal policy were unfavorable

Fiscal policy in Q1 2008 was conducted in unfavorable social and political circumstances. Immediately after the presidential election campaign, Kosovo and Metohija declared its independence from Serbia and was recognized by a number of Western countries. Soon afterward, a parliamentary election was called in Serbia. All these developments contributed to a rise in public spending and a reduction in public revenue.

Privatization proceeds were lower than planned

Additionally, the political crisis in the country, as well as the deterioration of relations with Serbia's main economic partners, exacerbated the conditions for securing resources for financing the fiscal deficit and servicing the public debt principal. Failures to complete the initiated big privatization transactions (RTB Bor) and the postponement of planned privatizations contributed to a slowdown in the inflow of privatization receipts to the Serbian budget. The lower level of privatization proceeds relative to the plan will result in Serbia needing to borrow in order to finance the planned deficit and service the public debt principal in the second semester of 2008.

The already drafted reform laws have not been passed

An unfavorable circumstance for the Serbian economy, and thus for public finances as well, was that the Parliament was in effective session for only six month over the past year and a half. Furthermore, its priorities in the period were electoral and other laws, and the adoption of already drafted bills relating to the economy, including laws on the ratification of loan agreements for the construction of transport infrastructure, were pushed to the back burner. In the field of public finances, such important pieces of legislation as a new budget system law, amendments to the public debt law, and amendments to the public procurement law, were not passed. The same happened with bills regulating public property in accordance with the new Constitution and practice of modern market economies. The failure to adopt property laws that would enable different levels of government to possess their own property (the Republic, autonomous provinces, cities and municipalities) is a constraint especially on local communities, as well as on the restructuring and privatization of public utilities. Generally speaking, it can be said that the long periods of inactivity of the Parliament, and relegation of economic issues to an inferior position, contributed to the deceleration of economic reforms, including public finance reform.

A tendency toward populist measures in fiscal policy is gaining ground

The political and social environment was conducive to the proposal of a range of populist economic policy measures. The announcement of a total write-off of interest on arrears for fiscal levies accumulated before the end of 2007 is an example of a policy which constitutes an incentive to lawbreaking and a reward to non-compliant taxpayers. The holding of a parliamentary election against the backdrop of a deep political crisis fuelled the contest among political parties as to who would announce the most expansive fiscal policy.

General Trends and Macroeconomic Implications

Growth of revenue accelerated, while that of expenditure decelerated

The y-o-y growth rate of consolidated public revenue in Q1 2008 increased slightly relative to Q4 2007. In the composition of consolidated revenue, tax revenue recorded above-average growth, while non-tax revenue had a modest growth, and capital revenue declined considerably. The actual y-o-y growth rate of tax revenue in Q1 2008 reached its highest level in the last three quarters.

Consolidated public expenditure growth decelerated in Q1. The y-o-y growth rate fell to the lowest level since the beginning of 2007. The growth of consolidated public expenditure of 6% relative to the same quarter of 2007 was relatively modest, particularly since a temporary financing regimen was in place in the first half of 2007, which strongly limited the level of public expenditure. However, the pace of growth in public expenditure was relatively unfavorable in terms of its structure. The real level of current public expenditure relative to the same quarter of 2007 rose by 10%, while capital public expenditure was reduced by as much as 38%. The real level of expenditure for the payment of the public debt to pensioners amounted to roughly one-half of its level in the same quarter of the previous year. Budget loans and recapitalization recorded extremely fast growth in Q1, mostly as a result of the recapitalization of Poštanska Štedionica (Postal Savings Bank) and the National Mortgage Insurance Corporation, while a smaller portion related to an increase in various types of incentive budget loan programs.

A modest surplus was generated in Q1

After a moderate deficit in Q3 and a very high deficit in Q4 2007, consolidated general government ran a surplus in Q1 2008. As it was a relatively modest surplus, it may be said that the impact of fiscal policy on aggregate demand was moderately restrictive. Accordingly, the fiscal policy conducted during Q1, will contribute, with a certain lag, to the deceleration of inflation and a cut in the external deficit. Naturally, the movements in inflation and the external deficit in Q1 were influenced by the fiscal expansion which occurred in late 2007.

Table T7-1. Serbia: Consolidated General Government Fiscal Operations1), 2005–2008

	2005	2006					2007					2008
	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1
	in billions of dinars											
I TOTAL REVENUE	721.7	185.7	211.3	218.6	250.2	865.8	226.4	240.0	251.3	290.1	1007.8	268.3
II TOTAL EXPENDITURE	-695.1	-182.9	-196.8	-214.7	-277.0	-871.4	-214.9	-220.8	-254.5	-334.1	-1024.3	-252.3
III "OLD" DEBT REPAYMENT, NET LENDING AND RECAPITALIZATIONS	-15.2	0.2	-0.8	-2.6	-6.4	-9.6	-9.8	-1.0	-5.5	-10.2	-26.5	-12.6
o/w Net lending [2)]	*-5.3*	*-1.8*	*-0.8*	*-1.4*	*-6.6*	*-10.7*	-0.8	-1.0	-5.5	-5.8	-13.1	-7.6
IV TOTAL EXPENDITURE, GFS (II+III)	-710.2	-182.7	-197.7	-217.3	-283.3	-881.0	-224.6	-221.8	-260.1	-344.3	-1050.8	-264.9
V CONSOLIDATED BALANCE (I+IV), GFS definition[3)]	11.4	3.0	13.6	1.3	-33.1	-15.1	1.7	18.2	-8.8	-54.2	-43.0	3.4
VI FINANCING (FREN's definition)	5.8	7.5	-13.3	98.4	7.3	100.0	20.3	-5.3	-6.8	5.2	13.4	0.0
VII ACCOUNT BALANCE CHANGE (V+VI)	17.3	10.5	0.4	99.7	-25.8	84.8	22.0	12.9	-15.5	-49.0	-29.6	3.4

Source: Table P-10 in Analitical Appendix.
1) Includes all levels of government (central, provincial and municipal) and their budget beneficiaries and social security organizations (Serbian Pension and Disability Insurance Funds, Health Insurance Funds, National Employment Service, but not public enterprises and the NBS.
2) The item corresponds to the item "Net acquisition of financial assets for policy purposes" in the PFB (in accordance to GFS 2001), i.e. to the item "net lending" or "lending minus repayment" in the IMF presentation (i.e. GFS 1986). It comprises loans to students, financing of the National Corporation for Housing Loan Insurance and the like.
3) See Table P-10 in Analytical appendix and/or Box 2.

A minimal fiscal deficit was run during the election campaign (April – May)

A preliminary assessment is that the fiscal expansion in April and the first half of May 2008 was minimal, which is a positive precedent compared to the strong expansion in the election campaigns in late 2003, 2006 and 2007. The Serbian budget ran a 7.3 bn dinars deficit in April, but the consolidated deficit was lower because a considerable portion of transfers to other levels of government (primarily to the Province of Vojvodina) was not spent by those levels of government. Based on the preliminary data, the estimates are that the Serbian budget ran a surplus in the first half of May in the amount of 4–5 bn dinars. Therefore, on the basis of preliminary and incomplete data, it is estimated that during the election campaign in April and the first half of May 2008 a minimum deficit was run in the consolidated general government balance.

Analysis of Individual Tax Instruments and Individual Expenditure Items

In Q1 2008, y-o-y real growth rates for the majority of more relevant fiscal levies accelerated relative to the last two quarters of 2007.

Revenue went up, driven by the corporate income tax, customs duties and import VAT

The personal income tax revenue in Q1 2008 was higher by 7.1% in real terms relative to the same period of the previous year. The y-o-y quarterly growth rate of the real level of revenue from the personal income tax in Q1 2008 was positive for the first time since the beginning of 2007. The negative growth rates in 2007 were a consequence of a cut in the payroll tax rate from 14% to 12%, as well as of the introduction of a tax allowance in early 2007. A rise in the real value of the personal income tax revenue was somewhat higher than the rise in the real level of wages, which are the most important base for the collection of that tax, and whose growth in the period amounted to 5.2%. Nor can the movements in employment explain the relatively high increase in revenue from the payroll tax, because preliminary data indicates that employment in Q1 stagnated or slightly fell. The faster real growth of the personal income tax revenue compared to the real wage and employment growth was a consequence of the increasing relevance of incomes from capital (dividends, shares in profits, interest, etc.), as well as of other incomes from work (royalties, etc.)

The real y-o-y growth rate of the corporate income tax revenue in Q1 remained high, but decelerated considerably relative to the actual rates in the previous two years. The deceleration is probably a consequence of the fact that this tax had already attained a relatively high level over the previous years, for which reason it is not possible to have growth rates of 50%–60%, as was the case in the preceding two years. A more reliable analysis of the reasons for the slowdown in the real growth of the corporate income tax revenue will be possible after the operating results of the economy in 2007 are released.

VAT revenue in Q1 2008 was higher by 8.7% in real terms relative to the same period of the previous year. Although the actual growth rate was slightly lower than the average for 2007, it can still be assessed as relatively high. The real level of the import VAT revenue went up at approximately the same speed as the real dinar-denominated value of imports, which indicates that the structure of imports has not changed in a way that could be relevant from the standpoint of VAT collection. The real value of the domestic VAT revenue in Q1 2008 grew more slowly than the estimated GDP growth (7.3%; see Section 5, Economic Activity), mostly due to the faster growth of exports than of GDP. Based on this, it can be concluded that there are no indications of a more significant increase in tax evasion or VAT arrears.

The real level of excise revenue in Q1 was higher by 5.7% relative to Q1 2007, which was slightly lower than the average of actual y-o-y quarterly growth rates in 2007. Year-on-year growth rates of excise revenue were characterized by relatively high variability.

The real level of customs revenue in Q1 was higher by 10.5% relative to the same quarter of the previous year. It grew at a somewhat slower pace than the movements of the real (dinar-denominated) import value.

The real level of revenue from contributions for mandatory social insurance in Q1 was higher by 7% relative to the same period of the previous year. The increase in the real level of the contribution revenue was somewhat faster than the growth of average real wages.

Non-tax revenue in Q1 had a relatively modest real growth of only 1.7%, which was considerably lower than the actual quarterly y-o-y rates in the previous year.

In the composition of public expenditure, expenditure on subsidies, purchases of goods and services and budget loans grew the most

Capital revenue, which is characterized by high variability, fell at a high rate of 23.8%.

In the composition of public expenditure in Q1 the y-o-y real growth rates of individual expenditure categories had extremely diverging paths. Real expenditures for subsidies, purchases of goods and services and budget loans (including recapitalization) went up considerably, while the growth of expenses for social transfers and wages was lower but still relatively high. The sharpest y-o-y real fall in Q1 occurred in capital expenses, interest expenses and other current expenditures.

The real level of expenses for employees in Q1 was higher by about 8% relative to Q! 2007. By comparing the real level of Q1 2008 expenditure with the real level of actual expenditure in the last quarter of 2007, it may be concluded that the mentioned y-o-y increase in expenditure for employees was a result of the high level carried forward from the previous year, rather than of growth within the quarter as such. This confirms the observed positive trend of the deceleration of public sector wage growth initiated in Q2 2007.

In Q1, the trend of high y-o-y growth rates of expenditure for purchases of goods and services continued in general government. The real level of this expenditure in Q1 was higher by 13.1% relative to the same period of the previous year. The high growth rate can partially be explained by low expenditure for purchases of goods and services in Q1 2007, due to the application of the temporary financing regimen.

The real level of expenditure for subsidies in Q1 was higher by 28% relative to the same quarter in 2007. The high y-o-y growth rate of subsidies was in part a consequence of their low level in Q1 2007 due to the application of the temporary financing regimen. In Q1 of the previous year, less than 15% of total subsidies approved for that year was spent, while in Q1 2008 nearly 20% of the planned annual amount was spent – which is at the level of the typical share of Q1 expenses in annual expenses.

The real level of social transfers in Q1 was higher by 11.2% relative to the same quarter of the previous year. Pension expenses, which constitute the largest item of social transfers, went up in real terms by 8.5%. The high growth of pension expenses was a consequence of the implementation of the statutory provision on the minimum replacement ratio of 60%. Due to the implementation of this provision, pensions were increased by 11.06% in January 2008.

The real level of capital expenditure in Q1 dropped by as much as 38.2% relative to Q1 2007. Bearing in mind that a new payment system in the Treasury came into force in January, it is not clear to what extent this drop in expenses on capital expenditure was a consequence of delays in payments due to the application of the new system, and how much capital expenditure declined in real terms.

The real level of expenses for servicing the public debt to pensioners in Q1 was lower by almost a half relative to Q1 2007. The decline in the real level of expenses for the repayment of this debt was a consequence of the fact that in Q1 2007 two installments of the debt were repaid, in contrast to only one in the first quarter of 2008.

Budget loans and recapitalization in Q1 were more than seven times higher relative to the same period in 2007. Such a huge increase in budget loans and recapitalization was a consequence of, on the one hand, their extremely low level in the first quarter of the previous year, when they were executed with only 6% of the total annual amount. On the other hand, in Q1 2008 this budget item was executed in a very high percentage (38%) relative to the total annual appropriation. The high percentage of execution of this budget item in Q1 was a consequence of recapitalizations in which the government participated, such as the recapitalization of the National Mortgage Insurance Corporation and Poštanska Štedionica[1].

1 The recapitalization of Komercijalna Banka in the amount of 3.25 bn dinars was treated as government investment in securities and was not included in expenditure. Such treatment of the bank's recapitalization reflects the fact that it is profitable, has a much higher level of capital than the capital requirement and complies with other prudential norms set by the NBS.

Table T7-2. Serbia: Consolidated General Government Fiscal Operations[1], 2005–2008

	2006	2007				2008	12-m							Comparing to previous period
							2006	2007					2008	2008
	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q1 / Q4
	in bn. dinars							real growth, in %							
I PUBLIC REVENUES	**865.8**	**226.4**	**240.0**	**251.3**	**290.1**	**1,007.8**	**268.3**	**6.8**	**15.2**	**8.4**	**7.9**	**6.2**	**9.2**	**6.5**	**-10.3**
o/w: Public revenues excluding VAT liabilities to enterprises and offsets with SDF[2], [3]	*855.6*	*224.9*	*237.2*	*250.3*	*289.9*	*1,002.2*	*268.3*	*8.9*	*13.5*	*8.3*	*8.6*	*9.3*	*9.9*	*7.2*	*-10.2*
1. Current revenues	855.5	223.1	237.4	248.9	286.7	996.0	265.5	6.7	14.8	8.4	8.2	6.4	9.2	7.0	-10.1
Tax revenue	756.0	195.7	209.9	216.5	248.2	870.3	234.6	5.4	15.6	8.0	6.6	3.4	8.0	7.7	-8.3
Personal income taxes	118.6	24.9	28.2	29.1	33.6	115.8	29.7	11.9	-8.9	-8.0	-6.7	-10.1	-8.4	7.1	-14.3
Corporate income taxes	18.3	11.7	5.6	4.6	7.8	29.7	15.0	58.0	39.2	82.4	25.0	79.0	52.1	15.2	86.3
VAT and retail sales tax	225.1	60.5	65.0	66.9	73.1	265.5	73.2	-7.3	23.4	5.7	11.9	4.6	10.6	8.7	-2.8
o/w: Net VAT and retail sales tax[2]	*224.5*	*59.1*	*62.3*	*65.8*	*73.1*	*260.3*	*73.2*	*0.3*	*16.5*	*5.1*	*6.9*	*7.8*	*8.8*	*11.3*	*-2.8*
Excises	86.9	20.1	24.1	26.0	28.4	98.6	23.7	8.3	23.3	3.2	5.8	-0.3	6.5	5.7	-18.9
Custom duties	45.4	12.0	13.9	14.6	16.9	57.4	14.8	3.9	18.1	18.3	19.4	18.3	18.6	10.5	-14.9
Social contributions	231.4	58.6	64.8	67.6	79.6	270.6	69.7	12.5	14.6	14.9	7.1	4.2	9.7	7.0	-15.0
o/w: contributions excluding offsets with SDF[3]	*221.9*	*58.5*	*64.7*	*67.6*	*79.2*	*270.1*	*69.7*	*11.3*	*14.8*	*14.7*	*14.7*	*12.6*	*14.3*	*7.2*	*-14.7*
Other taxes	30.3	7.9	8.4	7.7	8.8	32.8	8.5	11.1	13.0	9.5	-9.0	-4.0	1.7	-3.9	-6.6
Non-tax revenue	99.6	27.4	27.4	32.4	38.5	125.7	31.0	17.4	9.7	11.6	19.7	30.0	18.4	1.7	-21.9
2. Capital revenues	10.3	3.2	2.6	2.4	3.4	11.7	2.8	15.2	48.2	10.6	-13.3	-4.8	7.2	-23.8	-21.8
II TOTAL EXPENDITURE	**-871.4**	**-214.9**	**-220.8**	**-254.5**	**-334.1**	**-1,024.3**	**-252.3**	**12.1**	**11.0**	**7.1**	**11.3**	**10.5**	**10.3**	**5.5**	**-26.7**
1. Current expenditures	-790.0	-194.8	-203.8	-230.2	-279.0	-907.9	-238.5	8.9	6.1	6.7	10.1	7.5	7.8	10.0	-17.0
Wages and salaries	-204.4	-53.3	-57.7	-59.6	-67.6	-238.3	-64.1	7.0	6.2	17.3	15.5	0.6	9.4	8.0	-8.0
Wages and salaries excluding severance payments[4]	*-201.6*	*-53.3*	*-57.7*	*-59.6*	*-66.7*	*-237.3*	*-63.8*	*6.2*	*11.6*	*20.4*	*15.5*	*0.8*	*10.4*	*7.4*	*-7.2*
Expenditure on goods and services	-135.9	-30.3	-36.2	-41.0	-60.7	-168.2	-38.1	12.9	9.2	14.1	8.5	26.6	16.1	13.1	-39.1
Interest payment	-30.2	-6.2	-3.4	-4.7	-3.5	-17.9	-6.0	52.6	0.5	-37.3	-51.7	-67.5	-44.4	-12.2	65.7
Subsidies	-55.6	-9.4	-10.5	-17.9	-25.9	-63.7	-13.4	-10.0	-12.2	-21.6	23.1	25.0	7.6	28.0	-49.9
Social transfers	-343.4	-91.1	-91.8	-101.8	-111.3	-395.9	-112.7	9.9	7.8	7.3	12.6	5.0	8.2	11.2	-1.6
o/w: pensions[5]	*-227.7*	*-62.0*	*-63.3*	*-64.9*	*-69.7*	*-259.9*	*-74.8*	*11.1*	*11.0*	*8.5*	*4.1*	*5.0*	*7.1*	*8.5*	*4.2*
Other current expenditures	-20.5	-4.6	-4.1	-5.2	-10.0	-23.9	-4.2	2.9	5.8	-27.4	2.9	45.1	9.2	-17.3	-59.3
2. Capital expenditures[6]	-81.3	-20.0	-17.0	-24.4	-55.1	-116.4	-13.8	57.7	101.6	12.5	24.3	28.8	34.3	-38.2	-75.7
III "OLD" DEBT REPAYMENT, GOVERNMENT NET LENDING AND RECAPITALIZATIONS	**-9.6**	**-9.8**	**-1.0**	**-5.5**	**-10.2**	**-26.5**	**-12.6**	**-54.6**	**-4,678.6**	**12.0**	**99.4**	**47.2**	**159.0**	**15.7**	**19.6**
1. Pensions	-20.3	-8.9	0.0	0.0	-4.4	-13.4	-5.0	30.2	431.7	-100.0	-100.0	-68.9	-38.1	-49.7	9.8
2. Net lending[7]	-10.7	-0.8	-1.0	-5.5	-5.8	-13.1	-7.6	-291.5	-143.5	-212.6	-473.1	-179.8	-215.5	726.9	27.0
IV TOTAL EXPENDITURE, GFS (II+III)	**-881.0**	**-224.6**	**-221.8**	**-260.1**	**-344.3**	**-1,050.8**	**-264.9**	**10.2**	**16.2**	**7.1**	**12.3**	**11.3**	**11.9**	**6.0**	**-25.3**

Source: Table P-10 in Analytical Appendix.
1) See footnote 1) in Table T7-1.
2) Retail sales tax/VAT minus new tax credits to enterprises.
3) Social contributions reduced by refunds between Pension Fund, Serbian Development Fund and enterprises that are debtors of the Pension Fund.
4) QM's estimate, for details see Table P-10 in Analytical appendix.
5) Refers to the current expenditures on pensions.
6) Capital expenditures exclude projects financed from abroad (apart in 2004, see footnote 16 in Table P-10).
7) See footnote 2) in Table T7-1.
Note: Real growth is obtained comparing 2003 constant prices quarterly data

Memorandum on the Budget and Economic and Fiscal Policies

The outgoing Serbian government adopted a Memorandum on the Budget and Economic and Fiscal Policies for 2009 with Projections for 2010 and 2011. The Memorandum provides guidelines for the most important segments of economic policies (fiscal, monetary, foreign trade, wages and prices), as well as a wide spectrum of structural reforms for the coming three years. The part on fiscal policy offers relatively detailed guidelines for a fiscal adjustment program, an outline of tax policy and the most important activities aimed at the promotion of public finance management, in particular expenditure management. Since the adopted Memorandum does not contain the election promises made by political parties, it is not clear to what extent it will be modified after the new government is formed.

The plan is to cut the public spending-to-GDP ratio and to switch from deficits to surpluses

Projections of the consolidated general government balance in the Memorandum are based on the projections of macroeconomic aggregates and planned fiscal policy. As part of the macroeconomic projections, GDP is forecast to grow at a rate of 6.5% in the coming two years, and then to accelerate to the level of 7% in 2011. Likewise, wage growth is projected at rates ranging between 5% and 5.5% annually, and the growth of imports at an annual rate of around 11% (in euro terms) and exports at an annual rate of around 18% (in euro terms).

On the basis of the macroeconomic projections and planned fiscal policy, a reduction is envisaged in the share of public spending[2] in GDP over the coming three years by 3.6 percentage points relative to 2007, that is, by 3.2 percentage points relative to the estimate for 2008. The deepest

2 The data on public revenue and expenditure in the adopted Memorandum is mostly consistent with the GFS methodology. The most important changes in historical data refer to the exclusion of the cellular telephony license revenue from recurrent public revenue and the inclusion of budget net lending, recapitalization and repayment of the debt to pensioners in public expenditure. In addition, with the inclusion of the public enterprise Putevi Srbije (Serbian Road Company) and part of own revenues and expenditures of budget beneficiaries in the consolidated general government balance, the coverage of public revenue and expenditure was broadened. After these changes, the presentations of public revenue and expenditure in *QM* and in the Memorandum have been aligned to a large extent.

cut in the public spending-to-GDP ratio is planned for 2009 (1.6 percentage points) and 2010 (1.5 percentage points). Owing to high GDP growth, the real level of public spending would go up at a rate slightly lower than 4% annually on average, with current spending growing at a real rate of 3.5% annually on average, while public investment would grow at approximately the same rate as GDP. As a result of such developments, the share of public investment in consolidated public spending would increase.

According to the Memorandum projections, the consolidated public revenue-to-GDP ratio should remain more or less the same in the coming three years. The most significant changes in the composition of public revenue include a reduction in the share of customs revenue due to the expected gradual cuts of customs duties in trade with the EU, as well as an increase in the shares of the corporate income tax and excise revenues.

As a result of such movements of revenue and expenditure, a switch would be made from the estimated deficit in the consolidated balance in 2008 of 1.7% of GDP, to a deficit of 0.4% of GDP in 2009 and a surplus of around 1% of GDP in 2010 and 2011.

The key measures for the realization of the planned decrease in the share of public spending in GDP include deceleration of the growth in wages and pensions over the coming three-year period, which is understandable since these two categories account for around 55% of consolidated public expenditure.

Slower growth of wages and pensions relative to GDP is the key lever of fiscal adjustment

The Memorandum envisages a real growth of the wage bill in the government sector over the coming two years at a rate of 2% per year on average, while in 2011 wage growth would be approximately the same as GDP growth. As a result of these developments, the share of expenditure for employees in the consolidated balance of public spending would decrease by 1 percentage point. Expenditure for pension benefits was projected on the assumption that the indexation of pensions in the period 2009–2011 will gradually go back to the Swiss formula, and that the legal provision on the minimum replacement ratio of 60% will not be in force in the future. It is planned for expenditure for goods and services to go up at a rate of 2% in real terms in 2009 and 2010, for which reason its share in GDP would decline by 0.7 percentage points. Likewise, the plan is to reduce the share of subsidies and budget loans in GDP by 0.5 and 0.3 percentage points, respectively.

The Memorandum devotes special attention to the promotion of public expenditure management, and, particularly, to improvements in the management of public debt, public investment and subsidies. To this end, the revamping of the existing laws and the adoption of new ones, capacity building in the government, etc. have been announced. The improvement of public expenditure management is designed to contribute to both the reduction of its level and to increasing the economic and social utility of government spending.

The existence of considerable risks may call into question the adopted plans

Finally, the Memorandum lists some relevant fiscal risks that could result in a serious deterioration of the consolidated general government balance relative to the planned level. Some of the more significant risks include: a slower GDP growth than projected, non-materialization of the planned privatization proceeds, populist economic policies, debts and arrears of public enterprises (the Serbian Road Company, the Serbian Railroad Company), the obligation to finance the NBS's losses, demands of reservists for the payment of double war per diems (the accepted demands amounted to around 2 bn dinars, the current demands amount to around 12 bn dinars, the total potential demands to 40–50 bn dinars).

Likewise, bearing in mind the nature of the Memorandum, it is understandable that the risks arising from the election promises of political parties, which, in all likelihood, will constitute the most serious threat to the government's fiscal position in this and in the coming years, have not been analyzed in more detail.

Challenges for Fiscal Policy by end-2008

Substantial additional resources are necessary to maintain the liquidity of Serbia's budget in the second semester of 2008

An immediate challenge faced by fiscal policy in Serbia is the provision of liquidity of the budget in the second semester of 2008. If monthly privatization proceeds in that period stay at the level of the monthly average in the first four months of the current year, which they probably will, the estimate is that with unchanged fiscal policy (unchanged tax policy, expenditure and public debt servicing in line with the adopted budget and the like) there will be a financing gap amounting to 25-30 bn dinars in the Serbian budget. A possible inflow of a more sizeable amount of privatization proceeds, through, for example, the acceleration of distribution of proceeds from the company Robne Kuće and the like – would narrow the gap, but would not solve the budget's liquidity problem. Therefore, in order for the budget to be current on its existing liabilities in the second semester of 2008, the government will have to borrow on the domestic or foreign financial market.

In the election campaign, political parties promised a strong decrease in revenue and an increase in expenditure

From among the measures set out in the election campaign, an increase in the replacement ratio to 70% and the indexation of pensions to wage movements after that would have the most significant impact on raising consolidated public expenditure. It is estimated that the application of such a measure from mid-2008 would require additional funds for pensions by the end of the current year in the amount of around €250–300 mn (0.8% of GDP), and in the following year additional funds amounting to around €1 bn (2.5% of GDP).

The strongest effect on the reduction of public revenue would be the effect of a cut in the standard VAT rate from 18% to 12%[3], i.e., by one-third, as well as a cut in the fiscal burden on wages from the current 64% to 35%–40%. If these two measures were applied, the share of public revenue in GDP would be lowered by 5–6 percentage points[4].

Box 1. Electoral Promises Related to Public Finances

The most important promises made by parties in their election campaigns concerning public finances include:

Democratic Party: a cut in the payroll tax rate from 12% to 10% and an increase in the tax allowance from this year's 5,555 dinars to 8,000 dinars, reducing the conveyancing tax from 2.5% to 1%, lowering of customs duties on car imports from 20% to 10%, population policy.

Serbian Radical Party: a cut in the standard VAT rate from 18% to 16%, and then to 12%, reduction of the fiscal burden on wages from 64% to 35%–40% within five years, a cut in the corporate income tax rate from 10% to 8%, population policy.

Democratic Party of Serbia - New Serbia: reduction of the fiscal burden on wages to 50%, a cut in the corporate income tax rate from 10% to 8%, support to demands by reservists for double per diems.

Socialist Party of Serbia –Party of United Pensioners of Serbia –United Serbia: raising the minimum replacement ratio to 70%, and later even to 80%, pension indexation to wage movements, free education, free health care.

Liberal Democratic Party: reducing the public spending-to-GDP ratio from the present 44% to 35%.

3 The proposed standard VAT rate of 12% is lower than the minimum rate for EU member states, which stands at 15%.

4 When the effects of the mentioned measures were estimated, the impact of a VAT rate cut on a rise in the turnover volume was also taken into account, as was the effect of a reduction in the fiscal burden on wages on an increase in wages and employment. The incorporation of the mentioned effects resulted in a lower decline in the revenue from the mentioned tax instruments than the tax rate cuts.

Delivery on election campaign promises would increase the expansiveness of fiscal policy instead of necessary restrictiveness

Potential changes in fiscal policy in the direction announced by a majority of political parties in the elections (tax rate cuts and higher public expenditure) would additionally increase the gap in the financing of the fiscal deficit and public debt principal, not only in the second semester of 2008 but in the coming years as well. Even a partial delivery on these election promises would result in the lowering of the public revenue-to-GDP ratio and an increase in the public expenditure-to-GDP ratio and the fiscal deficit-to-GDP ratio relative to the projections set out in the Memorandum. Thus, instead of a necessary fiscal adjustment toward reducing the share of public spending in GDP and switching from fiscal deficits to fiscal surpluses, Serbia would face a higher fiscal policy expansiveness.

A rise in expansiveness would threaten macroeconomic stability and call into question the liquidity of Serbia's budget

Intensified fiscal policy expansiveness would not only aggravate the problem of the Serbian budget's liquidity, but would also have significant negative macroeconomic implications. A more expansive fiscal policy would contribute to a further growth of domestic demand, which has been maintained at a high level for quite some time now. In such circumstances, the rise in domestic demand would spill over into an increase in imports and the external deficit, as well as into an increase in domestic prices. Moreover, the implementation of some of the proposed measures, such as deep cuts in tax rates on the most important tax instruments, would contribute to high fiscal deficits in the coming several years as well.

A significant increase in the expansiveness of fiscal policy may contribute to a rise in inflation, accompanied by growing wages; the expansiveness of fiscal policy would then grow further.

8. Monetary Flows and Policy

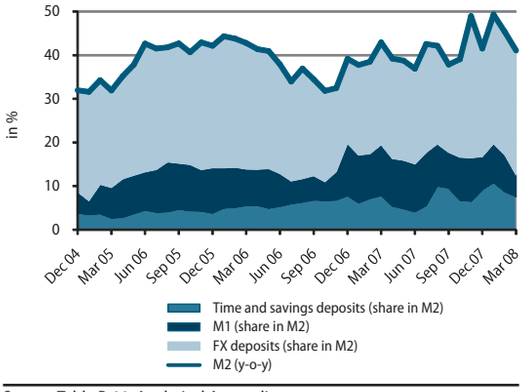
The trend of accelerated growth of nominal M2 recorded in 2007 ceased in Q1 2008, while the real 12-m growth of M2 continued to slow down. The monetary growth in Q4 was caused by the growth of net foreign exchange reserves and the rise in credit to the non-government sector. The latter slowed in Q1, with banks granting a new €614 mn in loans to companies and households, approximately the same amount as in Q4 2007. Housing loans accounted for four-fifths of loans to households, and retail and cash loans became increasingly rare. Companies continued borrowing abroad, to the tune of a new €590 mn. Banks found sources for new credit in funds released from their deposits with the NBS, new foreign exchange savings, and recapitalization. They invested less in repo instruments (a new €116 mn), although the NBS raised its reference rate on several occasions, by a total of 4.5 percentage points, in Q1. Since the exchange rate depreciated and the inflation rate remained high in the same period, there was no major increase in the restrictiveness of monetary policy. Primary money fell in Q1 as the result of the increase in the government deposit with the NBS and sterilization through the repo market.

Monetary System: Structure and Flows of Monetary Supply

The trend of accelerated growth of nominal M2 ceases in Q1...

Q1 saw the end of the trend of accelerating 12-m growth of total monetary supply (M2). At the end of the quarter it stood at 41%, only one-half of a percentage point less than at the end of 2007. Real M2, however, continued on the decelerating trend established in Q2 2007. The 12-m growth rate of M2 was 26.2% (27.8% in Q4 2007, Table T8-2). The nominal 12-m growth of total credit to the non-government sector, as well as its two components – credit to companies and households – also slowed in Q1. The deceleration of growth is evident both in the purely dinar denomination – 36.4% (38.3% in Q4 2007) and in the flows adjusted for exchange rate differentials in Q1 – 35.3% (38.4% in Q4 2007, Table T8-2). When the contribution of different forms of use of monetary supply is observed, what comes to light is a slight increase of the share of savings and time deposits in the structure of M2 in Q1, which was the case also in Q4 2007. This happened at the expense of a reduction of the contribution of dinar M1, while the biggest contribution to the growth of M2 continued to come from the growth of foreign exchange deposits (Graph T8-1).

Graph T8-1- Serbia: Money and Component Aggregates[1], 2004–2008



Source: Table P-11, Analytical Appendix.
The share of money components was obtained as their ratio against the value of M2 in the same period of the preceding year, whereby the sum of obtained ratios is equal to the y-o-y growth of total money (M2).

... while the real y-o-y growth of M2 continues to slow down

Monetary growth in Q4 was the result of the growth of net foreign exchange reserves...

The total increase in monetary supply in Q1 2008 of 5.5% of M2 at the beginning of the year (Table T8-2) was the result of a rise in NFA in Q1 of 3.6% of M2 at the beginning of the year and an increase in NDA of 1.9% of opening M2. Of the total increase in NFA, as much as 2.1% of opening M2 refers to exchange rate differentials (increase in dinar-denominated NFA in Q1 due to the depreciation of the dinar at end-Q1 relative to the exchange rate at end-2007). The remainder of the rise of 1.5% of opening M2 refers to the increase in foreign exchange-denominated NFA. The increase in NDA in Q1 was contributed to by the rise in credit to the non-government sector (4.8% of opening M2), a reduction in net credit to government of -0.6% of opening M2 (Table T8-2). Finally, on the negative side, the growth of M2 was impacted by the growth of the monetary sector's capital by -3.5% of opening M2 (Table T8-2).

.. and the growth of credit to the non-goverment sector

Table T8-2. Serbia: Monetary Survey, Selected Indicators, 2006–2008

	2006				2007				2008
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
					y-o-y, in%				
M2 [1]	42.8	37.9	34.4	39.2	42.9	37.4	39.4	41.5	41.0
Credit to the non-government sector[2]	45.3	44.4	34.6	17.5	21.6	23.9	28.0	38.3	36.4
Credit to the non-government sector[2], adjusted [3]	39.6	41.6	38.0	24.1	26.3	30.2	36.7	39.9	35.3
Households	100.6	96.6	80.8	62.2	58.4	54.7	60.2	52.2	43.3
Enterprises	25.0	26.9	24.7	11.1	14.2	20.2	26.2	33.7	31.0
					real y-o-y, in %				
M2 [1]	24.7	19.8	20.5	30.6	35.4	30.7	29.7	27.8	26.2
Credit to the non-government sector[2]	26.9	25.4	20.7	10.3	15.2	17.8	19.1	24.9	22.0
Credit to the non-government sector[2], adjusted [3]	21.5	22.7	23.6	16.4	19.8	24.1	27.4	26.3	21.1
Households	74.8	70.4	61.9	52.2	50.2	47.4	49.2	37.5	28.2
Enterprises	8.8	9.9	11.7	4.2	8.3	14.5	17.6	20.7	17.3
					cumulative, in % of opening M2 [4]				
M2 [1]	3.1	12.4	23.8	39.2	5.9	11.0	23.9	41.5	5.5
M2 dinar [1]	-0.5	3.6	8.8	19.8	-0.1	0.8	6.8	16.8	-2.5
Foreign deposits (households and enterprises)[5]	2.6	8.4	18.1	25.7	4.0	10.1	17.3	24.5	5.6
Valuation adjustments[6]	1.0	0.4	-3.1	-6.4	1.9	0.0	-0.1	0.2	2.4
NFA, dinar increase	-4.0	2.4	30.9	41.1	5.2	12.0	14.5	24.4	3.6
NFA, fx increase	-4.7	2.1	34.3	48.4	3.1	12.0	14.7	24.2	1.5
Valuation adjustments[6]	0.7	0.3	-3.4	-7.3	2.2	0.0	-0.1	0.3	2.1
NDA	7.1	10.0	-7.1	-1.9	0.6	-1.1	9.4	17.1	1.9
o/w: credit to the non-government sector[2], adjusted [3]	5.1	15.6	25.0	27.3	6.6	19.6	33.7	38.0	4.8
o/w: net credit to government[7]	-0.7	-1.3	-21.8	-17.4	-4.1	-7.7	-7.0	-1.9	-0.6
o/w: NBS and com. banks capital and reserves	-1.2	-7.5	-8.5	-13.2	-2.2	-7.4	-11.6	-17.9	-3.5
					cumulative, in % of GDP [8]				
Net credit to government[7]	-0.2	-0.3	-4.8	-3.4	-1.3	-2.2	-1.9	-0.5	-0.3
o/w: dinar credits	-0.2	-0.9	-0.7	0.6	-1.2	-2.4	-2.0	-1.1	-0.8
Credit to the non-government sector[2], adjusted [3]	1.6	3.8	4.8	4.3	2.6	5.5	7.5	9.8	2.7

Source, Table P-11, Analytical Appendix.
1) Definitions of M2, M2 dinar, NFA and NDA - see Analytical and Notation Conventions.
2) Credits to the non-government sector: credits to households and enterprises (including cities and municipalities, non-profit and other non-government entities).
3) Flows are adjusted for exchange rate changes. Adjustments are applied under the assumption that 70% of credit to the non-government sector (both households and enterprises) are euro-indexed.
4) "Opening M2" refers to the stock of M2 from the beginning of stated year (i.e. end of previous year).
5) The contribution of fx deposits to the growth of M2 measures only the contribution of the increase in fx-denominated fx deposits so that their revalorization produces the exchange differentials.
6) Valuation adjustments refer to the difference in NFA contribution to M2 growth calculated in dinars and NFA contribution to M2 growth calculated in euros.
7) Net credit to government: difference between government credits (dinar and fx) and deposits (dinar and fx). Government does not include cities and municipalities which are considered within the non-government sector.
8) The GDP used in the calculations is annually centered.

Growth of credit to non-government sector slows

The level of cash relative to dinar deposits falls in Q1...

... while the share of foreign exchange deposits in total M2 rises

The ratio of cash in circulation to dinar deposits continued to fall in Q1. Standing at 31.9% at end-2006, this ratio dropped to 23.7% at the end of Q1 2008 (Table T8-3). The share of foreign exchange deposits in total M2, however, was not reduced in the same period. In Q1, it even reached a record 61.4% (56.8% in Q4 2007; 58.2% in Q1 2007, Table T8-3). In spite of the steady and exceptionally high growth of total bank credit to companies and households, the proportion of bad loans (those overdue by over 90 days) has not risen in the year and a half since *QM* has been monitoring this indicator of financial stability. In Q1 2008, the indicator was 4.4% (Table T8-3).

Table T8-3. Serbia: Monetary Survey, 2006–2008

	2006				2007				2008
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
	in millions of dinars, end of period								
STOCK									
NFA	200,462	229,984	360,685	407,565	441,048	484,388	500,302	563,524	596,215
o/w: NBS gross reserves	465,497	549,529	648,946	715,114	719,381	730,668	751,920	765,615	788,296
o/w: commercial bank foreign liabilities	-229,081	-302,170	-300,781	-307,742	-318,598	-286,848	-290,860	-299,659	-264,865
NDA	272,642	285,856	207,195	231,055	234,991	224,279	291,193	340,174	357,307
Net credit to government [1]	-31,129	-33,954	-124,159	-100,061	-128,909	-149,081	-144,385	-112,290	-120,644
Net dinar credit	-25,479	-38,649	-35,438	-8,776	-35,782	-62,290	-56,369	-34,251	-53,126
Net fx credit	-5,650	4,695	-88,721	-91,285	-93,127	-86,791	-88,016	-78,039	-67,518
Credit to the non-government sector [2]	547,564	591,270	614,698	609,171	666,007	732,402	786,873	842,512	908,598
Other items, net	-243,793	-271,460	-283,344	-278,055	-302,107	-359,042	-351,295	-390,048	-430,647
M2 [3]	473,103	515,840	567,881	638,620	676,039	708,667	791,495	903,698	953,522
M2 dinar [3]	189,911	208,606	232,506	283,116	282,299	288,329	326,341	390,307	367,648
Fx deposits (households and economy)	283,192	307,234	335,375	355,504	393,740	420,338	465,154	513,391	585,874
STRUCTURAL INDICATORS									
Currency outside banks/Dinar deposits (households and economy), in %	31.80	30.64	28.89	31.89	26.23	29.14	25.05	24.56	23.66
Fx deposits (households and economy) / M2 (%)	59.86	59.56	59.06	55.67	58.24	59.31	58.77	56.81	61.44
Velocity (GDP [4] / M2)	3.87	3.70	3.50	3.33	3.23	3.17	3.01	2.64	2.59
M2 / GDP [4]	0.26	0.27	0.29	0.30	0.31	0.32	0.33	0.38	0.39
Credits to the non-government sector / GDP [4]	0.30	0.31	0.31	0.29	0.30	0.33	0.33	0.35	0.37
Non-perofrming loans [5] (in % of total loans)	..	..	..	4.65	4.92	4.69	5.20	5.10	4.40
Money multiplier (dinar M2/H)	2.10	2.08	2.12	1.97	2.37	1.99	2.27	2.31	2.58

Source: Table P-12, Analytical Appendix.
1) See footnote 7) in Table T8-2.
2) See footnote 2) in Table T8-2.
3) Definitions of M2, M2 dinar, NFA and NDA - see Analytical and Notation Conventions.
4) See footnote 8) in Table T8-2.
5) The figure for December 2006 relates to Januarz, 31 2007 and represents the ratio of loans with overdue payments of 90 days and more to total outstanding loans. The source for data in this row is The Credit bureau, Association of Serbian banks. For details, see QM6, Spotlight on No.1.

Banking Sector: Credits and Sources of Financing

In Q1, banks grant a new €614 mn in credits to companies and households... ... which is approximately the same amount as in Q4 2007

The amount of credit granted by banks to companies and households in Q1 was roughly the same as in Q4 2007 (€614 mn in Q1 2008; €630 mn in Q4 2007, Table T8-4). About €400 mn in new credits went to companies and some €200 mn to households (the same as in Q4 2007, Table T8-4). It is noteworthy that as much as 83% of the increase in credit to households in Q1 refers to housing loans, while the share of the sum of cash and consumer loans in the total growth of credit in the same period was negative (the stock of these loans was reduced). Only three quarters ago, in Q2 2007 for instance, housing loans accounted for only 33% of the increase in credit to households, and as much as 60% were consumer and cash loans (Table T8-5).

Companies continued borrowing abroad in Q1

In line with the trend established more than a year ago, companies continued with direct foreign borrowing in Q1, though at a slightly less intensive pace than in previous quarters. They took a new €600 mn in credit (€900 mn in Q4 2007), continuing thereby to avoid the domestic banking system.

Based on the above, it may be concluded that a slowing of the absolute growth of credit started in Q4 2007 and carried on into Q1 2008, with the y-o-y growth also slowing down. Credit to companies, however, did not slow, either in absolute terms compared to preceding quarters, nor in relative terms compared to a year ago. But credit to households, specifically its short-term component (consumer and cash loans) did decelerate, while housing loans started rising as of mid-2007. Since these short-term loans to households were the target of tough NBS administrative measures (the repayment term for cash loans was limited to two years, and total credit to households was not allowed to exceed 150% of banks' capital1), it would appear that the range of monetary policy where total bank credit is concerned is limited to the effect of administrative measures. In other words, based on these observations of the movement of credit and its main components, the impression is that the effect on the NBS interest rate on the amount of new credit and, by extension, of the interest rate on bank credits, is at present very meager.

1 For more details on these measures, see *QM* 9, Section 8: Monetary Flows and Policy, Box 1, page 59.

Table T8-4. Serbia: Funding, Credit and Investment Activity of banks, Adjusted Flows, 2006–2008

	2006				2007				2008
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
	in millions of euros, cumulative from the beginning of the year								
Funding(-, increase in liabilities)	-539	-2,208	-3,468	-5,237	-325	-1,061	-2,574	-4,582	258
Domestic deposits	-116	-550	-1,322	-2,245	-339	-757	-1,819	-3,254	-162
Households deposits	-178	-413	-795	-1,200	-329	-652	-1,059	-1,652	-192
dinar deposits	-13	-54	-51	-124	-35	-57	-97	-135	-18
fx deposits	-165	-359	-744	-1,076	-295	-595	-963	-1,518	-174
Enterprise deposits	63	-137	-527	-1,045	-10	-105	-760	-1,602	29
dinar deposits	36	-52	-295	-739	23	112	-324	-1,138	365
fx deposits	27	-85	-232	-307	-33	-218	-437	-464	-336
Foreign liabilities	-401	-1,278	-1,433	-1,660	-10	266	207	114	564
Capital and reserves	-22	-380	-713	-1,331	25	-569	-962	-1,441	-144
Gross foreign reserves(-,decline in assets)	-190	-191	-36	-77	-14	5	-17	695	-333
Credits and Investment[1]	417	1,193	1,906	3,100	687	1,294	2,488	3,626	697
Credit to the non-government sector, total	272	847	1,320	1,541	575	1,508	2,315	2,945	614
Enterprises	85	390	557	536	313	865	1,271	1,660	406
short term	85	254	258	194	195	549	699	939	341
long term	1	136	299	341	118	315	572	722	66
Households	187	457	763	1,006	263	644	1,044	1,285	207
short term	50	106	169	194	36	101	148	221	-8
long term	137	351	594	811	226	543	896	1,064	215
Placements with NBS (Repo transactions and treasury bills)	162	448	740	1,637	200	-11	438	849	116
Government, net[2]	-20	-107	-157	-79	-89	-203	-264	-168	-33
MEMORANDUM ITEMS									
Required reserves and deposits	216	1,182	1,535	1,813	-146	242	349	441	-369
Other net claims on NBS[3]	-56	-75	-46	0	13	-44	-104	-44	6
o/w: Excess reserves	-55	-59	-73	-50	20	-56	-103	-92	0
Other items[4]	168	130	166	499	-110	-464	-57	-78	-202
Effective required reserves (in %)[5]	32	38	38	36	34	37	34	31	30

Source: Table P-13, Analytical Appendix.

1) The increases in credits were obtained on the assumption that 70% of total credits are euro-indexed and that all long-term credits to companies and households are thus indexed. The increases in the original dinar values of deposits were calculated at the average exchange rate in the period, and in fx deposits as the difference in balances calculated at the exchange rates at ends of periods. Capital and reserves were calculated at the exchange rates at the ends of periods and do not include the effects of exchange rate differentials from revaluation of all previous items.

2) Credits to government, net: difference between credits to the government and government deposits held in commercial banks; negative sign means that deposits increase is larger that the growth of credits. Government include: Republic level and cities and municipalities.

3) Other net claims on NBS: difference between claims on NBS (cash and excess reserves) and liabilities to NBS.

4) Includes: Other assets; Deposits of enterprises undergoing liquidation; Interbank, net; and Other liabilities, excluding Capital and reserves.

5) Effective required reserve: refers to share of required reserves and deposits in total deposits (households and enterprises) and banks' foreign liabilities. The base for calculating required reserves does not include subordinated debt owing to unavailability of data.

Table T8-5: Structure of New Credit to Households, 2007–2008

	2007				2008
	Q1	Q2	Q3	Q4	Q1
	share in incremental growth of total loans to households,in %				
Total loans to householods	100.0%	100.0%	100.0%	100.0%	100.0%
Cash loans	46.5%	53.6%	36.0%	-3.5%	23.5%
Consumer	24.4%	6.6%	4.3%	8.2%	-28.1%
Adaptation	10.8%	2.2%	3.1%	3.4%	2.8%
Mortgage loans	43.7%	33.8%	49.2%	76.7%	83.7%
Other	-25.3%	3.7%	7.3%	15.3%	18.0%
	share in total stock of loans to households at the end of the quarter, in %				
Total loans to householods	100.0%	100.0%	100.0%	100.0%	100.0%
Cash loans	47.7%	48.5%	47.3%	43.2%	42.2%
Consumer	9.0%	8.7%	8.3%	8.3%	6.3%
Adaptation	1.0%	1.2%	1.4%	1.5%	1.6%
Mortgage loans	26.2%	27.3%	29.4%	33.2%	35.9%
Other	16.2%	14.4%	13.7%	13.8%	14.0%

Housing loans account for four-fifths of new credit to households...

... with less and less cash and consumer loans

Source: Credit Bureau, Association of Serbian Banks.

Banks slower to invest in repos in Q1...

Banks invested far less new funds in repo instruments and 6-m NBS papers than in the preceding period – a new €116 mn relative to about €400 mn in Q4 and Q3 2007. The most probable explanation is the rise in risk premiums in Q1 on the one hand and the depreciation of the dinar and relatively high inflation on the other. This prevented an increase in repo yields for banks, in spite of the repo rate being hiked by almost 5 percentage point in Q1 (more details on the repo rate increases in Box 1, and the yields on repos in Section 9 – Financial Markets, Graph T9-6).

... a new €116 mn

Banks find sources for new credits in funds released from deposits with the NBS....

The predominant sources for new credit in Q1 2008 were funds released from the reserve requirement account with the NBS, new foreign exchange savings, and banks' capital increases.

From the release of funds with the NBS, banks secured €370 mn for new credits and settlement of liabilities in Q1. Of this amount, some €160 mn certainly refers to the settlement of liabilities abroad (45% of the €400 mn that relates to the settlement of foreign liabilities in Q1, according to the balance of payments).

... new foreign exchange savings and capital increases

New household foreign exchange savings grew by €174 mn in Q1, considerably less than in the preceding quarters (€550 mn in Q4 2007; €400 mn in Q3 2007; €300 mn in Q1 2007).

Q1 saw an end to the trend of major inflow of company deposits with the banking sector, which, for no clear reason, had over several consecutive quarters been the dominant source for new bank credits (€840 mn in Q4; €400 mn in Q3 2007). Not only did the inflow cease, but there was an outflow of some €30 mn. In the frame of this overall change, there occurred a redistribution in the currency structure of company deposits, which were reduced by the equivalent of about €360 mn, while company foreign exchange deposits grew by around €330 mn in the same period.

In Q1 banks reduced their foreign liabilities and liabilities to non-residents (item Foreign borrowing, Table T8-4) by as much as €564 mn (increases of some €100 mn in Q4 2007 and €10 mn in Q1 2007). This can be explained with the excess liquidity in the banking system through banks' capital increases in the preceding period, in line with the NBS measure on balancing capital with credit to households. To recall, heavy borrowing abroad was dominant in banks' sources during 2005 and 2006, but as early as 2007 they began settling their liabilities, though not to the extent as in Q1 2008.

The overall banking sector recapitalized by €144 mn in Q1 (€500 mn in Q4 2007; €400 mn in Q3 2007). The reduction of net credit to government of €33 mn in Q1 (increase of €100 mn in in Q4 2007) was an additional source of bank credit and in most part related to the inflow of funds into the government dinar deposit with the banking sector.

Table T8-6. Serbia: Credit to Enterprises and to Households - Impact on Aggregate Demand, 2006–2008

	2006				2007				2008
	Mar.	Jun	Sep	Dec.	Mar.	Jun	Sep	Dec	Mar
	quarterly growth of stock, in millions of euros								
Total loans to enterprises and households from domestic banking sector and direct foreign borrowing by enterprises	512	843	1,008	746	1,053	2,157	1,537	1,542	1,203
Loans to enterprises and households from domestic banking sector	272	575	473	222	575	933	807	630	614
Loans to enterprises	85	305	167	-21	313	552	406	389	406
Loans to households	187	270	306	243	263	381	400	241	207
Direct foreign liabilities of enterprises	239	268	535	524	478	1,224	730	912	590
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	325	573	702	503	791	1,776	1,137	1,301	996
	quarterly growth of stock, in % of quarterly GDP								
Total loans to enterprises and households from domestic banking sector and direct foreign borrowing by enterprises	9.9	14.2	15.4	10.4	16.3	30.1[2)]	20.0	18.0	15.9
Loans to enterprises and households from domestic banking sector	5.3	9.7	7.2	3.1	8.9	13.0	10.5	7.4	8.1
Loans to enterprises	1.6	5.1	2.5	-0.3	4.8	7.7	5.3	4.5	5.4
Loans to households	3.6	4.5	4.7	3.4	4.1	5.3	5.2	2.8	2.7
Direct foreign liabilities of enterprises	4.6	4.5	8.1	7.3	7.4	17.1[2)]	9.5	10.7	7.8
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	6.3	9.6	10.7	7.0	12.3	24.8	14.8	15.2	13.2

Source: FREN.

1) See footnote 1 in Table T8-4

2) 9,1% of GDP relates to one loan to Telekom for the purpose of acquisition of Telekom Republika Srpska.

Central Bank: Balance and Monetary Policy

Primary money drops in Q1 due to the increase of the government deposit with the NBS...

The level of primary money was singificantly reduced in Q1 2008, by 26.2% from the level at end-2007 (Table T8-7). Primary money (H) increased in Q4 as the result of the following net changes in the stocks of certain components: a) an increase of 3.5% of opening H in the NBS net own reserves; and b) a major reduction of 29.7% of opening H in the NBS net domestic assets (Table T8-7). Where NDAs are concerned, a reduction of primary money was recorded in all components: an increase in the government foreign exchange deposit by 21.2% of opening H, an increase in the stock of repo instruments by 8.4% of opening H, a reduction in other NDAs by 0.3% of opening H (Table T7-6).

... and sterilization through the repo market

The total reduction of primary money by 35 bn dinars in Q1 was the outcome of the following absolute changes in its components: a) in Q1 the NBS placed around 4.7 bn dinars as the result of foreign exchange transactions (sale of foreign exchange to banks, net purchases from exchange offices, and purchase of foreign exchange from the government; b) the government increased its dinar deposit with the NBS and thereby withdrew 28 bn dinars, of which 8 bn refers to the deposits of local governments with the NBS; c) the NBS increased the stock of repos at end-Q1 relative to end-2007, and thus sterilized about 11 bn dinars (Table T8-7).

Table T8-7. Serbia: NBS – Foreign Exchange Purchases and Sterilization, 2005–2008[1]

	2005	2006				2007				2008
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
FLOW										
					in millions of dinars, cumulative from the beginning of the year					
NBS own resreves[2]	63,136	4,628	49,014	78,899	145,315	15,055	46,176	60,267	97,182	4,703
NBS own reserves (in euros)	*759*	*53*	*564*	*933*	*1,783*	*188*	*577*	*756*	*1,218*	*58*
NDA	-46,040	-20,755	-54,348	-74,989	-105,744	-46,267	-57,974	-72,100	-71,986	-39,760
Government, dinar credits	-6,077	-1,595	-1,856	-1,858	120	-710	-735	-735	-5,639	267
Government, dinar deposits	-18,576	-4,789	-14,422	-10,572	17,540	-30,939	-56,748	-44,985	-10,107	-28,386
o/w: municipalities	-824	-6,068	-5,339	-5,505	-3,500	-6,768	-13,485	-11,933	-516	-8,329
Repo transactions[3]	-16,829	-14,258	-39,152	-63,335	-132,903	-16,675	-2,094	-34,961	-67,950	-11,243
Other items , net[4]	-4,558	-113	1,082	776	9,499	2,057	1,603	8,581	11,710	-398
H	17,096	-16,127	-5,334	3,910	39,571	-31,212	-11,798	-11,833	25,196	-35,057
o/w: currency in circulation	8,485	-7,825	-4,724	-1,540	14,811	-9,792	-3,395	-3,088	8,488	-6,613
o/w: excess liquidity	3,518	-8,643	-7,916	-2,106	16,516	-13,061	-3,309	-6,293	20,605	-39,840
INCREASE										
					cumulative, in % of opening H[5]					
NBS own resreves[2]	93.4	7.9	52.5	73.5	135.1	11.2	34.5	45.0	72.6	3.5
NDA	-71.2	-25.0	-58.1	-69.4	-93.2	-34.6	-43.3	-53.8	-53.8	-29.7
Government, dinar deposits	-24.0	-5.1	-15.3	-11.2	19	-23.1	-42.4	-33.6	-7.5	-21.2
Repo transactions[3]	-21.8	-15.1	-41.5	-67.1	-141	-12.5	-1.6	-26.1	-50.7	-8.4
Other items , net[4]	-25.4	-4.8	-1.4	9.0	29	1.5	1.2	6.4	8.7	-0.3
H	22.1	-17.1	-5.7	4.1	41.9	-23.3	-8.8	-8.8	18.8	-26.2
o/w: currency in circulation	11.0	-8.3	-5.0	-1.6	16	-7.3	-2.5	-2.3	6.3	-4.9
o/w: excess liquidity	4.6	-9.2	-8.4	-2.2	18	-9.8	-2.5	-4.7	15.4	-29.7
MEMORANDUM ITEMS										
Gross fx reserves (flow, cumulative from the beginning of the year, in euros)	1,860.0	387.7	1,420.9	2,945.0	4,083.1	-233.3	193.9	482.7	610.4	-85.8
Gross fx reserves (in % of opening H in euros)	228.4	43.1	132.1	237.5	307.6	3.2	11.6	27.5	37.7	14.3
H (growth rate, y-o-y, in %)	22.1	13.7	24.3	20.8	41.9	31.3	37.2	24.2	18.8	20.8
Currency in circulation (growth rate, y-o-y, in %)	18.8	16.4	15.6	10.2	27.6	28.0	33.0	25.5	12.4	19.9

Source: Table P-13, Analytical Appendix.
1) Government include: Republic level and cities and municipalities.
2) Net own reserves definition - see Box 4 in QM5.
3) This category included NBS bills, and repo transactions.
4) Other domestic assets, net, include domestic credits (net claims on banks excluding NBS bills and repo transactions; net claims on enterprises together with other assets (capital, reserves and balance items; other assets and liabilities corrected by exchange rate differentials.
5) "Opening H" refers to stock of primary money (H) at the beginning of stated year (i.e. end of previous year).

Box 1. The NBS Raised its Reference Rate by 4.5% in Q1, But Failed to Make its Policy More Restrictive

The NBS raises the repo rate on several occasions...

The NBS raised the reference interest rate from 10.75% in early January to 11.5% in late February and, on 13 March, to 14.5%. The repo rate was hiked again in late April to 15.25%. The central bank resorted to these restrictive moves in reponse to the increasing inflationary pressures. In Q1, the dinar's exchange rate depreciated nominally by 3.9% and by 2.6% in real terms (for more details, see Section 3- Prices and the Exchange Rate). In view of the changes in the interest and exchange rates, the impression is that monetary policy was only mildly restrictive or even neutral. This is confirmed by the fact that the stock of repos in Q1 recorded a relatively small increase relative to the beginning of the year, as real yields and carry trade yields were low, particularly when the rising risk premiums on investments in Serbia due to political factors are taken into account.

... and changes the manner of holding foreign exchange reserve requirements

The NBS did not change the reserve requirement rate in Q1 2008, but did change the manner in which reserve requirements on the foreign exchange base are held. Under the amended regulation, which became effective on 17 May, banks must keep 10% of the calculated reserve requirement on the foreign exchange base in dinars in an account with the NBS, instead of in foreign exchange as until that date, and which still pertains to the remaining 90%. This change most certainly helped to strengthen the dinar's exchange rate as of mid-March to the end of April 2008 (a total of some 4.5%). It was only to be expected that banks would convert some €340 mn into dinars (10% of €3.4 bn, which is the stock of banks' foreign exchange reserve requirements with the NBS, Table T8-9).

Judging by statements issued by the NBS as well as the already evident and possible effects, the primary goals of the measure were a one-off increase in the supply of foreign currency and reining in the depreciation of the dinar. A further goal, as announced, was to increase banks' exposure to the currency risk, and thereby encourage them to collect dinar deposits. In other words, the aim was to decrease the degree of financial euroization. Although the effects on the reduction of euroization cannot be felt immediately and require time, the aim was probably second on the list of priorities. Reducing financial euroization should enhance the functioning of the interest rate channel, i.e. strengthen the tranmission of the effects of the repo rate, which is controlled by the NBS, to all other bank rates.1 Data on interest rates on the interbank financial market – BEONIA and BELIBOR 2w (Graph T9-7) show a very effective transmission of the repo rate to interest rates on interbank liquidity loans (overnight and very short terms of a few days to a few weeks). This, however, is not sufficient to claim that the interest rate channel is functioning, i.e. that changes in the repo rate are transmitted to banks' other lending and deposit rates and to longer maturities. Reducing the level of euroization is a good way to intensify the transmission in the future. Still, note must be taken of the fact that euroization in Serbia is now, as at the start of the reform of the monetary system seven years ago, very high, with foreign exchange deposits accounting for 66% of total deposits with banks.

1 For more details on this mechanism and obstacles to its full functioning in Serbia, see J. Dimitrijević, Monetary Policy – Transmission Channels to Prices: a Year of Inflation Targeting, 2.1., *QM* 10.

Table T8-8. Banks' Reserve Requirements with NBS,[1] Dec. 2004–Feb. 2008

	12/2004	05/2005	07/2005	10/2005	11/2005	03/2006	04/2006	05/2006	11/2006	12/2006	10/2007
Rate on:											
						in %					
DINAR DENOMINATED BASE	21	20	20	18	18	18	18	18	15	10	10
more then 1 month dinar time deposits											5
non-resident accounts with maturity up to 2 years:								60	60		
non-resident accounts with maturity over 2 years:								40	40		
FX DENOMINATED BASE	21	26	29	35	38	40	40	40	40	45	45
foreign borrowing with maturity up to 2 years[2]							60	60	60	45	
NEW FX SAVINGS DEPOSITS[3]	47	47	45	41	38	40	40	40	40	40	40
SUBORDINATED CAPITAL						20	20	20	20	20	20
Key regulation changes:	Introduction of required reserves on foreign borrowing	Separation of the dinar denominated from the fx denominated base			The 38% ratio applies to new fx savings deposits	Introduction of required reserves on subordinated debt					

Source: NBS

1) Applied to average daily book value of the base from the previous calendar month. Effective from the 17th of the next month. Bank is obliged to hold average daily reserve balance at the level of the accounted reserve during the entire accounting period.

2) Up to April 2006 and since December 2006, banks' foreign borrowing was treated equally, irrespective of the repayment period. This sub-category therefore is invalid until March 2006, i.e. the uniform fx base was applied to all foreign inflows on the basis of commercial banks' borrowing.

3) Up to December 2005, reserve requirements on new fx savings of households (fx deposits collected after 30 June 2001) were regulated by a special NBS decision. In December 2005, the regulation became uniform since the NBS introduced a unique reserve requirement rate for all commercial banks' fx accounts.

Note:

Under current regulations, banks' reserve requirements with the NBS include:

- dinar base: dinar deposits (including the government), dinar credits (including the government), securities and other dinar liabilities;
- fx base: fx deposits (including the government), fx-indexed dinar deposits, fx credits (including the government), subordinated capital, securities, other fx liabilities and other fx funds received from abroad for bank services on behalf and for the account of third persons.

Excluded from the dinar/fx-denominated base are: liabilities to the NBS; up to December 2005 – liabilities arising from household fx savings deposited after 30 June 2001; the amounts generated with the settlement of debts for FFCDs, and those arising in the rescheduling of debt to creditors from the Paris and London Clubs. Amount of long-term housing mortgage credits insured with the National Corporation for Housing Loan Insurance is deducted from the required reserves base.

From 17th of May 2008, 10% of calculated fx based reserve is required to be held in dinars countervalue.

Government makes the biggest contribution to increasing the NBS net own reserves...
... by converting its foreign exchange funds

The NBS's net own reserves rose by only €58 mn in Q1 (€460 mn in Q4 2007, Table T8-8). Transactions on the foreign exchange market – sale of foreign exchange to banks and purchases from exchange office – reduced the net own reserves by €168 mn in Q1. The overall net increase in NBS's net own reserves was due to the purchase of foreign exchange from the government. Exact data on this transaction is not available, but since the surplus of the consolidated government sector was only some 3.4 bn dinars, almost the whole inflow into the government's dinar deposit with the NBS (28 bn dinars, Table T8-7, less 3.4 bn dinars of the consolidated surplus, Table T7-1, Section 7, i.e. about 25 bn dinars or €300 mn) relates to the conversion of foreign exchange from the government deposit with the NBS into dinars. This transaction, consequently, was crucial for the increase in the NBS's net own reserves in Q1. In spite of the conversion, the government foreign exchange deposit increased in Q1 by €160 mn (Table T8-8). The converted €300 mn and the increase of €160 mn most probably relate to privatization proceeds in Q1.

The reduction of the NBS foreign exchange reserves in Q1 by €101 mn (Table T8-8) does not tally with balance of payments data, namely that there was a mild rise of €29 mn in the NBS foreign exchange reserves. The discrepancy, however, can be acribed to a change in the balance of payments methodology which, starting from Q1 2008, takes into account changes in the prices of gold and securities that are included in the foreign exchange reserves in the period to which the balance of payments refers (in this case Q1 2008). The monetary accounts that are the source of the data shown in Table T8-8 most probably have not yet taken into account this factor of change in the value of the NBS foreign exchange reserves.

Table T8-9. Serbia: Structure of Foreign Exchange Reserves, Stocks and Flows, 2005–2008

	2005	2006				2007				2008
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
					stock, in millions of euros					
NFA of Serbia	2,544	2,303	2,674	4,403	5,164	5,413	6,130	6,347	7,116	7,246
Commercial banks, net	-1,451	-2,042	-2,921	-2,920	-3,188	-3,213	-2,918	-2,998	-2,379	-2,147
Gross foreign reserves	784	594	593	748	707	693	712	690	1,403	1,070
Foreign liabilities	-2,235	-2,636	-3,514	-3,668	-3,895	-3,906	-3,630	-3,688	-3,782	-3,218
NBS, net	3,995	4,345	5,595	7,323	8,352	8,626	9,048	9,345	9,495	9,394
Gross foreign reserves	4,969	5,357	6,390	7,914	9,052	8,819	9,246	9,535	9,662	9,577
Foreign liabilities	-974	-1,011	-795	-591	-700	-193	-198	-190	-168	-183
IMF	-748	-787	-575	-373	-181	6	1	3	4	3
Other liabilities	-226	-225	-220	-218	-519	-200	-199	-193	-171	-186
NBS, NET RESERVES-STRUCTURE										
1. NBS, net	3,995	4,345	5,595	7,323	8,352	8,626	9,048	9,345	9,495	9,394
1.1 Commercial banks deposits	-1,725	-1,995	-2,858	-3,126	-3,210	-3,358	-3,478	-3,584	-3,409	-3,411
1.2 Government deposits	-220	-247	-123	-1,213	-1,309	-1,247	-1,160	-1,172	-1,034	-874
1.3 NBS own reserves (1.3 = 1 - 1.1 - 1.2)	2,050	2,103	2,614	2,983	3,833	4,021	4,410	4,589	5,051	5,109
					in millions of euros, cumulative from the beginning of the year					
NFA of Serbia	535	-240	131	1,859	2,620	249	967	1,183	1,952	131
Commercial banks, net	-1,223	-591	-1,469	-1,468	-1,737	-24	270	190	809	232
Gross foreign reserves	-29	-190	-191	-36	-77	-14	5	-17	695	-333
Foreign liabilities	-1,194	-401	-1,278	-1,433	-1,660	-10	266	207	114	564
NBS, net	1,758	350	1,600	3,328	4,357	274	696	993	1,143	-101
Gross foreign reserves	1,860	388	1,421	2,945	4,083	-233	194	483	610	-86
Foreign liabilities	-102	-37	179	383	274	507	502	510	532	-15
IMF	-44	-38	173	375	567	187	182	184	185	0
Other liabilities	-58	1	6	8	-294	320	320	327	348	-15
NBS, NET RESERVES-STRUCTURE										
1. NBS, net	1,758	350	1,600	3,328	4,357	274	696	993	1,143	-101
1.1 Commercial banks deposits	-904	-270	-1,133	-1,401	-1,485	-148	-269	-374	-200	-2
1.2 Government deposits	-95	-27	97	-993	-1,089	63	149	137	275	161
1.3 NBS own reserves (1.3 = 1 - 1.1 - 1.2)	759	53	564	933	1,783	188	577	756	1,218	58

Source: NBS

Note: NBS foreign exchange liabilities are treated differently in the monetary survey and in the NBS balance sheet. In the monetary survey, this category includes IMF credits and other foreign liabilities. In the NBS balance sheet, however, it also includes commercial banks' fx deposits (reserve requirement funds and other fx deposits).

Table T8-10. Net Monthly Transactions on Foreign Currency Market - NBS, Banks and Exchange Offices, 2006–2008

	Interbank fx market (NBS-commercial banks)	Exchange offices	Total	
(-, net sale of foreign currency by NBS)				
	in millions of euros			
Monthly average January-October 2006	-64	151	87	
November 2006	260	131	391	
December 2006	154	86	240	
January 2007	-412	42	-370	
February 2007	-14.8	86	72	-238 in Q1 2007.
March 2007	-54.1	114	60	
April 2007	0	137	137	
May 2007	-75.9	160	84	+288 in Q2 2007.
June 2007	-19	86	67	
July 2007	-22	94	72	
August 2007	-23	106	83	+195 in Q3 2007.
September 2007	-20	60	40	
October 2007	-4	72	68	
November 2007	-20	76	56	+212 in Q4 2007.
December 2007	-40	128	88	
January 2008	-57	63	6	
February 2008	-129	39.6	-89	-168 u Q1 2008.
March 2008	-105	20.6	-84	

Source: NBS

9. Financial Markets

Q1 2008 saw a sharp drop in the turnover volumes on the domestic stock and bond markets. Relative to the previous quarter, the value of the stock turnover and the number of transactions performed fell by 50.5 % and 40.5% respectively, while the volume and turnover of FFCD bonds went down by around 49% and 45% respectively. The Belgrade Stock Exchange indices dropped to their annual lows and lost between 19% and 25% of their value. The decline in both the domestic stock exchange and the stock exchanges in the region was a consequence of the global financial crisis, which increased international investors' aversion to risk. A higher drop of the Belgrade stock exchange index relative to the indices of other regional stock exchanges indicates that political instability in Serbia has exacerbated the observed negative trend. All domestic investment funds recorded a drop in the value of the investment unit, but lower in percentage terms than the loss of the Belgrade Stock Exchange indices over the same period. The NBS monetary policy measures increased the nominal yield on 2w repo operations by as many as 450 basis points in Q1 and by an additional 75 bp in early Q2, so that the reference rate stood at 15.25%. This increase pulled real repo yields, too, out of the negative area in late Q1, measured both relative to inflation and relative to the movements in the euro/dinar rate. Another consequence of the increase in the NBS reference rate was also a parallel shift of the average FFCD bond yield curve, while the curve itself remained inverted.

Q1 saw a sharp drop in the turnover volume on the stock market measured both by the number of performed transactions and by the dinar-denominated value

In Q1 2008, the downward trend in the turnover volume, which started in Q3 2007 (Graph T9-1), continued on the domestic stock market. Unlike in the previous quarters, the drop in the volume was much steeper in Q1. Measured by the number of performed transactions, the volume fell by 40.55% relative to Q4 2007, while the total value of the volume declined to 16.58 bn dinars, which was a reduction by 50.5%. Since the number of transactions fell by less than their total value, the value of an average transaction also fell, and in Q1 amounted to around 486,000 dinars, or by 16.74% less than in Q4 2007.

When observed in relation to Q1 2007, the drop in the volume is even sharper. The number of performed transactions and the total value of turnover declined by 48.91% and 58.07% respectively.

The fall on the discontinuous market was sharper

Both the discontinuous and continuous market segments contributed to the decline in volume in Q1 2008, but not equally. The discontinuous market segment experienced a steeper drop in percentage terms than the continuous one – measured both by the number of performed transactions and by the total dinar-denominated value. Relative to Q4 2007, 49.06% fewer transactions were performed on the discontinuous market segment, while the continuous segment fell by 31.24%. The total dinar- denominated value of the discontinuous segment volume declined by 69.60% in Q1 2008, while on the continuous segment the decline was 30.48%.

In Q1, the five most active shares in terms of the trade volume value accounted for almost 60% of the total stock turnover on the continuous segment

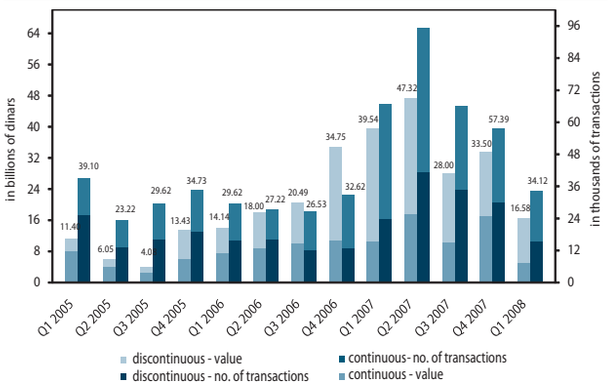
In Q1, the five most active shares in terms of the trade volume value accounted for almost 60% of the total stock turnover on the continuous segment. These five most active shares included: AIKB (AIK Banka), AGBN (Agrobanka), SJPT (Soja Protein a.d. Bečej), MTBN (Metals Banka) and ENHL (Energoprojekt Holding). Just as in the previous quarters, AIKB was absolutely the most active share and accounted for slightly more than 34% of the value of the total volume on the continuous segment of the stock market.

As for market capitalization, financial intermediation was in the leading position in Q1 as well, with a market capitalization amounting to 309.4 bn dinars in the last month of the quarter.

The decline in the value of the Belgrade Stock Exchange indices continued into Q1 2008, even more sharply than in the previous quarter (Graph T9-2). Between the first and the last trading day in Q1 of the current year the BELEX15[1] and SRX[2] EUR indices lost around 25% of their value, while BELEXline[3] lost 19.35%. In early February the indices experienced a brief recovery,

1 Index of the most liquid shares of the Belgrade Stock Exchange.
2 Index of the eight most liquid shares of the Belgrade Stock Exchange calculated by the Vienna Stock Exchange (Wiener Börse).
3 Overall stock index of the Belgrade Stock Exchange.

Graph T9-1. Stock Trading Volume, Value and Structure, 2005–2008



Source: www.belex.co.yu.

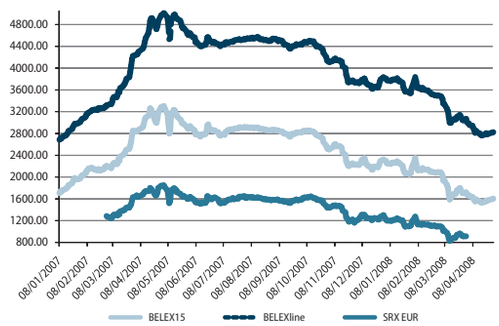
when they actually reached their all-time highs for the observed quarter. The all-time highs were reached on 4 February and, for the indices BELEX15, BELEXLine and SRX EUR, they amounted to: 2,346.24, 3,835.16 and 1,272.71 index points respectively. After that, a sudden slump in the value of all three indices occurred, which continued up until mid-March, when the indices reached their all-time lows in Q1 2008. For the SRX EUR index, the value of 827.75 index points was reached on 13 March, which was its lowest value since the calculation of this index began, and on the same day BELEX15 dropped to the value of 1,589.33 index points, its lowest since December 2006. On the following day, BELEXLine also dropped to its lowest value since last January with an attained 2,995.39 index points. Although the second half of March saw an upward adjustment of the indices, the general trend remained negative, at both the quarterly and monthly levels. In March alone, the BELEX15 index lost 17.63% of its value, which was its largest monthly loss ever. The drop in the values of the indices continued in April, too.

The decline in the Belgrade Stock Exchange indices was followed by a similiar decline on regional stock exchanges

In Q1 other stock exchanges in the region also recorded a decline in value of the approximately same magnitude as the Belgrade Stock Exchange. The BIRS of the Banja Luka Stock Exchange and the Macedonian MBI-10 lost the least of their value, since they declined by 16.81%, and 12.78% respectively. The Montenegrin MOSTE and NEX20 indices lost 24.66%% and 24.51% respectively, while the Croatian Crobex, the Romanian BET and the Bulgarian SOFIX lost 26.70%, 27.67%, and 29.01% respectively.

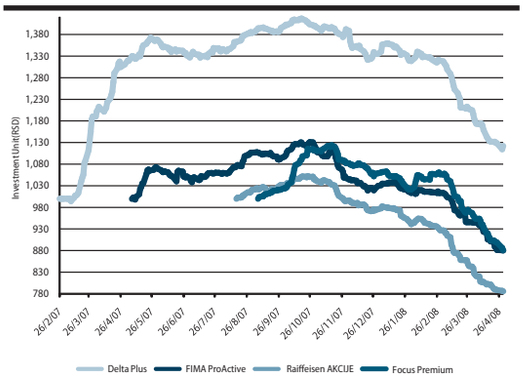
For the most part, the decline in the regional stock exchanges and the Belgrade Stock Exchange was a consequence of the global financial crisis. Big investors substantially reduced investment in more risky undertakings, which, of course, include transition markets. The Belgrade Stock Exchange was additionally burdened by political uncertainty, which was heightened in Q1. Instability reduces the possibility for investors to predict future economic developments, so more investors wary of risks are withdrawing, while other investors exercise more caution in decision-making regarding new investment – which contributed to the drop in the trade volume on the domestic capital market.

Graph T9-2. BELEXfm, BELEX15 and SRX EUR Indices, 2007–2008



Source: www.belex.co.yu, www.wienerborse.at

Graph T9-3. Delta Plus, FIMA ProActive, Raiffeisen AKCIJE and Focus Premium Investment Funds, 2007–2008

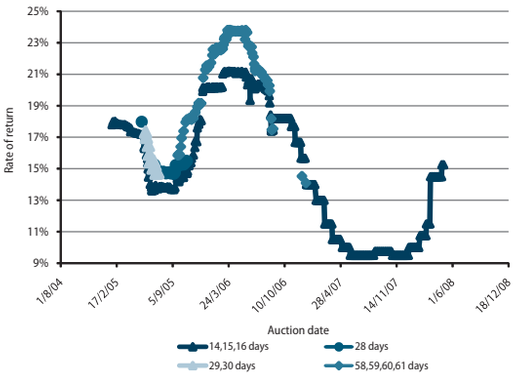


Source: www.deltainvestments.co.yu, www.fimainvest.com, www.focusinvest.biz, www.raiffeiseninvest.co.yu

Investment funds also recorded losses in value in Q1 (Graph T9-3). The investment units of domestic funds lost less in percentage terms than the Belgrade Stock Exchange indices over the same period. The funds FIMA ProActive and Focus Premium lost 8.35% and 8.84% respectively. The sharpest drop in Q1 2008 was recorded by the fund Raiffeisen AKCIJE, whose investment unit lost 13.79% of its value, while the fund Delta Plus lost 10.12%. In the same period, the BELEX15 index lost around 25%. When the performance of the funds is observed in the period from their establishment to the end of Q1 2008 –they all, with the exception of Delta Plus, had a negative growth. Since not all the funds started trading at the same time, which is a problem when making a proper comparison of their performances, the annual yields earned by the funds from their establishment to the end of Q1 can be observed. The annual yield of the Delta Plus fund since its establishment stands at 18.73%, while the yields of the funds FIMA ProActive, Raiffeisen AKCIJE and Focus Premium are -6.02%, -25.12% and -5.84% respectively.

In Q1 2008, the NBS raised the reference rate by 450 basis points to 14.5%. Another increase of 75 bp, to 15.25%, occurred in late April

Graph T9-4. Repo Yields by Maturity, 2004–2008



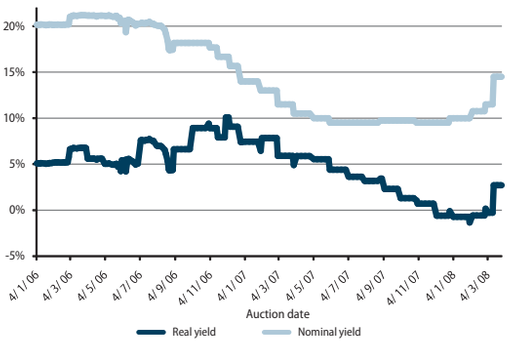
Source: NBS.

In the course of Q1 2008, the NBS raised the reference interest rate as many as three times, namely in total by 450 bp (Graph T9-4). In early Q1, the rate on 2w repos stood at 10%, after a rise of 50 bp in late 2007. The first increase of 75 bp took place at a meeting of the Monetary Board in early February, which was followed by another increase of 75 bp in late February. Finally, in mid-March, the Monetary Board raised the NBS reference rate by as many as 300 bp, to 14.5%. In late April, the NBS continued with the policy of reference rate increases, and raised the rate by another 75 bp, to 15.25%.

Following negative values in mid-March, real yields on repo operations were positive again

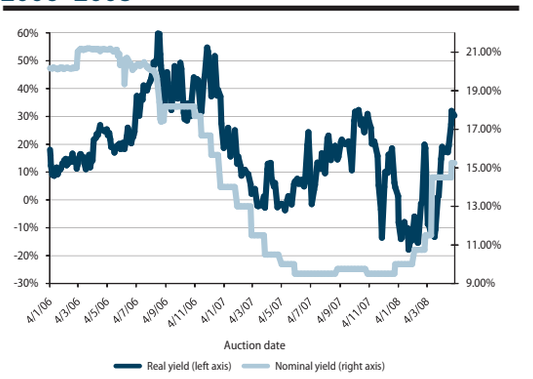
Although the NBS raised the reference rate on 2w repos several times during Q1, real yields were negative up until the last change in the nominal rate. Measured relative to the annual inflation rate, real yields ranged from -0.71% to –0.29% and grew to 2.71% only after the increase in the reference interest rate by 300 bp in mid-March (Graph T9-5). Measured relative to the movements in the euro/dinar rate (a change in the exchange rate from the previous three months[4]), real yields on NBS repo operations were also negative for the most part of Q1. After the increase in the reference rate in mid-March and the dinar's appreciation in late March, these yields, too, became positive and reached 1.40% toward the end of the quarter (Graph T9-6).

Graph T9-5. Real (with regard to inflation) and Nominal REPO Yields, 2006–2008



Source: NBS.

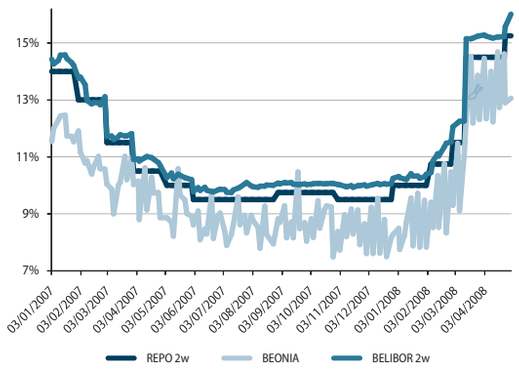
Graph T9-6. Real (with regard to exchange rate) and Nominal REPO Yields, 2006–2008



Source: NBS.

4 A detailed explanation of such an approach to the calculation of the real return rates is provided in Spotlight on: 1 " The Exchange Rate and NBS Policy in Serbia: 2002–2006", QM 5.

Graph T9-7. REPO, BEONIA i BELIBOR 2W rates, 2007–2008



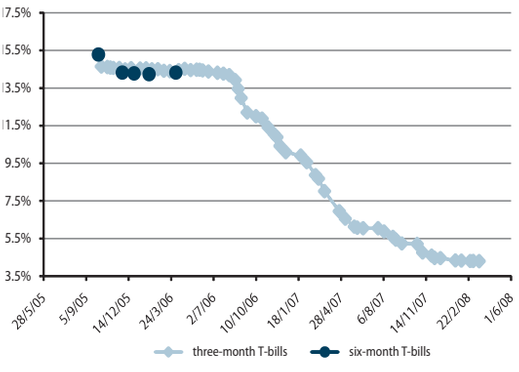
Source: NBS & Reuters.

Interest rates on the money market followed the nominal repo rate (Graph T9-7). In the course of Q1, the spread between the repo rate and the 2-week BELIBOR (the same maturity as repo agreements) widened, while the spread between the repo rate and the overnight BEONIA rate was largely stable.

After a long downward trend, the yields on Treasury Bills of the Republic of Serbia lost a mere 4 bp[5] in Q1. In the last auction that quarter, an interest rate of 4.29% (Graph T9-8) was achieved. Like in the previous quarters, only three-month T-bills were offered in auctions, and the issues were worth 400 mn, 800 mn or one billion dinars. The total nominal value of all T-bills issued in the course of Q1 amounted to 3.8 bn dinars, the same as in Q3 and Q4 2007.

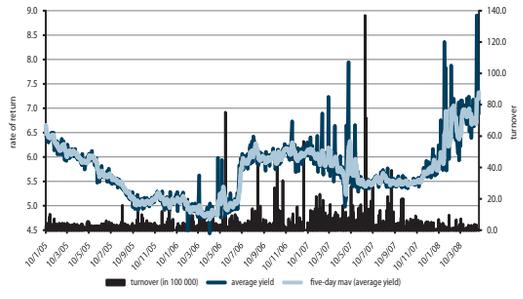
Graph T9-8. Yields in T-Bill Market, 2005–2008

Yields on Treasury Bills of the Republic of Serbia stagnated in Q1



Source: MoF.

Graph T9-9. Average Yield on FFCD Bonds[1)], 2005–2008



Source: www.belex.co.yu.
1) The graph does not depict extraordinary yield of A2006 bond of 42% on March 10, 2006.
Note: The graph was derived as the weighted average yield on securities from A2006 to A2016. The turnover values for each of securities were used as weights. Left axis refers to average yield, while the right axis refers to total FFCD trade volume.

The volume and turnover on the FFCD bond market were halved relative to the previous quarter

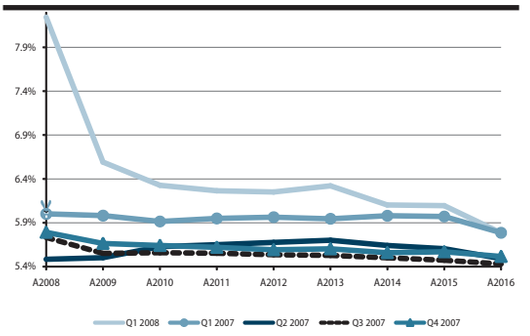
In Q1 2008, the downward trend in the volume and turnover on the FFCD bond market, which started in Q2 last year (Graph T9-9), continued. The actual volume amounted to around €13.2 mn euros, and the turnover to €10.2 mn euros, which was less than in the previous quarter by 48.86% and 44.93% respectively (in Q4 2007 the volume and turnover went down by 49.59% and 49.81% respectively, relative to Q3 2007). If the y-o-y change is observed relative to Q1 2007, the volume and turnover went down by 74.35% and 72.10% respectively.

Q1 2008, the FFCD bond market saw a strong increase in average yields on all maturities

The rise in the yields on FFCD bonds also continued in Q1 2008, so that the average yield curve moved farther up (Graph T9-10). The highest rise was that of the A2008 bond, whose average yield went up by 245 bp, while the lowest rise of 27 bp was recorded by the A2016 bond. The increase in yields was stronger than in the previous quarter, when the average yields went up between 6 and 11 bp. Unlike in the previous quarter, the curve shifted upward relative to Q1 2007. The parallel upward shift of the yield curve was primarily a consequence of the increase in the NBS reference rate, which triggered a rise in all interest rates on the domestic market. The yield curve in Q1 remained descending, i.e. bonds with shorter maturities had a higher average yield than those with longer maturities.

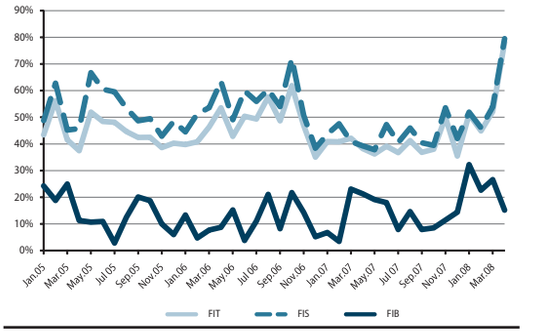
5 In Q3 and Q4 2007 yields on T-bills dropped by 80 bp and 75 bp respectively.

Graph T9-10. FFCD Bonds Average Yield Curves



Source: www.belex.co.yu.

Graph T9-11. Foreign Investor Participation in Turnover, 2005–2008



Legend: FIT- Foreign Investors Participation in Total Turnover, FIS-Foreign Investors in Equity Market, FIB- Foreign Investors in Bond Market.

Foreign investors' participation in the turnover on the Belgrade Stock Exchange went up in early Q1 2008, to reach its all-time high on the stock market and in the total turnover in April, while on the bond market it dropped to the December 2007 level

Relative foreign investors' participation in the turnover on the Belgrade Stock Exchange went up in early Q1 2008. On the stock market (the FIS curve, Graph T9-11) the average foreign investors' participation in Q4 in the turnover increased by around 5.6% relative to the previous quarter. In April, a participation of 79.5% was recorded, which was an all-time high of foreign investors' participation. On the bond market (the FIB curve, Graph T9-11) the increase in participation was 15.7% on average – with the largest contribution occurring in January when it went up to 32.25% from 14.39%, its level at end-2007. After January, foreign investors' participation on the FFCD bond market declined and amounted to 15.20% in April. After some time, foreign investors' participation in the total turnover of the Belgrade Stock Exchange (the FIT curve, Graph T9-11) exceeded 50% in January 2008. In April, foreign investors' participation in the total turnover reached its all-time high of 78.16%.

SPOTLIGHT ON:

Macroeconomic and Fiscal Aspects of Decentralization

Lazar Šestović*

This paper analyzes the public finances of local governments (municipalities, cities and provinces) in Serbia. It examines to what extent local budgets affect Serbia's overall fiscal deficit and discusses possible mechanisms and measures that could be used to align the revenues and expenditures of different levels of government. Local governments currently account for almost one-fifth of total public spending, and this is set to go up even further, thus generating wide deficits in the consolidated general government balance. The capacity of local governments to borrow will be enhanced after the state-owned property they currently use is restituted to them pursuant to the Constitution, which will additionally boost public spending growth. If adverse macroeconomic consequences are to be avoided, there must be tighter coordination of fiscal policy at the local and central levels.

1. Introduction

The possibility of Serbia achieving macroeconomic stability and continuing the restructuring of its public finances has and will largely depend on the activities of the parts of the government sector at the local level.[a)] In many countries, the fiscal performance of local governments (as used here, "local governments" denotes municipalities, cities and the provincial government) caused numerous difficulties in the conduct of sound macroeconomic policies. The reason was that they often ran high deficits, borrowed excessively and without any control, accumulated arrears to their suppliers, etc. This paper will analyze the movements in revenue and expenditure of the local levels of government in Serbia, the extent to which they impacted macroeconomic developments in the country, and finally – what mechanisms and measures Serbia could use to align the activities of different levels of government. The analysis was prompted by the fact that local governments manage increasingly significant funds (at present, nearly one-fifth of total public spending is executed through them), as well as the prospect of their receiving even more funds to manage in the near future through the property restitution mentioned above. At the same time, this part of general government has considerably deteriorated the composition of its expenditure and started to run high deficits. In order to arrive at a conclusion on the quality of finances at the lower level of government, they are compared to the central government's fiscal performance, the focus of attention for most analysts. The main conclusion is that the composition of expenditure at the local level has deteriorated significantly, in particular in the 2004–2005 period, when a strong fiscal adjustment was carried out at the entire government sector level in Serbia. Precisely in that period, public finance adjustment was driven by cuts in expenditures for wages and subsidies at the central level, which did not coincide with the adjustment at the local level. The closing part of the paper deals with possible forms of an institutional framework for the control of overall public finances in the country, in order to make certain proposals for Serbia. This is important, since the budget deficits generated at the local level of government accounted for as much as one-third of the country's total deficit last year, despite the recent improvement in the Ministry of Finance's capacity to monitor overall public finances (*ex post facto* in most cases). In addition, the local level of government has contributed negatively to the widening of the current account deficit, which is an additional reason for this analysis.

a) For the purposes of this paper, municipalities, cities and the Autonomous Province of Vojvodina were analyzed as sub-national governments.

* World Bank Serbia macroeconomist. This text builds on work done in the field of fiscal and macroeconomic impact of decentralization, covered, among other issues, in the World Bank's recent study, Serbia: decentralization and local service provision, published in March 2008.

2. Fiscal Performance of the Local Levels of Government

If general government is observed, it is evident that its budgets have passed through three phases since the beginning of transition, that is, since 2001. The first phase, 2001–2003, was characterized by rising public spending and somewhat slower revenue growth, so that in each of those years Serbia ran a fiscal deficit (see Table L 1-1). In the course of the second phase in 2004 and 2005 – Serbia performed an extremely successful public finance adjustment, the results of which were balanced budgets or surpluses. In the third phase, over the last two years (2006–2007) – Serbia has unfortunately made a U-turn in public finances and ran deficits again on account of increased public spending. As Table L 1-1 shows, during all three phases, the total expenditure of the central government and of lower levels of government as a whole moved along more or less the same path. However, there were significant differences in the composition of those expenditures and this will be the subject-matter of the analysis in the text below.

Table L1-1. General Government Fiscal Performance, in % of GDP

	2001	2002	2003	2004	2005	2006	2007
Total revenues, incl. grants	35.8	40.1	40.7	41.5	41.4	40.8	41.2
Total expenditures	36.2	43.4	43.7	41.4	40.,	42.3	43.0
o/w Republican government	16.7	20.9	24.3	23.7	22.8	22.6	23.7
o/w local governments	3.7	6.7	7.2	6.9	6.8	7.3	8.1
Ballamce, after grants	-0.4	-3.4	-2.8	0.0	0.8	-1.5	-1.8

Source: IMF; Serbian Ministry of Finance.

The differences in the composition of public spending at the local and central levels came to the fore especially in the second phase (2004–2005), when the central government led the successful fiscal adjustment, while the fiscal results of local governments as a whole largely cancelled out what the central government and its Ministry of Finance had achieved. An overview of the movements in public spending at all levels of general government is important for ensuring that maximum effects of fiscal adjustment are achieved and in order for that whole process to be rendered sustainable in the medium and long run (so as to avoid U-turns of the kind that have occurred in Serbia over the past few years). An additional reason for an analysis of local finances is also the fact that almost one-fifth of public funds is spent through provincial, city and municipal budgets, and their share has been constantly growing over the recent years (see Table L1-2). So far, the role of those levels of government was mostly neglected due to the unavailability of data and difficulties in the coordination of activities at that level of government.[b)]

b) Several models for coordinating public finances at various government levels are outlined at the end of this paper.

Table L 1-2. Shares of Local Government Revenue and Expenditure in the Consolidated General Government Balance, in %

	2001	2002	2003	2004	2005	2006	2007
Revenues	11.2	17.2	18.1	17.6	17.1	17.6	18.2
Expenditures	10.3	15.5	16.6	16.6	16.8	17.2	18.7

Source: Own calculations based on IMF and Serbian MoF data.

Local governments' revenue has undergone many changes since 2001. These changes occurred as a consequence of numerous modifications of the Serbian tax system, amendments to the Law on Local Self-government, the introduction of new legislation on local finance and the powers of the autonomous province and, finally, the adoption of Serbia's new Constitution. Right now, lower levels of government (municipalities, cities and the province) have three basic sources of finance: (1) their own revenue (taxes, fees, charges, etc.), (2) shared revenue with other levels of government, and (3) different types of transfers from the central budget. Own and shared revenues of local governments increased in the first years (the rise between 2001 and 2004 amounted to 1.9 percentage points of GDP). In 2005, these revenue sources fell (from 4.9% of GDP in 2004 to 3.7% in 2005), primarily as a result of the VAT introduction and the automatic elimination of

the sales tax, which used to be shared between the local and central governments.[1] Due to that decline in own revenue, the central government increased transfers to the local governments. Own revenue in terms of the narrow definition accounted for 16.2% on average of total local government revenue. After adding non-tax revenue to this revenue group, as well as capital revenue, their average share in the total revenue of local governments in the past seven years stood at around 36.7%. Over the past seven years, transfers from the central budget also went up considerably, which in part demonstrated a different political attitude of the central government to the local level relative to the practice in the 1990s, when the finances and competences of the lower levels of government were mostly cut back. This was particularly obvious in the provisions of the newly adopted Laws on Local Self-government and Local Finance. Finally, it should be noted that a number of municipalities also benefited from the privatization process initiated after 2001.[2]

The changes that occurred in the composition of expenditure had a positive impact on total available funds for local governments as well. The laws cited above and other regulations enabled a strong increase in the budgets of local governments, which was to a large extent a reflection of a new, different political attitude toward decentralization after the 2000 political change.[c)] And while the revenue of local governments was strongly increased, the scope of their responsibilities and competences was not commensurately increased, thus creating a comforting fiscal position. As they came out of the reforms as net winners, local governments have strongly increased the funding for their existing competences in the past few years since the reforms started. Furthermore, many municipalities and cities recorded high surpluses for several years in a row.[3] This was most evident in 2002, when the total revenue of local governments went up from 4% to 6.9% of GDP in just one year. This rise in revenue was primarily a result of the increased tax revenue of local governments, as well as of higher transfers from the central budget. The taxes collected rose from 2.8% to 4.7% of GDP, while the transfers went up from a very low 0.1% of GDP to 1.3%. After the sudden surge in local government revenue in 2002, in 2003 it went up by another 0.5% of GDP, and maintained a constant level ranging between 7.1% and 7.5% of GDP after that. The peak level of total available funds for local governments was attained last year, when they accounted for 7.5% of GDP. It is important to note here that all the discussions in this paper are based on the consolidated data of the Serbian Treasury; there are indications, however, that a part of the own revenue of local governments, as well as the revenue of certain extrabudgetary institutions whose founders are local and provincial governments are not adequately covered by the reporting system. This means that both the revenue and expenditure sides of those levels of government are, in all likelihood, slightly underestimated and, consequently, their fiscal and general macroeconomic impact as well.

c) During the 1990s local authorities lost many of their powers, and much of their revenues.

The size of local government expenditure had a similar path as in the case of revenue, but changes in the composition of their expenditure had a considerably worse trend of movement and thus, by default, a more adverse impact on the macroeconomic situation. In the first couple of years (2001–2003), expenditure grew strongly, which was followed by a phase of gradual reduction in spending at the local level of government (2004–2005) and finally, in the last two years, public spending at that level surged rapidly. In general terms, this is similar to the movements in public spending at the central level. However, if the compositions of public expenditure at these two levels of government are compared, significant differences become apparent. Moreover, it can be said that there are two completely diverging trends in the movements of the shares of certain expenses, which were particularly obvious in the phase of the successful fiscal adjustment (2004–2005). The most important thing to be mentioned here, which will be discussed in more detail later, is the fact that, at the local level of government, spending on wages and on subsidies went up tremendously. Thus the wage bill at the local level

1 Transfers from the national budget were increased whenever changes to the tax system were introduced that could have led to drops in local authorities' own revenue. This was the case, for instance, in 2004, when the salary fund tax was abolished.

2 According to several municipal officials, the distribution and payment of privatization income could be made more transparent and predictable.

3 This has become especially apparent in larger cities, which have seen their own revenue increase substantially due to greater investment and faster housing construction.

increased from 0.7% of GDP (in 2001) to a record-high 2.3% of GDP last year, which was more than a threefold increase in the share in GDP for that category of expenses. In addition, local governments almost tripled their spending on subsidies (predominantly to their local public utilities). Thus, subsidies as share in GDP went up from 0.47% in 2001 to 1.31% last year. While the rise in the spending on the cited two categories is certainly an adverse trend, it is important to say that there were also positive developments, reflected primarily in the fact that local level capital expenditure, too, grew strongly (from a minimum of 0.1% of GDP in 2001 to a high 1.6% in 2007).

Table L 1-3. Consolidated Balance of Lower Levels of Government, in % of GDP

	2001	2002	2003	2004	2005	2006	2007
Total revenue and grants	4.0	6.9	7.4	7.3	7.1	7.2	7.5
Total revenue	4.0	6.9	7.4	7.3	7.1	7.1	7.5
1. Current revenue	4.0	6.9	7.0	6.9	6.6	6.7	7.0
Tax revenue	2.8	4.7	5.0	4.9	3.7	3.9	3.4
Shared taxes	2.2	3.5	4.2	3.3	2.5	2.7	2.3
1. Personal income tax	0.2	0.9	1.6	1.5	2.5	2.6	2.2
2. Corporate income tax	0.0	0.0	0.1	0.0	0.0	0.1	0.1
3. VAT (retail sales) tax	1.0	1.5	1.5	1.8	0.0	0.0	0.0
4. Payroll tax	1.0	1.1	1.0	0.0	0.0	0.0	0.0
Own-taxes	0.7	1.1	0.8	1.5	1.2	1.2	1.1
1. Property tax	0.3	0.4	0.4	0.8	0.9	0.9	0.8
2. Other taxes	0.4	0.8	0.4	0.7	0.3	0.4	0.4
Non-tax current revenues	1.1	1.0	0.7	1.0	1.2	1.1	1.3
Transfers from the other levels of gov.	0.1	1.3	1.3	1.0	1.7	1.7	2.3
2.Capital revenue	0.0	0.0	0.4	0.4	0.5	0.5	0.5
3. Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure and net lending	**3.7**	**6.7**	**7.2**	**6.9**	**6.8**	**7.3**	**8.1**
Total expenditure	3.7	6.7	7.2	6.9	6.8	7.3	8.1
Current expenditure	3.6	6.3	7.1	6.7	5.9	5.9	6.1
Expenditure on goods and services	1.7	3.6	4.7	4.5	3.6	3.5	3.8
Wages and salaries (gross)	0.7	1.9	1.8	1.7	2.1	2.1	2.3
Purchases or goods and services	0.9	1.7	2.8	2.8	1.6	1.4	1.5
Interest payment	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Subsidies and other current transfers	1.9	2.6	2.4	2.2	2.3	2.4	2.3
Subsidies	0.5	0.8	0.6	0.6	1.5	1.1	1.3
Transfers to households	1.4	1.8	1.8	1.7	0.8	1.2	1.0
Capital expenditure	0.1	0.5	0.1	0.1	0.9	1.4	1.6
Other expenditures incl. reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Overall budget balance (cash)	**0.3**	**0.2**	**0.1**	**0.5**	**0.3**	**-0.1**	**-0.6**

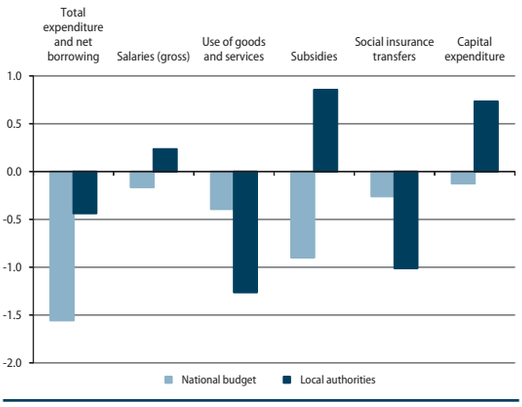
Source: Serbian MoF, IMF.

As already noted the most interesting period for this analysis is the one from 2004 to 2005, when Serbia underwent a strong and sound fiscal adjustment. Namely, in that period, while total general government revenue was maintained at a still high level of around 41.5% of GDP (see Table L 1-1) – total expenditure was cut by a very significant 3.1% of GDP. Expenditure was reduced from 43.7% of GDP (the share in 2003) to 40.6% of GDP in 2005. The bulk of the cut in total general government expenditure originated from the savings in the central budget, where spending was cut by 1.5% of GDP. This reduction in spending at the central level was quite difficult to achieve, since the central government still had to finance fairly high deficits in mandatory social insurance funds, primarily in the pension funds. Lower levels of government also managed to cut their total expenditure in these two years, but by a somewhat lower amount than the central budget, that is, by 0.4% of GDP. Generally for the government sector, spending cuts occurred in lower current expenditures, while capital expenditure was even slightly increased in those two years (from 2.4 to 2.6% of GDP), which can be considered to be very positive changes.

The central government based the cuts in its current expenditure primarily on reductions in subsidies to enterprises and in wage expenditure, but, for all practical purposes, in all other items as well (as Graph L1-4 shows). This is completely in line with the main objectives of transition to create a government sector that will be as small and as efficient as possible, while making the real sector, that is, enterprises, independent from constant subsidies. As shown in Graph

L1-4, local levels of government increased precisely these two categories in those two years: *expenditure for employees* (a rise from 1.8% to 2.1% of GDP) and *subsidies to enterprises* (a rise from 0.6% to 1.5% of GDP). The subsidies to enterprises whose founders are municipalities, cities or the province went up primarily due to the extremely high inefficiency of those companies. Namely, in 2005, when expenditure for subsidies peaked, 43.5% of local public utilities made losses in their operations. The situation might have been even worse because the figure refers to data only for those enterprises that submitted their financial statements. This certainly disrupted the overall fiscal policy, which aimed to reduce fiscal pressure on macroeconomic flows, and accelerate the process of privatization and restructuring, which require, first and foremost, hard budget constraints, that is, cuts in subsidies. What can be cited as a positive course of events in this period is the fact that local levels of government increased their capital expenditure (while at that same time, this expenditure fell at the central level). Capital expenditure was increased from a mere 0.1% of GDP in 2003 to 0.9% in 2005 (these expenses at the central level were cut by 0.1% of GDP).

Graph L1-4. Changes in Spending Levels at the Central and Local Levels of Government, in % of GDP, 2003–2005



Source: Own calculations based on the Serbian MoF data.

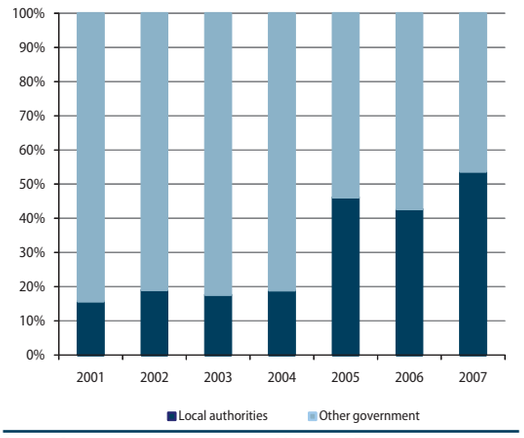
There were areas where expenditure moved in the same direction at both these two levels of government. As shown in Graph L1-4, both the central government and lower levels of government managed to reduce their shares in GDP of expenditures for goods and services and for social transfers. Expenditure for purchases of goods and services at the local level was cut from 2.8% of GDP in 2003 to 1.6% in 2005. In the same period, social transfers were reduced from 1.8% of GDP (the record level of spending on these items was reached in 2003) to 0.8% of GDP, which, on the other hand, was the minimum amount of these expenditures over the observed 2001–2007 period.

3. Subsidies from the Local Level

Expenditure for subsidies by local governments surged rapidly in the period analyzed (2004–2005), and after that (in the period 2006–2007) they declined gradually as a share in GDP, only to reach 1.3% in 2007. Despite the slight fall as share in GDP, expenditure for subsidies executed by local levels of government accounted for an increasing part of total subsidies provided by the government sector (see Graph L1-5). Thus, more than a half of total subsidies paid last year by general government were provided from lower levels of government (53.7% of the total amount). This expenditure accounted for as much as 16.1% of total expenditure of local governments. Subsidies were mainly paid to local public utilities; only in 20 municipalities were subsidies paid to private companies as well. At present, there are 608 companies in Serbia whose founders are stakeholders from the lower levels of government and they employ around 69,000 people whose average wage in 2007 was by around 18% higher than in the private sector companies.[d)] The introduction of tighter financial discipline in local public utilities would enable a reduction of the need for their subsidizing, thus creating room for either a cut in total spending at the local level and the consequential reduction of the tax burden – or, at least, would enable the financing of some other expenditure of higher priority. An additional problem created by the lack of restructuring and a failure to introduce financial discipline in these companies lies in the fact that, in many cases, they accumulate high amounts of arrears (namely, mostly to other public utilities such as the Serbian oil and electricity companies (NIS and EPS). These are *de facto* quasi-fiscal deficits that are expected to be covered by local governments as their founders. They constitute a contingent liability of local governments, which is not accounted for anywhere;

d) Based on data for the first 11 months of 2007, according to the Public Finances Bulletin, December 2007.

Graph L 1-5. Share of Local Subsidies in Total Government Subsidies, 2001–2007



Source: Own calculations based on the Ministry of Finance data

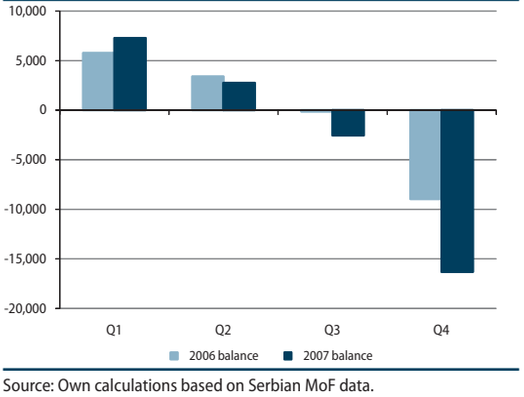
hence the picture of their finances and their indebtedness is distorted. Such developments in local government finances, as well as in the companies of which they are founders, must have impacted upon the labor market as well, by creating pressure on wages in the private sector and automatically undermining its competitiveness. On the other hand, a completely unnatural incentive is created for job seekers to give preference to employment in the government sector over the private sector.

4. Features of Public Finances at the Local Level over the Last Two Years

In the 2006–2007 period, an important U-turn occurred in fiscal policy and consequently in public finances, i.e. practically at all levels. On the whole, the government sector increased current expenditure at a slower pace, but capital expenditure went up strongly. The total capital expenditure of general government increased by 1.9% of GDP, of which a large portion came from the local level (0.7% of GDP). Taken separately, lower levels of government have again started to increase their spending as a share in GDP and it reached its maximum last year, or 8.1% of GDP. Since the revenue of lower levels of government has not been growing at the same speed as their expenditure, they have started to run outright deficits. Thus, the total fiscal deficit of the lower levels of government last year reached 0.6% of GDP, accounting for one-third of the total general government deficit.

Quarterly data on local government finances points to another possible problem. Deficits at this level of government are mostly generated in the last quarter of the year. This is so because expenditure rises abruptly toward the year-end, while, on the other hand, revenue, including transfers from the central budget, is relatively stable. One of the main reasons is the fact that local governments start with uncontrolled increases in discretionary expenditure once they become sure that their collected revenue will be higher than planned. This, unfortunately, refers mainly to the less productive, current expenditure – because it takes more time for this surplus in available funds to spill over into new capital expenditure, due to the preparation of projects. Although it should be noted that, to a certain extent, capital expenditure also rises in the last quarter as a result of seasonal factors, e.g. the end of the construction season in that period, hence payments are effected at that time. It is probably a consequence of bad budgeting and a not so appropriate setting of monthly and quarterly quotas, and such a practice can have serious impacts on liquidity management. In addition, such a practice can also affect the capacity of the Ministry of Finance to pursue an adequate public debt policy, for, if the number of municipalities and cities requesting new borrowing in the last months suddenly goes up, ceilings originally set for that year in the macroeconomic framework of the Memorandum on the Budget may be breached.

Graph L 1-6. Quarterly Fiscal Deficits for Lower Levels of Government 2006–2007, in mns of dinars



Source: Own calculations based on Serbian MoF data.

The process for apportioning state-owned property to levels of government could further boost public spending. For that reason, it is extremely important to design this process very carefully and conduct it cautiously. Namely, the constitutional arrangement for defining state-owned property by level of government is significant progress, but it is important to put all potential effects (both positive and negative) under control. One possible negative effect is much higher borrowing by municipalities and cities, since they will be able to mortgage their properties. Therefore the control and supervision of all forms of borrowing by lower levels of government must be one of the government's priorities. Another potential problem is the control of use and sale of property at the local level. One of the possibilities is to make use of the capacities of the Privatization Agency to help local governments in the preparation and implementation of privatization at the local level. One of the priorities in privatization should, by all means be, the office space owned by local governments. This is not one of normal competences of general government, including local governments, and for that reason its privatization could be defined by a law and subject to time limits. Proceeds generated through privatization at the local level could be used for introducing a true capital budget, i.e. they could all be used for financing investment projects.

5. What is the Right Size of Local Level Public Spending?

It is difficult to say what amount of spending at the local level in Serbia is adequate, i.e. when that spending is excessive, and when it is too low. However, if the composition of expenditure is more thoroughly analyzed, it can be concluded that there is room for reduction. One of the main characteristics of the local level spending is an increased share of discretionary spending, an indication that there is excess liquidity available. On several occasions, the wage bill was increased by more than stipulated in the Memorandum on the Budget, the main document which defines public spending in the country. Thus, in 2005 the total amount of expenditure for employees grew by 27% in real terms, which is yet another indication that available funds were probably too high, thus making such behavior possible.

Likewise, it is also difficult to determine what level of spending is adequate when looking at spending levels in other transition countries that have become EU members (Table L 1-7), because each of those countries has a different territorial organization and division of competences among different levels of government. Thus, certain countries also have an intermediate level of government between municipalities/cities and the level of the national/central government. It usually includes districts, regions, provinces and the like. On the other hand, some states are more decentralized than others, i.e., they have delegated more powers to local governments. It is also noteworthy that many of those countries passed through stages of increasing and reducing the spending at this level of government (see, for example, data for Poland, Hungary, Bulgaria, Slovakia, Romania and the Czech Republic). This happened primarily because all these countries, just like Serbia, are continually reforming their tax systems, distribution of competences in numerous social and economic fields and other reforms typical of transition countries. Also, it could be said that some countries (the Czech Republic, Estonia and Latvia) have reduced spending at the local level, while others (e.g. Slovakia and Romania) have increased it.

Table L 1-7. Spending at the Local Level as Share in GDP

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	..	..	..	..	..	..	10.9	11.1	11.1	11.1	11.2	11.2
Bulgaria	..	..	..	..	..	..	7.7	6.2	7.2	6.2	7.0	7.2
Czech Republic	14.6	9.2	10.2	9.2	9.1	9.7	10.6	12.8	12.4	11.8	11.6	11.3
Estonia	9.9	10.0	9.4	9.1	8.1	9.2	9.1	8.6	8.5	8.3	8.4	8.5
Latvia	..	..	..	..	9.1	9.7	9.5	9.0	9.0	8.2	8.2	8.1
Lithuania	..	..	10.3	9.8	9.4	8.8	9.3	9.4	9.9	9.3	10.1	10.7
Hungary	12.8	12.4	12.6	12.4	11.4	12.0	12.0	13.0	12.5	12.5	12.2	11.5
Poland	14.8	9.3	8.8	13.6	12.9	13.6	13.1	12.5	12.9	13	13.3	13.2
Slovenia	8.0	8.3	8.2	8.5	8.6	8.7	8.6	8.8	8.8	8.8	8.7	8.4
Slovakia	3.8	3.3	2.7	2.8	3.0	3.0	3.9	7.3	6.9	6.7	6.3	6
Romania	..	..	..	..	..	6.3	6.6	6.7	7.0	7.1	8.3	9.8

Source: Eurostat.

e) Includes all sub-national government levels.

On average, 11.2% of GDP is spent at the local level[e] in the European Union. The most decentralized countries in terms of the size of local level spending are the Scandinavian countries, Italy and the Netherlands. On the other hand, the lowest share of spending from the local level in GDP is that of, as expected, smaller countries – Malta, Cyprus and Luxemburg, as well as some other countries, which are more similar to Serbia in terms of size: Slovakia, Greece and Portugal.

6. Impact of Local Finances on External Balances

The impact of local budgets on macroeconomic variables is rarely analyzed because it involves a large number of individual budgets (of municipalities, cities and provinces), despite the fact that this impact is not negligible. This paper primarily focuses on the impact on the current account deficit of the balance of payments, as this is probably one of Serbia's biggest problems. The current account deficit equals the difference between national savings and investment (the so-called S-I gap)[f], which can be further divided into private and public (government) sector. Within the government sector, further calculations can be made for individual parts of the sector, and Table L 1-8 presents the results for Serbia. The findings presented in the Table show that the government sector strongly contributed to the rise in the external imbalance in 2002 and 2003, and, to a soewhat lesser extent, in 2006 and 2007. The growth of the current account deficit was particularly high in 2002, (an increase from 2.4% to 7.9% of GDP), primarily because the S-I gap of the government sector declined by 3.5% of GDP. To a certain degree, the movements in the S-I gap of the local level of government had a diverging trend, compared to the overall government sector, in particular in the 2002–2005 period when the overall government sector and the local level carried opposite signs. The first deterioration of the S-I gap of local governments occurred in 2003 when the S-I gap turned negative due to the rise in their spending. The most adverse impact of local finances on the external balance occurred in 2005 and 2007. In the course of 2005, local governments had a negative S-I gap, while other parts of general government actually managed to reduce the overall national external imbalance. In the course of 2006 and 2007, local governments had another increase in the negative S-I gap and, during 2007, they accounted for as much as 55% of the total S-I gap of the government sector.

f) Aggregates obtained from the national accounts system.

Table L 1-8. S-I Gap (after grants) by Sector (in % of GDP)

	2001	2002	2003	2004	2005	2006	2007
S-I	-2.4	-7.9	-7.0	-10.5	-9.6	-11.5	-16.1
Sp-Ip	-2.8	-4.7	-4.2	-10.2	-10.1	-10.1	-14.3
Sg-Ig	0.4	-3.1	-2.8	-0.3	0.5	-1.4	-1.8
o/w local governments S-I	0.3	0.2	-0.3	0.0	-0.2	-0.6	-1.0

Source: Own calculations based on IMF data for national accounts and the balance of payments, and the fiscal data of the Serbian MoF

7. Institutional Framework for Management of Macroeconomic Policies in a Decentralized System of Government

Mechanisms that enable coordination and the consistency of fiscal policy in a system with several levels of government differ from one country to another. This largely reflects the differences in their socio-economic systems and institutional heritage. As with other public policies, in the conduct of fiscal policy some countries rely more on formalized rules, while others rely more on informal rules and the market. They also differ among themselves with regard to the objectives and priorities they set for their fiscal policies: a balanced budget, public spending cuts, reduction of the primary balance, public debt control and the like. In the OECD countries (according to the findings of Joumard and Kongsrud[4]), four mechanisms can be identified that ensure the coordination of fiscal policies at different levels of general government, depending on the degree of the exercise of administrative, that is, legal control. The first model consists of full reliance on direct control of local budgets by the national Ministry of Finance. The second model requires the introduction of precise rules by the national government on the permitted size of the budget, deficit and financing modes. The third model is based on cooperation between representatives of different levels of government in defining the size of public spending and the deficit, and such cooperation is institutionalized through some sort of a council or a coordinating body or common agreement. The fourth model is the most liberal and it is based on full reliance on the market to ensure fiscal discipline at all levels of government. The Table below (Table L1-9) provides an overview of which country relies on which of the four mechanisms just described.

Table L1-9. Mechanisms for Ensuring Fiscal Coordination and Discipline

Administrative Control	Centrally Imposed Rules	Formalized Cooperation	Reliance on Market
France, Greece, Ireland, Japan, Korea, Luxembourg, Turkey, United Kingdom	Brazil, Finland, Hungary, Italy, New Zealand, Norway, Poland, Portugal, Slovak Republic, Sweden	Australia, Austria, Belgium, Denmark, Germany, Iceland, Netherlands, Spain	Canada, Czech Republic, Mexico, Switzerland, United States

Source: The OECD.

Serbia does not belong to any of the above models in full, because it relies on the indirect impact of the central government on local budgets, and rules have been introduced for borrowing by all parts of general government. The indirect impact on budgets at lower levels of government is reflected in the definition of the amount of the transfers made to local governments from the central budget and their distribution. The second indirect way in which the central government exerts influence on the budgets at lower levels of government was introduced by the Law on Public Debt (adopted in 2005), which precisely defines the borrowing rules for local governments, thus significantly reducing the room for deficit financing of local government activities. This is of great importance, particularly in the early stages of transition, when a firmly established institutional framework for controlling public finances has not yet been put in place. The Public Debt Division in the state Treasury collects data on all loans taken out by the local governments, and as soon as it is noticed that a municipality, city or province has breached the statutory limits – the imposition of corrective measures and even the suspension of transfers can be ordered. So, for as long as this kind of indirect impact by the central government exists on public spending at lower levels of government, they are free to determine their budgets and their spending priorities on their own. Local budgets are adopted by the local councils and no subsequent approval from the Ministry of Finance is required.

One of the priorities of the Ministry of Finance and of the Serbian government should be the introduction of one of the fiscal coordination and consolidation models. This does not necessarily have to be one of the described models existing in OECD countries, but it is important

4 Joumard, Isabelle and Kongsrud, Per Mathis – Fiscal Relations across Government Levels, OECD Economic Studies No. 36, 2003/1.

to put in place a mechanism that will ensure that all parts of general government are responsible for the overall macroeconomic effect of their finances. An initial step in that direction could be heavier reliance on the consolidated presentation of overall general government finances (both of the plan and of the execution), which should be jointly analyzed by representatives of all levels of government on a regular basis (e.g. quarterly). The importance of this will grow as pressure from lower levels of government rises for new borrowing, and with the increase in sources of funding that they receive based on property restitution, etc. And in order to successfully coordinate fiscal activities, it is necessary to further upgrade standards for budget accounting and reporting by local governments[5], as well as to increase the coverage of local government finances to include all quasi-fiscal activities and the performance of local public utilities.

8. Conclusions

Since the beginning of transition in Serbia, relatively little attention has been devoted to the finances of the local and provincial governments, despite the fact that their share in total public expenditure has been growing steadily. In fact, during the last year lower levels of government reached the maximum spending level and their peak share in the fiscal deficit and in subsidies. Before that, in the period of successful fiscal adjustment (2004–2005), local governments changed the composition of their expenditures in a direction which was opposite to the one taken by the central government, thus annulling some positive aspects of fiscal adjustment. Finally, although rather neglected by public policy makers, the impact of local governments on the equilibrium of the balance of payments is not negligible. Moreover, Serbia still does not have a formally established and defined mechanism for fiscal policy coordination at different levels of government, and this arises as one of the priorities for government officials in the coming period. Considering all the above, it can be concluded that, pending the introduction of clearer rules and fiscal coordination and control models – further steps in decentralization in Serbia should be made carefully.

9. Literature

— Public Finance Bulletin, Ministry of Finance, different issues.

— Joumard, Isabelle and Per Mathis Kongsrud – Fiscal Relations across Government Levels, OECD Economic Studies No. 36, 2003/1.

— Memorandum on the Budget and Economic and Fiscal Policies for 2008, Ministry of Finance, 2007.

— World Bank: “Decentralization and Local Service Delivery in Serbia”, March 2008.

5 One of the first steps in increasing the transparency of sub-national government finances could be to post adopted and actual budgets of all municipalities, cities, and the autonomous province on their websites – a practice that has yet to take root.

Transition Cost of Introducing Mandatory Private Pension Funds

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The introduction of mandatory private pension funds (pillar II) in conditions when a mandatory pay-as-you-go (PAYG) state pension system (pillar I) already exists, requires additional funds for covering the so-called *transition cost*. This paper focuses on estimating the transition cost in Serbia in a hypothetical scenario of pillar II introduction. We show that the greatest portion of the transition cost is pre-defined, that its volume is significant, and that it would persist for several decades. Society has to foot the bill in any case, regardless of the future performances of pillar II. We also demonstrate that the volume of the transition cost is proportionate to the volume of contributions paid into pillar II, while the initial number of insured who switch to pillar II funds does not affect the aggregate amount of the transition cost.

The most delicate issue is the financing of the transition cost, especially in a country with an already substantial pillar I deficit. We note that directing the cost to retirees is socially unacceptable whereas, on the other hand, an increase in the contribution rate would make the economy less competitive. Possible financing by means of the remaining privatization revenues should be contrasted with the alternative use of such revenues for investment purposes. Finally, financing the transition cost through public debt practically means that the state, in addition to the cost, has to cover high pillar II operating fees as well. It can therefore be concluded that circumspection should be exercised when analyzing the justifiability of introducing pillar II into the Serbian pension system.

1. Introduction

The long-term and pervasive process of population aging has given rise to the need for reforming pension systems, especially in countries with dominant pay-as-you-go (PAYG) systems. Although it is widely believed in this country that there is a unique recipe for reforming the pension system, differences and dilemmas on how to go about it are significant. It is true, however, that the share of private pensions is on the increase. Also, during the previous decade, and based on the Chilean experience of 1981, a great number of countries (mainly in Latin America and Central-East Europe) reformed their pension systems, chiefly under the auspices of the World Bank and other international financial institutions.

The reform model offered by the World Bank in the 1990s relies on the so-called three pillars: pillar I – mandatory state pension system funded on the PAYG principle, but with a scaled-down role; pillar II – mandatory private pension funds; and pillar III – voluntary private pension funds.

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The main features of the reform are the introduction of pillar II, which replaces the role of the state system to a significant extent, and generally heavier reliance on funded systems. Of the numerous advantages usually mentioned in respect to pillar II, we focus on the following: first, the rate of return on capital has been much higher than wage growth over the past decades, and second, there is a need for risk diversification, i.e. receiving pensions from "several addresses".

Nonetheless, the introduction of pillar II – mandatory private pension funds, in conditions when a state pension insurance system is already in place and contributions are paid, requires substantial additional financial resources. This financial gap is called the *transition cost*. It is created when a portion of the contributions paid into the mandatory state pension fund is diverted to private funds. Additional funds are then needed to finance liabilities towards current and future retirees who will remain in pillar I only. The so-called *double-payment burden* is thus imposed on the current generation of employees who finance current and future retirees in the state PAYG system, and save for their own retirement income as well.

In the meantime, numerous questions of the pros and cons of pillar II have been raised. The years of experience in Chile and almost a decade in some neighboring countries have revealed problems and shortcomings. Furthermore, an important theory explores the impact of demography on all macroeconomic variables, and calls into question the existing relation between return on equity and total wage growth (productivity) in the future, which means the superiority of pillar II is questioned as well. For instance, the so-called "asset market meltdown hypothesis" predicts the collapse of the asset market once the baby boom generation starts to "de-accumulate" its assets. However, all these issues are a different topic, and will be covered in a separate study. Our original assumption is the appropriateness of pillar II introduction, whereby we raise the issue of transition and its feasibility.

The latter part of the paper elaborates on the *concept of the transition cost* and the *aggregate transition cost calculation in Serbia in a hypothetical scenario*. Finally, the paper illustrates the issue of *financing the transition cost and the impact of the manner of its financing on national savings*.

2. Concept of Transition Cost

The transition cost arises upon the introduction of pillar II because two pension systems have to be financed over a long period of time: the existing PAYG system – the state has to disburse benefits to current pensioners; and the new system, based on accumulation of contributions for future benefits. The double financing is usually manifested as a diversion of a portion of contributions, paid into the public fund up until then, into mandatory private funds. Additional funds for financing the existing liabilities towards current and future retirees are therefore necessary.

The transition cost decreases only with the first savings in the PAYG system due to the introduction of pillar II. These savings are created *when the first generations that paid contributions into both pillars begin to retire*. The aim of introducing a multi-pillar system is to scale down the role of the PAYG system, so that future retirees – those who contributed to pillar II as well – could receive their retirement incomes from several sources. One portion would be generated from the state PAYG system, with appreciably lower pensions than those today, whereas another portion would be financed from pillar II. **The transition cost ends when savings in the PAYG system due to the introduction of pillar II exceed the revenue loss in the form diverted contributions (the *cross-over date*)**[a)]. The transition cost is therefore associated with a very long period.

a) When the transition cost is observed as a higher contribution rate, the cross-over date occurs when the overall contribution rate on the transition path falls and equalizes with the pure PAYG rate.

We would like to point to possible differences in the definition and the manner of transition cost calculation. For example, calculating the hypothetical transition cost for the USA, Feldstein and Samwick (1996) start with the assumption that pension benefits from their state system would remain at the same level as without privatization, i.e. the current law would be applied in the future (scenario: *the current law benefit path*). According to this scenario, the transition cost enters a decline with the first disbursements from the private capitalized system, that is when first

savings on account of privatization/capitalization are created in the state system[1].

According to another Feldstein and Samwick scenario, pension benefits would be lower after 2030, and it would be possible to finance them from the existing contribution rate. The majority of actuarial calculations have shown that after 2030, the US Social Security Trust Fund will be exhausted with the current contribution rate of 12.4%.[2]. It is assumed that after 2030, pillar I pensions will be lower than envisaged by the current law, and such savings were therefore also taken into account. Feldstein uses this scenario as the *baseline benefit path* scenario. He predicts a lower transition cost as besides savings from privatization/capitalization of the system, savings from reduced PAYG benefits after 2030 are taken into account as well.

On the other hand, Miles and Iben (1998) proceed from the current replacement rate when calculating transition costs for Great Britain and Germany, and they assume the rate will remain unchanged in the future. Thus, they keep a fixed ratio of average pension to average wage. They also underscore that such an assumption contradicts the current law in Great Britain under which pensions are indexed to the cost of living, which inevitably pushes the replacement rate down, especially over such a long term for which the transition cost is calculated. However, they believe such a decrease in pensions is an untenable assumption, and add that "if pensions are paid in 2100, there is little likelihood they will have the same value in real terms as they have today. We therefore believe a fixed replacement rate is a natural assumption."

The definition used in calculations for neighboring countries that have already introduced pillar II usually includes one way of financing the transition cost (which will be discussed in more detail in chapter 4), i.e. it includes savings in the PAYG system not directly linked to reduced obligations in respect to the introduction of pillar II. For instance, "the transition cost in Croatia is defined as the difference between total contributions to pillar II and total savings in the PAYG pillar". Total savings in pillar I emerge from the direct decrease in future benefits due to the introduction of pillar II (the so-called basic pension for those participating in both pillars – it is around 50% lower than for other retirees) and indirect (implicit) benefit reduction that results from various changes in other PAYG parameters (Anušić, 2003).

In order to avoid confusion stemming from different ways of defining the transition cost, we hereby introduce the terms *explicit* and *implicit* transition cost.

The explicit transition cost is the financial gap created upon the introduction of pillar II, and it requires additional financial resources. Possible savings from reduced PAYG benefits have already been accounted for.

The implicit transition cost arises from the introduction of pillar II, under the assumption of maintaining retirees' current standard of living.

The explicit cost, as calculated for Croatia, points only to the "burden" that is left to the current generation of workers, whereas the burden borne by the generation of current retirees and those who will retire soon, remains hidden. For instance, the current net replacement rate in Croatia has already fallen to 40%, although pension benefits are mainly the only source of income in old age. It is therefore obvious that the generation of current pensioners in Croatia largely participates in financing the transition cost, which was the initial idea: "The underlying financing principle promoted by the Government was to achieve a high level of intergenerational equity by spreading the transition cost similarly across generations, suggesting a mixed strategy for filling the pillar I financing gap." (Anušić, 2003).

1 However, it should be noted that this scenario, aligned with the current law, does not imply that the replacement rate remains defined at the same level. It is, however, certain that the law does not anticipate privatization, which is rather common in other cases. According to the law in force, the replacement rate for an average worker who entered the labor market in 2005 will reach 51% at the time of his/her retirement (OECD, 2005). Also, retirement income in the USA is now largely financed from additional private programs as well, such as 401K and IRA.

2 The state US pension program OASDI runs a surplus (Trust Fund). It is forecast that the OASDI program will stop recording a surplus in 2016, and that it will register a deficit which will be covered from the Trust Fund until 2030. The Trust Fund will be exhausted in 2030. Feldstein's original assumption is that the contribution rate will not be raised, and that pensions will not be financed from some additional revenues (transfers, other tax revenues, etc), while pension benefits will decline in a manner that would provide for the constant equilibrium of the OASDI program.

We believe it is important to obtain an insight into the whole "burden", including those who bear, i.e. finance it. "It is well known that in general transition from an unfunded to a funded system, some generations will be worse-off" (Miles and Iben 1998, as in Breyer 1989). Despite debates over the inadequacy of the term as it is believed the transition cost does not represent a cost but saving (which will be elaborated on in chapter 4), there is no disputing that initial accumulation will require some generations to lower their consumption. The manner of allocating the burden of lower consumption is important (Miles and Timmerman, 1998).

We therefore believe the *implicit transition cost* is an analytically desirable measure as it indicates the overall transition burden, irrespective of the manner of financing the cost. On the other hand, *the explicit cost* is important in respect of information on necessary funds that the state would have to provide if it decides to introduce pillar II. However, it blurs the picture about the allocation of the lower consumption burden among different generations.

3. Level of Transition Cost in Serbia

The aggregate transition cost for Serbia presented in the paper is calculated as the **difference between contributions diverted to pillar II and savings in pillar I generated due to the introduction of pillar II.** Other expected savings are not taken into account, especially savings in pillar I that are not directly linked to the introduction of pillar II. According to the above terminology, this is the *aggregate implicit transition cost*.

As already noted, the transition cost can be calculated in different ways, depending on what we really want to calculate and the underlying assumptions. **We define the transition cost as the amount of contributions transferred to pillar II minus pension benefits disbursed from pillar II.** The transition cost ends when the level of annual benefit payments from pillar II outstrips the level of annual contributions into pillar II. Our starting assumption is that the PAYG system is designed in such a way that savings in this system equal the benefit payments from pillar II. The model description and assumptions used are explained in Box 1.

We underline once again that we do not offer a general equilibrium analysis. This means simulations do not account for the effects that demographic movements and possible switching to the funded system might have on key macroeconomic variables[3].

Box 1. Actuarial Model and Assumptions*

For the purposes of the study, a suitable model was developed enabling the analysis of the transition cost for different values of economic, financial and actuarial assumptions.

In terms of demographic assumptions, the model relies on the Serbian Bureau of Statistics (SBS) projections on the size of the Serbian population in the 2002-2052 period. According to these projections, the total number of inhabitants is expected to fall from 7.5 mn in 2002 to 7 mn in 2022 and 6.7 m in 2052. It is assumed the mortality rate will decline by 0.75% on an annual basis, which will lead to an increase in the average life expectancy by around one year per each decade. As there are no relevant projections for years following 2052, the demographic projection for 2052 has been replicated forward for the years thereafter. The Serbian pension system is approximated to the PDI Employee Fund that accounts for almost 90% of revenues and expenditures of the whole system. The number of PDI Employee Fund contributors stood around 1.85 million in 2005, while the number of retirees totaled around 1.25 million.

In economic terms, Serbia is expected to witness three important periods in future: (1) a EU accession period (2006-2012), (2) a period of economic convergence to developed EU members (2013-

3 This issue, as well as the adequacy of pillar II introduction, and pillar II pros and cons are analyzed in the forthcoming study: "The Introduction of Mandatory Private Pension Funds into the Serbian Pension System – Adequacy and Feasibility", Bearing Point/SEGA project, 2008.

2020), and (3) a period of stable long-term growth (after 2020) which would be characterized by equal wage and GDP growth (in earlier periods, GDP growth could be more rapid than wage growth owing to the completion of transition).

Expressed as a percentage of GDP (which is customary), the transition cost is not particularly sensitive to different macroeconomic assumptions. Namely, both GDP growth and the absolute size of the transition cost depend on the assumed wage growth, and therefore relative to each other, these two categories are very similar under different macroeconomic scenarios. Thus, we present the results of only one (rather conservative) economic growth scenario.

The underlying macroeconomic assumptions are the following: GDP growth of 5% until 2012, its decline to 4% until 2020, and its subsequent fall to 3%. Wage growth follows GDP growth partially, reaching 4% up to 2012, and then declines to 3%. The unemployment rate in Serbia is assumed to reach a long-term equilibrium level around 2020.

Relatively speaking, the projected pillar II performances and volume of the transition cost are relatively not overly sensitive to different economic and demographic assumptions. The greatest impact on the projected pillar II performances comes from the financial assumption of investment returns, i.e. the rate of return on pillar II capital compared to wage growth, i.e. GDP growth. Also, the level of fees that mandatory private pension funds charge has a significant impact on their performances.

The model presupposes that all employees (both men and women) contribute into pillar II from the beginning of their careers at the age of 20, until their retirement at the age of 62. In the event of an insured person's death before retirement, the total savings accumulated in pillar II are paid to his/her heirs, and when they retire the insured convert their accumulated balance into a single life annuity. In the absence of reliable statistics, the model ignores the possible disability of insured persons prior to retirement, which partially improves the projected performances as pillar II *per se* does not include disability insurance.

The average annual real rate of gross return on capital in the accumulation phase is assumed at 5.5% (the long-term rate of wage growth, i.e. GDP + 2.5%), while the assumed real discount rate in the liquidation phase stands at 4.5%. We would like to underline that this is an assumed rate of return which is higher compared to the rate of return in transition countries that have introduced pillar II.

Contribution fees account for 3% of paid contributions (which is the current legal cap for voluntary funds in Serbia), annual asset management fees equal 0.5%, and the exit fee for purchasing single life annuity is 5% of the value of accumulated funds. The assumed fee structure is rather modest compared to the observed fee levels in transition countries that have introduced pillar II.

*Source: Pension Modeling Package, Bearing Point, Nikola Altiparmakov (with Katarina Stanić), 2006–2008

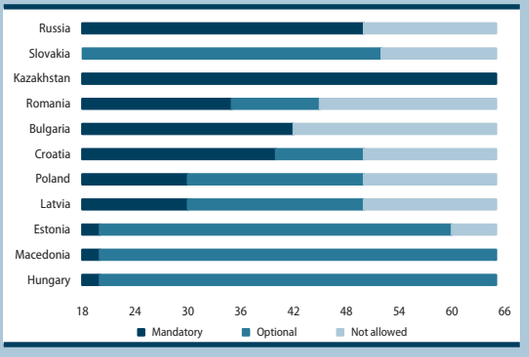
We have calculated the transition cost for several alternative *cut-off* ages of contributors who would be embraced by the mandatory private system – all employees younger than 30 years of age, those under 35 and employees under 40. Furthermore, several alternative levels of the contribution rate that would be diverted to pillar II have been analyzed – 5%, 7% and 9% of contributions. The baseline scenario deals with the hypothetical introduction of pillar II in 2009 for all contributors under 35 years of age, whereby 7% of PDI contributions would be diverted to pillar II.

We have not analyzed the introduction of a system that would be compulsory for some age groups, and optional for others. Aiming at a simpler modeling and clearer presentation of the cost, we opted for strict cut-off ages. Finally, this does not affect the total volume of the transition cost, but its time distribution, as explained below.

Box 2. Cut-off Ages for Entering Pillar II – Experiences

The cut-off ages for entering pillar II were different in countries that introduced the system. Entering pillar II was often optional for some age groups. Experience suggests that the majority of countries that introduced pillar II underestimated the initial transition cost for this very reason, as they underestimated the probability of voluntary switching to pillar II of the insured who were not obliged to do so. Countries introducing pillar II are usually countries in transition whose populations have a deeply ingrained mistrust in the state and a high percentage of insured people who decide to switch to the private pension system. For instance, transition costs in Hungary and Poland are significantly higher than previously planned, due to the poor estimate of the number of pillar II participants, which exerts strong fiscal pressure, especially in Hungary. The graph below illustrates cut-off ages of entering pillar II in the neighboring countries.

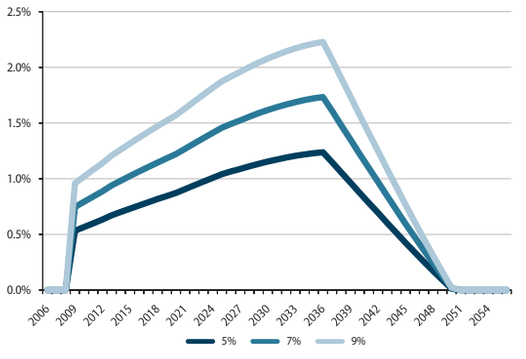
Graph L2-1. Pillar II Cut-off Ages, by Country



Graph L2-2 and Table L2-3 illustrate the transition cost in Serbia, in the event that out of the existing 22% of PDI contributions different contribution rates are diverted to pillar II (assuming a cut-off age of 35 years), and that the assumed contribution rates are unchanged over time. As can be seen, the transition cost is very high and long-lasting. During the initial years/decades, the transition cost is practically equal to the level of contributions diverted to pillar II.[b)] The annual amount of contributions increases over years commensurately with the rise in the total number of employees who contribute to pillar II (older employees who were not covered by pillar II upon its introduction retire with the passage of time, and are replaced by younger workers who have participated in pillar II since the beginning of their careers). It is only after the first generations of pillar II contributors start to retire that pillar II benefits become substantial and the transition cost decreases. Over the years, the level of pension benefit payments constantly increases and the transition cost decreases. At one point benefit payments reach the annual level of contributions into pillar II, which marks the end of the transition cost. This is the co-called *cross-over date*.

b) During the initial accumulation period, disbursements from pillar II due to pre-retirement deaths of contributors are negligible.

Graph L2 -2. Transition Cost for Different Levels of Contributions (% GDP)



Source: Pension Modeling Package, Bearing Point, 2006–2008

Graph L2-2 and Table L2-3 illustrate that the **volume of the transition cost is directly proportional to the amount of contributions diverted to pillar II.** Although the introduction of the second-by-size pillar II, (for example, 2% of contributions) would require a more modest additional financial effort, this is a very rare case in practice (of the transition countries, only Bulgaria introduced a 2% contribution pillar II). The main reasons are the very high fixed expenses of pension fund operations per participant. According to some researches, the minimum that justifies the introduction of pillar II, i.e. that provides for a potentially higher return than the expected PAYG return is 4-6% of contributions[4].

4 Drawing on the experiences of Croatia, Hungary, Kazakhstan and Poland, Dobronogov and Murti note there are "high fixed costs upon the establishment of funds. As a consequence, the economy of scale is rather strong in the industry." On the basis of available experience, they estimate the annual fixed cost at around $35 by individual account. In view of such a level of cost,

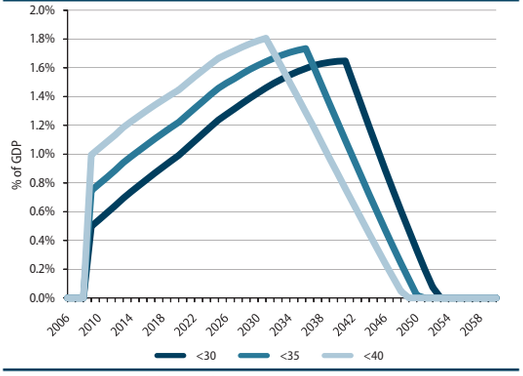
Table L2-3 –Volume of Transition Costs for Different Levels of Pillar II Contributions (%GDP)

	5%	7%	9%
2009	0.53%	0.75%	0.96%
2010	0.57%	0.79%	1.02%
2011	0.60%	0.84%	1.08%
2012	0.63%	0.89%	1.14%
2013	0.67%	0.94%	1.21%
2014	0.70%	0.98%	1.26%
2015	0.73%	1.02%	1.32%
2016	0.76%	1.07%	1.37%
2017	0.79%	1.11%	1.42%
2018	0.82%	1.15%	1.47%
2019	0.85%	1.18%	1.52%
2020	0.87%	1.22%	1.57%
2025	1.04%	1.46%	1.88%
2030	1.16%	1.62%	2.08%
2035	1.23%	1.72%	2.21%
2040	0.87%	1.22%	1.57%
2045	0.43%	0.60%	0.77%
2050	0.01%	0.02%	0.02%
2055	0.00%	0.00%	0.00%
Total	**34.2%**	**47.8%**	**61.5%**

Note: Only data for some years is presented
Source: Pension Modeling Package, Bearing Point, 2006–2008

It is often believed the size of the transition cost is directly proportionate to the percentage of employees that opt for pillar II upon its introduction, i.e. to the pillar II cut-off age. It is therefore believed that a lower *cut –off* age facilitates transition. However, this is not true, as shown in Graph L2-4 and Table L2-5.

Graph L2-4. Transition Cost – 7% of Contributions for Different Combinations of Cut-off Ages *(%GDP)



Source: Pension Modeling Package, Bearing Point, 2006–2008.

In the event of a lower cut-off age, the transition cost is indeed lower in the first years following introduction, but it lasts much longer. This happens because savings in the PAYG system, upon introduction of pillar II – in the form of reduced pension benefits to be disbursed from the PAYG system to pillar II contributors – are created only when the oldest generation of pillar II contributors retires. If the oldest generation is 35 years old now, it is evident that the first savings will be created only 62–35=27 years afterwards. Therefore, to be more precise, **the cut-off age of those entering pillar II affects the time distribution of the transition cost and not its aggregate volume.**

In concrete terms, if only the younger generation (e.g. persons under 30) enters pillar II, the transition cost will be lower in the first years, but will last longer, as benefits from the introduction of pillar II (in the form of decreased pillar I pensions) occur not earlier than 2041 when this generation starts retiring. On the other hand, the cost of introducing pillar II for all persons under 40 years of age is significantly higher in the first 10 years (by around 0.5% of GDP), but savings in the PAYG system are created 10 years earlier. In all scenarios, the annual volume of the transition cost varies from 0.5% to almost 2% of GDP (in the year when it was created), i.e. reaches **almost 50% of the average value of GDP over the relevant multi-decade period.**

individual accounts should reach 4-6% of average wage so that pillar II can function and realize the rate of return higher than is expected from the existing PAYG system".

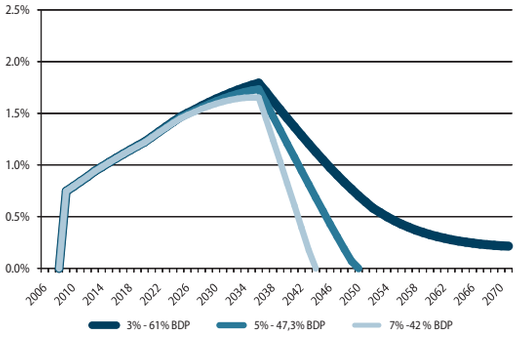
Table L2-5. Transition Cost – 7% of Contributions for Different Combinations of Cut-off Ages (%GDP)

	<30	<35	<40
2009	0.50%	0.75%	0.99%
2010	0.55%	0.79%	1.04%
2011	0.59%	0.84%	1.09%
2012	0.64%	0.89%	1.13%
2013	0.69%	0.94%	1.19%
2014	0.74%	0.98%	1.23%
2015	0.78%	1.02%	1.27%
2016	0.82%	1.07%	1.30%
2017	0.87%	1.11%	1.34%
2018	0.91%	1.15%	1.38%
2019	0.95%	1.18%	1.41%
2020	0.99%	1.22%	1.45%
2025	1.24%	1.46%	1.67%
2030	1.43%	1.62%	1.79%
2035	1.57%	1.72%	1.39%
2040	1.65%	1.22%	0.87%
2045	1.04%	0.60%	0.34%
2050	0.33%	0.02%	0.00%
2055	0.00%	0.00%	0.00%
Total	**47.2%**	**47.8%**	**48.0%**

Note: Only data for some years are presented.
Source: Pension Modeling Package, Bearing Point, 2006–2008.

The amount of the transition cost in initial decades does not depend on the performances/returns of pillar II, and equals the volume of contributions diverted from the PAYG system. When the first generations of pillar II contributors start to retire, the first (tangible) savings in the PAYG system are created, and their volume depends on the assumed (net) rate of return on accumulated pillar II savings. The transition cost is therefore sensitive to the pillar II rate of return in this period, as shown in Graph L2-6.

Graph L2 -6. Transition Cost until 2071 – Sensitivity to Different Rates of Return



Note: In order to present results in a simpler form, the assumed discount rate in the liquidation phase equals the net return in the accumulation phase.
Source: Pension Modeling Package, Bearing Point, 2006–2008.

Graph L2-6 shows that the duration of the transition cost depends on the assumed rate of return on capital in pillar II – the higher the rate of return, the sooner will the transition cost end. In the scenario with an assumed rate of return of 3% on an annual basis, while wages grow at a rate of 4% until 2012, and at the rate of 3% thereafter, the transition cost practically does not end.[5] These findings are not surprising. They actually substantiate the well-known rule that the introduction of pillar II is desirable/profitable on condition the pillar II rate of return is higher than the PAYG internal rate of return which equals the sum of the wage growth rate and the support ratio.

5 Such a cost could be more conveniently called the cost of inefficiency/unprofitability of pillar II, rather than the transition cost, but this is a separate issue.

4. Transition Cost Financing

This part of the paper illustrates the main methods of financing the transition cost. The key question is *how* the transition cost is financed, and a related question is *who* finances it. Also, the manner of financing the transition cost influences the potential effect of the introduction of pillar II on government savings, and therefore on total national savings as well.

Schmidt-Hebbel (1998) defined "two fundamental ways of financing the transition deficit". *First*, the implicit PAYG debt can be swapped for another public-sector asset (by selling government assets like public enterprises) or liability (by issuing explicit government debt). The *second* way to finance the transition deficit is by lowering public expenditure or raising taxes (contributions) for a period that lasts as long as the transition deficit lasts.

4.1. Debt-Financed Transition and Privatization Revenues

The transition cost may be debt-financed, and it may be financed by means of privatization revenues in transition countries. In the event of debt financing, the *implicit pension debt* (future liabilities of the PAYG system towards current retirees) is actually *transformed* into an *explicit pension debt*.

In this case, the transition is financed by the current and future generations of employees. The effect on national savings is almost neutral, since the increase of the explicit debt has been neutralized by a decrease of the implicit debt. Moreover, this method of financing the transition cost may have an adverse effect on government savings, if the interest rate on repayment of the explicit debt is higher than the rate of the implicit debt (the so-called rate of return in the PAYG system), which actually is the case. Furthermore, a sudden surge of the explicit debt and claims by the government might also have an adverse effect on the increase in interest rates. Besides, in countries that have introduced pillar II, these private pension funds are the ones purchasing government securities. Thus, the contributions diverted to pillar II practically finance the explicit debt, but now, private funds operating with rather high fees emerge in the chain, as well.

Utilization of privatization revenues appears as a common method for financing transition, in fairness, only in the first years following the introduction of mandatory private funds. As time goes by, this source of financing becomes scarce. At the same time, it is essential to calculate the foregone interest in the form of the opportunity cost if these funds were to be used for other purposes.

In addition, when considering this financing method for Serbia, it should be noted that it is largely exhausted – bearing in mind that the privatization of the commercial sector is nearing its end, and the future proceeds from the sale of public companies have been already burdened (in part) by the distribution of free shares.

4.2. Financing by PAYG Savings/increased Contributions

The most common way of financing the transition cost is by savings generated in the PAYG system. As a rule, countries that have introduced pillar II immediately start a rather rigorous parametric reform of the PAYG system. This creates the explicit transition cost only in the first years following the introduction of pillar II. After a while, upon creation of a surplus in the PAYG system, the transition cost becomes partially or fully funded by PAYG savings (or rarely, by some other budgetary savings). Therefore, the explicit transition cost disappears. In this way, the double-payment burden of the current working generation is transferred gradually, and then entirely, to the current generation of pensioners.

It has already been mentioned that Croatia largely used this method to finance its transition cost. Croatia made projections that PAYG system savings would outgrow the transition cost by 2016, followed by a drastic deterioration in the replacement rate. The total transition cost in Croatia was consequently calculated to amount to 9% of GDP (lasting 14 years). However, that country's

almost 10t years' experience indicates serious social problems that threaten to annul some of the key PAYG system reforms.

There are also other ways to finance the transition cost. Instead of diverting current contributions (*carve-out* method), pillar II can be financed by raising the contribution rates (the so-called *add-on* or *top-up* method), and then the transition cost problem i.e. the PAYG revenue shortfall does not appear as a cost at all, that is, the financial gap does not occur.

However, this method surely puts a strain on the current generation of workers – in terms of consumption reduction and possible labor market distortions. The add-on method is politically highly unpopular, as it increases taxes levied on the economy. Nonetheless, a combination of the add-on method with the carve-out method is often used. Estonia, for example, introduced pillar II in this way - contributions amounted to 6% of salary, out of which 4% were diverted from the existing state PAYG system, and the contributions were increased by an additional 2% of salary. This could hardly be the case in Serbia, since any increase in the contribution rates would be used, quite logically, for financing the existing PAYG system deficit.

Financing transition cost by means of PAYG savings or by an increase in contributions represents, in fact, a restrictive fiscal policy. Therefore, it might bring about growth of national savings accompanied by increases in state savings. The crucial point is whether it really represents a restrictive policy, or the consumption reductions in the PAYG system are just offset by increased government spending on the other side. The experience so far indicates that, deprived of other investment options combined with conservative rules applicable to the pension funds, private funds have no options to invest in other than the most commonly used - government bonds. This is, however, an entirely different topic, and will be dealt with in a separate study[6].

5. Conclusion

The transition cost that will occur in Serbia if a part of the PAYG system contributions is diverted to mandatory pension funds is overly high and long-lasting. Hypothetically, if 7% of the 22% of current contributions is diverted to the funded pillar (II), the transition cost would last 40 years, an range from 0.5% to more than 1.5% of GDP per annum.

The cost certainly exists in the form of decreased consumption, the only question is who would be paying for it. It could be partially or entirely borne by the current pensioners and those due to retire in the coming years, by reducing their pension benefits. However, not only is this a politically sensitive issue, but would also bring about negative social effects.

Increases in the contribution rates are also not acceptable, since they would further burden gross wages and diminish the competitiveness of the economy. This is particularly so since the existing system was not designed to fully cover payment of pension benefits by contributions, and any increase in contribution rates would be better used for financing PAYG system pensions.

Privatization revenues can be used for partial funding. However, in as the privatization of the commercial sector drawing to a close and the fact that some of the future proceeds from the sale of public companies have been already burdened by the distribution of free shares, this method is not a viable option. In addition, potential utilization of privatization proceeds should be compared to their alternative use for other purposes.

As regards debt-financed transition cost and increases in government debt, in countries which have introduced pillar II, the debt is mostly financed by pension funds. Consequently, contributions diverted to pillar II merely fund the (explicit) public debt, accompanied by high operational fees of privately managed pension funds.

Finally, we can safely conclude that the size of the transition cost, its duration, financing options as well as the initial results of the countries which have introduced it, demand utmost caution in deciding upon instituting mandatory private pension insurance in the Serbian pension system.

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Anex A. Transition Cost over Years - Detailed Projections (% GDP)

	Alternative cut-off ages (7% contribution rate)			Alternative contribution rates (35 years cut-off age)		
	<30	<35	<40	5%	7%	9%
2009	0.50%	0.75%	0.99%	0.53%	0.75%	0.96%
2010	0.55%	0.79%	1.04%	0.57%	0.79%	1.02%
2011	0.59%	0.84%	1.09%	0.60%	0.84%	1.08%
2012	0.64%	0.89%	1.13%	0.63%	0.89%	1.14%
2013	0.69%	0.94%	1.19%	0.67%	0.94%	1.21%
2014	0.74%	0.98%	1.23%	0.70%	0.98%	1.26%
2015	0.78%	1.02%	1.27%	0.73%	1.02%	1.32%
2016	0.82%	1.07%	1.30%	0.76%	1.07%	1.37%
2017	0.87%	1.11%	1.34%	0.79%	1.11%	1.42%
2018	0.91%	1.15%	1.38%	0.82%	1.15%	1.47%
2019	0.95%	1.18%	1.41%	0.85%	1.18%	1.52%
2020	0.99%	1.22%	1.45%	0.87%	1.22%	1.57%
2021	1.04%	1.27%	1.49%	0.91%	1.27%	1.63%
2022	1.09%	1.32%	1.54%	0.94%	1.32%	1.69%
2023	1.14%	1.37%	1.58%	0.98%	1.37%	1.76%
2024	1.19%	1.41%	1.63%	1.01%	1.41%	1.82%
2025	1.24%	1.46%	1.67%	1.04%	1.46%	1.88%
2026	1.28%	1.49%	1.69%	1.07%	1.49%	1.92%
2027	1.31%	1.53%	1.72%	1.09%	1.53%	1.96%
2028	1.35%	1.56%	1.74%	1.11%	1.56%	2.00%
2029	1.39%	1.59%	1.77%	1.14%	1.59%	2.04%
2030	1.43%	1.62%	1.79%	1.16%	1.62%	2.08%
2031	1.46%	1.64%	1.81%	1.17%	1.64%	2.11%
2032	1.49%	1.67%	1.70%	1.19%	1.67%	2.14%
2033	1.52%	1.69%	1.60%	1.21%	1.69%	2.17%
2034	1.55%	1.71%	1.50%	1.22%	1.71%	2.19%
2035	1.57%	1.72%	1.39%	1.23%	1.72%	2.21%
2036	1.60%	1.73%	1.29%	1.24%	1.73%	2.23%
2037	1.62%	1.61%	1.19%	1.15%	1.61%	2.07%
2038	1.63%	1.48%	1.08%	1.06%	1.48%	1.90%
2039	1.64%	1.35%	0.97%	0.97%	1.35%	1.74%
2040	1.65%	1.22%	0.87%	0.87%	1.22%	1.57%
2041	1.65%	1.10%	0.76%	0.78%	1.10%	1.41%
2042	1.49%	0.97%	0.66%	0.69%	0.97%	1.25%
2043	1.34%	0.84%	0.55%	0.60%	0.84%	1.09%
2044	1.19%	0.72%	0.45%	0.51%	0.72%	0.92%
2045	1.04%	0.60%	0.34%	0.43%	0.60%	0.77%
2046	0.89%	0.47%	0.24%	0.34%	0.47%	0.61%
2047	0.75%	0.36%	0.14%	0.25%	0.36%	0.46%
2048	0.61%	0.24%	0.05%	0.17%	0.24%	0.31%
2049	0.47%	0.13%	0.00%	0.09%	0.13%	0.16%
2050	0.33%	0.02%	0.00%	0.01%	0.02%	0.02%
2051	0.20%	0.00%	0.00%	0.00%	0.00%	0.00%
2052	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%
total	**47.24%**	**47.81%**	**48.02%**	**34.15%**	**47.81%**	**61.47%**

Source: Pension Modeling Package, Bearing Point, 2006–2008.

Annex B. Estimated Transition Cost Under Fixed (Pillar I) Benefit Reductions

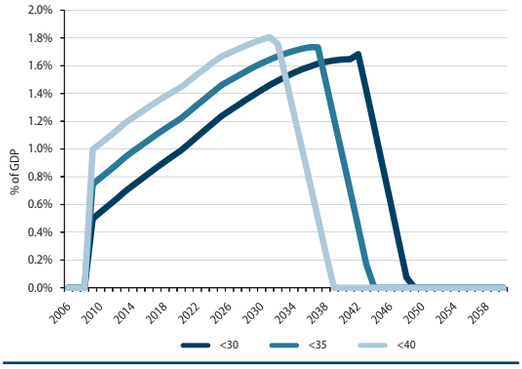
The assumption from the main text that the PAYGO system savings equal the level of paid pension benefits from the pillar II is highly useful in analytical terms, since it precisely indicates the costs and the savings generated by the introduction of pillar II. Thus, this approach clearly illustrates the effect of investment returns and fees that private pension funds charge, that is, it takes into consideration a potential failure of pillar II which would become the responsibility of the state. This is the reason for presenting this method of calculating transition cost in the main text, since we believe it is important to exactly present the "burden" borne under different circumstances.

It is, however, unrealistic to assume the PAYG system will be redesigned in such a way, as the statutory solutions would be probably overly complicated. Indeed, the practice of countries which have introduced pillar II suggests that PAYG systems were not redesigned in this manner. Hence, the Annex presents an appraisal of the volume the transition cost would have under the assumption of fixed (proportional) savings in the PAYG system for the insured who participate in pillar II as well. The method relies on the practice of countries which have introduced pillar II and the practices they have applied in redesigning their PAYG systems.

When pillar II was introduced, the laws regulating the state fund were changed to reflect that each individual participating in both pillars would have a lower pillar I pension. The pension benefits received from pillar I are calculated in accordance with a predefined formula, and they are independent of the level of pillar II returns. Furthermore, the pillar I pension benefits are usually independent of the number of years a person contributes to pillar II, resulting in different replacement rates per cohort.

This is the general approach employed by the countries which have introduced pillar II in regulating their PAYG systems - such as Croatia, Hungary, etc. For example, the Croatian law envisages: "For the average earner participating in both mandatory pillars, the total accrual rate from the first pillar in the new system would stand at 0.5%, i.e. about 50 percent lower than the accrual rate for those participating in the first pillar only" (Anušić, 2003). The accrual rate in Hungary for persons contributing to pillar I amounts to 1.65%, and it is 1.22% for those participating in both pillars - including the years during which the insured contributed to the PAYG system only. This represents a 25% reduction in PAYG pension benefits, equaling the share of contributions diverted to pillar II.

Graph B1. Transition Cost – 7% Contributions for Different Cut-off Ages (%GDP)



Note: Method: 45% savings in the PAYG system.
Source: Pension Modeling Package, Bearing Point, 2006–2008.

We have replicated the transition costs for two cases: PAYG savings proportional to the share of contributions diverted to pillar II (7/22=31.8%), which copies the Hungarian approach; and the method which uses fixed savings totaling 45% of PAYG expenditures for pillar II members, which resembles the Croatian approach.

The transition cost defined in such a manner is independent of the level of pillar II returns. At the same time, however, this means that the risk of a low return in pillar II has been shifted to pension beneficiaries. Consequently, the savings in pillar I are fixed, but the total expected pension benefit is not fixed and would depend on the level of pillar II returns.

This approach to estimation of the transition cost, therefore, assumes that the state will not have any financial responsibilities in the future

to private pension funds and their beneficiaries, e.g. there will be no minimum pension and minimum return guarantees, social security benefits and similar. However, the practice shows that, generally, the investment risk is not completely transferred to beneficiaries, but the state remains a provider of certain guarantees. Therefore, it is necessary to take into consideration some statutory provisions in using this approach, and calculate the expenses the state would have to bear if those guarantees were to be activated under certain circumstances - such as low pillar II returns, for example.

Table B2. Estimated Total Transition Cost Fewer than 7% Contribution Rate and Fixed (Pillar I) Benefit Reductions (% GDP)

	<30	<35	<40
31.8% PAYG savings	47.8%	46.3%	43.4%
45% PAYG savings	45.0%	43.4%	40.3%

Source: Pension Modeling Package, Bearing Point, 2006–2008.

ANALYTICAL APPENDIX

Table P-1. Serbia: Retail Price Index (RPI), 2003–2008

	RPI			RPI components				
	base index (avg. 2005 =100)	y-o-y growth	cumulative index[1]	GOODS	Agricultural products	Industrial foodproducts	Industrial non-foodproducts	SERVICES
				year-on-year growth				
				annual indices[2]				
2003	77.7	111.7	107.7	107.4	107.2	99.8	111.1	125.0
2004	85.3	110.1	113.8	110.0	103.4	112.4	109.6	110.2
2005	100.0	116.5	117.7	114.9	125.3	117.4	113.8	120.7
2006	112.7	112.7	106.6	112.4	117.6	111.2	112.3	113.3
2007	120.0	106.8	110.1	106.5	116.0	105.5	104.5	107.7
				quarterly indices[2]				
2005								
Q1	95.1	116.9	105.1	114.9	112.7	116.6	114.7	122.6
Q4	105.6	117.9	117.7	115.4	130.5	115.4	115.1	124.6
2006								
Q1	109.2	114.8	102.2	114.6	134.4	113.2	114.4	115.4
Q2	113.1	115.6	105.7	115.7	123.6	112.2	117.1	115.4
Q3	114.0	112.5	106.1	112.3	108.8	112.4	111.9	112.8
Q4	114.3	108.2	106.6	107.6	105.8	107.4	106.5	109.8
2007								
Q1	115.5	105.8	101.2	105.1	101.1	104.8	103.2	107.5
Q2	118.5	104.8	104.2	103.4	92.9	102.7	102.5	108.2
Q3	121.5	106.6	106.9	105.8	113.8	103.8	104.5	108.5
Q4	124.7	109.1	110.1	110.0	125.0	110.5	107.9	106.9
2008								
Q1	128.5	111.3	102.8	113.6	130.6	115.2	112.0	105.3
				monthly indices				
2005								
September	102.3	116.6	111.8	114.1	122.1	113.3	115.1	123.3
December	107.6	117.7	117.7	115.3	136.1	115.8	114.0	124.1
2006								
January	108.1	115.1	100.4	114.9	136.6	114.4	114.0	115.6
February	109.6	115.0	101.9	114.9	135.6	113.2	115.0	115.2
March	110.0	114.4	102.2	114.1	131.4	112.1	114.3	115.3
June	113.7	115.1	105.7	115.1	119.6	112.2	116.5	115.2
September	114.1	111.6	106.1	111.3	109.6	111.5	110.4	112.3
October	113.7	109.3	105.7	108.4	102.5	108.7	107.2	111.6
November	114.6	108.8	106.5	107.8	108.5	107.6	106.3	111.6
December	114.7	106.6	106.6	106.7	106.2	106.0	105.9	106.3
2007								
January	115.1	106.5	100.4	106.8	104.6	105.2	105.6	106.0
February	115.3	105.2	100.5	104.1	100.5	105.0	101.4	108.1
March	116.1	105.6	101.2	104.5	98.4	104.2	102.7	108.4
April	117.1	104.7	102.1	103.2	99.6	103.6	101.2	108.2
May	118.8	104.5	103.6	103.0	92.5	102.7	102.1	108.2
June	119.5	105.1	104.2	104.0	86.7	101.9	104.2	108.1
July	120.2	105.8	104.8	104.6	99.2	101.1	104.9	109.1
August	121.6	106.3	106.0	105.5	117.3	103.4	103.9	108.5
September	122.6	107.4	106.9	107.3	125.0	106.9	104.7	107.9
October	123.3	108.5	107.5	108.8	127.7	108.3	106.9	107.7
November	124.7	108.8	108.7	109.7	123.6	110.1	108.0	106.4
December	126.3	110.1	110.1	111.4	123.7	113.2	108.8	106.5
2008								
January	127.5	110.7	100.9	112.1	126.7	114.1	110.4	106.7
February	128.3	111.3	101.6	113.9	129.7	115.2	112.6	104.8
March	129.8	111.8	102.8	114.7	135.5	116.3	113.0	104.2
April	131.2	112.0	103.9	114.8	133.4	120.2	111.3	104.8

Source: SBS.

1) Cumulative is the ratio of given period and December of previous year.

2) Twelve-month averages for annual data, three-month averages for quarterly data.

Table P-2. Serbia: Selected Price Indices, 2003–2008

	Retail Price Index		Consumer price index		Industrial producers' price index		Agricultural producers' price index	
	base index (avg. 2005 =100)	y-o-y growth	base index (avg. 2005 =100)	y-o-y growth	base index (avg. of previous year =100)	y-o-y growth	base index (avg. of previous year =100)	y-o-y growth
					annual indices[1]			
2003	77.7	111.7	77.6	109.9	104.6	104.6	100.5	100.5
2004	85.3	110.1	86.1	111.4	109.1	109.1	110.0	110.0
2005	100.0	116.5	100.0	116.2	114.2	114.2	115.6	115.6
2006	112.7	112.7	111.7	111.7	113.3	113.3	109.2	109.2
2007	120.0	106.8	118.9	107.0	105.9	105.9	…	…
					quarterly indecies[1]			
2005								
Q1	95.1	116.9	94.8	115.9	108.2	113.5	113.2	106.4
Q4	105.6	117.9	105.5	116.6	121.6	115.7	120.4	109.9
2006								
Q1	109.2	114.8	108.7	114.6	108.9	114.3	105.0	105.9
Q2	113.1	115.6	112.7	114.2	113.3	116.2	107.0	107.0
Q3	114.0	112.5	112.6	111.4	115.7	114.6	110.9	110.0
Q4	114.3	108.2	113.0	107.1	115.2	108.4	111.0	107.0
2007								
Q1	115.5	105.8	113.9	104.8	101.8	105.5	101.9	105.2
Q2	118.5	104.8	116.4	103.3	104.9	104.4	101.8	103.1
Q3	121.5	106.6	120.0	106.6	106.9	105.1	117.9	116.3
Q4	124.7	109.1	125.1	110.8	109.8	108.5	132.0	129.8
2008								
Q1	128.5	111.3	129.2	113.4	108.2	111.8	…	…
					monthly indices			
2005								
September	102.3	116.6	101.7	114.8	118.2	114.5	120.0	108.2
December	107.6	117.7	107.0	117.1	122.3	115.4	121.7	111.8
2006								
January	108.1	115.1	107.8	115.3	108.0	114.5	104.7	108.2
February	109.6	115.0	108.9	114.8	109.0	113.9	104.6	104.6
March	110.0	114.4	109.5	113.8	109.6	114.4	105.8	104.9
June	113.7	115.1	113.4	113.7	114.0	116.2	108.4	108.7
September	114.1	111.6	112.6	110.7	115.8	112.9	112.4	108.7
October	113.7	109.3	112.2	107.9	115.5	110.0	109.7	106.5
November	114.6	108.8	113.3	107.5	115.1	108.0	111.0	107.3
December	114.7	106.6	113.4	106.0	114.9	107.3	112.3	107.3
2007								
January	115.1	106.5	114.0	105.8	101.6	106.2	102.7	107.5
February	115.3	105.2	113.7	104.5	101.6	105.1	101.7	104.6
March	116.1	105.6	114.1	104.2	102.2	105.1	101.2	103.4
April	117.1	104.7	115.0	103.4	103.0	103.7	99.3	101.8
May	118.8	104.5	116.9	103.1	105.5	104.5	101.6	102.7
June	119.5	105.1	117.3	103.5	106.2	104.9	104.5	104.8
July	120.2	105.9	117.0	104.1	106.1	104.2	109.1	110.2
August	121.6	106.3	120.5	106.9	106.8	104.9	120.5	118.0
September	122.6	107.4	122.6	108.9	107.7	106.1	124.2	120.6
October	123.3	108.5	123.2	109.8	108.6	107.3	130.0	130.2
November	124.7	108.8	125.2	110.5	109.9	108.4	133.4	132.1
December	126.3	110.1	127.0	112.0	111.0	109.8	132.6	127.2
2008								
January	127.5	110.7	128.0	112.3	107.1	111.0	115.6	127.4
February	128.3	111.3	128.8	113.3	107.8	111.5	117.8	132.1
March	129.8	111.8	130.8	114.6	109.6	112.8	…	…

Source: SBS.

1) Twelve-month averages for annual data, three month averages for quarterly data.

Table P-3. Serbia: Euro / Dinar Exchange rate, 2003–2008

	Nominal					Real			CPI in Euro area[4] (avg. 2005 = 100)
	Exchange rate (FX)[1]	Base index (avg. 2005=100)	y-o-y index	cumulative index[2]	USD/EUR	real FX[3] (avg. 2005=100)	y-o-y index	cumulative index[2]	
					annual exchange rate[5]				
2003	64.9743	78.4	107.1	110.5	1.1241	96.7	97.7	104.6	95.8
2004	72.6215	87.6	111.8	115.6	1.2392	100.5	104.0	104.0	97.9
2005	82.9188	100.0	114.2	109.3	1.2433	100.1	99.6	94.9	100.0
2006	84.1879	101.5	101.5	91.7	1.2537	92.1	92.1	87.7	102.2
2007	79.9744	96.4	95.1	101.0	1.3705	83.9	91.1	94.6	104.4
					quarterly exchange rate[5]				
2005									
Q1	80.2421	96.8	115.9	102.7	1.3145	100.5	101.2	98.1	98.8
Q4	85.7085	103.4	111.3	109.3	1.1898	98.8	96.6	94.9	101.0
2006									
Q1	87.0875	105.0	108.5	101.4	1.2031	97.2	96.7	99.6	101.0
Q2	86.8674	104.8	106.1	101.0	1.2552	94.9	94.1	96.9	102.4
Q3	83.2482	100.4	99.3	96.7	1.2745	90.2	90.2	92.5	102.5
Q4	79.5486	95.9	92.8	91.7	1.2893	86.2	87.3	87.7	102.8
2007									
Q1	79.9849	96.5	91.8	102.7	1.3105	86.0	88.5	101.9	102.9
Q2	81.0734	97.8	93.3	103.0	1.3482	86.1	90.8	100.3	104.4
Q3	80.0302	96.5	96.1	100.8	1.3741	83.0	91.9	95.8	104.4
Q4	78.8092	95.0	99.1	101.0	1.4493	80.6	93.5	94.6	105.7
2008									
Q1	82.6488	99.7	103.3	104.5	1.4997	82.5	96.0	102.6	106.4
					monthly exchange rate				
2005									
March	80.7498	131.2	116.1	102.7	1.3074	100.6	100.9	98.1	99.3
September	84.4958	137.3	113.6	107.5	1.2265	100.4	100.0	97.9	100.8
December	85.9073	139.6	109.3	109.3	1.1861	97.4	94.9	94.9	101.1
2006									
January	86.9033	141.2	108.8	101.2	1.2122	97.6	96.8	100.3	100.7
February	87.2558	141.8	108.9	101.6	1.1960	96.9	96.9	99.6	101.0
March	87.1033	141.5	107.9	101.4	1.2013	97.0	96.4	99.6	101.5
April	86.5391	140.6	106.4	100.7	1.2239	95.3	94.4	97.9	102.2
May	87.3023	141.8	106.7	101.6	1.2750	94.9	94.2	97.5	102.5
June	86.7609	140.9	105.1	101.0	1.2677	94.4	93.6	96.9	102.6
July	83.7931	136.1	101.0	97.5	1.2684	91.1	91.7	93.6	102.4
August	82.8893	134.7	98.7	96.5	1.2803	89.6	89.2	92.0	102.5
September	83.0621	134.9	98.3	96.7	1.2748	90.0	89.7	92.5	102.5
October	80.9242	131.5	95.0	94.2	1.2615	88.1	88.3	90.5	102.6
November	78.9404	128.2	91.7	91.9	1.2876	85.3	85.8	87.6	102.6
December	78.7812	128.0	91.7	91.7	1.3210	85.4	87.7	87.7	103.0
2007									
January	79.6587	96.1	91.7	101.1	1.2993	85.6	87.6	100.2	102.5
February	79.3993	95.8	91.0	100.8	1.3075	85.4	88.1	100.1	102.8
March	80.8968	97.6	92.9	102.7	1.3246	87.0	89.7	101.9	103.5
April	80.5768	97.2	93.1	102.3	1.3516	86.4	90.7	101.3	104.2
May	81.4770	98.3	93.3	103.4	1.3512	86.4	91.0	101.2	104.4
June	81.1665	97.9	93.6	103.0	1.3420	85.6	90.7	100.3	104.5
July	80.6204	97.2	96.2	102.3	1.3716	84.3	92.5	98.8	104.3
August	80.0703	96.6	96.6	101.6	1.3622	82.8	92.4	97.0	104.3
September	79.3999	95.8	95.6	100.8	1.3884	81.8	90.9	95.8	104.7
October	77.6627	93.7	96.0	98.6	1.4227	79.9	90.8	93.6	105.2
November	79.1979	95.5	100.3	100.5	1.4689	81.1	95.1	95.0	105.8
December	79.5669	96.0	101.0	101.0	1.4563	80.7	94.6	94.6	106.2
2008									
January	81.8460	98.7	102.7	102.9	1.4719	82.0	95.8	101.5	105.8
February	82.9685	100.1	104.5	104.3	1.4755	82.8	96.9	102.6	106.2
March	83.1319	100.3	102.8	104.5	1.5516	82.8	95.2	102.6	107.2
April	81.0287	97.7	100.6	101.8	1.5770	80.1	92.7	99.2	107.6

Source: NBS, SBS, Eurostat (www.epp.eurostat.cec.eu.int)

1) Monthly average, official daily NBS mid rate.

2) Cumulative index: ratio of given period and December of previous year.

3) Real fx calculation includes Euro area inflation. See footnote 5) in Table T3-9.

4) Harmonized indices of consumer prices.

5) Twelve-month averages for annual data, three-month averages for quarterly data.

Table P4. Serbia: Registered Employment, 2004–2008

	Total No. of employed (employees and entrepreneurs)	Employees in legal entities	Entrepreneurs			Total No. of employees
			Total	No. of entrepreneurs	No. of employees with entrepreneurs	
	1 (=2+3)	2	3 (=4+5)	4	5	6(=2+5)
			quarterly data - in thousands			
2004	2,047	1,574	473	210	263	1,837
Q1	2,036	1,576	460	207	253	1,829
Q2	2,061	1,593	468	208	259	1,853
Q3	2,051	1,576	475	209	266	1,842
Q4	2,041	1,552	489	216	273	1,825
2005	2,056	1,535	521	228	293	1,828
Q1	2,050	1,543	507	225	283	1,825
Q2	2,062	1,544	518	228	289	1,833
Q3	2,057	1,530	527	229	298	1,828
Q4	2,055	1,521	533	230	304	1,825
2006	2,028	1,472	556	236	320	1,791
Q1	2,035	1,500	535	228	307	1,806
Q2	2,031	1,481	550	234	316	1,797
Q3	2,031	1,462	569	242	327	1,789
Q4	2,014	1,444	571	241	329	1,773
2007	1,998	1,429	569	241	328	1,756
Q1	2,002	1,432	567	240	328	1,759
Q2	1,999	1,433	566	239	327	1,760
Q3	1,997	1,425	572	244	328	1,753
Q4	1,995	1,422	573	245	328	1,750
2008						
Q1[1)]	1,989	1,416	573	245	328	1,744
			monthly data - in thousands			
2006						
January	2,037	1,506	534	229	305	1,811
February	2,029	1,497	535	228	307	1,804
March	2,032	1,496	536	228	308	1,804
April	2,023	1,487	543	231	312	1,799
May	2,016	1,481	550	234	316	1,797
June	2,011	1,475	557	237	320	1,795
July	2,008	1,472	564	240	324	1,796
August	2,002	1,467	571	243	328	1,795
September	2,019	1,447	572	242	330	1,777
October	2,020	1,448	572	242	330	1,778
November	2,015	1,443	570	241	329	1,772
December	2,012	1,440	570	241	329	1,769
2007						
January	2,005	1,432	568	240	328	1,760
February	1,997	1,425	568	240	328	1,753
March	2,004	1,438	566	239	327	1,765
April	2,003	1,436	567	240	327	1,763
May	2,001	1,433	568	241	327	1,760
June	1,998	1,429	569	242	327	1,756
July	1,998	1,427	571	243	328	1,755
August	1,993	1,421	572	244	328	1,749
September	2,001	1,428	573	245	328	1,756
October	1,998	1,425	573	245	328	1,753
November	1,995	1,422	573	245	328	1,750
December	1,991	1,418	573	245	328	1,746
2008						
January	1,989	1,416	573[2)]	245	328	1,744

Source: Semi-annual Report on the Employed and Wages RAD-1/P; Additional Survey to the Semi-annual RAD-1 Report; Semi-annual Report on Small Businesses and Their Employees RAD-15.

Notes by column:

1) The total number of employed (employees and entrepreneurs) includes those employed by legal entities (enterprises, organizations, institutions) - Column 2, and small businesses i.e. entrepreneurs - Column 3 (including store owners, self-employed professionals, etc., and those working for them). Employees of the Ministry of Defense of Serbia-Montenegro, and the Serbian Ministry of Internal Affairs are not included.

2) Employees in legal entities (companies, organizations, institutions).

3) Owners of small businesses and self-employed persons (entrepreneurs) and their employees (Column 4 + Column 5).

4) Entrepreneurs, i.e. owners of small businesses.

5) Employees with entrepreneurs, i.e. in small businesses.

Footnotes:

1) Data for Q1 are in fact January 2008 data.

2) The most recent data on the number of entrepreneurs and their employees are from September 2007.

Table P-5. Serbia: Employees by Activities, 2004–2008

	2004	2005	2006	2007	2006						2007												2008
					Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Employees in enterprises, institutions and organizations, by sections of activities	in thousands																						
Agriculture, hunting and forestry	69	64	58	54	58	58	57	57	56	56	56	56	55	55	56	55	54	54	53	52	52	52	50
Fishing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mining and quarrying	32	31	27	24	28	28	29	25	24	24	24	23	23	23	23	23	24	24	24	24	24	24	24
Manufacturing	484	460	419	389	419	415	409	407	403	400	400	396	399	395	391	388	387	384	385	382	379	376	372
Electricity, gas and water supply	46	46	45	45	44	44	43	47	46	46	46	45	45	45	45	45	45	45	45	45	45	45	45
Construction	88	88	86	83	86	85	85	86	86	86	84	83	83	82	82	82	82	82	83	83	83	82	81
Wholesale and retail trade, repair	208	205	198	195	200	201	192	192	193	193	192	191	197	197	196	196	196	195	195	195	195	194	195
Hotels and restaurants	28	27	25	24	24	24	24	24	24	24	23	23	24	24	24	24	24	23	24	23	23	23	22
Transport, storage and communications	119	116	110	109	110	110	109	108	108	108	107	109	109	109	108	108	109	108	110	109	109	108	107
Financial mediation	29	29	30	31	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	32
Real estate, renting activities	59	63	67	67	67	68	68	67	67	67	63	63	65	67	67	67	67	67	68	69	68	68	71
Public administration and social insurance	71	71	69	69	69	69	69	69	69	69	69	69	68	68	68	69	69	69	69	69	70	70	69
Education	131	129	127	130	126	125	125	128	129	129	130	130	130	130	130	130	129	129	129	132	133	133	133
Health and social work	165	166	158	157	158	158	157	156	155	156	155	156	156	156	157	157	156	156	158	158	158	159	159
Other communal, social and personal services	49	51	52	52	52	52	51	51	51	51	51	51	52	52	52	52	53	52	53	53	53	53	53

Source: Semi-annual Report on the Employed and Wages RAD-1/P; Additional Survey to the Semi-annual RAD-1 Report; Semi-annual Report on Small Businesses and Their Employees RAD-15.

Table P-6. Serbia: Average Monthly Wage and Wage Index (SBS), 2005–2008

	Average monthly wage (SBS)			Average Monthly Wage Real Chain Index (SBS)	
	Total labour costs, in dinars	Gross, in dinars	Net, in dinars	Gross	Net
2005					
August	30,951	26,252	17,928	108.9	109.2
September	31,618	26,818	18,345	110.6	110.6
October	31,503	26,720	18,265	107.1	107.4
November	32,280	27,379	18,696	106.6	106.6
December	38,014	32,243	22,078	108.5	108.7
2006					
January	31,365	26,603	18,191	110.4	110.6
February	33,787	28,657	19,567	111.5	111.5
March	34,624	29,367	20,094	111.2	111.3
April	36,044	30,572	20,887	106.2	106.1
May	35,730	30,305	20,713	108.3	108.2
June	37,568	31,864	21,777	109.9	109.8
July	37,419	31,738	21,774	110.3	110.6
August	37,844	32,098	21,925	109.3	109.3
September	38,382	32,555	22,259	109.7	109.6
October	38,516	32,668	22,340	113.4	113.4
November	39,959	33,892	23,148	115.1	115.1
December	48,686	41,294	28,267	120.9	120.8
2007					
January	39,815	33,770	24,122	120.0	125.3
February	41,523	35,219	25,228	117.6	123.4
March	42,618	36,148	25,960	118.1	124.0
April	43,761	37,117	26,632	117.4	123.3
May	44,411	37,668	26,981	120.6	126.4
June	45,882	38,916	27,882	118.0	123.7
July	45,641	38,712	27,752	117.2	122.4
August	46,337	39,302	28,143	114.5	120.1
September	46,344	39,308	28,161	110.9	116.2
October	47,257	40,082	28,720	111.7	117.1
November	48,351	41,010	29,373	109.5	114.8
December	56,736	48,122	34,471	104.1	108.9
2008					
January	46,371	39,331	28,230	103.5	104.0
February	50,954	43,218	30,982	108.3	108.4
March	50,547	42,873	30,809	103.5	103.5
April	53,474	45,355	32,562	105.5	105.6

Source: Serbian Bureau of Statistics (SBS).

Table P-7. Serbia: Average Gross Monthly Wages in Public Sector, 2004–2008

	From the budget			Public enterprises		Serbia average
	Administration - all levels	Education and culture	Health and social work	National public	Local public	
			in dinars			
2004	28,268	22,944	23,120	29,104	27,943	20,555
2005	34,783	28,261	26,984	33,987	33,353	25,565
2006	42,386	33,812	33,150	42,052	38,385	31,801
2007	49,872	41,248	43,377	51,987	42,725	38,781
2005						
Q1	31,221	25,153	22,942	31,275	31,143	22,166
Q2	34,371	28,137	26,612	32,530	32,633	25,035
Q3	34,146	29,023	27,222	35,080	33,693	26,280
Q4	39,395	30,731	31,159	37,065	35,946	28,781
2006						
Q1	39,906	32,032	26,887	39,030	34,607	28,209
Q2	40,118	32,390	31,322	40,731	38,295	30,914
Q3	41,106	33,700	31,849	42,379	38,572	32,130
Q4	48,413	37,127	42,542	46,070	42,067	35,951
2007						
Q1	46,633	37,797	35,345	53,092	41,294	35,046
Q2	49,166	39,908	42,550	50,030	41,368	37,900
Q3	58,941	49,428	51,048	59,964	50,499	46,108
Q4	63,310	53,483	61,678	63,628	53,531	50,781
December	66,729	57,875	78,125	66,341	55,618	56,736
2008						
Q1	52,454	46,928	42,341	56,775	46,133	41,807

Source: SBS.
Note: This table shows only the wage share paid out from the budget. The wages of those employed in the public sector are in fact higher because they are partially financed from own revenues.

Table P-8. Serbia: Balance of Payments, 2003-2007[1)]

	2003	2004	2005				2006				2007			
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	flows, cumulative from the beginning of the year, in millions of euros													
CURRENT ACCOUNT	**-1,355**	**-2,197**	**-324**	**-615**	**-1,134**	**-1,805**	**-689**	**-1,199**	**-1,972**	**-3,137**	**-1,186**	**-1,992**	**-3,337**	**-4,994**
GOODS AND SERVICES	**-3,621**	**-5,156**	**-708**	**-1,755**	**-2,970**	**-4,284**	**-1,129**	**-2,395**	**-3,557**	**-5,023**	**-1,440**	**-2,950**	**-4,438**	**-6,425**
Goods	-3,808	-5,311	-683	-1,772	-2,987	-4,279	-1,110	-2,378	-3,554	-4,983	-1,445	-2,949	-4,454	-6,413
Exports , f.o.b.[2)]	2,447	2,991	813	1,824	2,843	4,006	1,030	2,258	3,629	5,111	1,383	2,977	4,708	6,444
Imports , f.o.b.	-6,415	-8,302	-1,496	-3,596	-5,830	-8,285	-2,140	-4,636	-7,183	-10,093	-2,829	-5,927	-9,162	-12,858
Exports/ Imports (%)	*38.1*	*36.0*	*54.3*	*50.7*	*48.8*	*48.4*	*48.1*	*48.7*	*50.5*	*50.6*	*48.9*	*50.2*	*51.4*	*50.1*
Services	187	155	-25	17	17	-5	-19	-17	-3	-41	6	0	16	-11
Receipts	906	1,171	251	594	951	1,319	350	771	1,306	1,840	488	989	1,564	2,140
Expenditures	-719	-1,016	-276	-577	-934	-1,324	-369	-788	-1,309	-1,881	-482	-990	-1,547	-2,152
Balance of goods and services	-3,621	-5,156	-708	-1,755	-2,970	-4,284	-1,129	-2,395	-3,557	-5,023	-1,440	-2,950	-4,438	-6,425
Export of goods and services	3,513	4,162	1,063	2,418	3,794	5,326	1,380	3,030	4,935	6,951	1,871	3,967	6,272	8,585
Imports of goods and services	-7,134	-9,319	-1,772	-4,173	-6,764	-9,610	-2,509	-5,424	-8,492	-11,974	-3,311	-6,916	-10,710	-15,009
Income, net	-180	-172	-59	-141	-198	-260	-65	-164	-252	-330	-106	-216	-358	-498
Earnings	61	64	12	32	53	80	33	68	107	157	41	89	133	174
Payments	-241	-235	-71	-174	-250	-339	-98	-232	-359	-488	-147	-305	-491	-672
Current transfers	2,020	2,728	410	1,200	1,886	2,471	468	1,276	1,710	2,031	318	1,094	1,327	1,729
Private remittances, net	332	340	35	167	225	281	-19	104	188	202	-17	148	116	98
Inflow	690	796	184	424	683	955	97	104	232	573	276	608	953	1,336
Outflow	-358	-456	-149	-256	-457	-674	-286	-456	-724	-1,051	-292	-460	-838	-1,238
F/X accounts of non-residents	308	568	37	108	259	460	175	236	269	259	111	274	300	378
F/X purchases, net	1,106	1,592	320	884	1,329	1,631	289	882	1,166	1,447	194	606	807	1,103
Other[3)]	274	228	17	41	73	99	23	54	87	123	30	65	104	150
Official grants	425	403	33	82	148	268	37	84	127	185	42	80	131	200
ERRORS AND OMISSIONS	**44**	**168**	**-184**	**-75**	**-205**	**-384**	**-57**	**-76**	**-123**	**-258**	**-165**	**-186**	**-80**	**-192**
CAPITAL AND FINANCIAL ACCOUNT	**1,898**	**2,377**	**710**	**1,173**	**2,276**	**3,863**	**1,129**	**2,745**	**5,103**	**7,635**	**1,161**	**2,394**	**4,099**	**6,126**
Financial account	1,898	2,377	710	1,173	2,276	3,863	1,129	2,745	5,103	7,635	1,161	2,394	4,099	6,126
Foreign direct investment (FDI)	1,198	773	262	502	998	1,248	180	788	2,566	4,348	614	608	1,147	1,942
Other investment	701	1,604	448	671	1,278	2,615	949	1,957	2,537	3,286	547	1,785	2,952	4,184
Medium/long term loans, net[4)]	628	1,221	159	602	988	1,820	456	1,695	2,473	3,156	534	1,488	2,137	3,149
Government	206	229	15	44	108	192	68	85	133	133	36	43	81	95
Commercial banks	106	417	68	209	292	729	166	1,137	1,366	1,506	41	-160	-196	-126
Other	317	574	74	348	588	886	222	474	974	1,517	458	1,606	2,252	3,180
Short-term loans, net	14	164	94	28	33	330	212	-188	25	170	-197	-98	24	337
Extraordinary debt and interest repayment[5)]	0	0	0	0	0	0	0	-188	-377	-1,060	-143	-98	-86	-56
Other assets and liabilities	18	187	120	11	186	378	136	112	441	833	347	449	843	1,476
Commercial banks F/X reserves (increase,-)	-3	33	77	30	71	100	144	146	-25	1	6	43	33	-722
NBS reserves, net[4)], (increase,-)	**-587**	**-349**	**-202**	**-483**	**-937**	**-1,675**	**-382**	**-1,469**	**-3,008**	**-4,240**	**191**	**-216**	**-681**	**-941**
IMF disbursements	246	192	0	0	151	151	75	75	75	75	0	0	0	0
IMF amortization[6)]	0	-188	-47	-93	-133	-166	-15	-22	-22	-32	-19	-29	-38	-64
MEMORANDUM ITEMS														
NBS reserves excl. com. banks deposits	-765	-293	-51	-270	-455	-680	-85	-433	-613	-1,666 0	276	-97	-444	-1,016
	in % of GDP													
Exports of goods and services	19.5	21.1	23.2	24.9	24.9	25.2	26.6	27.3	27.9	27.9	29.0	29.1	29.4	28.8
Imports of goods and services	-39.6	-47.2	-38.7	-43.0	-44.4	-45.5	-48.4	-48.8	-48.0	-48.1	-51.3	-50.8	-50.2	-50.3
Balance of goods and services	-21.1	-26.9	-14.9	-18.3	-19.6	-20.3	-21.4	-21.4	-20.1	-20.0	-22.4	-21.7	-20.9	-21.5
Current account	-7.5	-11.1	-7.1	-6.3	-7.5	-8.6	-13.3	-10.8	-11.2	-12.6	-18.4	-14.6	-15.6	-16.7
GDP in euros[7)]	18,008	19,723	4,578	9,703	15,220	21,108	5,180	11,113	17,681	24,877	6,449	13,619	21,342	29,845

Source: NBS, SBS.

1) Original US dollars monthly data are converted to euros using monthly averages of official daily NBS mid rates.

2) Exports f.o.b. corrected for unregistered exports.

3) Includes payments settlement with Kosovo.

4) Excluding IMF tranches.

5) Includes extraordinary repayment of principal and interests on WB and IMF loans.

6) Principal repayments.

7) Cumulative from the beginning of the year. GDP 2006 and 2007: QM estimate.

Table P-9. Serbia: Balance of Payments, Q1 2007 and Q1 2008 (new methodology)[1)]

	March 2007	March 2008
	in millions of euros	
CURRENT ACCOUNT	**-911**	**-1,165**
GOODS AND SERVICES	**-1,516**	**-1,772**
Goods	-1,482	-1,823
Exports , f.o.b.[2)]	1,383	1,666
Imports , f.o.b.	-2,865	-3,489
Exports/ Imports (%)	*48*	*48*
Services	-35	51
Receipts	517	682
Expenditures	-551	-632
Balance of goods and services	-1,516	-1,772
Export of goods and services	1,900	2,349
Imports of goods and services	-3,417	-4,121
Income, net	-55	-86
o/w: interests	-69	-96
Current transfers inkluding grants	661	694
Private remittances, net	502	509
Registered	136	130
Unregistered	366	378
Grants	23	37
Other transfers	135	148
ERRORS AND OMISSIONS	**-188**	**-54**
CAPITAL AND FINANCIAL ACCOUNT[3)]	**813**	**1,218**
Capital account	-322	5
Financial account	1,134	1,213
Foreign direct investment (FDI)	935	686
o/w portfolio investment	269	-44
Other investment	-30	557
Medium/long term loans, net	515	440
Government	17	1
Commercial banks	43	-34
Other	455	474
Short-term loans, net	-199	-237
Commercial banks, net	-220	-353
F/X cash and deposits	-198	274
o/w extraordinary debt and interest repayments	-143	0
Other assets and liabilities	-148	79
NBS Reserves, net, (increase -)	**229**	**-29**
MEMORANDUM ITEMS		
NBS reserves excl. government and com. banks deposits	314	-188
	in % of GDP	
Exports of goods and services	29.5	31.0
Imports of goods and services	-53.0	-54.4
Balance of goods and services	-23.0	-24.1
Current account	-14.1	-15.4
GDP in euros[4)]	6,449	7,573

Source: NBS, SBS.

1) According to new methodology of NBS adjusted to IMF BOPM-5. Original US dollars monthly data are converted to euros using monthly averages of official daily NBS mid rates.

2) Exports f.o.b. corrected for unregistered exports.

3) According to new methodology of NBS, Capital and Financial account included NBS reservs.

4) Quarterly GDP is converted to euros using annual average (average of official daily NBS mid rates).

Table P-10. Serbia: Consolidated General Government Fiscal Operations[1], 2004–2008

	2004	2005	2006	2007					2008	2004	2005	2006	2007
	Total	Total	Total	Total	Q1	Q2	Q3	Q4	Q1				
	in bill of dinars									% in GDP			
I TOTAL REVENUE	**589.4**	**721.7**	**865.8**	**1007.8**	**226.4**	**240.0**	**251.3**	**290.1**	**268.3**	**41.2**	**41.2**	**42.4**	**42.1**
o/w: Public revenues excluding government VAT liabilities and offsets with SDF[2,3]	*580.6*	*699.1*	*855.6*	*1002.2*	*224.9*	*237.2*	*250.2*	*289.9*	268.3	*40.6*	*39.9*	*41.9*	41.9
1. Current revenue	583.4	713.7	855.5	996.0	223.1	237.4	248.9	286.7	265.5	40.8	40.8	41.9	41.6
Tax revenue	540.8	637.9	756.0	870.3	195.7	209.9	216.5	248.2	234.6	37.8	36.5	37.0	36.4
Personal income tax	76.9	94.3	118.6	115.8	24.9	28.2	29.1	33.6	29.7	5.4	5.4	5.8	4.8
Corporate income tax	6.9	10.3	18.3	29.7	11.7	5.6	4.6	7.8	15.0	0.5	0.6	0.9	1.2
Value added tax and retail sales tax	159.1	215.9	225.1	265.5	60.5	65.0	66.9	73.1	73.2	11.1	12.3	11.0	11.1
o/w: Net VAT and retail sales tax[2]	*159.1*	*198.8*	*224.5*	*260.3*	*59.1*	*62.3*	*65.8*	*73.1*	*73.2*	*11.1*	*11.4*	*11.0*	10.9
Excises	69.1	71.3	86.9	98.6	20.1	24.1	26.0	28.4	23.7	4.8	4.1	4.3	4.1
Custom duties	34.3	39.0	45.4	57.4	12.0	13.9	14.6	16.9	14.8	2.4	2.2	2.2	2.4
Social contributions	159.0	183.0	231.4	270.6	58.6	64.8	67.6	79.6	69.7	11.1	10.5	11.3	11.3
o/w: contributions excluding offsets with SDF[3]	*150.2*	*177.5*	*221.9*	*270.1*	*58.5*	*64.7*	*67.6*	*79.2*	*69.7*	*10.5*	*10.1*	*10.9*	11.3
Other tax	35.5	24.2	30.3	32.8	7.9	8.4	7.7	8.8	8.5	2.5	1.4	1.5	1.4
Non-tax revenue	42.6	75.8	99.6	125.7	27.4	27.4	32.4	38.5	31.0	3.0	4.3	4.9	5.3
2. Capital revenue	6.1	7.9	10.3	11.7	3.2	2.6	2.4	3.4	2.8	0.4	0.5	0.5	0.5
II TOTAL EXPENDITURE	**-572.0**	**-695.1**	**-871.4**	**-1024.3**	**-214.9**	**-220.8**	**-254.5**	**-334.1**	**-252.3**	**-40.0**	**-39.7**	**-42.7**	**-42.8**
1. Current expenditure	-535.0	-579.2	-790.0	-907.9	-194.8	-203.8	-230.2	-279.0	-238.5	-37.4	-33.1	-38.7	-37.9
Wages and salaries	-138.0	-170.0	-204.4	-238.3	-53.3	-57.7	-59.6	-67.6	-64.1	-9.6	-9.7	-10.0	-10.0
o/w: wages and salaries excluding severance payments[4]	*-0.3*	*-1.3*	*-3.2*	*-2.0*	*-0.3*	*-0.4*	*-0.4*	*-0.9*	-0.3	*0.0*	*-0.1*	*-0.2*	-0.1
o/w: Health Insurance Bureau severance payments[5]	*0.0*	*-2.2*	*-2.3*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	0.0	*0.0*	*-0.1*	*-0.1*	0.0
Expenditure on goods and services	-78.3	-107.2	-135.9	-168.2	-30.3	-36.2	-41.0	-60.7	-38.1	-5.5	-6.1	-6.7	-7.0
Interest payments	-24.6	-17.7	-30.2	-17.9	-6.2	-3.4	-4.7	-3.5	-6.0	-1.7	-1.0	-1.5	-0.7
Subsidies	-63.8	-54.9	-55.6	-63.7	-9.4	-10.5	-17.9	-25.9	-13.4	-4.5	-3.1	-2.7	-2.7
Social transfers	-217.0	-281.7	-343.4	-395.9	-91.1	-91.8	-101.8	-111.3	-112.7	-15.2	-16.1	-16.8	-16.5
o/w: pensions[6]	*-151.1*	*-186.1*	*-227.7*	*-259.9*	*-62.0*	*-63.3*	*-64.9*	*-69.7*	*-74.8*	*-10.6*	*-10.6*	*-11.2*	-10.9
Other current expenditure	-13.3	-17.8	-20.5	*-23.9*	-4.6	-4.1	-5.2	-10.0	-4.2	-0.9	-1.0	-1.0	-1.0
2. Capital expenditure[7]	-37.0	-45.9	-81.3	-116.4	-20.0	-17.0	-24.4	-55.1	-13.8	-2.6	-2.6	-4.0	-4.9
III "OLD" DEBT REPAYMENT, GOVERNMENT NET LENDING AND RECAPITALIZATIONS	**-6.3**	**-15.1**	**-30.9**	**-26.5**	**-9.8**	**-1.0**	**-5.5**	**-10.2**	**-12.6**	**-0.4**	**-0.9**	**-1.5**	**-1.1**
1. Pensions[8]	-4.5	-9.8	-20.3	-13.4	-8.9	0.0	0.0	-4.4	-5.0	-0.3	-0.6	-1.0	-0.6
2. Budget credits, net[9]	-1.8	-5.3	-10.7	-13.1	-0.8	-1.0	-5.5	-5.8	-7.6	-0.1	-0.3	-0.5	-0.5
IV CASH BALANCE (I+II+III)	**17.5**	**11.5**	**-36.5**	**-43.0**	**1.7**	**18.2**	**-8.8**	**-54.2**	**3.4**	**1.2**	**0.7**	**-1.8**	**-1.8**
Republic budget	-0.8	4.7	-36.9	-38.8	-8.0	14.5	-9.5	-35.8	1.1	-0.1	0.3	-1.8	-1.6
Pension and Disability Insurance Employee Fund	-0.8	1.7	1.3	2.1	-2.2	-1.6	0.1	5.9		-0.1	0.1	0.1	0.1
Pension and Disability Insurance Self-employed Fund	2.7	2.5	5.2	5.4	1.3	1.0	1.4	1.7	-5.3	0.2	0.1	0.3	0.2
Pension and Disability Insurance Farmers Fund	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	-0.1		0.0	0.0	0.0	0.0
Health Insurance Fund	1.4	1.2	3.1	0.4	3.5	0.8	1.5	-5.4	3.8	0.1	0.1	0.2	0.0
National Employment Service	0.8	0.4	0.2	-0.8	-0.6	0.1	0.0	-0.3	-2.6	0.1	0.0	0.0	0.0
Vojvodina budget	-0.6	-2.0	-2.7	-1.4	0.4	-0.3	-0.7	-0.8	2.0	0.0	-0.1	-0.1	-0.1
Local government	..	3.3	0.5	-8.6	7.4	2.8	-2.5	-16.3	7.4	…	0.2	0.0	-0.4
	..	..	-4.4	-1.4	0.0	0.6	0.1	-2.0	-0.3	…	…	-0.2	-0.1
V FINANCING (FREN's definition)	**4.8**	**5.9**	**100.0**	**13.5**	**20.3**	**-5.3**	**-6.8**	**5.2**	**21.3**	**0.3**	**0.3**	**4.9**	**0.6**
Grants[12]	0.9	0.2	0.7	0.6	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0
Privatization receipts[13]	14.2	21.7	106.1	40.6	26.6	8.6	3.3	2.2	14.0	1.0	1.2	5.2	1.7
Domestic financing[14]	5.9	5.0	21.0	6.7	0.5	0.5	0.0	5.6	1.0	0.4	0.3	1.0	0.3
Foreign financing[15]	7.4	6.7	2.0	-1.1	-0.4	-0.3	-0.3	-0.1	0.1	0.5	0.4	0.1	0.0
Expenditures for principal repayments to domestic and foreign creditors[16]	-23.6	-27.7	-29.9	-33.2	-6.4	-14.1	-10.0	-2.7	6.2	-1.6	-1.6	-1.5	-1.4
VI ACCOUNT BALANCE CHANGE (IVb+III.1+V)	**22.3**	**17.4**	**63.5**	**-29.5**	**22.1**	**13.0**	**-15.6**	**-49.0**	**24.7**	**1.6**	**1.0**	**3.1**	**-1.2**

Source: Public Finance Bulletin (PFB), IMF Country Report No. 06/58, FREN's estimates, Memorandum on the Budget and Economic Policy for 2006 with Projections to 2009 and for 2007with projections to 2009.

1) Includes all levels of government (central, provincial and municipal) and their budget beneficiaries and social security organizations (Serbian Pension and Disability Insurance Funds, Health Insurance Funds, National Employment Office, but not public enterprises and the NBS.

2) VAT revenue excluding government VAT liabilities given in Memorandum items (see footnote16).

3) Contributions revenue reduced by the item "Offsets with SDF" in the Memorandum items.

4) Account 414 - Social benefits for employees, including sick benefits, expenditure for training employed persons, and severance payments. This item refers only to the Republic budget.

5) FREN's estimate based on media reports and the MoF website, which tallies with item on receipts from borrowing (Account 91) Serbian Health Insurance Bureau from PFB.

6) Expenditures on current pensions, adjusted for the payment of the "old debt" and debt incurred through the delay in pension payments starting in December 2005 . (See item III.2 and footnote 8).

7) Capital expenditure figures for 2003 and 2004 were taken from the Memorandum on the Budget and Economic Policy for 2006 with Projections to

2009. (see footnote 16).
8) In December 2002, payment started of the "old debt" to pensioners which was incurred in the April 1994-June 1995 period when only 83% of the due pension amounts was paid. Payment was envisaged in 43 installments (mid-2006). In addition, the delay in pension payments inherited from the 1990s was eliminated at the end of last year, with payment of the 1.5 pension arrears starting in December 2005.
9) The item corresponds to the item "Outlays for acquisition of financial assets" in the PFB, i.e. to the item "net lending" in the IMF presentation. This refers exclusively to credits deemed to be for public policy purposes. It comprises loans to students, financing of the National Corporation for Housing Loan Insurance and the like. A large amount in 2003 can probably be explained by the shift in financing of government spending for the period of the temporary budget in the first months of 2004.
10) Overall fiscal balance (GFS 2001) - Cash surplus/deficit adjusted for transactions in assets and liabilities that are deemed to be for public policy purposes (i.e. lending minus repayment - GFS 1986), or what we named "budget credits". See discussion on methodology in Box 1, QM 3 for more details.
11) Under FREN's definition, the analytical balance includes on the expenditure side the payment of old (domestic) debts, specifically payments for FFCDs, the Serbia Reconstruction Loan, debt to pensioners, etc. Defined in this way, the result measures the liquidity effect government transactions have on the economy.
12) Information from IMF CR 06/58. There is no data on grants in the PFB.
13) Estimate based on the reported republic's privatization proceeds, increased by 10% an account of the statutory allocations to the Pension Fund and the Restitution Fund. We have no explanation for the negative privatization proceeds in the PFB in Q4 2005.
14) Financing through the issuance of T-bills of the Republic of Serbia. There is a possibility that new loans to the government extended by domestic banks are included here, in which case they should be excluded from the item: "Change in Government Net Position in the Banking System on the basis of data from commercial bank's balance sheets (NBS data)" in Memorandum items.
15) Foreign financing in the budget of the Republic has been increased by 30% (an allowance for unknown local financing).
16) Expenses for debt amortization from the PFB, which are not included in Section III.

Table P-11. Serbia: Monetary Survey, 2005–2008

	2005	2006				2007				2008
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
	in millions dinars, end of period[1]									
Net Foreign Assets (NFA)	**218,886**	**200,462**	**229,984**	**360,685**	**407,565**	**441,048**	**484,388**	**500,302**	**563,524**	**596,215**
Net Foreign Assets (NFA) (in euros)	2,560	2,307	2,674	**4,399**	5,159	5,407	6,130	6,344	7,112	7,243
Assets	491,883	517,118	600,522	710,311	770,999	775,921	786,952	806,345	876,769	876,397
Assets (in euros)	*5,753*	*5,951*	*6,983*	8,662	*9,759*	*9,512*	*9,958*	*10,225*	*11,065*	*10,647*
NBS	424,844	465,497	549,529	648,946	715,114	719,381	730,668	751,920	765,615	788,296
NBS (in euros)	*4,969*	*5,357*	*6,390*	7,914	*9,052*	*8,819*	*9,246*	*9,535*	*9,662*	*9,577*
Commercial banks	67,039	51,621	50,993	61,365	55,885	56,540	56,284	54,425	111,154	88,101
Commercial banks (in euros)	*784*	*594*	*593*	748	*707*	*693*	*712*	*690*	*1,403*	*1,070*
Liabilities (-)	-272,997	-316,656	-370,538	-349,626	-363,434	-334,873	-302,564	-306,043	-313,245	-280,182
Liabilities (-) (in euros)	*-3,193*	*-3,644*	*-4,309*	-4,264	*-4,600*	*-4,105*	*-3,829*	*-3,881*	*-3,953*	*-3,404*
NBS	-81,873	-87,575	-68,368	-48,845	-55,692	-16,275	-15,716	-15,183	-13,586	-15,317
NBS (in euros)	*-958*	*-1,008*	*-795*	-596	*-705*	*-200*	*-199*	*-193*	*-171*	*-186*
Commercial banks	-191,124	-229,081	-302,170	-300,781	-307,742	-318,598	-286,848	-290,860	-299,659	-264,865
Commercial banks (in euros)	*-2,235*	*-2,636*	*-3,514*	-3,668	*-3,895*	*-3,906*	*-3,630*	*-3,688*	*-3,782*	*-3,218*
Net Domestic Assets (NDA)	**239,985**	**272,642**	**285,856**	**207,195**	**231,055**	**234,991**	**224,279**	**291,193**	**340,174**	**357,307**
Domestic credits	490,467	516,435	557,316	490,539	509,110	537,098	583,321	642,488	730,222	787,954
Net credits to goverment[2]	-27,831	-31,129	-33,954	-124,159	-100,061	-128,909	-149,081	-144,385	-112,290	-120,644
Credits	40,106	40,311	37,919	31,415	34,896	29,559	25,652	24,605	19,203	21,147
Dinar credits	21,272	18,381	16,408	15,322	18,271	16,193	16,102	16,073	10,936	12,306
NBS	16,330	14,735	14,474	14,472	16,450	15,740	15,715	15,715	10,811	11,078
Commercial banks	4,942	3,646	1,934	850	1,821	453	387	358	125	1,228
Fx credits	18,834	21,930	21,511	16,093	16,625	13,366	9,550	8,532	8,267	8,841
Fx credits (in euros)	*220*	*252*	*250*	196	*210*	*164*	*121*	*108*	*104*	*107*
NBS	181	184	182	0	0	0	0	0	0	0
NBS (in euros)	*2*	*2*	*2*	0	*0*	*0*	*0*	*0*	*0*	*0*
Commercial banks	18,653	21,746	21,329	16,093	16,625	13,366	9,550	8,532	8,267	8,841
Commercial banks (in euros)	*218*	*250*	*248*	196	*210*	*164*	*121*	*108*	*104*	*107*
Deposits (-)	-67,937	-71,440	-71,873	-155,574	-134,957	-158,468	-174,733	-168,990	-131,493	-141,791
Dinar deposits	-43,604	-43,860	-55,057	-50,760	-27,047	-51,975	-78,392	-72,442	-45,187	-65,432
NBS	-40,718	-39,439	-49,801	-45,785	-19,678	-43,849	-62,941	-52,730	-29,269	-49,326
Commercial banks	-2,886	-4,421	-5,256	-4,975	-7,369	-8,126	-15,451	-19,712	-15,918	-16,106
Fx deposits	-24,333	-27,580	-16,816	-104,814	-107,910	-106,493	-96,341	-96,548	-86,306	-76,359
Fx deposits (in euros)	*-285*	*-317*	*-196*	-1,278	*-1,366*	*-1,305*	*-1,219*	*-1,224*	*-1,089*	*-928*
NBS	-18,806	-21,464	-10,586	-99,498	-103,443	-101,705	-91,685	-92,463	-81,966	-71,923
NBS (in euros)	*-220*	*-247*	*-123*	-1,213	*-1,309*	*-1,247*	*-1,160*	*-1,172*	*-1,034*	*-874*
Commercial banks	-5,527	-6,116	-6,230	-5,316	-4,467	-4,788	-4,656	-4,085	-4,340	-4,436
Commercial banks (in euros)	*-65*	*-70*	*-72*	-65	*-57*	*-59*	*-59*	*-52*	*-55*	*-54*
Credit to the non-government sector	518,298	547,564	591,270	614,698	609,171	666,007	732,402	786,873	842,512	908,598
Households	132,146	150,290	172,185	190,378	203,631	230,775	254,803	286,000	306,240	333,557
Enterprises	386,152	397,274	419,085	424,320	405,540	435,232	477,599	500,873	536,272	575,041
Other item, net[3]	-250,482	-243,793	-271,460	-283,344	-278,055	-302,107	-359,042	-351,295	-390,048	-430,647
o/w: Capital and Reserves (-)	-181,772	-187,095	-216,178	-220,712	-242,254	-256,429	-289,801	-316,438	-356,592	-388,618
NBS	-41,450	-42,531	-42,364	-27,662	-7,454	-15,993	-9,923	-6,189	-6,881	-13,470
Commercial banks	-140,322	-144,564	-173,814	-193,050	-234,800	-240,436	-279,878	-310,249	-349,711	-375,148
Broad money: M2[4]	**458,870**	**473,103**	**515,840**	**567,881**	**638,620**	**676,039**	**708,667**	**791,495**	**903,698**	**953,522**
Dinar denominated M2[5]	192,180	189,911	208,606	232,506	283,116	282,299	288,329	326,341	390,307	367,648
M1	144,949	137,800	148,694	158,452	200,090	193,187	205,564	218,393	248,839	227,209
Currency outside banks	53,650	45,825	48,926	52,110	68,461	58,669	65,066	65,373	76,949	70,336
Demand deposits (households and economy)	91,299	91,975	99,768	106,342	131,629	134,518	140,498	153,020	171,890	156,873
Time and savings deposits (households and economy)	47,231	52,111	59,912	74,054	83,026	89,112	82,765	107,948	141,468	140,439
Fx deposits (households and economy)	266,690	283,192	307,234	335,375	355,504	393,740	420,338	465,154	513,391	585,874
Fx deposits (households and economy), in euros	*3,119*	*3,259*	*3,572*	4,090	*4,500*	*4,827*	*5,319*	*5,898*	*6,479*	*7,117*
o/w: households[6]	190,136	207,609	222,105	243,328	260,661	293,195	307,783	336,109	381,687	410,836
o/w: households [6] (in euros)	*2,224*	*2,389*	*2,583*	2,967	*3,300*	*3,594*	*3,895*	*4,262*	*4,817*	*4,991*

Source: NBS: Statistical bulletin.

1) Unless otherwise indicated.

2) Government does not include cities and municipalities, these are treated as a non-government sector.

3) As mentioned in footnote 3 in Table T-22: Enterprises also include non-profit and other non-government economic entities.

4) M2 refers to M3 in accepted methodology in Serbia, and it includes: currency outside banks; demand deposits of households and enterprises; time and savings dinar deposits of households and enterprises; and time and savings fx deposits of households and

5) M2 dinar refers to M2 in accepted methodology in Serbia, and it includes: currency outside banks; demand deposits of households and economy; and time and savings dinar deposits of households and economy.

6) Household savings.

Table P-12. Serbia: Commercial Banks Balance Sheet, 2005–2008

	2005	2006				2007				2008
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
					in millions dinars, end of period[1)]					
Net foreign reserves	**-124,085**	**-177,460**	**-251,177**	**-239,416**	**-251,857**	**-262,058**	**-230,564**	**-236,435**	**-188,505**	**-176,764**
Net foreign reserves (in euros)	-1,451	-2,042	-2,921	-2,920	-3,188	-3,213	-2,918	-2,998	-2,379	-2,147
Gross foreign reserves	67,039	51,621	50,993	61,365	55,885	56,540	56,284	54,425	111,154	88,101
Gross foreign reserves (in euros)	*784*	*594*	*593*	*748*	*707*	*693*	*712*	*690*	*1,403*	*1,070*
Gross reserve liabilities (-)	-191,124	-229,081	-302,170	-300,781	-307,742	-318,598	-286,848	-290,860	-299,659	-264,865
Gross reserve liabilities (-) (n euros)	*-2,235*	*-2,636*	*-3,514*	*-3,668*	*-3,895*	*-3,906*	*-3,630*	*-3,688*	*-3,782*	*-3,218*
Net Domestic Assets (NDA)	**124,085**	**177,460**	**251,177**	**239,416**	**251,857**	**262,058**	**230,565**	**236,435**	**188,505**	**176,764**
Domestic credits	331,378	375,536	481,132	483,067	509,090	534,592	569,540	573,534	566,860	598,261
Net claims on goverment2)	5,838	4,295	-3,369	-8,219	-2,492	-9,261	-18,611	-23,546	-15,933	-18,523
Claims	25,803	27,837	26,044	20,745	23,479	19,134	15,314	15,097	15,400	17,424
Dinar credits	7,145	6,086	4,710	4,652	6,854	5,768	5,764	6,565	7,133	8,583
Fx credits	18,658	21,751	21,334	16,093	16,625	13,366	9,550	8,532	8,267	8,841
Fx credits (in euros)	*218*	*250*	*248*	*196*	*210*	*164*	*121*	*108*	*104*	*107*
Liabilities (-)	-19,965	-23,542	-29,413	-28,964	-25,971	-28,395	-33,925	-38,643	-31,333	-35,947
Dinar deposits	-14,399	-17,382	-23,171	-23,630	-21,496	-23,592	-29,212	-34,522	-26,956	-31,466
Fx deposits	-5,566	-6,160	-6,242	-5,334	-4,475	-4,803	-4,713	-4,121	-4,377	-4,481
Fx deposits (in euros)	*-65*	*-71*	*-73*	*-65*	*-57*	*-59*	*-60*	*-52*	*-55*	*-54*
Net claims on NBS	204,896	235,986	340,148	382,531	467,869	483,231	482,321	521,562	567,401	560,666
Claims	205,631	236,443	341,952	382,974	468,312	483,620	482,561	522,696	569,468	562,160
Cash	7,053	6,793	6,799	8,654	10,206	9,889	10,958	10,812	15,665	16,108
Required reserves	26,046	26,387	33,352	33,602	34,290	25,931	29,196	31,838	30,393	41,789
Excess reserves	2,621	-2,109	-2,473	-3,440	-1,524	49	-5,973	-9,617	-8,841	-9,165
Deposits (-)	153,016	174,078	247,994	263,765	273,808	280,284	298,088	303,240	313,546	285,163
o/w: dinar deposits	5,274	948	2,564	7,535	20,189	6,651	22,804	20,741	43,226	4,871
NBS bills/repo 3)	16,895	31,294	56,280	80,393	151,532	167,467	150,292	186,423	218,705	228,265
Liabilities (-)	-735	-457	-1,804	-443	-443	-389	-240	-1,134	-2,067	-1,494
Net claims on the rest of the economy	120,644	135,255	144,353	108,755	43,713	60,622	105,830	75,518	15,392	56,118
Claims	507,171	536,214	579,880	593,628	589,303	645,429	711,313	764,589	820,404	894,338
Households	131,860	150,007	171,904	190,098	203,318	230,357	254,319	285,502	305,736	333,045
Long-term claims	107,724	121,378	138,539	151,998	163,638	187,445	206,568	234,021	248,453	275,820
Short-term claims	24,136	28,629	33,365	38,100	39,680	42,912	47,751	51,481	57,283	57,225
Enterprises	375,311	386,207	407,976	403,530	385,985	415,072	456,994	479,087	514,668	561,293
Long-term claims	165,442	168,212	178,091	183,205	179,842	195,326	204,816	224,636	237,551	252,188
Short-term claims	209,869	217,995	229,885	220,325	206,143	219,746	252,178	254,451	277,117	309,105
Liabilities (-)	-386,527	-400,959	-435,527	-484,873	-545,590	-584,807	-605,483	-689,071	-805,012	-838,220
Dinar deposits	-121,022	-119,059	-130,309	-150,239	-191,040	-191,962	-186,591	-224,799	-292,376	-263,676
Households	-16,542	-17,688	-21,273	-20,972	-26,729	-29,482	-31,264	-34,490	-37,558	-38,976
Enterprises	-104,480	-101,371	-109,036	-129,267	-164,311	-162,480	-155,327	-190,309	-254,818	-224,700
Fx deposits	-265,505	-281,900	-305,218	-334,634	-354,550	-392,845	-418,892	-464,272	-512,636	-574,544
Households4)	-190,136	-207,609	-222,105	-243,328	-260,661	-293,195	-307,783	-336,109	-381,687	-410,836
Households (in euros)	*-2,224*	*-2,389*	*-2,583*	*-2,967*	*-3,300*	*-3,594*	*-3,895*	*-4,262*	*-4,817*	*-4,991*
Enterprises	-75,369	-74,291	-83,113	-91,306	-93,889	-99,650	-111,109	-128,163	-130,949	-163,708
Enterprises (in euros)	*-882*	*-855*	*-966*	*-1,113*	*-1,188*	*-1,222*	*-1,406*	*-1,625*	*-1,653*	*-1,989*
Other item, net5)	**-207,293**	**-198,076**	**-229,955**	**-243,651**	**-257,233**	**-272,534**	**-338,975**	**-337,099**	**-378,355**	**-421,497**
o/w: capital and reserves	-140,322	-144,564	-173,814	-193,050	-234,800	-240,436	-279,878	-310,249	-349,711	-375,148

Source: FREN, NBS - Statistical Bulletin.

1) Unless otherwise indicated.

2) Government include: Republic level and cities and municipalities.

3) Household savings.

4) Includes: Other assets: Deposits of enterprises undergoing liquidation; Capital and reserves; Other liabilities; and Interbank, net.

Table P-13. Serbia: National Bank of Serbia Balance Sheet, 2005–2008

	2005	2006				2007				2008
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
	in millions dinars, end of period1)									
Foreign assets , net	**194,094**	**204,236**	**235,394**	**344,129**	**406,226**	**429,702**	**440,156**	**454,324**	**482,161**	**492,431**
Foreign assets, net (in euros)	2,270	2,350	2,737	4,197	5,142	5,268	5,570	5,761	6,085	5,982
Gross foreign reserves	424,844	465,497	549,529	648,946	715,114	719,381	730,668	751,920	765,615	788,296
Gross foreign reserves (in euros)	*4,969*	*5,357*	*6,390*	*7,914*	*9,052*	*8,819*	*9,246*	*9,535*	*9,662*	*9,577*
Gross foreign liabilities (-)	-230,750	-261,261	-314,135	-304,817	-308,888	-289,679	-290,512	-297,596	-283,454	-295,865
Gross foreign liabilities (-) (in euros)	*-2,699*	*-3,006*	*-3,653*	*-3,717*	*-3,910*	*-3,551*	*-3,676*	*-3,774*	*-3,577*	*-3,594*
o/w: fx deposits of commercial banks	-147,467	-173,371	-245,784	-256,325	-253,563	-273,927	-274,871	-282,625	-270,152	-280,814
o/w: fx deposits of commercial banks (in euros)	*-1,725*	*-1,995*	*-2,858*	*-3,126*	*-3,210*	*-3,358*	*-3,478*	*-3,584*	*-3,409*	*-3,411*
Net Domestic Assets (NDA)	**-99,741**	**-126,011**	**-146,374**	**-245,869**	**-272,302**	**-326,990**	**-318,030**	**-332,233**	**-323,041**	**-368,368**
Domestic credits	-64,206	-87,578	-110,436	-220,997	-264,055	-310,446	-311,683	-333,182	-325,783	-354,020
Net claims on government)	-48,936	-57,975	-56,993	-142,239	-116,094	-146,005	-161,819	-150,834	-110,363	-128,439
Claims	16,511	14,919	14,656	14,472	16,450	15,740	15,715	15,715	10,811	11,078
o/w: other dinar credits	16,330	14,735	14,474	14,472	16,450	15,740	15,715	15,715	10,811	11,078
Deposits (-)	-65,447	-72,894	-71,649	-156,711	-132,544	-161,745	-177,534	-166,549	-121,174	-139,517
Dinar deposits	-46,641	-51,430	-61,063	-57,213	-29,101	-60,040	-85,849	-74,086	-39,208	-67,594
o/w: municipalities	-5,923	-11,991	-11,262	-11,428	-9,423	-16,191	-22,908	-21,356	-9,939	-18,268
Fx deposits	-18,806	-21,464	-10,586	-99,498	-103,443	-101,705	-91,685	-92,463	-81,966	-71,923
Fx deposits (in euros)	*-220*	*-247*	*-123*	*-1,213*	*-1,309*	*-1,247*	*-1,160*	*-1,172*	*-1,034*	*-874*
Net claims on banks	-15,875	-30,218	-53,912	-79,337	-149,252	-165,948	-151,528	-184,184	-217,095	-227,308
Claims	954	869	2,069	827	488	467	306	517	595	1,625
o/w: other dinar credits	946	493	1,710	489	481	453	292	511	589	1,625
o/w: Fx credits	8	376	359	338	7	14	14	6	6	0
o/w: Fx credits (in euros)	*0*	*4*	*4*	*4*	*0*	*0*	*0*	*0*	*0*	*0*
Liabilities (NBS bills, repo transactions) (-)	-16,829	-31,087	-55,981	-80,164	-149,740	-166,415	-151,834	-184,701	-217,690	-228,933
Net claim on the rest of the economy	605	615	469	579	1,291	1,507	1,664	1,836	1,675	1,727
Claims	670	674	653	639	1,353	1,509	1,666	1,838	1,680	1,735
Dinar and fx credits	670	674	653	639	1,353	1,509	1,666	1,838	1,680	1,735
Liabilities (-)	-65	-59	-184	-60	-62	-2	-2	-2	-5	-8
Dinar deposits	-65	-59	-184	-60	-62	-2	-2	-2	-5	-8
Other items, net3)	-35,535	-38,433	-35,938	-24,872	-8,247	-16,544	-6,347	949	2,742	-14,348
Reserve money (H)	**94,353**	**78,226**	**89,019**	**98,263**	**133,924**	**102,712**	**122,126**	**122,091**	**159,120**	**124,063**
Currency in circulation	53,650	45,825	48,926	52,110	68,461	58,669	65,066	65,373	76,949	70,336
Commercial bank's reserves	40,703	32,401	40,093	46,153	65,463	44,043	57,060	56,718	82,171	53,727
Required reserves allocated	26,046	26,387	33,352	33,602	34,290	25,931	29,196	31,838	30,393	41,789
Excess reserves	14,657	6,014	6,741	12,551	31,173	18,112	27,864	24,880	51,778	11,938
Overnight deposits	7,604	-779	-58	3,897	20,967	8,223	16,907	14,069	36,113	-4,170
Giro account and cash	7,053	6,793	6,799	8,654	10,206	9,889	10,957	10,811	15,665	16,108

Source: NBS, Statistical bulletin.

1) Unless otherwise indicated.

2) Government include: Republic level and cities and municipalities.

3) Includes: Other assets; Fx deposits of other financial institutions; Deposits of banks undergoing liquidation; Capital and reserves; and Other liabilities.

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