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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

Q2 2007 was more important for what it sowed than for what actually went on in the economy. This was a quarter when the 2007 Budget was passed, with a delay because of the formation of the new government. Immediately after that, a government Memorandum on the Budget, Economic and Fiscal Policy in 2008 was adopted. The 2007 Budget envisages a major rise in wages and public investments until the end of the year. This not very welcome fiscal expansion is the result mainly of obligations undertaken legally by the previous government. The new government's Memorandum announces a needed turnabout – cutting of spending and wage controls. Whether this will actually happen is a question.

In Q2, the economy sailed into calmer waters, albeit with the albatross it has been carrying for a long time – the high foreign trade deficit.

Inflation is *under control* and will probably be around 8% in 2007. There is some public concern over the rate being higher than projected (6.5%) and above last year's (6.6%). Nonetheless, this for Serbia is still a low rate and, more importantly, was triggered primarily by the necessary adjustment of controlled prices, not the expansion of demand. As there was almost no adjustment of these prices in the 2004-2006 period, 2007 had to foot the bill. Consequently, it is better to compare core inflation as determined by supply and demand on the market. This year it declined relative to 2006 – we estimate it will lie between 4% and 5% by the end of 2007, the low end of the NBS target band (4%-8%). Since core inflation fell, this means that inflation in Q2 was not driven by demand and, hence, that there is no danger at present of it running out of control. Core inflation did rise in August, but by all accounts owing to one-off supply-side shocks: the drought, possible monopolistic behavior and the like, which should not unleash an inflationary wave. But the risk is still there and inflation should be closely monitored in September.

GDP grew strongly in Q2 too and we estimate it at an annual 7.3%. It would have grown even more if agricultural production had not fallen short. The movement of nonagricultural production therefore better reflects economic activity and the impact aggregate demand has on it. The high 8.5% growth of nonagricultural production indicates that economic activity was above the long-term growth trend, which was doubtless triggered by the high aggregate demand.

As in the preceding quarter, the high demand was manifested in a *high current account deficit of 13.5% of GDP* and not in inflation. This level of deficit is an improvement over the excessive deficit in Q1 (17.7%) but is still the second worst in the past two years. The reduction was the result of a major slowdown of the growth of imports, which, unfortunately, was for the most part due to a temporary drop in the import of energy products (Table T6-7).

Though still high, aggregate demand slowed its growth in Q2. Total demand grew somewhat faster than production in the quarter, causing an above-average GDP growth. Interestingly, the growth of domestic demand (total demand minus imports) slowed and was below the GDP growth (see Box 1, Section 5, Economic Activity). It follows then that imports, as an element of demand, are becoming increasingly significant, which is good news. Another piece of good news is that domestic demand decelerated as a result of fiscal tightening . A surplus was achieved in Q2 even when the payment of FFCDs is factored into expenditures (see Section 7, Fiscal Flows and Policy). What then is the role of the remaining two sources of the growth of demand: wages and credits?

Wages recorded substantial y-o-y growth in Q2 too (18.6% in real terms), but primarily as a reflection of the high level achieved, and not as a further acceleration of their growth. Wages jumped in Q1, far more than GDP, and triggered higher domestic demand. The high level and aggregate wages of Q1 continued in Q2, but their share in GDP did not increase: 37.3% in Q1 and 36.6% in Q2 (see Table T4-5). Consequently, wages did not spur demand or inflation in Q2, though they can be blamed for the high demand. The growth of wages can also affect inflation through rising labor costs. The movement of unit labor costs shows growth in Q1, which was retained at the same high level in Q2 (see Table T4-5). This indicates that the wage growth may have been a cost shock in Q1 but not in Q2. It must be emphasized here that wages in the public sector rose more than the average in the

economy, which is a strong argument in favor of the controls announced for 2008.

Credit expanded in Q2 and was the main driver of the growth of demand. Banks granted €1 bn in new loans in Q2 and companies additionally borrowed some €0.5 bn abroad (excluding the credit taken by Telekom Serbia). The increase in credit in Q2 was higher than the increase in production, with the share of credit increase in GDP rising from 15.9% in Q1 to 21.2% in Q2. The faster growth of credit than GDP indicates that it pushed up demand, which in turn pushed GDP growth above the long-term trend. Luckily, the bulk of the credit increase found its way into the economy – some €1.1 bn (15.8% of quarterly GDP), while a new €350 mn (5.3% of quarterly GDP) was granted to households. The greater part of this, however, was in the form of cash loans (over €150 mn or more than 2.5% of quarterly GDP), which prompted the NBS to react (see Box 1, Section 8, Monetary Flows and Policy).

In addition to banks turning toward the economy, another positive development was that the banking sector ceased additional foreign borrowing and even started reducing its liabilities. Thus the main sources of bank credit became capital increases and domestic deposits. Both to a considerable extent avert the possibility of a banking crisis. Finally, it was also good news that banks are cutting "unproductive" investment in NBS papers and making the released funds available to the economy.

For the second quarter, *monetary policy* has not been under the pressure of major inflows of foreign capital, a problem it had to tackle in 2006. Moreover, the NBS could allow itself to issue currency through moderate foreign exchange purchases without subsequently having to withdraw it with costly lending (repo operations) from the private sector. This was a luxury the NBS could not afford in 2006 when it was forced to withdraw funds arising from the inflow of foreign capital through expensive repo operations. It was these repo operations that led to the NBS recording a real loss in 2006 (see Box 3, Section 8, Monetary Flows and Policy). After a longer period, the trend has been reversed and the NBS is now in a position to reduce its liabilities by buying its papers and with a small cut in the reference rate to 9.5% (and again as a signal, a mild raise to 9.75% in August following the price hikes). This reduces the costs of monetary policy but leads to additional issuance of currency which, however, is tolerable for the time being. The NBS's costs are still very high as its liabilities (repo stock) remain large as does also the interest it pays on them.

Additional NBS issuance in Q2 was tolerable as it did not lead to an acceleration of the growth of money supply (M2). Quite the contrary, this growth slowed in Q2, while the growth of credit pushed M2 up. The net effect was a slowing of the growth of money supply. This is consistent with the deceleration of domestic demand mentioned above as it is connected with the movement of M2 in its broadest definition.

Fiscal policy played a positive role in Q2, as well as in July, achieving a surplus and savings. This enabled the position of the economy in Q2 to come close to the desirable: government is saving (albeit still modestly) and thus creating room for a significant growth of credit to the private sector and its expansion. But this is just too good to last.

The prospects are that macroeconomic stability will be shaken by the end of the year. The greatest challenges, however, will be in 2008 and lie in the budget that is currently being prepared.

Major fiscal expansion until the end of the year is built into the 2007 Budget, which takes us back to the beginning of this note. The expansion will be through the substantial growth of the already high wages in the government sector, the rapid growth of public investments as part of the National Investment Plan (NIP), and increased spending on current government operations. On the revenue side, higher spending will be prompted by the cutting of conveyance tax and the abolition of tax on first-apartment purchases. This will entail a shift from the surplus in the first semester to a substantial fiscal deficit in the second. The real deficit in 2007 will therefore amount to some 2% of GDP.

The forthcoming fiscal expansion will rely on the described high growth of credit to the private sector, and lead to a surge in domestic demand. The already high current account deficit will deteriorate further and inflationary pressures will be increasing. In that event, the NBS will have to react by raising interest rates, and probably, limiting the growth of credit. The result will be suppression of the private sector by government and the slowing of its growth. The rise in interest rates will be an impetus to the appreciation of the dinar, additionally worsening the current account deficit. As a result, the economy will rapidly slide away from the desired position.

The problems described above will be transient (or less glaring) if the 2008 Budget is restrictive, which government has promised in its Memorandum on Fiscal Policy next year. The envisaged reduction of public expenditure by 1.7 percentage points of GDP can only be acclaimed, while public revenue is to remain

unchanged. But this will require difficult and politically courageous decisions: freezing of wages that come out of the budget (and the funds) in 2008, albeit at the high level of November 2007, cutting back of the investments envisaged by the NIP, lower government spending and lower subsidies (see Section 7, Fiscal Flows and Policy). On the other hand, trade unions have announced strikes in the event of a wage freeze. There are also demands for additional spending in 2008 – for restitution, early settlement of debts (of which half is the debt of the Serbia Roads public company amounting to 23 bn dinars), payment of social security for people without coverage and the like. If these demands only are met, spending would go up 2 percentage points of GDP and completely cancel out the effects of the planned cuts in expenditure. And there is also the issue of adjusting pensions to the suddenly much higher wages, i.e. raising them from 50% to 60% of the average wage; full adjustment would mean an additional growth of public spending by 1 percentage point of GDP. And to add to all this are the upcoming elections, a period when fiscal policy as a rule is ridden over roughshod (as in late 2006 and late 2003).

If the government backs down and allows *fiscal expansion in 2008*, the problems described above would become full blown. The current account deficit would rise to a dangerous level and threaten a balance of payments crisis, and only very high interest rates and forceful restrictions on the growth of the private sector would be able to curb inflation. This is to say that high public spending and the resultant deficit is not a "game" some win and everyone else stays where they were. On the contrary, only a few win and the overwhelming majority of the population loses because of the stagnation of economic growth and/or inflation. The government should work in the interests of the majority, not partial interests, regardless of how strong the pressures to this end.

The danger of an excessive growth of demand and its curbing is the point of the above discussion, which is justified when macroeconomic stability is directly involved. In the medium and long run, however, the "problem" of high growth of demand can be resolved with a high growth of supply, i.e. substantial economic growth. Structural reforms are an essential factor in the growth of supply. For this reason, the topics under the spotlight in this *QM* deal with the segment of structural reform in Serbia where the common thread is regulation. Also important and topical are the issues of the privatization and restructuring of big public enterprises, a sounder financial market (how *the legislation regulating the financial market is applied*), and promoting risk control in banking operations in keeping with international standards (implementing the Basel 2 standards).

TRENDS

1. Review

After a four-month pause in the work of central government, a coalition government was formed in Q2 and Parliament resumed sitting. Despite the lack of central governance in the period, economic growth was not jeopardized. But the hiatus in the work of the Parliament and delay in forming a new government, and the regimen of temporary financing it entailed, restricted fiscal spending to a major extent. Combined with high economic growth and the consequential rise in fiscal revenue, the moderate fiscal spending resulted in a fiscal surplus and the reduction of aggregate domestic demand relative to Q1. In the circumstances, the NBS was able to relax its restrictive policy in spite of the expansion of credit and monetary aggregates. Economic growth in Q2 was high, although slightly slower than in Q1, primarily, *QM* believes, because of the mild slowing of domestic demand and poorer performance of the agriculture. Inflation picked up slightly, mainly due to supply side shocks, i.e. the rise in the prices of energy products and raw materials on the international markets. The external disbalance, manifested in a high foreign trade deficit, is still significant and further efforts should be invested in doing away with the underlying causes of the endemic problem of the domestic economy: uncompetitiveness and, consequentially, low exports.

The strong growth of economic activity continued in Q2. *QM* estimates the y-o-y GDP growth in Q2 at 7.3% in real terms. This was slightly below Q1, mainly owing to the poorer results of the agriculture, but the fast pace of growth was maintained. Nonagricultural GVA, which *QM* considers to be a reliable indicator of economic activity, recorded an 8.5% y-o-y growth, almost as high as in Q1. It would appear that the extraordinarily high economic growth in the first semester of 2007 was driven by the high aggregate demand. The highest y-o-y growth relative to 2006 was recorded by services, in particular commerce and financial intermediation – some 20% up on the first half of 2006. Industrial production in Q2 grew at solid 5.2%, and both export-oriented and domestic market sections grew at a similar pace. Construction in Q2 was about 10% up on the same period last year, which *QM* considers to be the underlying trend of this activity. On the other hand, the poorer results of the agriculture caused supply side disruptions which, in the already unfavorable configuration of domestic supply and high demand, will likely lead to intensified inflationary pressures and/or an additional growth of the foreign trade deficit.

As in the preceding quarters, the high economic growth was not accompanied by job creation. According to the semi-annual SBS Report on Employment and Wages, employment stagnated in March 2007 relative to September, with the figure standing at about 2.004 mn. The good news is that the drop in employment with artificial persons slowed down, mainly thanks to the manufacturing industry letting fewer workers go. The total employment, however, declined slightly as the high rate of employment by entrepreneurs ceased.

Wages in Q2 remained at the high level of the preceding quarter, with the real y-o-y growth of gross wages standing at 18.6%. The highest y-o-y growth of 31.5% in Q2 was by wages paid out of the budget, specifically in the health care and social welfare sectors. In the private sector, high growth was recorded by wages in construction (26%), and the growth in almost all activities exceeded the real y-o-y rate of 11%. Wages grew faster than labor productivity, thereby increasing unit costs and, by implication, threatening the competitiveness of the Serbian economy.

Aggregate demand was decreased by fiscal policy in Q2. Consolidated public revenue grew by 8% in real terms relative to the same period last year, while consolidated public expenditure rose by 8.8% in real terms. Though total revenue grew faster than GDP in Q2, the y-o-y growth rate slowed relative to Q1. These movements in public revenue and expenditure produced a favorable net result, even when the proceeds from the sale of the third cellular telephony license are

excluded from revenue and the servicing of the domestic public debt (foreign exchange savings, the Loan for the Rebirth of Serbia, pension arrears, etc.) and credits approved by the government (farm loans, student loans and start-up loans) are included in expenditure. If the definition of fiscal deficit measuring the impact of government activities on aggregate demand (analytical balance) is applied, a surplus of 2.4 bn dinars was recorded in Q2 2007.

Moderate government spending notwithstanding, the growth of prices accelerated in Q2: the average monthly inflation rate in the quarter reached 1.0%, or 12% annually, compared to only 5.1% in Q1. The acceleration was mainly due to the rise in non-core prices (in particular the May hike in electricity prices). Core inflation also accelerated but remained relatively low at an annual 3.7%. In August, however, both total and core inflation picked up speed, and total inflation reached 6.1% in August from the beginning of the year. It seems that this was primarily the consequence of supply side factors and of a temporary nature and that, in spite of the evident acceleration, the rise in prices will not run out of control. In Q2, the dinar depreciated very slightly against the euro in nominal terms (0.3%), and recorded a real appreciation of 1.6%. Observed from the beginning of the year, the nominal depreciation of the dinar against the euro was 1.6%, and its real appreciation was 2.7%.

The deficit of the balance of payments current account was down by 4.2% of GDP in Q2 relative to Q1. Although this was good news, the deficit remained high (13.5% of GDP), and, expressed in percentage of GDP, was up by two-thirds on Q2 2006. The y-o-y growth of the current account deficit was caused by the deterioration of the trade deficit and drop in current transfers. Although exports continued growing at a stable pace (28.7% y-o-y), the trade deficit widened because of the high growth of imports (23.3%), which in turn led to the foreign trade deficit rising by 17.8% in Q2. The drop in current transfers can primarily be ascribed to the lower inflow of foreign exchange from exchange offices. But the strong inflow of FDIs and further growth of private mid- and long-term borrowing led to a significant capital account surplus, which covered the current account deficit and generated the further growth of NBS foreign exchange reserves by €397 mn.

The y-o-y growth of monetary supply slowed in Q2 after two quarters of accelerated growth. Credit to the non-government sector, however, began expanding again and recorded a y-o-y rise of 30.2% in nominal terms (26.3% in Q1 2007). Credit to companies grew the most, both through the domestic banking system (€550 mn in new credits in Q2, relative to €313 mn in Q1), and through direct foreign borrowing of over €1,200 mn in new credits to local companies in Q2, or €550 mn if the foreign credit to Telekom Serbia earmarked for its regional expansion is excluded. Banks found new sources for lending primarily in capital increases (€600 mn in Q2 as against -€25 mn in Q1) as well as domestic deposits. The liquidity they withdrew from maturing repos exceeded their investments in that market in Q2 by €-200 mn. Interest in repo operations slackened after the NBS cut its reference rate and inflation began accelerating, which resulted in a further decline in real yield on repo instruments (from 5.9% to 4.4% in Q2). In the monetary sphere, the NBS was more passive than in the preceding period, which led to a growth of primary money. The NBS also issued dinars through both the repo market and the foreign exchange market (purchases from exchange offices and only a few interventions on the interbank foreign exchange market). The reference rate was lowered from 10.5% at end-Q1 to 9.5% in May. Government behaved restrictively in Q2, increasing its dinar deposit with the NBS by as much as 26 bn dinars).

Turnover on the stock exchange hit new records in Q2. In contrast to several preceding quarters, this was now driven by the discontinual segment of the market. In Q2, turnover rose by 20% and 43% more transactions were performed than in Q1. The average transaction in Q2 was 16% lower than in Q1, an indication that the participation of small individual investors continues rising. Q2, however, saw a substantial drop in the value of the majority of shares. Very high growth of the stock exchange from the beginning of the year, which many believe was unrealistic, ceased in Q2 when, sparked by the political crisis in May, both Belgrade Stock Exchange indices had record daily losses in value. The market recovered briefly, but a downward trend began again a

few days later and continued into Q3. Yields on FFCD bonds also continued decreasing. The highest drops in yields were recorded by series A2008 and A2009 bonds, which fell by 52 bp and 48bp respectively. At the same time, an all-time high in trade with FFCD bonds was achieved, to the amount of some €78.4 mn, which was a growth of 52.1% relative to Q1 2007. Data on the participation of foreign investors on the domestic markets showed that domestic investors were behind the increased volume of trade on the FFCD market.

Serbia: Selected Macroeconomic Indicators, 2004-2007[1)]

	Annual Data			Quarterly Data						
	2004	2005	2006	2005	2006				2007	
				Q2	Q1	Q2	Q3	Q4	Q1	Q2
Prices and the Exchange Rate					**y-o-y[2)]**					
Retail Price Index - total	10.1	16.5	12.7	17.2	14.8	15.6	12.5	8.2	5.8	4.7
Retail Price Index - core inflation[3)]	7.9	14.8	10.3	15.2	12.0	11.6	10.8	6.9	4.7	3.0
Real fx dinar/euro (avg. 2005=100)	100.5	100.0	92.1	100.9	97.1	94.8	90.3	86.4	86.2	86.3
Nominal fx dinar/euro (period average)[4)]	72.62	82.92	84.19	81.89	87.09	86.87	83.25	79.55	79.98	81.07
Economic Growth					**y-o-y, real growth[2)]**					
GDP (in billions of dinars)	1,431	1,750	2,085	…	…	…	…	…	…	…
GDP	8.4	6.2	5.7	7.8	7.0	5.9	5.3	5.0	8.7	7.3
Non-agricultural GVA	7.5	6.3	7.7	7.7	9.6	7.3	7.0	7.2	8.8	8.5
Industrial production	7.1	0.8	4.7	-1.5	5.3	6.1	3.9	2.9	4.8	5.2
Manufacturing	9.7	-0.7	5.3	-4.1	7.5	6.2	4.4	2.9	8.5	4.9
Average net wage (per month, in dinars)	14,108	17,478	21,745	17,122	19,284	21,126	21,986	24,585	25,103	27,165
Registered Employment (in millions)	2.050	2.061	2.022	2.070	…	2.032	…	2.019	…	2.004
Fiscal data	**in % of GDP**				**y-o-y, real growth[2)]**					
Public Revenues	41.2	40.1	38.9	-0.5	4.8	3.8	4.4	5.9	15.9	8.0
Public Expenditures	40.0	38.2	38.3	-2.0	8.1	-2.4	5.2	21.0	9.7	8.8
					in billions of dinars					
Consolidated balance	17.5	33.8	12.0	3.9	0.4	16.3	9.9	-14.8	12.2	16.9
Analytical balance (FREN's definiton)[5)]	-7.7	-2.9	-37.2	-13.4	-3.9	-0.8	-0.2	-32.3	-1.9	2.4
Balance of Payments					**in millions of euros, flows**					
Imports of goods	-8,302	-8,286	-10,096	-2,100	-2,139	-2,494	-2,541	-2,910	-2,813	-3,078
Exports of goods	2,991	4,006	5,146	1,011	1,039	1,244	1,368	1,484	1,401	1,599
Current account	-2,197	-1,805	-2,892	-291	-679	-469	-633	-1,111	-1,141	-974
in % GDP	*-11.1*	*-8.6*	*-11.6*	*-5.7*	*-13.1*	*-8.0*	*-9.5*	*-15.4*	*-17.7*	*-13.5*
Capital account	2,377	3,863	7,353	463	1,100	1,587	2,247	2,418	1,296	1,303
Foreign direct investments	773	1,248	4,077	240	164	545	1,671	1,668	887	152
NBS gross reserves (increase +)	229	1,857	4,240	281	390	1,079	1,539	1,232	-202	397
Monetary data[6)]					**in billions of dinars, e.o.p. stock[2)]**					
NBS net own reserves[6)]	103,158	175,288	302,783	137,044	182,772	224,808	244,631	302,783	327,997	348,471
NBS net own reserves[6)], in mn of euros	1,291	2,050	3,833	1,656	2,103	2,614	2,983	3,833	4,021	4,410
Credit to the non-government sector	342,666	518,298	609,171	409,397	547,564	591,270	614,698	609,171	666,007	732,402
FX deposits of households	110,713	190,136	260,661	141,477	207,609	222,105	243,328	260,661	293,195	307,783
M2 (y-o-y, real growth, in %)	10.4	20.8	30.6	22.1	24.7	19.8	20.5	30.6	35.4	30.7
Credit to the non-government sector (y-o-y, real growth, in %)	27.3	28.6	10.3	25.0	26.9	25.4	20.7	10.3	15.2	17.8
Credit to the non-government sector, in % GDP	23.9	29.6	28.6	25.7	29.9	31.0	30.9	28.6	30.5	32.6
Financial Markets										
BELEXline (in index points)[7)]	1,161	1,954	2,658	1,777	2,107	2,036	2,342	2,658	4,220	4,456
Turnover on BSE (in mil. euros)[8) 9)]	423.7	498.8	1,166.4	90.0	182.5	235.8	271.4	476.7	529.4	644.8

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) 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.

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

The US economy recovered in Q2 from the poor results in Q1, while growth slowed in the euro zone and Japan. Developing countries, in particular China and Russia, continued their high growth. Inflation was under control in most countries, and central banks' decisions on interest rates were impacted by the instability of the financial markets.

Table T2-1. World: GDP growth and inflation, 2005–2007

in %	Real GDP growth							Inflation		
	over a year ago		over previous period, seasonally adjusted annual rate (saar)					over a year ago		
	2005	2006	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q4 2006	Q1 2007	Q2 2007
World total	3.2	3.6	3.5	2.8	4.0	3.2	3.9	2.1	2.3	2.4
of which:										
USA	3.5	2.9	2.6	2.0	2.2	0.6	4.0	0.2	2.4	2.7
Canada	2.9	2.8	2.0	1.7	1.0	3.9	3.4	1.5	1.8	2.2
Japan	2.7	2.2	1.5	0.8	3.8	3.2	0.5	0.5	-0.1	-0.1
Asia ex. Japan	7.5	8.4	7.5	8.7	6.2	9.2	10.1	2.9	3.2	3.4
China	10.2	11.1	13.1	10.4	7.9	13.6	15.7	2.0	2.7	3.6
India	8.4	9.4	7.7	9.6	7.8	11.3	9.6	6.2	7.0	6.3
Euro area	1.5	2.9	2.7	2.7	3.3	2.9	1.4	1.8	1.9	1.9
Germany	1.1	3.1	4.4	2.6	4.0	2.2	1.0	1.6	1.9	2.0
France	1.2	2.2	4.9	0.0	2.2	2.2	1.3	1.3	1.3	1.3
UK	1.9	2.8	2.8	2.8	2.7	2.8	3.4	2.7	2.9	2.6
Italy	0.1	1.9	2.6	1.1	2.8	1.1	0.4	2.0	2.0	1.9
Emerging Europe	5.7	6.3	7.4	5.1	10.7	4.9	5.7	6.7	6.5	6.5
Russia	6.4	6.7	9.9	1.8	7.7	3.7	10.0	9.2	7.9	8.1
Bulgaria	5.5	6.0	6.4	6.7	5.7	6.2	…	6.0	5.3	4.7
Romania	4.1	6.9	7.7	8.2	7.6	5.8	5.6	6.1	3.8	3.8
Hungary	4.1	3.8	4.1	3.9	3.4	1.4	0.2	6.4	8.5	8.6
Croatia	3.8	5.0	3.5	4.7	4.9	4.9	…	2.2	1.8	2.1
Macedonia	3.8	4.0	5.7	3.6	…	…	…	0.4	1.6	…
BIH	5.0	…	…	…	…	…	…	…	…	…

Source: Eurostat, JP Morgan, National Bank of Bulgaria, National Bank of Romania, National Bank of Macedonia, National Bank of Croatia

Euro zone. Economic growth in the euro zone in Q2 was below expectations, recording a rate of 1.4% in Q2 (seasonally adjusted annual rate (saar) over previous quarter), as against 2.9% in Q1 and 3.3% in Q4 2006 (Table T2-1). The record trade surplus in June 2007 of €7.8 bn[1] (€1.6 bn in June 2006) came as a surprise, and was the result of exports growing at double the rate of imports. Relations with trading partners are gradually changing: the connection between Europe and the United States is weakening, since from 2000 to the present, exports to that country have been declining, and exports to central and east Europe rising (by 4 percentage points[2] from 2000 to the present). The waning of the interdependence with the United States, globalization and stronger trade ties with central and east Europe will help to mitigate the negative effects on the euro zone countries of the US recession. Since 2000, exports to the United States have declined from 17.3% of total exports to 14.4% in 2006, while the share of the central and east European countries was 14.6% in February 2007 (Poland, Russia and the Czech Republic alone accounted for 11.3% of the euro zone's exports in 2006). Y-o-y inflation in June was 1.9%, the same as at the end of Q1 (Table T2-1). The growth of housing and retail loans slowed, which had a negative effect on personal spending. The good developments on the labor market (the unemployment rate in May was 7%,[3] the lowest in the last 25 years) will cushion the effects of the credit squeeze, but personal spending will probably be somewhat below last year's. In June, the European Central Bank raised its reference interest rate from 3.75% to 4%, hinting that another hike could take place in September as the balanced rate is defined in the 4%-4.25% band. The global money markets crisis, provision of liquidity through central bank interventions (the US Federal Reserve

1 Eurostat
2 BNP Paribas
3 JP Morgan

and the ECB), uncertainty as to whether the realty crisis in the US will further threaten growth, led the ECB to strike a compromise between price stability and calming of the financial markets, and to retain the 4% rate in September. There is a risk of rising inflation: use of capacities is high, monetary supply is growing and economic activity is still substantial. The ECB believes it should wait for more information before deciding on whether the rate should be raised further.

In Q1, the German economy grew in accordance with the EU average, while exceeding it in the same period a year ago. The GDP growth was 1% (quarterly saar, Table T2-1), primarily due to the growth of investments in machines and equipment (2.5% y-o-y growth[4]), reduction of imports (-0.9% y-o-y[4]) and investments in construction (-4.6% y-o-y[4]). In France, the growth of GDP was 2.2% (Table T2-1). The problem of falling production in the automotive industry continued from Q1, but was offset by the rise in the exports of the aeronautic industry (Airbus). Foreign trade again had a negative effect on GDP owing to the surge in imports (2.1% y-o-y), primarily of energy products. As French households used more energy products, total personal spending rose in spite of the drop in retail sales. After Q1, when Italy recorded the lowest growth in the EU, another bad result followed (0.4%). The Italian economy is hard hit by the strong euro and the fact is that its production is to a large part in relatively low-tech sectors, where it faces strong competition from the Asian countries with their cheap labor, while its own is more expensive than in the new EU member states. A good indication of the direction structural changes in the Italian economy should go is FIAT, whose y-o-y production growth was 20%[5] in the first four months of the year.

The y-o-y inflation rate in Euro zone in Q2 was 1.9% (Table T2-1). The negative impact of the rise in energy product prices in June was offset by the stable food prices. According to a June report of the European Commission, managers in the industry and construction as well as consumers were expecting higher inflation. The low employment rate has not yet affected the inflation rate in any significant way. The political situation has complicated the problem of increasing supply and controlling inflation in the EU. The imbalance between supply and demand in France is constantly widening as domestic demand has grown by 12.7%[6] in the last six years, while GDP rose by only 9.7%[6] in the same period. The energetic new French president, Nicholas Sarkozy, has come out with an aggressive plan of structural reforms. Since rising of the ECB rate could slow him down, he has adopted a softer stance on inflation. France will not achieve the planned reduction of the budget deficit as this too could stand in the way of the reforms. Hence France's wish to base economic policy more on democratic decision-making and to promote an economic patriotism of sorts. President Sarkozy blames the strong euro for the poor performance of French exports, while Germany has no interest in it depreciation. Its arguments are that German exports to the US have risen despite the strong euro while trade with other European Union members is down, although they are in the same monetary zone; therefore the exchange rate is not really an obstacle to the growth of exports. The conflict of interest derives from the different positions of the two countries' economies, which can hardly be interested in the same measures to deal with different problems.

United States. The statistics show a real increase in US GDP in Q2, with the rate standing at 4% (Table T2-1)[7]. This was a dramatic improvement on Q1 when the growth was only 0.6%.[7] The growth of retail sales, non-residential investments and government spending offset the negative effects of the lower personal spending and investments in construction and equipment. In Q1, the lower accumulation of inventories reduced GDP by as much as 1 percentage point. In Q2, there were indications that inventories would rise to a higher level, but they contributed to only a 0.2 percentage point[7] rise in GDP. The rise in the prices of fuel reduced consumption and a substantial drop in auto sales and slower sales of other products were also recorded. It is important to establish whether the drop in consumption was caused by the fall in property prices or the rise in fuel prices. If it was the latter, the chances for a speedy recovery are much better, while

4 Statistisches Bundesamt
5 ISTAT
6 BNP Paribas
7 Bureau of Economic Analysis, US Department of Commerce

the impact of property prices would be severer and much more long-lasting. Record exports in May contributed to GDP growth and the rise in government spending. Inflation stayed at a low 2.7% y-o-y rate[8] but the Fed chairman noted that there was still a risk of inflation: high use of capacities, the possibility of the growth of total inflation triggering core inflation, and the chances of total inflation fanning inflationary expectations. For the time being, the stable inflationary expectations have kept the inflation rate at a satisfactory level, but as this is a two-way street, an opposite effect is possible.

Innovation of financial instruments in the US over the past 10 years resulted in the expansion of subprime mortgages. But when real estate prices stopped rising and interest rates increased many defaulted on their loans. According to the latest data, the sale of existing properties in June was below expectations. This means that the crisis, which was thought to be gradually blowing over, could be prolonged. Despite the optimism over the Q2 growth, it is not certain yet whether the crisis that started in the real estate market will spill over into other sectors or remain isolated. Many hedge funds that invested in the realty market are recording losses and some have even gone bankrupt, as have also companies that lent in the subprime mortgage market. Banks, funds and companies with financial instruments connected with subprime mortgages in their portfolios are now aggressively selling off their stock, which further erodes the confidence of investors and increases anxiety that the realty crisis could be prolonged and spill over into other sectors. Investors are now wary of any risks, which led to a liquidity crunch on the world's money markets. Banks are circumspect about borrowing on the interbank market, fearing that potential debtors have high-risk mortgages in their portfolios. As a result, the interbank rate jumped in August to almost 6%, much above the federal rate of 5.25%. Up to that time, the interbank rate was usually only a few hundredths of a percentage point above the federal rate. On 9 and 10 August, the Fed infused $62 bn into the market to increase liquidity, after which it slashed the discount rate from 6.25% to 5.75%. This is the rate at which banks can borrow overnight, or longer in some cases, from the Fed. It is interesting that exceptionally this time mortgages are accepted as collateral for these loans. This helps those who have invested in the realty market and are facing problems in acquiring credit to avoid illiquidity difficulties. It is uncertain at present when the crisis will end and what adverse effects it will have on growth.

It remains unclear why unemployment did not rise in Q1 when GDP fell, and particularly because of the slowdown in construction due to the realty crisis (in Q2 unemployment stood at 4.5%), close to the level which, in some views, can be considered as "full employment" (NAIRU). According to all estimates, some half a million workers were not laid off in the construction sector. The explanations being put forward are that many of them were not registered, that the number of those seeking jobs has dropped, that workers are increasingly opting for jobs in non-residential construction, or that companies are not firing workers because they expect the sector to recover. If the latter is true and as, by all accounts, firings will start soon, personal consumption will decline, which will have an adverse effect on the financial markets and growth projections.

Asia. The east and southeast Asia region excluding Japan recorded a high growth of GDP in Q2 - as much as 10% (quarterly saar). This was up on the very good Q1 result of 9.1% (Table T2-1). Inflation was relatively low, with a y-o-y rate of 3.2%.

According to preliminary estimates, the Chinese economy's real growth was almost 16% (quarterly saar),[8] which was a record if the quarter when the SARS virus struck is excluded. The biggest contribution to the growth came from exports, investments in fixed assets and retail sales. The trade surplus grew by 84.5% (annualized rate)[8] in the first semester. China, which has for years been keeping down global inflation with its cheap exports, can start increasing it soon in the same way. Following the appreciation of the yuan against the dollar by 3.8% in the first half of the year, Chinese export prices rose by some 4.7%. Total inflation came close to an annual 5%, but core inflation remained under control. The Chinese government is investing efforts to prevent an unrealistic rise in the price of category A shares owing to the high liquidity. The daily band

8 JP Morgan

for exchange rate oscillations against the dollar was widened from 0.3% to 0.5%, and a larger number of banks have been allowed to invest domestic savings in foreign financial markets. The appreciation of the yuan makes investing abroad attractive for the Chinese, and the abundant free capital is finding its way into foreign financial markets by way of the special funds. In June, some $1.7 bn dollars was invested in foreign markets. The government's measures, designed to reduce the pressure of capital on domestic gilt-edged securities, were accompanied by a moderate monetary policy.

In Japan, the real GDP growth in Q2 was 0.5% (quarterly saar, Table T2-1), which was below expectations even though a slowdown relative to Q1 (when the growth was 3.2%) had been announced. The slowing was due to smaller exports to the US and lower demand by the private sector, while inflation remained at close to zero. Spending will probably drop in Q3 as the tax benefits for the population cease in June. On the other hand, the expansion-contraction indicator was under 50[9] in April, but returned to a balanced level so that the slowdown will probably be of short duration. The 3.7% unemployment rate is at its lowest in the past nine years, and the size of the active population is increasing. Inflation continued to be low, with an annual rate of -0.1% in Q2 (Table T2-1). The deflationary ambience connected with other factors is severely testing Japan's central bank. Its experts say the effects of monetary measures are highly unpredictable. In the past 10 years, for instance, the movement of monetary supply was in negative correlation with nominal GDP. The yen continued declining to June, reaching a record low against the US dollar. But, as the realty crisis in the US deepened, the contraction of carry trade led to the growth of the yen. Carry trade is borrowing in a low-interest-rate currency (the yen) and investment in high-interest-rate currencies and their markets. Because of its very low rates (0.5%), Japan is suitable for these transactions. Investors are borrowing there and most often plow the funds into safe papers in the US, which, however, has decreased since the realty crisis began.[10]

East, Central-east and South-east Europe. After a somewhat lower growth in the preceding quarter (4.7%), Emerging Europe saw a solid growth rate of 5.7% (quarterly saar) in Q2, albeit less than the 2006 growth of 6.3% (Table T2-1).

Romania's growth fell from 6.9% in 2006 to 5.6% in Q2 (Table T2-1). The slowdown was the result of the slowing of personal spending, doubling of the trade deficit (owing to a jump in demand for EU products after the trade barriers came down, and the deficit rose in Q1: expressed in euros, exports rose by 4.9% and imports by 21% y-o-y[11]) and lower VAT revenue owing to the adoption of EU procedures. The inflation rate in June was up to 4.6% y-o-y. In contrast to most countries gripped by inflation and with overburdened capacities, Hungary is at a different stage of the cycle and is implementing expansive economic policy measures, i.e. reducing the reference rate. The GDP growth in Q2 was very low (0.2% quarterly saar, Table T2-1), which was considerably lower than the 1.4% recorded in Q1 2007. The trade deficit fell in May to only 1.6%[12] of GDP at a year to date level as Hungary's exports grew by 19%[12] y-o-y, helped by the high demand and prices of corn. The rise in the price of corn on the world market in the period observed was the result of the fact that inventories are building up in the EU and US because of the high price of fuel, and thereby prompting demand since corn is being used to produce biofuels. As the nominal annual growth of wages has stabilized (in the 8.5%-9%[13] band since September 2006) and personal spending did not rise substantially, the central bank determined that wages were not affecting the inflation rate and cut its reference rate to 7.75%. According to the statement by Russian Ministry of Economic Affairs, the real GDP growth in Q1 will be an annualized 7.9%[12]. The rising prices of oil together with a record capital inflow in the first semester have provided funding for major investments in infrastructure. With the help of a government plan and the Development Bank's funds, as well as the high foreign investments,

9 BNP Paribas, value under 50 indicates contraction of the economy, and over 50 its expansion.
10 This kind of investment can be risky as the currency in which the investor has borrowed may appreciate. During the 1998 crisis, the yen appreciated by 15% in only one week. Because of the growing risk and reduced liquidity in the US market, there has been a contraction of the carry trade accompanied by the sale of dollars, so that the yen grew substantially stronger.
11 National Institute of Statistics, Romania
12 JP Morgan
13 Magyar Nemzeti Bank

there has been a surge of investment into fixed assets. In the four-month period from May to August, the growth of total investments in fixed assets was over 20% y-o-y. Subsidized credits, exemption from customs duties for production inputs and tax benefits for the special economic zones, such as Zelenyigorod, the Russian equivalent of Silicon Valley, in which $1 bn will be invested, are planned. The Moscow Stock Exchange has attracted major funds from abroad, but President Putin's cooling of relations with the West and the increasing interference of the government in the economy could have a negative impact on foreign investment. Because of the rise in the price of wheat, inflation has overshot the planned 8% annually, but the VAT rate on all kinds of bread has been cut, so that it will be curbed over a short term, but will stay higher than projected. Because of the major inflows from abroad, the central bank in early July increased the required reserves ratio to 4.5%, but the measure will not do away with the risk of inflation rising by the end of the year if it continues to be pressurized by domestic demand.

3. Prices and the Exchange Rate

Price growth accelerated in Q2 relative to Q1, primarily as a result of non-core price[1] rises (above all May's electricity price hike). The average monthly inflation rate in Q2 thus reached 1.0%, and stood at 12.0% annually – compared to 5.1% in Q1. The core inflation rate also speeded up, but remained relatively low and was still below the lower end of the NBS target band. Core inflation[2] in Q2 stood at an average of 0.3% a month, or 3.7% at the annual level. August, however, saw a more significant acceleration of total and core inflation, with total inflation from January to August reaching 6.1%. The August shock, however, appeared to have been primarily caused by demand-related factors and to be temporary in nature. Despite the evident acceleration, price growth will in all likelihood not get out of hand. The dinar depreciated very mildly against the euro in Q2 (0.3%); in real terms, it appreciated by 1.6%. Observed from the beginning of the year, there was a nominal depreciation of 1.6% of the dinar against the euro by August; its appreciation, in real terms, amounted to 2.7%.

Inflation accelerated slightly in Q2…

After a period of very low inflation (measured by movements in the retail price index) in the last quarter of 2006 and Q1 this year, inflation in Q2 2007 accelerated slightly. Although y-o-y price growth in Q2 amounted to only 4.7%, lower than in the previous two quarters (5.8% in Q1 2007 and 8.2% in Q4 2006), a more realistic picture is obtained by observing the monthly inflation rates. Caution should be exercised with respect to the drop in the y-o-y rate, since the second half of 2006 saw rapid trend changes. It is therefore *QM*'s opinion that, from an analytical standpoint, it is still more correct to consider the annualized monthly inflation rates. Thus, the average monthly inflation rate in Q2 amounted to 1%, i.e. an annualized 12%, which was twice as high as in the previous quarter (where it stood at an annualized 5.1% rate, Table T3-1).

Table T3-1. Serbia: Retail Price Index and Core Inflation, 2005–2007

	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								
March	110.0	14.4	0.3	9.1	108.1	11.7	0.8	7.0
April	111.9	15.5	1.8	15.2	108.9	11.7	0.8	8.3
May	113.7	16.1	1.6	16.0	109.7	11.9	0.7	9.6
June	113.7	15.1	0.0	14.4	110.4	11.3	0.6	8.7
July	113.6	12.8	-0.1	6.0	111.0	11.3	0.6	7.9
August	114.4	13.1	0.7	2.3	111.5	10.8	0.4	6.6
September	114.1	11.6	-0.2	1.4	112.1	10.1	0.6	6.6
October	113.7	9.3	-0.4	0.3	112.3	8.0	0.1	4.5
November	114.6	8.8	0.8	0.6	112.5	6.8	0.2	3.7
December	114.7	6.6	0.1	2.1	112.5	5.8	0.0	1.2
2007								
January	115.1	6.5	0.4	5.4	112.5	5.3	0.0	0.8
February	115.3	5.2	0.1	2.5	112.2	4.7	-0.2	-0.8
March	116.1	5.6	0.8	5.1	112.4	4.0	0.1	-0.4
April	117.1	4.6	0.9	7.0	112.6	3.3	0.2	0.4
May	118.8	4.4	1.4	12.7	112.8	2.8	0.2	2.0
June	119.5	5.1	0.6	12.0	113.4	2.7	0.5	3.7
July	120.2	5.9	0.6	10.9	113.6	2.3	0.2	3.7
August	121.6	6.3	1.2	10.0	114.9	3.0	1.1	7.4

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)

1 Non-core prices are prices which are under direct administrative control (electricity, utility services, etc.) or are directly influenced by seasonal factors (agricultural produce) or under the influence of exogenous factors (prices of petroleum products).
2 Core inflation measures the price movements of goods and services that are not under administrative control, but formed freely on the market.

…as a consequence of rising non-core prices

This price growth acceleration in Q2 was mainly the consequence of the rise in non-core prices. Inflation in April (0.9% in relation to the previous month, or 4.6% y-o-y) saw the greatest contribution to price growth in the form of a rise in the prices of oil products, which accounted for about two-thirds of the total price rise. In May, electricity prices shot up by 15%; nearly all price growth in this month (1.4% over the previous month) was the consequence of this increase. In addition, May saw slightly larger increases in the costs of social protection services and agricultural products.

Slightly lower inflation again in June and July …

June saw slightly lower inflation (0.6% relative to the previous month) than the two months preceding it, but in June core inflation gave a significant impetus to total price growth (some 40% of the total). In addition to core inflation, the greatest contribution to total inflation growth in June compared to May was provided by industrial non-food products, mainly oil products and pharmaceuticals. The rise in prices of tobacco products also made a significant contribution. In contrast, prices of agricultural products fell by 8.1% relative to May (in line with seasonal movements), thereby reducing the total price growth.

A trend similar to that of Q2 as a whole was also recorded in July: total inflation amounted to 0.6% per month – more than in Q1 2007 and Q4 2006, but still relatively low. As in nearly all months of this year, non-core inflation also gave the greatest contribution (over 80%) to price growth in July. More specifically, price growth was mostly the consequence of increases in the prices of oil products (some 60% of the total), social protection services (about 20%), and transport services (about 20%). On the other hand, a reduction in the price of agricultural products of 6.2% cut total price growth in July by about 35%.

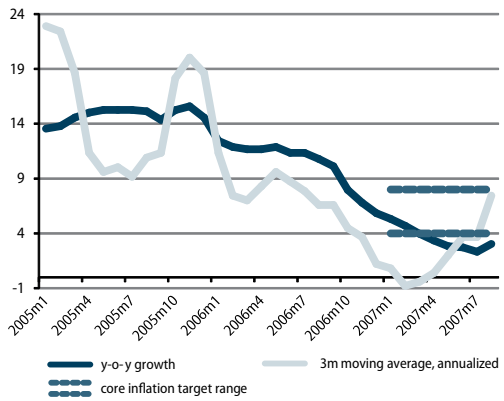
… but total inflation accelerated significantly in August

August saw a significant acceleration in total (but also core) inflation. Total inflation in August stood at 1.2% relative to the previous month, or 6.3% compared to August of the previous year. Not counting May, when electricity prices rose, this was the highest monthly inflation rate in the previous 15 months. In addition to the significant contribution made by core inflation, the high growth was also spurred by rising prices of agricultural products, primarily due to the drought and poor harvest. Total price growth since January thus reached 6.1%.

Core inflation also accelerated slightly in Q2…

Core inflation in the second quarter also accelerated, but still remained below the lower end of the NBS target band. Average monthly core inflation rate in Q2 amounted to 3.7% at an annual level, as opposed to negative levels (-0.4%) in the previous quarter. The core inflation acceleration became apparent in June, when monthly core price growth reached 0.5%, at that time was the highest monthly core inflation rate since September 2006. This June core inflation growth was mainly contributed to by an increase in the cost of personal hygiene products of 4.7%. After the June episode, core inflation was again briefly brought under control in July (with a monthly growth of 0.2%). Similar to total inflation, the Q2 y-o-y core inflation growth rate (3.0%) was lower than the previous quarter's (4.7%); *QM*, however, considers movements in the monthly core inflation rate a better indicator of the actual trend.

Graph T3-2. Serbia: Core Inflation (in %), 2005–2007



Source: SBS.

…and, in August, reached a record level not seen since November 2005

In August, however, core inflation rocketed, reaching a monthly growth rate of 1.1%, the highest since November 2005 (Graph T3-2). Average monthly core inflation rate for the past three months, when annualized in August, thus reached 7.4%, and, for the first time this year, not only breached the lower end of the NBS target band (4%-8%), but came close to the upper end (Graph T3-2). The high core inflation was mainly the consequence of rising meat, oil, and milk prices.

Accelerating core inflation was mainly caused by supply-side shocks

The acceleration of core inflation over the past several months was probably caused by supply-side shocks (factors not under the direct control of the monetary and fiscal authorities), rather than demand-side ones. High demand, in all likelihood, still reflects primarily on the large foreign trade deficit, rather than on inflation. In *QM*'s opinion the situation so far is not dramatic, and the record inflation rate seen in August does not mean it will accelerate further or that there is a danger of running out of control. At the same time, core inflation, although showing some signs of accelerating, remained rather low, and, by all accounts, under the control of the monetary authorities. Taking into account realistic assumptions of its movement until the end of 2007, core inflation in December will probably stand at between 4% and 5%. Therefore, it is our opinion that it will be close to the lower edge of the NBS target band.

Motivated by August's inflation acceleration, the government intervened in price formation

As inflation accelerated in August, both the government and the NBS took steps to rein it in. The government, on the one hand, postponed a hike in the price of electricity previously announced for September, and came to an agreement with edible oil producers and bakers under which they refrained from major price raises. It remains to be seen how much these administrative moves can truly limit price hikes for individual products, and to what extent the rises will only be postponed. In addition, these measures could distort natural market relations to some extent, and thereby adversely affect the economy in other ways. The NBS, for its part, raised the reference interest rate (albeit symbolically), and introduced limitations on cash loans.[3] Greater attention is definitely necessary here, all the more so since additional pressure on demand in Q3 and Q4 can be expected from increased government expenditure foreseen by the 2007 Budget.[4]

Both the cost of living index and industrial producers' prices accelerated in Q2

As in previous quarters, the industrial producers' price index and the cost of living index moved in accordance with the retail price index. Thus, in Q2, these indices saw an acceleration (Table T3-3) Average monthly growth of the cost of living index was 0.9%, i.e. 11.8% at an annual level (the figure for the previous quarter was 2.6%). Average monthly growth of industrial producers' prices in Q1 stood at 1.3%, or as much as 16.8% at an annual level (against 4.5% in the previous quarter). As for the y-o-y growth rates, they were slightly lower in Q2 (3.3% in Q2 against 4.8% in Q1 for the cost of living index, and 4.4% in Q2 against 5.5% in Q1 for industrial producers' prices, Graph T3-4); however, as in the case of the retail price index and core inflation, *QM* holds that monthly rates are a better indicator of the trend here.

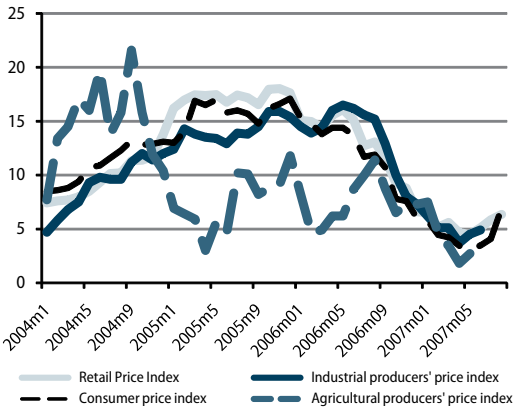
Table T3-3. Serbia: Comparative Price Growth, Selected Indices, 2005–2007

	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
Jun	113.7	15.1	0.0	13.7	0.0	16.2	0.2	8.7	1.2
Sep	114.1	11.6	-0.2	10.7	-0.1	12.9	0.0	8.7	0.8
Oct	113.7	9.3	-0.4	7.8	-0.4	10.0	-0.3	6.5	-2.4
Nov	114.6	8.8	0.8	7.6	1.0	8.0	-0.3	7.3	1.2
Dec	114.7	6.6	0.1	6.0	0.1	7.3	-0.2	7.3	1.1
2007									
Jan	115.1	6.5	0.4	5.8	0.5	6.2	0.5	7.5	-1.5
Feb	115.3	5.2	0.1	4.5	-0.2	5.1	0.0	4.6	-1.0
Mar	116.1	5.6	0.7	4.2	0.4	5.1	0.6	3.4	-0.5
Apr	117.1	4.7	0.9	3.4	0.8	3.7	0.8	1.8	-1.8
May	118.8	4.5	1.4	3.1	1.6	4.5	2.4	2.7	2.3
Jun	119.5	5.1	0.6	3.5	0.4	4.9	0.7	...	...
Jul	120.2	5.8	0.6	4.1	-0.3	...	...	...	...
Aug	121.6	6.3	1.2	6.9	3.0	...	...	...	...

Source: SBS

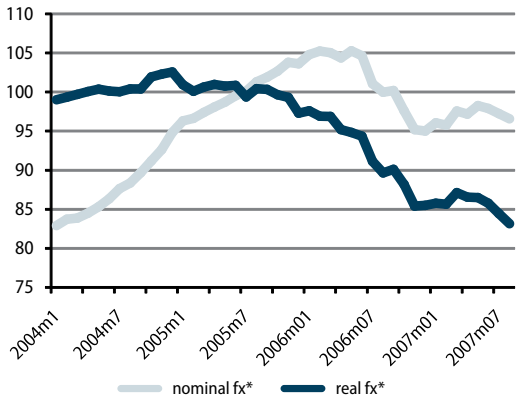
3 The new NBS measures are covered in more detail in Boxes 1 and 2 of Section 8, Monetary Flows and Policy.
4 For more details on this see Section 7, Fiscal Flows and Policy.

Graph T3-4. Serbia: Selected Price Indices, 2004–2007 (Y-o-y growth)



Source: SBS

Graph T3-5. Serbia: Dinar/Euro Exchange Rate, 2004–2007



Source: Table P-3. in Analytical Appendix.
*Aug 2005=100. See definition of real fx in Table T3-5.

After a slight depreciation in Q2, the dinar appreciated again in July and August

The dinar saw a slight nominal depreciation (0.3%) against the euro in the second quarter, while its appreciation, in real terms, amounted to 1.6% (Table T3-6). The period from January to June saw a nominal depreciation of the dinar against the euro of 3%, or 0.3% in real terms. In July and August, however, the dinar appreciated again, with the exchange rate gaining 1.3% nominally (or 3.0% in real terms) relative to June. Thus, from the beginning of 2007, the dinar nominally depreciated by 1.6% in relation to the euro, or, in real terms, gained 2.7% (Graph T3-5).

Table T3-6. Serbia: Nominal and Real Dinar/Euro Exchange Rate, 2004–2007

	Nominal				Real			
	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]	USD/EUR rate[6]
				annual exchange rate[7]				
2004	72.6215	87.6	111.8	115.6	100.5	103.8	103.9	1.2392
2005	82.9188	100.0	114.2	109.3	100.0	99.5	94.9	1.2433
2006	84.1879	101.5	101.5	91.7	92.1	92.1	87.9	1.2537
				monthly exchange rate				
2005								
June	82.5172	99.5	115.3	105.0	100.8	100.7	98.3	1.2180
December	85.9073	103.6	109.3	109.3	97.3	94.9	94.9	1.1861
2006								
March	87.1033	105.0	107.9	101.4	96.9	96.3	99.6	1.2013
April	86.5391	104.4	106.4	100.7	95.2	94.3	97.9	1.2239
May	87.3023	105.3	106.7	101.6	94.8	94.1	97.5	1.2750
June	86.7609	104.6	105.1	101.0	94.4	93.6	97.0	1.2677
July	83.7931	101.1	101.0	97.5	91.1	91.7	93.7	1.2684
August	82.8893	100.0	98.7	96.5	89.7	89.3	92.2	1.2803
September	83.0621	100.2	98.3	96.7	90.1	89.8	92.6	1.2748
October	80.9242	97.6	95.0	94.2	88.2	88.5	90.6	1.2615
November	78.9404	95.2	91.7	91.9	85.4	86.0	87.8	1.2876
December	78.7812	95.0	91.7	91.7	85.5	87.9	87.9	1.3210
2007								
January	79.6587	96.1	91.7	101.1	85.8	87.9	100.3	1.2993
February	79.3993	95.8	91.0	100.8	85.6	88.4	100.2	1.3075
March	80.8968	97.6	92.9	102.7	87.1	89.9	101.9	1.3246
April	80.5768	97.2	93.1	102.3	86.5	90.9	101.2	1.3516
May	81.4770	98.3	93.3	103.4	86.5	91.2	101.2	1.3512
June	81.1665	97.9	93.6	103.0	85.8	90.9	100.3	1.3420
July	80.6204	97.2	96.2	102.3	84.5	92.7	98.8	1.3716
August	80.0774	96.6	96.6	101.6	83.2	92.8	97.3	1.3622

Source: Table P-3 in Analytical Appendix.
1) Monthly 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. 7) Twelve-month averages for annual data

4. Employment and Wages

In March 2007, the number of employed stood at about 2.004 mn. The decline in employment in legal entities was substantially slowed down, mainly because of fewer layoffs in the manufacturing industry. However, total employment continued to fall as the high growth of employment with entrepreneurs recorded in the previous period came to a halt. Commerce saw the highest rise in employment between September 2006 and March 2007, of some 5,000 new jobs (about 2.6% within the sector). This was only to be expected in view of the extraordinarily high growth rate of this economic branch. The y-o-y growth in gross wages amounted to 18.6% in real terms in Q2 2007. The highest y-o-y gross wage growth of 31.5% in Q2 was recorded by wages paid from the budget, more specifically in the health and social work sector. As for the private sector, the highest growth (26%) was seen by wages in construction. Wage growth in Q2 in nearly all fields exceeded the y-o-y real rate of 11%. This quarter was, thus, characterized by wage growth outstripping labor productivity, which led to rising unit costs.

Employment

In March 2007, the number of employees stood at 2.004 mn

Total employment on 31 March 2007 was 2.004 mn (Table T4-1), according to SBS finalized data for March.[1]

Table T4-1. Serbia: Registered Employment, 2003–2007

	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

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 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 RAD-1/P, Additional Survey to the Semi-annual RAD-1 Report, and RAD-15. According to these surveys, there are 13,000 more employed than estimated by SBS before the correction.

The fall in employment in legal entities slowed in March, thanks primarily to the manufacturing industry

Between September 2006 and March 2007, the fall in employment decelerated relative to the previous semester. This slowdown in layoffs in legal entities was mainly ascribable to the manufacturing industry, which accounts for some 28% of total employment in legal entities, and where the decline in employment is slowing. Along those lines, employment in the manufacturing industry shrank by about 10,000 jobs between September 2006 and March 2007, whereas in the previous semester, 23,000 jobs were cut (Table P-5, Analytical Appendix). The slowing in the reduction of employment took place concurrently with the growth of the manufacturing industry by over 8% in Q1 2007, and was therefore expected. By far the most significant drop in employment was recorded in the mining and quarrying sector – about 6,000 jobs lost from September 2006 to March 2007 – or 20.7% of the sector's total employment. A drop in employment was also recorded in construction (some 3,000 fewer jobs than in March 2006, a drop of about 3.5% within the sector). This is surprising, as *QM* estimates construction's Q1 2007 y-o-y growth rate at between 35% and 45% in real terms. The reason may be methodological, since construction in Serbia, as a sector, generally suffers from inadequate statistical monitoring. Employment also fell by some 3,000 jobs (4.4%) between March and September in the real estate and renting activities sector.[2]

The highest employment growth was seen by commerce and education, followed by electricity, gas and water supply

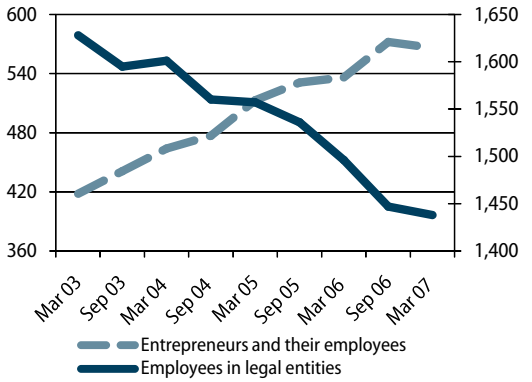
Commerce saw the biggest employment growth, with some 5,000 new jobs, or 2.6% (Table P-6, Analytical Appendix), certainly caused by growth in retail, where the y-o-y rate rocketed from 7.7% in September 2006 to 30% in March 2007. While the growth in employment in commerce can be explained by the growth of this sector, there is no accounting for the gain of some 4,000 new jobs (growth of 3.4%) in education. This could be the result of a change in classification or sample for this sector. Only after the September 2007 employment data comes in will it be possible to tell with more certainty whether this rise represents a real increase in employment, a temporary fluctuation, or a measurement error.

The gain of some 2,000 jobs, or 4.6%, in the sector of electricity, gas and water supply will also became clearer when the September 2007 data is released.

A slight drop in the number of entrepreneurs and their employees

For the first time since 2003, a slight drop was recorded in the number of both entrepreneurs and their employees – or, rather, their growth stagnated. This slump in the growth of employment with entrepreneurs correlates with the slowdown in the growth of small and medium-sized companies in the second half of 2006, when lending to companies saw a temporary slowdown due to restrictive monetary policy measures.[3] This deceleration in growth of entrepreneurs may have been caused by the slowdown in lending, among other factors. However, a longer series is needed for a more precise conclusion as to whether this slowdown is a new trend, or a merely temporary fluctuation.

Graph T4-2. Serbia: Employment with Legal Entities and Entrepreneurs, 2003–2007



Source: SBS

The stabilization in the number of employees, both with entrepreneurs and legal entities, is shown in Graph T4-2. The graph's left axis denotes entrepreneurs and their employees, and the right one employees in legal entities.

2 According to statistical classification, this sector includes equipment rental, computer-related activities, research and development, and other business activities (architectural studios and offices, management, advertising, etc).
3 For a more detailed explanation, see *QM* 6, Trends, Section 5, Economic Growth.

Box 1. Employment in Legal Entities

This issue of *QM* is the first to set out disaggregated data on employees in legal entities, categorized as employees whose wages are paid out from the Government budget, those employed in public enterprises, and others. Table T4-3 shows that the "others" category (made up of private, socially owned, and mixed-ownership companies) was mainly responsible for the fall in employment in legal entities over the past several years. Declining employment in this category was to be expected because of the privatization and restructuring of socially owned companies: the government plans to wind up all socially owned companies, either through privatization or bankruptcy, by the end of 2008.

Total employment in public enterprises has been declining over the past two years. While a significant drop was seen in national public enterprises – 29,000 jobs cut between March 2003 and March 2007 – the number of employees in local public enterprises is quite stable; the figure has for the past two years generally remained at the 60,000 level. However, data published by local authorities should be taken with a grain of salt, since this is the least reliable of all public sector wage and employment data (Table T4-3).

Budget-funded employment[1] has fallen over the past two years in the health and social work sector (by about 10,000 jobs, or some 7%), as well as in administration (by some 5,000 jobs, or about 8%). On the other hand, budget-funded employment in education and culture grew by about 4,000 jobs, or 3.4%, over the same period (Table T4-3). It should, however, be emphasized that employment data is at its most reliable for administration, whereas employment figures for health and education are slightly less reliable.[2]

1 Health and social work sector employees are actually paid from the Serbian Health Insurance Fund.
2 Employment data for public administration, education and health in Table T4-3 is lower than the data for the same sectors given in Table P-5 in the Analytical Appendix. The main reason is that Table T4-3, showing the number of budget-funded employees, does not include the private sector, as opposed to the Table P-5 in the Appendix.

Table T4-3. Serbia: Employees in Legal Entities, Disaggregated, 2003–2007

	Employees in legal entities							
	Public sector							
	From the budget			Public enterprises		Public sector - total	Other[1)]	Entrepreneurs and their employees
	Administration - all levels	Education and culture	Health and social work	National public	Local public			
	1	2	3	4	5	6	7	8
	in thousands							
2003								
March	60	116	147	129	54	506	1,122	418
September	62	114	147	127	55	505	1,090	441
2004								
March	63	117	147	125	57	509	1,092	464
September	63	116	148	124	57	508	1,052	477
2005								
March	63	119	148	122	61	513	1,044	513
September	61	117	147	112	61	498	1,038	531
2006								
March	60	118	141	105	61	485	1,011	536
September	58	117	138	102	60	475	972	572
2007								
March	58	121	138	100	59	476	962	566

Source: SBS.
Note: Military and police, 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 employed in Serbia. The data on their exact numbers and wages are not published by the SBS because of national security issues.
1) Private, socially-owned and mixed ownership enterprises. This column has not been disaggregated further due to absence of data. 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.

According to the SBS, the unemployment rate in March 2007 stood at 26.7%.

Three methodologies can be used to calculate the unemployment rate in Serbia. The rate shown in Column 4 of Table T4-4 provides the most reliable picture and internationally comparable unemployment rate – that published in the Labor Force Survey (LFS). In the last issue of *QM* we explained the methodology used by the LFS, as well as the methodology behind the unemployment rate we said the SBS had received from the National Employment Service (NES).[4] However, in preparing this article, we established that the NES methodological approach differs to a certain degree from that used by the SBS. While the SBS includes the total number of agricultural producers from the LFS in the active population to calculate the unemployment rate (the figure stood at 501,937 in October 2006), the NES counts only agricultural producers who pay contributions to the Agricultural Producers' Pension Insurance Fund as active population (under Serbian law, only one member of a household pays these contributions, and thus this number is a great deal lower than the LFS figure; for instance, in October 2006, it stood at 341,795, and is declining constantly[5]). Hence the SBS unemployment rate, which stood at 26.7% in March 2007, includes only insured employees working in non-agricultural fields, but at the same time takes into account the total number of agricultural producers, regardless of whether or not they have insurance. On the other hand, the NES unemployment rate, standing at 28.1%[6] in March 2008, is purely administrative, and can be taken more as information about the percentage of people who are registered as employed, whether or not they are agricultural producers. In our opinion, both these rates significantly overestimate total unemployment in Serbia. In Table T4-4 we continue publishing the SBS unemployment rate, as it is well-known and generally accepted by the public; however, we must draw attention to the fact that only the unemployment rate from the LFS (Column 4 in Table T4-4) is the true unemployment rate – and it stood at 21.6% in October 2006. There are indications that both the SBS and the NES will soon switch over to using the unemployment rate from the LFS, and in that case *QM* will stop publishing the SBS unemployment rate (Column 3 in Table T4-4).

This rate is an overestimation of actual unemployment, which is closer to October's figure of 21.6% from the Labor Force Survey

Table T4-4. Serbia: Registered Unemployment, 2003–2007

	Individuals searching employment (NES)[1]	Total number of unemployed (NES 15-64)[2]	Unemployment rate (SBS)[3]	Unemployment rate (LFS 15-64)[4]
2003				
March	945,960	...	25.8	..
September	954,794	...	26.1	16.0
2004				
March	948,837	...	26.0	..
September	946,512	842,775	23.9	19.5
2005				
March	992,147	884,111	25.0	..
September	1,000,652	897,724	25.3	21.8
2006				
March	1,012,245	920,031	26.6	..
September	1,007,657	914,564	26.6	21.6
2007				
March	997,306	913,299	26.7	..

Source: National Employment Service (NES); SBS, Labor Force Survey (LFS).
Note: Population aged 15-64 is considered working-age population.
1) Unemployed individuals searching work or employed individuals requesting job change via NES.
2) As of July 2004, "Total number of unemployed" are a separate category from "Individuals searching employment".
3) The SBS unemployment rate stems from dividing the number of unemployed with the 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 unemployeed from the NES statistics (Column 2 in this table) and the number of agricultural workers from the LFS. As of September 2004, "Unemployment rate" is based on the "Total number of unemployed", rather than "Individuals searching employment".
4) Labor Force Survey is conducted in October each year (once per year), thus the September data are in fact October data for that same year.

4 See *QM* 8, Trends, Section 4, Employment and Wages, Box 1.
5 Of the insured agricultural producers, only 15% are thought to actually pay their contributions; the rest are merely registered, and in fact owe money to the Agricultural Producers' Pension Insurance Fund.
6 The unemployment rate monitored by the NES has begun to decline slowly since January 2007, a development attributed to the operation of the Health Insurance Act, whereby the unemployed can no longer claim health insurance through the NES. After this legislative change, some 50,000 people stopped registering to renew their "unemployed" status.

Wages

Y-o-y gross wage growth in Q2 stands at 18.6% in real terms

The average monthly gross wage in Q2 grew by some 3,000 dinars relative to Q1 2007 (Table T4-5). Y-o-y gross wage growth in Q2 was at 18.6% (Table T4-6). This quarter again saw y-o-y wage growth higher than GDP growth. High y-o-y wage growth continued in July, with the average gross wage rising by 17.2% (Table T4-6).

Table T4-5. Serbia: Wage Bill and Average Monthly Wage, 2003–2007

	Wage Bill (SBS)[1)]			Average Monthly Wage (SBS)		
	in 000 dinars	% of GDP	% of non-agricultural GVA	Gross, in dinars	Net, in dinars	Gross, in euros
2004	454,125,726	33.1	46.1	20,555	14,108	283
2005	562,190,728	32.9	45.4	25,565	17,478	308
2006	683,292,822	33.6	45.7	31,801	21,745	379
2005						
Q2	137,692,500	33.9	45.9	25,035	17,122	306
2006						
Q1	152,864,571	35.3	45.8	28,209	19,284	324
Q2	166,655,577	33.5	44.8	30,914	21,126	356
Q3	172,572,020	32.2	44.4	32,130	21,986	386
Q4	192,591,293	33.4	46.6	35,951	24,585	452
2007						
Q1	185,111,211	37.2	47.9	35,046	25,103	438
Q2	200,284,312	36.6	48.3	37,900	27,165	467
July	..	..	..	38,712	27,752	480

Source: SBS.
1) The wage bill is an inferred value representing the multiple of the total number of employed with the average wage, using SBS data.
2) Due to the official change of the RPI base year from 2002 to 2005, a minor change occurred in wage bill participation in GDP and GVA. The data has been corrected for the entire series.
3) The wage bill was slightly modified for Q1 2007 as well as its % in GDP, due to the final data on the number of employed in March 2007.

Unit labor costs remain at the high Q1 2007 level

With a y-o-y growth of 16.3% in real terms in Q2, the wage bill has been rising at twice the speed of GDP; this is also evidenced by the fact that its share in GDP has increased from 33.5% in Q2 2006 to 36.6% in Q2 2007. Similarly, the share of the wage bill in non-agricultural GVA, which we use as an indicator of unit labor costs, grew by 3.5 percentage points, from 44.8% in Q2 2006 to 48.3% in Q2 2007. Unit labor costs thus remained at the high level reached in Q1 2007 (Table T4-6).

Y-o-y gross wage growth stands at above 11% in real terms in almost all sectors

Y-o-y gross wage growth stands at above 11% in real terms in all sectors, except in agriculture, which has seen growth of 5.8%, and fishing, which has recorded a significant drop of over 36% (Table T4-7).

While Table T4-7 shows growth of gross wages across all sectors, Table T4-8 provides a more detailed overview of wages in the public sector, or rather the portion of wages paid from the budget.[7] Here we can compare wage movements in the public sector with the Serbian average, as well as with the rest of the economy, made up of private, socially owned and mixed-ownership companies.

7 Wages of budget beneficiaries in Table T4-8 do not show the part of wage growth resulting from budget beneficiaries' own revenues.

Table T4-6. Serbia: Real Y-o-y Wage Indices, 2004–2007

	Wage Bill Index (SBS)[1)]		Average Gross Monthly Wage Index (SBS)	
	nominal	real	nominal	real
2004	123.7	111.4	123.7	111.4
2005	123.8	106.6	124.4	107.1
2006	121.8	109.0	124.4	111.3
2005				
Q2	124.1	106.6	125.3	107.6
2006				
Q1	124.9	109.0	127.3	111.0
Q2	121.0	106.0	123.5	108.1
Q3	119.4	107.1	122.3	109.7
Q4	122.2	114.1	124.9	116.6
December	..	..	128.1	120.9
2007				
Q1	121.1	115.5	124.2	118.5
Q2	120.2	116.3	122.6	118.6
July	..	..	122.0	117.2

Source: SBS.
1) The wage bill is an inferred value representing the multiple of the total number of employed with the average wage, using SBS data.

Table T4-7. Serbia: Average Gross Wages by Activities, Y-o-y Real Indices, 2005–2007

	2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	2006	Q1 2007	Q2 2007
Total	106.8	110.9	108.0	109.7	116.4	111.3	118.6	118.6
Agriculture, forestry and water works supply	112.2	118.3	115.7	112.4	112.4	114.7	110.2	105.6
Fishing	116.2	105.5	70.8	93.6	100.5	92.6	78.8	63.6
Mining and quarrying	100.4	108.9	114.5	115.5	115.1	113.5	135.4	121.1
Manufacturing	109.1	114.4	110.9	113.8	115.8	113.7	114.9	114.7
Electricity, gas and water supply	104.1	104.0	99.4	107.1	114.9	106.3	143.0	117.7
Construction	104.5	108.7	111.0	112.7	119.4	112.9	123.9	126.0
Wholesale and retail trade, repair	111.6	114.2	113.9	112.0	117.9	114.5	118.7	115.1
Hotels and restaurants	108.3	112.0	111.0	106.4	108.6	109.5	112.0	114.7
Transport, storage and communications	104.2	110.0	111.0	104.0	109.1	108.5	108.5	111.9
Financial intermediation	110.5	112.9	111.5	113.9	111.3	112.4	112.9	111.4
Real estate, renting activities	111.6	101.5	99.1	105.8	107.3	103.4	122.0	120.8
Public administration and social insurance	105.0	112.6	104.3	107.6	112.5	109.2	111.5	118.3
Education	108.2	114.9	103.5	105.0	112.0	108.9	111.9	118.5
Health and social work	100.0	101.4	102.3	104.9	125.5	108.5	125.5	130.8
Other community, social and personal service	102.6	105.2	100.7	103.1	111.0	105.0	106.2	111.7

Source: SBS, RAD-1 Survey.

The highest y-o-y gross wage growth, 31.5%, was recorded in the health and social work sector, funded from the budget

The highest y-o-y gross wage growth – 31.5% in real terms – was in the public sector, specifically in health care and social work, both funded from the budget (Table T4-8). The "Health care and social work" column in Table T4-7 shows the total wage growth in this sector, including the part of wages not paid out from the budget; the total growth here amounts to 30.8%. Second only to it in the public sector is education and culture, where the y-o-y growth of gross wages paid from the budget stood at 19.2% in real terms (Table T4-8). The total wage growth in this sector amounted to 18.5% (Table T4-7).

Table T4-8. Serbia: Gross Wage Y-o-y Real Indices - Public Sector, 2004–2007

	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	106.7	107.3	110.9	107.8	113.1	114.9	111.4
2005	106.0	106.1	100.5	100.6	102.8	105.2	107.1
2006	109.1	107.1	110.0	110.7	103.0	112.5	111.3
2005							
Q2	103.0	108.4	102.9	98.1	104.1	102.0	107.6
2006							
Q1	111.5	111.1	102.2	108.9	97.0	113.9	111.0
Q2	102.2	100.8	103.1	109.6	102.8	110.0	108.1
Q3	108.0	104.2	105.0	108.4	102.7	110.3	109.7
Q4	114.7	112.8	127.5	116.1	109.3	115.3	116.6
2007							
Q1	111.5	112.6	125.4	129.8	113.8	117.2	118.5
Q2	118.6	119.2	131.5	118.9	104.5	116.0	118.6

Source: SBS.
Note: 1) Column 6 includes private, socially-owned and mixed ownership enterprises.

High gross wage growth in public enterprises continues

High y-o-y gross wage growth continues in public enterprises, with a rate of 18.9% in national public enterprises, and a much more modest 4.5% in the local ones. However, both rates are significantly lower than in the previous quarter (Table T4-8).

The highest wage growth in the private sector was in construction

In the private sector, the highest wage growth was seen in construction – 26% – followed by the real estate and renting activities sector where y-o-y gross wage growth stood at 20.8%.

Box 2. Wage Trends in the Public Sector

From this issue onwards we will also be monitoring wage trends in the public sector (Table T4-8). Wages paid directly from the budget (administration, education, and health services), as well as wages in public enterprises, are higher than the average gross wage for 2003; this is especially true of wages in national public enterprises, which are some 75% higher than the average wage in Serbia[1] (Table P-7, Analytical Appendix).

According to *QM*'s estimate, the average monthly gross wage in Q1 in the private sector amounted to 32,644 dinars; for the public sector, the figure was 41,805 dinars.[2]

The share of the public sector wage bill in the total wage bill in Q1 2007 stood at 32.3% (Table P-8 in the Analytical Appendix), while the share of the public sector in total employment amounted to 27% in March 2007,[3] which further substantiates the claim that public sector wages are higher than the average.

Table T4-8 provides a comparative overview of y-o-y rates for gross wages paid from the budget, in real terms, wages in public enterprises, as well as those in the rest of the economy, made up of private, socially owned and mixed-ownership companies – i.e. all the companies that will be priva-

1 It should also be kept in mind that Serbia's average wage is overestimated. For a more detailed explanation, see Stanić, K. (2006), "Spotlight on: Registered Employment and Wages – Statistical Data and Trends 2000-2005", Quarterly Monitor 3, FREN, pp. 61-70.
2 This estimate is based on the quotient of the wage bill and the number of employees in both sectors. We analyze Q1 since we still lack reliable Q2 employment data. We would also like to draw attention to the fact that this is a rough estimate of wages in these sectors, as we still cannot establish the reliability of the data.
3 The total number of public sector employees from Table T4-3 was divided by the total number of employees (Column 6) from Table T4-1.

tized or wound up by the end of 2008. Although wages are lower in the private sector, their growth rates have, since 2003, seen dynamic shifts in relation to wage growth rates in the public sector.

It is interesting to note that the annual wage growth averages in the private sector for 2004, 2005, and 2006 were higher than, or equal to, the growth rates in the public sector. Quarterly data shows that the ratio began to shift continually in the second half of 2006, with the trend continuing into 2007. In Q4 2006, wage growth in health care and social work far outstripped that of other sectors. Extremely high wage growth was also registered in national public enterprises, while the growth of wages in administration almost reached that of the economy. In Q1 2007, wage growth in the health sector and national public enterprises far exceeded wage growth in the private sector, while in Q2 all public-sector wages, except those in local public enterprises, rose much more than wages in the rest of the private sector. However, it should be kept in mind that wage growth in the rest of the economy is still much higher than GDP growth. Although new services, such as financial intermediation, insurance, and the like have contributed a great deal to the total growth of wages in the private sector, even the rise in wages in manufacturing (14.7% in Q2), is very high.

We believe that the impact of public-sector wages is very important for total wage growth, due to the availability of public-sector wage information to the general public, and because of the significant share of this sector in the economy as a whole.[4] With such high wage growth rate, unit labor costs have been rising across all sectors.

4 A similar view is taken by the Serbian Ministry of Finance in its *"Public Sector Wages in Serbia"*.

5. Economic Activity

The economy recorded a moderate slowdown in Q2 relative to Q1 but still retained a high growth rate. GDP in Q2 grew at an estimated 7.3% compared to the same period last year, the figure including poor agricultural results. Agricultural GVA, which *QM* believes is the right measure of economic activity, rose by 8.5%. The extraordinarily high economic growth in 2007 was triggered by booming aggregate demand. The highest rise, relative to 2006, was recorded in the services sector, in commerce and financial intermediation, with a y-o-y- rise of approximately 20% in the first half of the year. The weak performance of the agriculture caused supply side disruptions which, in conjunction with the already unfavorable situation in domestic supply, will most probably create inflationary pressures and contribute to further growth of the foreign trade deficit. Industrial production recorded satisfactory growth of 5.2%, with sectors oriented toward the domestic and the export markets both having similar growth patterns. Construction activity rose by some 10% in Q2 relative to the same period last year, which *QM* considers to be the underlying growth trend in this sector.

Gross Domestic Product

QM estimates that GDP grew at a very high rate of 7.3% in Q2

The y-o-y real growth of GDP in Q2 2007 was a hefty 7.3%, according to *QM*'s preliminary estimate, based on available data on the results of economic activity and according to the SBS methodology[1] (Table T5-1). This was 1.5% lower than the 8.7% recorded in Q1.[2]

The slowing of economic growth relative to Q1 was mainly due to extraordinary circumstances (the unusually warm winter was conducive to construction and activities in related sectors). Additionally, domestic demand slowed down, which had a direct impact on slowing GDP growth.

Table T5-1. Serbia: Gross Domestic Product, 2004–2007[1)]

	y-o-y indices									base index	GDP share
	2004	2005	2006	2006				2007		(jan-jun)$_{07}$/ (jan-jun)$_{02}$	2006
				Q1	Q2	Q3	Q4	Q1[2)]	Q2[3)]		
Total	108.4	106.2	105.7	107.0	105.9	105.3	105.0	108.7	107.3	133.2	100.0
Taxes minus subsidies	109.3	110.2	99.8	99.2	101.1	97.2	101.5	113.4	110.0	151.0	15.3
Value Added at basic prices	108.3	105.5	106.9	108.4	106.8	106.9	105.7	107.9	106.8	130.4	84.7
Non agricultural Value Added	107.5	106.3	107.7	109.6	107.3	107.0	107.2	108.8	108.5	135.4	87.1
Agriculture	119.0	95.1	101.6	98.9	102.9	106.6	97.9	100.7	92.8	96.4	12.9
Manufacturing	108.8	99.9	105.6	109.2	106.6	104.4	103.1	108.8	104.9	113.3	16.1
Construction	103.5	102.0	109.3	125.6	106.6	102.7	108.8	116.2	110.0	136.1	3.5
Transport	115.8	123.4	127.5	128.0	126.6	126.9	128.5	119.4	120.0	233.0	11.5
Wholesale and retail trade	117.0	122.0	110.6	116.6	107.9	109.0	110.5	124.1	115.0	212.8	12.9
Financial intermediation	109.9	117.4	117.2	119.8	118.8	116.8	114.0	118.7	120.1	200.5	7.4
Other	99.8	99.9	100.2	100.8	100.2	100.1	100.1	98.6	102.0	105.1	35.7

Source: SBS.
1) In constant prices in2002.
2) Official revision is expected
3) QM estimate.

Growth was the result of high demand

QM's analysis indicates that the high economic growth in Q2 2007 can be ascribed to the high demand owing to the rise in real wages and credit expansion, as well as the considerable growth of exports. The 18.6% rise in wages in Q2 relative to Q2 2006 (real gross wages increase), and

1 The methodology used to estimate GDP is based on the evaluation of the real increase in GVA of individual economic sectors based on the productivity principle, adding up the resultant figures and then adding the tax component to the total. Modifications regarding the SBS data were in part connected with the indicators used to estimate growth by sectors and which, in our opinion, better reflect the real growth of the sector (e.g. production of cement in civil engineering). Considering that a limited number of indicators are available from the SBS, in our estimate we also included direct indicators that are not part of the official methodology, and we analyze more deeply the trends of the individual sectors.

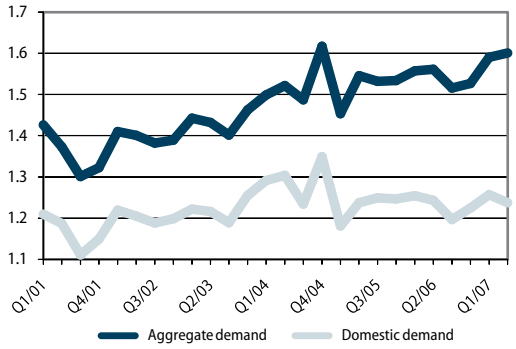
2 The SBS is expected to make a downward correction of its GDP estimate, to some 8%, and the real slowdown in GDP growth is therefore between 0.5% and 1%, as indicated by the nonagricultural GVA.

the credits to households boosted total consumption. The y-o-y growth of retail trade at constant prices was 25.9% in Q2 (8,5% in Q4 2006.). Noticeable, however, was a slowdown in the trend in Q1, when the y-o-y retail trade at constant prices was almost 32.2%.

Box 1: Analysis of Demand

Starting from this edition, *QM* will regularly monitor the trends in aggregate and domestic demand that have an impact on economic activity and set out its findings in the section *Economic Activity*. Graph T5-2 shows the trends of aggregate and domestic demand[1] in the period 2001-2007 with respect to GDP (expressed in 2002 constant prices).

Graph T5-2. Serbia: Aggregate and Domestic Demand Ratio to GDP, 2001–2007



Source: SBS

Aggregate demand in the observed period showed a real growth in respect to GDP and in Q2 was 1.6 times higher than GDP. With regard to GDP, domestic demand was at its highest in mid-2004, declining relatively soon afterwards, and in Q2 it was 1.2 times higher than GDP.

Aggregate demand continued increasing in Q2 as a consequence of exports growing faster than GDP, while the share of domestic demand in GDP decreased (Graph T5-2). QM believes the fall in domestic demand in Q2 was related to the unintentional tightening of fiscal policy. The Graph also shows that, in Q1 when real GDP growth was considerable, approximately 8%, domestic demand accelerated, and was in fact the reason for the extraordinary economic growth in Q1. All the earlier analyses by QM arrived to the same conclusion.

1 Domestic demand= aggregate demand – export

Aggregate demand apparently influenced production

The increase in demand was reflected in domestic supply. The additional impetus to production growth in Q1 partly continued in Q2. The y-o-y growth of the manufacturing industry was also high in Q2, running at 4.9%, and notable growth was recorded in the sectors that market the bulk of their output at home (Graph T5-5). What is alarming, however, is that the higher consumption of households was met largely through imports which, given the already high foreign trade deficit, was an unfavorable trend. *QM* feels compelled to warn that the effect of increased household consumption might be faster growth of the foreign trade deficit, which would cancel out the positive impact that higher demand has had on domestic production and jeopardize the macroeconomic picture in Serbia over the medium term.

Expansion of credit to companies may have a long-term impact on economic growth

Credits to companies and households also accelerated their growth, through the domestic financial system and partly through direct foreign borrowing by companies. The result is accelerated investment activity by companies. Imports of capital goods in Q2 increased by 32.9%[3], and there were also signs of recovery in domestic production[4] of capital goods. The expansion of credit to companies and the heightened investment could have a long-lasting positive impact on economic growth.

3 This increase is considerably slower than recorded in Q1. For more information see Balance of Payments and Foreign Trade in *Trends* of this edition of *QM*.

4 The July results of capital goods production show a y-o-y increase of 26.4%, a longer series of data is required to reach a conclusion on any change in production. More details on the production of investment goods will be elaborated on in the part on industrial production.

GVA rose by 6.8% in Q2 ...

Gross value added (GVA) grew by 6.8% in Q2, and was somewhat lower than GDP growth. The GDP tax component was still significant, as it was also in Q1, and was still ahead of GVA growth (the estimated growth in Q2 was approximately 10%). The reason for this disproportion lies in demand being higher than GVA growth, which is directly reflected in the increased collection of VAT, which constitutes the largest part of the GDP tax component.

... and nonagricultural GVA by 8.5%

Nonagricultural GVA was estimated at a very high 8.5% but still slightly lower than in Q1 (Table T5-1). *QM* considers the nonagricultural GVA to be the most relevant indicator of economic activity, and it indicates high economic growth in Q2 and throughout 2007. The significantly lower growth of GDP and GVA relative to the nonagricultural GVA was due to exogenous factors (the drought) that affected agricultural production. The estimate is that agricultural production in 2007 will be down 10% on 2006. Since the agriculture's share in GVA is 13% , the drop will have a direct impact, resulting in GVA declining by 2.3 percentage points and the GDP by 2 percentage points. Analysis of the nonagricultural GVA is, therefore, significant, because it reveals crucial economic trends unburdened by the influence of exogenous factors.

The unfavorable agricultural results should, however, not be excluded from Serbia's economic picture. In view of the already high demand, the disruptions in supply will result in mounting inflationary pressures and further growth of the foreign trade deficit.

Since no substantial fall in demand, the prime generator of high economic growth, is expected until the end of the year, *QM* estimates that real GDP growth in 2007 will remain high, at about 7%. Nonagricultural GVA growth will be even higher, between 8.5% and 9%. If inflation is kept under control, which is one of the priorities of economic policy, and the dinar's exchange rate remains stable, it is quite clear that the internal imbalance will for the most part be manifested as a record foreign trade deficit in 2007.

Industrial Production

Changes in the structure of growth are apparent in Q2

The Q2 results confirm that industrial production is moving forward on a broad front. *QM* analyses show that there are not as many divergent trends in the movements of industrial production between leading performers and others, which is the main characteristic of industries in transition. The overall assessment of industrial production growth in Q2, therefore, is not just the sum of successful and unsuccessful participants, as was often the case in the earlier period, but an assessment of the general movement of industrial production.

Industrial production in Q2 grew by 5.2%

In Q2, industrial production recorded a y-o-y growth of 5.2% (Table T5-3). The upward trend of some 5% established in Q1 continued, but changes occurred in the structure of that growth. The highest y-o-y rise in Q2 of 8.7% was recorded in the production and distribution of electricity, gas and water. There was a downturn in the growth of the manufacturing industry relative to Q1 and it now stands at 4.9%. This was mainly the consequence of the June manufacturing production results, when the trend of exceptionally high growth that marked 2007 was interrupted (Graph T5-4). But the July results show that the June downturn was temporary. Mining and quarrying recorded a y-o-y growth of 1.4%.

Table T5-3. Serbia: Industrial Production Indices, 2005–2007

	y-o-y indices								base index	share
	2005	2006	2006				2007		(jan-jun)07/ (jan-jun)02	2006
			Q1	Q2	Q3	Q4	Q1	Q2		
Total	100.8	104.7	105.3	106.1	103.9	102.9	104.8	105.2	112.2	100.0
Mining and quarrying	102.1	104.1	104.0	102.6	102.8	104.6	102.1	101.4	102.3	6.3
Manufacturing	99.3	105.3	107.5	106.2	104.4	102.9	108.5	104.9	114.4	75.4
Electricity, gas, and water supply	106.6	102.2	99.3	107.6	101.6	102.1	94.2	108.7	106.6	18.3

Source: SBS

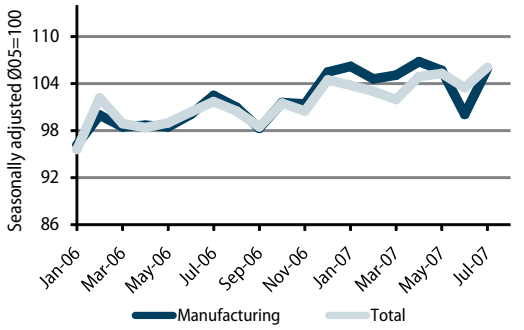
Production and distribution of electricity and gas take the lead

Extraordinary circumstances may have affected industrial production in Q2. Production and distribution of electricity, gas and water recorded a y-o-y increase in May and June (15.6% in June), possibly because of the mounting use of air conditioners. The high growth trend in the production and distribution of electricity, gas and water, continued into July.

Seasonally adjusted indices of industrial and manufacturing production show their high performances in Q2 (Graph T5-4). Seasonally adjusted indices of total industrial production in Q2 indicated a rise of 4.5% relative to 2006, confirming *QM*'s expectations that it will achieve a 5% growth in 2007. It is also clear that the June downturn was at odds with the established trend, an indication of extraordinary circumstances. At present, *QM* cannot clearly identify the reason for the slowdown, but it is quite possible that it was prompted by the very high temperature that month. A slowdown was also noted in the manufacturing industry, which until then was the leader in industrial production growth in 2007 (Graph T5-4). But the seasonally adjusted indices of the manufacturing industry in July showed that it was back on track[5].

Industrial production is expected to grow at a rate of approximately 5% to the year-end

Graph T5-4. Serbia: Industrial Production, Seasonally Adjusted Indices, 2006–2007



Source: SBS.

Small companies recorded much faster production growth rates in Q2

Evaluation of the industrial production of small companies that are not captured by regular industrial statistical analysis, shows that in Q2 these companies recorded a much faster y-o-y growth rate than the rest of the industry[6].

QM believes there is a correlation between the credit activity of banks on the domestic market and the industrial production of small companies. Namely, large- and medium-size companies can more easily borrow from foreign banks than their small counterparts whenever interest rate differentials on the domestic and international financial markets become significant. *QM* therefore assumes that small companies (and probably entrepreneurs too) were hardest hit by the monetary policy measures to rein in banks' credit activity. As of June last year, the growth index of small companies was considerably lower than of the rest of the industry, which coincided with the restrictive monetary policy measures. This continued until February 2007.

The trend is expected to continue till the end of the year

Based on this, the conclusion is that the y-o-y growth index of small companies from June to the year-end will very likely be considerably higher than that of the rest of the industry, since it is compared to the low 2006 base. The real y-o-y growth in industrial production in this period will, therefore, be somewhat higher than officially recorded.

Manufacturing industry records a y-o-y growth of 4.9% in Q2

The manufacturing industry grew by 4.9% in Q2. This was considerably below the figure for Q1 (8.5%, Table T5-3), but the seasonally adjusted indices do not indicate a significant slowdown.[7] Indices of the movement of inventories of consumer goods do not show any changes; hence the growth of production in the manufacturing industry is in keeping with the existing demand

Sections producing for the domestic market are still in the lead ...

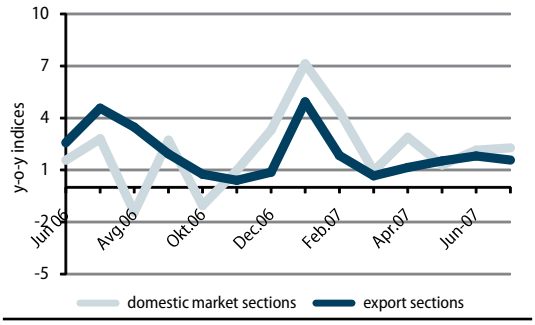
QM believes the high growth of production in the manufacturing industry in 2007 (6.2% including July) can be attributed to the rise in domestic demand. In this issue, we continue the analysis started in *QM*8 of the typical sections in the manufacturing industry that could be indicative of the origin of the demand for industrial products.

5 This figure may be unexpected if the actual reason for the slowdown of the manufacturing industry in June was high temperature, which lasted through July. Industrial production seasonally slows down in July and August, thus the seasonal component is incorporated in to their y-o-y comparison , in contrast to June when industrial production normally records high results.

6 Growth of industrial production of small companies is not published and is not included in the official data on industrial production. It appears only as an evaluation of its estimated influence on total industrial production.

7 If we exclude from the analysis the results recorded in June that do not follow the trend.

Graph T5-5. Serbia: Contribution to Y-o-y Manufacturing Industry Growth, Domestic Market Sections[1] and Export Sections[2], 2006–2007



Source: SBS.
1) Manufacturing industry sections selling most of their production on the domestic market.
2) Manufacturing industry sections selling a significant part of their production abroad.

Two groups of six industrial sections were analyzed: those exporting the major part of their production – export sections, and those selling almost all their production in the domestic market – domestic market sections (Graph T5-5). Over most of 2006, the export sections contributed more to manufacturing industry growth than the domestic market sections, even though their share in manufacturing was smaller. Indeed, in August and October 2006 the domestic market sections even recorded negative contributions to total manufacturing growth. The trend was reversed in November 2006, and domestic market sections have since been the drivers of manufacturing industry growth. All this is a strong indication that increased domestic demand spurred industrial production in late Q4 2006 and Q1 2007.

...but almost equal growth was recorded by exporters

Contrary to the period November 2006–April 2007, when the sections of domestic demand propelled the manufacturing industry, the situation is now somewhat different. The gap between the contributions by domestic market sections and export sections to total industrial production of the manufacturing industry is narrower. This, however, is not yet the usual picture of the production of the manufacturing industry, which grew over the past years largely due to the export sections such as basic metals production. This analysis is entirely in accordance with the movements of aggregate and domestic demand analyzed in Box 1.

New leader sections appear in 2007...

Table T5-6 shows the sections contributing the most to industrial production growth in 2007 (*leader sections*): food and beverages, basic metals, furniture and related products, production of machines and equipment (excluding electrical), non-metallic mineral products, publishing and reproduction. Obviously, all of them cannot be considered leader sections as we defined them up to 2007. This means that there are no sections with a significant share in industrial production in 2007 that stand out by having considerably higher growth rates than the rest of the manufacturing industry.

Contrary to 2006, the most successful industrial sections in Serbia no longer include the tobacco and chemical sections, while sections with the highest share in the growth of the manufacturing industry in 2007 are production of machines and equipment (excluding electrical) and publishing and reproduction (Table T5-6). It is interesting to note that since *QM* started monitoring industrial production sections separately, this is the first time that the section of investment goods (production of machines and equipment- excluding electrical) can be found among the leaders.

Table T5-6. Serbia: Sub-Sectors with Highest Growth Rates in 2007, 2004–2007

	y-o-y indices								base index	share
	2005	2006	2006				2007		(jan-jun)07/ (jan-jun)02	2006
			Q1	Q2	Q3	Q4	Q1	Q2		
Manufacturing	99.3	105.3	107.5	106.2	104.4	102.9	108.5	104.9	112.5	100.0
Total-selected sectors	102.8	111.0	109.3	113.0	115.9	106.0	115.5	108.5	135.0	56.4
Food and beverages	104.6	105.3	104.2	105.1	109.5	102.5	112.2	107.7	123.8	30.0
Basic metals	121.8	122.7	116.6	131.7	135.4	109.8	115.1	108.7	247.2	10.9
Furniture and related products	92.2	165.5	134.3	163.0	197.8	160.2	169.5	113.6	153.7	3.1
Machinery and equipment, except electrics	60.9	86.2	95.8	85.8	79.0	86.6	102.6	106.4	68.6	3.6
Non-metal mineral products	97.7	106.6	119.3	107.8	103.3	103.1	123.4	98.0	91.3	5.4
Publishing,printing and reproduction	94.0	105.0	107.1	115.1	95.3	100.6	99.8	119.4	114.7	3.4
Other	94.8	97.9	105.2	97.4	89.5	98.9	99.5	100.2	83.4	43.6

Source: SBS.

...but the growth of the leaders in 2007 is quite similar to that of the rest of the industry.

Interestingly, there is no major difference in 2007 between the growth of the leader sections in production and other sections. In Q2 leader sections recorded a y-o-y growth of 8.5%, while other sections remained at the Q2 2007 production level (y-o-y growth 0.2%). Analysis of the basic indices of individual sections (Table T5-6) brings out that the past five years have permanently affected the structure of industrial production. Production of basic metals was 2.5 times higher than in 2002, while, on the other hand, production of machines and equipment, excluding electrical, was only 70% of the 2002 production. It was not unusual in this period to have double-digit y-o-y changes in the level of industrial production in most sections. The 2007 results and the rather heterogeneous structure of the leader sections indicates that calmer waters lie ahead as far as structural changes in industrial production are concerned.

Viewed by use, production of consumer goods is in the lead ...

Observed by use, Q2 saw no major changes relative to Q1. The highest y-o-y growth of 10.6% was recorded in the production of consumer goods (Table T5-7). Production of intermediary goods followed with 8.4%, and the y-o-y production of energy grew by 4.9%. The only downturn in the y-o-y industrial production index was recorded in the production of investment goods (0.9%).

Table T5-7. Serbia: Components of Industrial Production, 2005–2007

	y-o-y indices								base index	share[5]
	2005	2006	2006				2007		(jan-jun)$_{07}$/ (jan-jun)$_{02}$	2006
			Q1	Q2	Q3	Q4	Q1	Q2		
Total	100.6	104.7	105.3	106.1	103.9	102.9	104.8	105.2	112.5	100.0
Energy[1]	103.9	102.5	100.7	104.8	99.9	102.7	93.0	104.9	106.4	23.6
Investment goods[2]	74.2	90.0	107.2	87.9	78.4	90.3	97.1	99.1	67.2	7.5
Intermediate goods[3]	104.9	106.7	109.4	109.1	106.5	102.3	113.6	108.4	133.0	32.2
Intermediate goods without basic metals	101.5	101.3	106.9	101.4	96.6	99.7	113.1	108.2	104.5	24.0
Consumer goods[4]	101.6	112.0	107.5	110.0	116.2	110.2	122.4	110.6	125.1	36.7
Consumer goods without food industry	96.3	128.3	112.9	117.8	126.9	122.5	138.7	114.8	127.1	14.1

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.

...but the recorded growth is much lower than in Q1...

... with energy production following ...

A major downturn of approximately 12% relative to Q1 was recorded in the production of consumer goods (Table T5-7). The main reason was probably the slowing of domestic demand besides the slowing of exports of consumer goods (y-o-y growth of exports of 30.4% in Q1, and 24.4% in Q2). The acceleration of the y-o-y growth in energy production in Q2 relative to Q1 could be the consequence of the low energy production in Q1 because of the warm winter, not a change in the trend. The production of intermediary goods recorded stable growth at 8.4%, and this rise was not only due to the growth of basic metals production, since growth was evident on a broad front (Table T5-7). A y-o-y decline of only 0.9% was recorded in the production of investment goods, indicating at long last a break with the steep downward trend over the past several years and better days ahead for domestic producers of these goods (Graph T5-8). This is supported by the results of the production of investment goods in July, when the y-o-y growth was as high as 26.4%. Exports of capital goods in 2007 recorded a remarkable growth (60%). It is quite likely that for the first time since 2004, after the first two neutral quarters, production of capital goods in 2007 will have a positive growth rate.

... the only fall was in the production of investment goods

Production of investment goods is probably on the verge of recovery

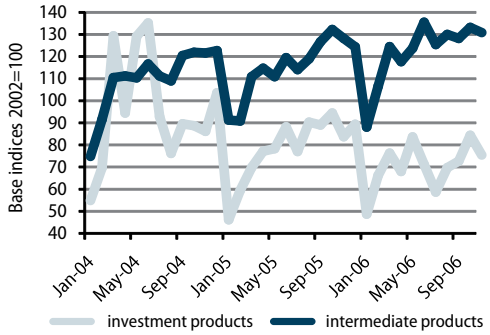
Graphs T5-8 and T5-9 show trends of the basic indices of industrial production by components. There are two diverging trends in the production of the intermediary goods from 2004 to 2007 (Graph T5-8), and total industrial production was all this time somewhere in between the two. While intermediary goods performed quite well, thanks primarily to the good results in the production of basic metals (Table T5-7, basic indices) which recorded continuous growth, while at the same time production of investment goods declined constantly. *QM* believes this was the result of the industry's adjustment to the market, with the competitive sections (dominated by privatized companies) utilizing the opening up of the economy to speed up their spreading into foreign markets. On the other hand, the noncompetitive companies in the same process lost the domestic market for their products and either cut back or closed down production. The process will most probably draw to an end in 2007. The decline in the production of investment goods has ceased. The high growth of exports of investment goods indicates that it was not halted by the temporary domestic nonselective investment demand, but that this is a durable reversal of the trend. From the remainder of this evidently competitive section,[8] we expect further expansion in line with the total growth of industrial production.

Also, the growth in the production of intermediary goods in 2007 was not achieved only through the accelerated recovery of certain sections with their existing production capacities, but was also impacted by the growth trend of the whole group. In this case too, it can hardly be expected that the divergent trends with regard to the rest of industrial production will continue.

A sharp slowdown in production of consumer goods was recorded in May

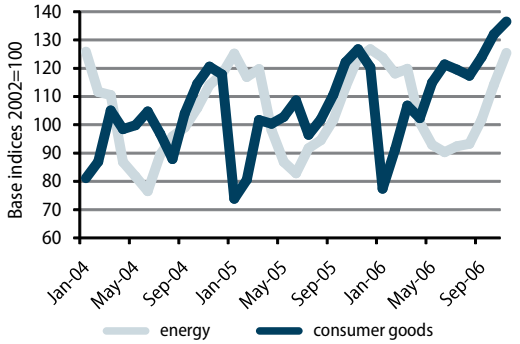
Graph T5-9 shows the movements in energy and consumer goods production. The most significant changes in energy production in 2007 occurred in months with significant seasonal components. Energy production in January and February was way below the expected seasonal level while, on the other hand, the expected seasonal drop in June did not take place. *QM* believes this was due to exogenous factors (weather conditions). June is usually the month with the lowest level of energy production, but this year it was above the May level. Production of consumer goods in the period December 2006-April 2007 recorded an average y-o-y growth rate of approximately 22%. Just as suddenly as it started, this high growth in ceased in May when the y-o-y rates plunged back down to approximately 4%. *QM* holds that the changes were caused mainly by the movements in domestic demand. A slowing of the growth of exports is also noticeable.

Graph T5-8. Serbia: Components of Industrial Production, 2004–2007



Source: SBS.

Graph T5-9. Serbia: Components of Industrial Production, 2004–2007



Source: SBS.

8 We underline that production of investment goods in 2007 is less than 70% of the 2002 production..

Construction

In Q2 construction grew by approximately 10%...

Following the extremely high y-o-y growth rates in Q1, construction in Q2 went back to the 10% trend established in 2006. Among the several indicators describing movements in construction, *QM* holds the cement[9] production index to be the most reliable (Table T5-10). Cement production in Q2 2007 was up 8.9% on the same period a year ago.

... which we see as the underlying trend

Q2 is an extremely important quarter for estimating the underlying trend in construction, since variable seasonal factors have the smallest impact on construction. The recorded growth of approximately 10% is in line with the 2006 estimated growth, and *QM* considers it to be a long-term growth trend in construction.

SBS data indicates high productivity growth rate

Other construction indicators released by the SBS: the value of construction works in Q2 was nominally up 28.4%, and 21.6% in constant prices, relative to the same period last year. The number of workers on construction sites fell by 2%, while the y-o-y decline in work hours was 2.5%. These indicators are at odds, and point primarily to the high growth of productivity, as well as, in *QM*'s view, the poorer reliability of the data.

Table T5-10. Serbia: Cement Production, 2001–2007

	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	…	…	…

Source: SBS

9 A 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

The current account deficit in Q2 2007 (13.5% of GDP) was reduced by 4.2 percentage points relative to Q1 (17.7% of GDP). The foreign trade deficit in the quarter was €1,478 mn and, although lower than in Q1, it showed a significant y-o-y growth (17.8%). Exports recorded stable growth (28.7% y-o-y), while imports slowed compared to Q1, growing at 23.2%. The high inflow of FDIs and further expansion of private mid- and long-term borrowing led to a significant surplus in the capital account, which covered the current account deficit and resulted in a further growth of the NBS foreign exchange reserves (€397 mn growth).

The current account deficit was reduced by 4.2% of GDP compared to the Q1...

... and amounted to 13.5% of GDP

The current account deficit fell relative to Q1, amounting to €-974 (13.5% of the estimated quarterly GDP, Table T6-1), which was lower by 4.2 GDP percentage points than the deficit recorded in Q1, when it amounted to 17.7% of GDP. Relative to the same quarter of 2006 and expressed in euros, however, this deficit doubled (y-o-y growth of 105.0%). Expressed in percentage of GDP, the deficit rose from 8.0% in Q2 2006 to 13.5% in Q2 2007. This y-o-y deterioration was the consequence of the worsening trade balance, which is 17.8% higher in Q2 2007 than in Q2 2006. Another contributing factor to the growth of the deficit was the y-o-y drop in current transfers (of 34.6% or €286 mn) owing to a significantly poorer foreign currency inflow through exchange operations and lower inflow into non-residents' accounts.

Exports in Q2 recorded stable growth of 28.7% (y-o-y), and imports grew by 23.2% ...

... which led to the merchandise trade deficit rising by 17.8%

According to the NBS[1] methodology of the and expressed in euros,[2] exports in Q2 grew at a y-o-y rate of 28.7%, a slowdown relative to Q1 when they rose at a rate of 34.9%. This, however, only seems to be a slowdown since the significant export growth in Q1, and particularly in January, was the consequence of December 2006 exports spilling over into Q1 2007. The issue is discussed in more detail in the part on exports and imports. Imports also slowed relative to Q1, rising in Q2 at a y-o-y rate of 23.2% (31.5% in Q1). This growth of imports and exports led to a further rise in the merchandise trade deficit in Q2, which was up 17.8% on Q2 2006. In Q2, this deficit amounted to 20.6% of the estimated quarterly GDP (21.9% in Q1).

The imports/exports ratio is still far from 1:2, which is approximately by how much exports/imports coverage (52.0%). Namely, in order for the merchandise trade deficit to be cut, the y-o-y import growth rate should be 52.0% of the export growth rate at the most. If the export growth rate is taken as the reference, imports should not grow at a annual rate higher than 14.9% if the deficit is to be reduced.

Services balance is almost at equilibrium (only €9 mn surplus)

Both imports and exports of services recorded a stable growth of 32.3% and 31.2% respectively, with the difference standing at a mere €9 mn. In those terms, the merchandise balance (€1,469 mn) is virtually the same as the trade balance (€1,478 mn). The biggest contribution to the growth of services came from transport (57.8%) and other services (30.1%). According to NBS data, foreign tourists spent €92 mn in Serbia in Q2, up 23.6% (y-o-y). Spending on services increased primarily due to higher expenditures in transport (totalling €168 m in Q2, a growth of 51.7% y-o-y), and tourism (€91 mn in Q2, a 50.3% growth).

1 In analyzing the balance of payments, the corrected import and export (f.o.b.) data released by the NBS were used. This data is calculated in accordance with IMF methodology. In the part on imports and exports SBS data which differs methodologically from the NBS data were used. Hence the differences in the presented figures on imports and exports and growth rates.

2 Because of the significant appreciation of the dinar in the last year, as well the change in the dollar-euro ratio, the imports and exports growth rates expressed in dinars and US dollars would have a significantly different values depending on the currency in which we express their value. However, in view of the importance of trade with the EU and the high degree of euro-ization in Serbia, *QM* believes that data expressed in euros best reflects the movements in Serbia's foreign trade sector.

Table T6-1. Serbia: Balance of Payments, 2004–2007[1)]

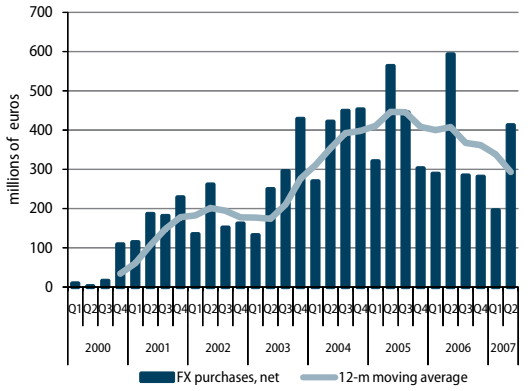
	2004	2005	2006	2005 Q1	2005 Q2	2006 Q1	2006 Q2	2007 Q1	2007 Q2
				in million of euros					
CURRENT ACCOUNT	-2,197	-1,805	-2,892	-324	-291	-680	-475	-1,141	-974
Balance of goods	-5,311	-4,279	-4,950	-683	-1,089	-1,101	-1,256	-1,412	-1,478
Exports of goods	2,991	4,006	5,146	813	1,011	1,039	1,243	1,401	1,599
Growth rate (12-m, in %)	*14.7*	*33.9*	*28.5*	*54.4*	*52.6*	*27.8*	*22.9*	*34.9*	*28.7*
Imports of goods	-8,302	-8,285	-10,096	-1,496	-2,100	-2,140	-2,498	-2,813	-3,078
Growth rate (12-m, in %)	*29.4*	*-0.2*	*21.9*	*-13.4*	*6.6*	*43.0*	*19.0*	*31.5*	*23.2*
Balance of services	155	-5	-49	*-25*	*42*	*-31*	*4*	*-4*	*9*
Income, net	-172	-260	-314	-59	-83	-58	-97	-84	-85
Current transfers	2,728	2,471	2,240	410	790	474	828	318	542
F/X purchases, net	1,592	1,631	1,447	320	563	289	593	196	412
Non-resident's accounts	568	460	561	37	70	183	94	111	6
Grants	403	268	181	33	49	36	45	41	38
ERRORS AND OMISSIONS	168	-384	-221	-184	109	-31	-32	-87	69
CAPITAL AND FINANCIAL ACCOUNT	2,377	3,863	7,353	710	463	1,100	1,587	1,296	1,303
Foreign direct investment (FDI)	773	1,248	4,077	262	240	164	574	887	152
Other investments	1,604	2,615	3,276	448	223	936	1,013	409	1,151
Medium and long-term loans, net	1,221	1,820	3,140	157	444	443	1,242	494	986
Extraordinary debt and interest repayment[2)]	...	...	-1,060	0	0	0	-189	-177	0
Other[3)]	383	795	1,196	291	-221	493	-40	93	164
NBS Reserves, net[4)], (increase +)	-349	-1,675	-4,240	-202	-281	-390	-1,079	202	-397
MEMORANDUM ITEMS									
NBS reserves excl. com. banks deposits	-299	-679	-1,666	-51	-219	-92	-340	288	-364
				in % of GDP					
Exports of goods	15.2	19.0	20.7	17.8	19.7	20.1	21.0	21.7	22.2
Imports of goods	-42.1	-39.3	-40.6	-32.7	-41.0	-41.3	-42.2	-43.6	-42.8
Balance of goods	-26.9	-20.3	-19.9	-14.9	-21.2	-21.3	-21.2	-21.9	-20.6
Current account	-11.1	-8.6	-11.6	-7.1	-5.7	-13.1	-8.0	-17.7	-13.5
GDP in euros[5)]	19,723	21,108	24,886	4,578	5,125	5,181	5,914	6,456	7,192

Source: Table P-9 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, unpaid imports of oil and gas, short-term loans, other assets and liabilities and gross reserves of commercial banks.
4) Excluding IMF tranches.
5) For the stated period. GDP 2006, Q1 and Q2 2007: FREN's estimate.

Y-o-y drop in current transfers of 34.6% contributes to the rise of the current account deficit

The positive balance of current transfers (€524 m) dropped significantly relative to Q2 2006 (-34.6%) and this contributed in a major way to the deterioration of the current balance. The inflow of remittances through formal channels was 19.8% higher than in the same quarter of 2006, and reached €332 mn. The growth of official remittances was, among other things, the consequence of increased confidence and modernization of the domestic financial system, which resulted in a shift from unofficial to official flows. This led to a fall in the inflow of remittances through unofficial channels, which is registered in the balance of payments as a drop in the purchase of foreign exchange from exchange offices. On the other hand, there was a significant growth of withdrawals of hard currency from household accounts, by as much as 45.9%. These withdrawals and remittances transferred abroad are registered in the balance of payments as a "remittances outflow" (Table P-5, Analytic Appendix). Owing to the above, the net remittances balance in Q1 was down 19.9% on Q2 2006. The inflow of foreign exchange through exchange bureaus, albeit

Graph T6-2. Serbia: FX Inflows, Net, 2000–2007



Source: NBS

Inflows from exchange offices down -30.4% relative to 2006

seasonally high, was €180 mn lower than in Q2 2006 (a 30.4% drop), due to the legalization of the remittance flows, reduction of the level of euro-ization, the gradual shrinking of the gray economy, and normalization of foreign trade with Montenegro.

Big capital account surplus (€1,303 mn) covers the current account deficit

In Q2 2007, the capital account recorded a surplus of €1,303 mn, offsetting the current account deficit and amplifying the NBS foreign exchange reserves by €397 mn. The positive capital balance was primarily the upshot of the major inflow of FDIs in Q2.

The data shown in Table T6-1 suggests that the record level of foreign borrowing by enterprises, to the tune of €1,192 mn, contributed to the positive current account balance, while the FDIs were seemingly low.

Acquisition of Republika Srpska Telekom distorts the picture but the FDI performance is essentially good, with a significant FDI inflow

However, the figures should be taken with some reservations since they are, although methodologically correct, strongly impacted by the acquisition by Telekom Serbia of the Telekom Srpska mobile telephony operator in the Republic of Srpska (Bosnia-Herzegovina). To finance this investment, Telekom Serbia borrowed approximately €630 mn abroad. The transaction increased the level of corporate foreign borrowing. The funds were almost simultaneously paid to the account of the Republika Srpska government, which represented a significant outflow of FDIs. However, as the NBS balance of payments shows net foreign investments (inflow minus outflow), the FDIs in the balance of payments seem low.

The FDI inflow into Serbia in Q2 amounted to €800 mn, of which €182 mn were portfolio investments. The FDI outflow was €636 mn, owing to which the FDI balance in Q2 that figures in the balance of payments (net investments into Serbia) amounts to €152 mn.

As reported in NBS balance of payments, companies' direct foreign borrowing amounted to €1,192 mn. Excluding the credit to Telekom, this borrowing would be around €572 mn, is in line with the level of the direct foreign borrowing of companies in the last four quarters of around €500 mn. Total mid- and long-term borrowing from abroad, including the credit to Telekom, was €986 mn, since banks settled €199 mn in the observed period. Without the credit to Telecom, net mid-term borrowing would amount to around €366 mn.

Further growth of NBS foreign reserves (€397 mn)

New foreign exchange savings went up in Q2 by a further €290 mn, while €155 mn was paid out on the basis of FFCDs. As a consequence, the foreign exchange reserves continued their growth (€397 mn).

Foreign Debt

Serbia's foreign debt is 57.1% of GDP and is going down at the y-o-y level.

According to NBS data, the foreign debt in June 2007 amounted to €15.7 bn, or 57.1% of GDP (Table T6-3), which puts Serbia among the moderately indebted countries. In absolute terms, the total foreign debt has been growing in the last four years. However, expressed in GDP percentage points, it has declined relative to 2005, primarily due to the reduction of the public foreign debt.

The public foreign debt has been going down since 2004, primarily due to the writing-off of the debt to the Paris Club of Creditors in early 2006, which was conditional on a positive conclusion of an arrangement with the IMF. Furthermore, with the payment of the last instalment of principal to the IMF in March 2007 ahead of time, the public foreign debt was additionally cut by €183 mn.

The share of the public foreign debt in the overall foreign debt declined significantly, from 68.7% in December 2004 to 39.9% in June 2007.

On the other hand, the private foreign debt recorded a major growth, rising from 16.4% of GDP in 2004 to 34.4% in June 2007.

The long-term foreign private debt amounts to €8,532 mn, 31.7% of which is the debt of the banking sector, while 68.3% represents the company debts.

During 2006, banks' foreign debt more than doubled (annual growth of 132.4%, €1,669 mn), both owing to the domestic credit expansion and the major hike in reserve requirements on foreign borrowing, which led to a multiplicative effect of this borrowing. In 2007, the long-term borrowing of the banking sector went down, after the NBS passed measures to compel banks to increase their capital base.

Table T6-3. Serbia: Foreign Debt by Term Structure and Debtor, 2004–2007

	2004	2005	2006	2007 Mar	2007 Jun
	stocks, in EUR millions, at the end of the period				
Total foreign debt	10,354	13,064	14,884	14,858	15,689
(in % of GDP)	*52.5*	*61.9*	*59.8*	*56.7*	*57.1*
Public foreign debt	7,112	7,714	6,420	6,241	6,253
(in % of GDP)	*36.1*	*36.5*	*25.8*	*23.8*	*22.8*
Long term	7,039	7,630	6,363	6,185	6,197
o/w: to IMF	706	732	185	0	0
Short term	73	84	57	56	56
Private foreign debt	3,242	5,350	8,464	8,617	9,436
(in % of GDP)	*16.4*	*25.3*	*34.0*	*32.9*	*34.4*
Long term	2,582	4,156	7,263	7,669	8,532
Banks	687	1,260	2,929	2,906	2,704
Enterprises debt	1,895	2,895	4,334	4,763	5,828
Short term	660	1,194	1,201	948	904
Banks debt	444	924	942	701	808
Enterprises debt	216	271	259	247	96
Net foreign debt[1)] (in % of GDP)	36.7	38.4	23.4	23.1	23.5

Source: NBS
1) Total foreign debt minus NBS Fx reserves.

Exports

Exports maintained a high growth rate in Q2 (31.4% y-o-y), with a slight deceleration relative to Q1

In Q2 2007, exports continued their high and stable growth (y-o-y growth of 31.4%, Table T6-4).[3] Nevertheless, compared to the y-o-y growth in Q1 2007, there was a slight deceleration (exports in Q1 grew at a rate of 34.5%). The July data suggests that the strong growth of exports continues (a 34.1% growth). This is a consequence of two factors. First, the acceleration of export growth in Q1 2007 due to the transfer of exports from December 2006 into January and February 2007, and which produced the high growth rates in Q1. Second, the apparent deceleration of iron and steel exports as well as a wide range of products classified in the category *Other*. Quarterly y-o-y growth has been stable, running at some 30% since Q1 2006.[4]

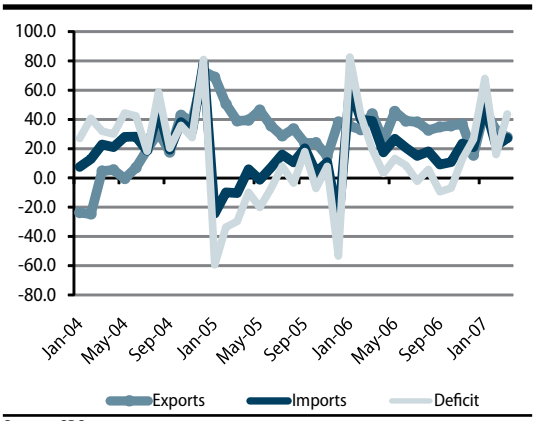
Table T6-4. Serbia: Merchandise Exports Growth, 2005–2007

	Exports share in 2006	2007		2005		2006				2007	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
	%	mil.euros				y-o-y growth (%)					
Total	100.0	1,390	1,613	28.5	25.6	38.0	36.7	35.3	28.7	34.5	31.4
Bulky exports	32.8	455	501	21.9	27.6	32.7	13.1	55.0	45.9	36.1	34.3
Iron and steel	13.6	213	222	-13.6	5.4	2.2	24.7	92.5	43.4	61.5	29.2
Non ferrous metals	9.6	120	149	76.1	67.7	79.9	53.5	58.8	73.3	11.8	36.2
Fruits and vegetables	5.1	57	75	19.2	8.5	88.0	31.9	20.5	26.9	30.3	59.2
Cereal and cereal products	4.5	65	55	130.5	77.1	88.0	31.9	21.2	29.6	26.6	23.2
Underlying exports	67.2	935	1,113	31.6	24.8	23.2	26.2	26.8	21.4	33.8	30.1
Core	31.9	443	515	38.2	40.4	29.6	24.0	26.8	26.0	30.6	35.3
Clothes	5.0	76	74	69.9	55.8	8.6	1.4	19.1	28.0	29.8	31.0
Miscellaneous manufactured articles,n.e.s.	4.4	51	64	40.5	32.9	34.8	21.8	7.2	4.5	6.0	17.1
Manufactures of metals, n.e.s.	4.2	60	81	37.1	36.6	24.1	14.7	68.8	50.8	76.7	60.6
Rubber products	3.8	55	54	36.2	17.8	24.1	14.7	10.0	17.7	16.2	18.0
Electrical machinery, apparatus and appliances	2.8	42	58	49.6	81.9	19.7	9.5	70.5	56.1	77.6	81.2
Organic chemicals	2.6	43	39	20.0	29.8	61.4	69.6	16.9	36.0	42.8	71.4
Plastics in primary forms	2.6	30	36	-4.8	14.6	30.2	11.7	35.7	3.8	-7.4	8.2
Footwear	2.5	35	37	55.0	60.0	45.2	19.4	21.6	22.2	34.9	18.1
Paper, paperboard and articles of paper pulp	2.1	27	34	36.2	61.9	20.2	72.1	18.0	22.1	12.3	35.6
Non-metal mineral produce	2.0	25	37	40.2	70.0	32.5	33.8	34.2	26.0	55.3	32.0
Other	35.4	492	598	25.8	14.0	13.4	29.4	26.8	17.5	36.8	25.9

Source: SBS.

3 The time series which were the subject of the analysis also includes foreign trade with Montenegro (since July 2005).
4 The average annual growth rate is 34.1% - calculated using real data, and 29.7% - calculated using seasonally adjusted data.

Graph T6-5. Serbia: Imports and Exports, Y-o-y Growth Rates 2004–2007



Source: SBS.

The usual *QM* analysis involves disagreggation of total exports into two large segments – *Bulky exports* and *Underlying exports*. *Bulky exports* include sections (categories) of exports disaggregated in accordance with the SITC classification, whose share in overall exports in 2006 surpassed 4% and whose growth rate was significant. This category includes: iron and steel, non-ferrous metals, vegetables and fruit, and cereals. The *Core* category includes sections whose share in overall exports in 2006 was above 2%, while their annual growth surpassed 15%. Finally, the component *Other* includes a very wide spectrum of products that have not been classified in the two mentioned groups.

***Bulky exports* grew dynamically in Q2 at a y-o-y rate of 34.3%**

Bulky exports maintained a high and stable growth, with a slight deceleration (y-o-y growth of 34.3% in Q2 relative to 36.1% in Q1, Table T6-4). This component is very important since it accounts for 31% of overall exports and contributes to their growth by 33.2%.[5] Nevertheless, certain changes are readily noticeable in the structure of *Bulky exports*.

Exports of iron and steel seemingly slow down in Q2, as the consequence of the surge in Q2 2006.

One of the more important characteristics of *Bulky exports* in Q2 is the ostensible slowing of the growth of iron and steel exports (y-o-y growth of 29.2% in Q2 relative to 61.5% in Q1). This deceleration is to a great degree the consequence of the acceleration of exports in Q1 2007, as well as of the sharp jump in Q2 2006, the bases for comparison. Namely, in Q2 2007 more iron and steel was exported than in Q1, but the y-o-y growth rate was lower owing to a significantly higher base for comparison (Table T6-6). This effect was particularly prominent in May (see Table T6-7).[6] That the slowing of exports is most likely temporary is also shown by the y-o-y growth rate in July of 35.8%. However, despite the apparent slowing of its growth, the export of iron and steel remains the locomotive of the overall growth of exports. Because of its relatively high share, its contribution to overall exports growth is the greatest and amounts to 13.7% (or a seasonally adjusted 12.7%).

Table T6-6. Serbia: Export of Iron and Steel and Non-ferrous Metals, 2006–2007

	2006			2007			2007		
	April	May	June	April	May	June	April	May	June
	mil.euros						y-o-y growth (%)		
Iron and steel	49	65	58	69	75	78	42.2	15.2	33.8
Non-ferrous metals	29	40	39	43	62	44	45.1	54.0	11.2

Source: SBS.

The recovery of non-ferrous metals exports offsets the apparent deceleration of iron and steel exports

The deceleration of the growth of iron and steel exports was partially offset by the recovery of *non-ferrous metals* exports (36,2% in Q2 relative to 11.8% in Q1), with a deceleration in June 2007 (Table T6-7). It should be noted that this deceleration was accompanied a decrease in the value of non-ferrous metals exports in June 2007 compared to May. However, since the value of the exports in June was somewhat higher than the value in April, it may be concluded that the deceleration was a result of a rise in the comparison base, i.e. the value in June 2006. (Table T6-7). Nonetheless, there was a fall in non-ferrous metals exports in July, at a y-o-y rate of 10%. The months ahead will show whether or not the deceleration is of a temporary nature.

5 The contribution to the growth represents a share of the export growth of some product in the increase of overall exports. The same holds for imports.

6 Seasonally adjusted series provide somewhat different results which, nevertheless, do not affect *QM*'s conclusion. Namely, the value of iron and steel exports in Q2 2007 is somewhat lower than the value in Q1, but at the same time, it is higher than the value of exports of these products in any other quarter if we observe the series since Q1 2003. Therefore, the deceleration is primarily the result of the acceleration of exports in Q1 2007 and the jump in the comparison base – exports in Q2 2006 (19.3% growth relative to Q1). A similar conclusion also relates to the month of May.

Table T6-7. Serbia: Exports of Iron and Steel, 2006–2007

	2006		2007		2007	
	Q1	Q2	Q1	Q2	Q1	Q2
	mil.euros				y-o-y growth (%)	
Iron and steel	132	172	213	222	61.5	29.2

Source: SBS.

Vegetable and fruit exports significantly accelerate growth in Q2 (y-o-y growth of 59.2%)

The dynamic growth of *Bulky exports* was also the result ot the recovery of fruit and vegetable exports (59.2% in Q2 as against 30.3% in Q1, Table T6-3), which was particularly prominent in June (y-o-y growth rate of 103.7%).

Finally, exports of cereals and cereals products maintained a solid y-o-y growth rate of around 23%, with a slight deceleration compared to Q1 (26.6%), which was followed by a seasonal decrease in its value. There was an extraordinary acceleration of these exports in July (y-o-y growth rate of 173.4%).

The Core category accelerates its growth in Q2 and rises at a rate of 35.3%

Q2 2007 saw an acceleration in the export of products in the *Core* category (35.5% in Q2 relative to 30.6% in Q1), which was accompanied by an increase in value (Table T6-3). As for the pace of growth, the following stand out most within this category: electrical machinery, apparatus and appliances (81.2%), organic chemical products (71.4%) and metal products (60.6%). No section of this category experienced a drop in exports during the observed period, with the smallest growth being achieved by exports of plastics in primary form (8.2%). The *Core* category accounts for 31.9% of overall merchandise exports and contributes 34.8% to its growth.

Exports of a wide range of products in the category other seemingly decelerate their growth in Q2.

Exports of products in the category *other* decelerated their growth in Q2 2007 (25.9% in Q2 as against 36.8% in Q1). This was in large part due to the effect of the spilling over of the December 2006 exports, which increased the y-o-y rate in Q1 2007. Since the value of these exports increased in Q2 2007 relative to Q1, it may be concluded that the deceleration was also a result of the increase in their value in Q2 2006, i.e. only seems to be a slowing down. This component makes up 37.1% of overall merchandise exports and contributes to their growth with 32%. The highest y-o-y export growth rate in this group was achieved by the following sections: live animals (588.8%), tobacco and tobacco products (427.7%) and solid vegetable fats and oils (165.2%). At the same time, the steepest decline in exports within this category was recorded by: oil and oil products (46.9%), oil seeds and fruits (45.5%), and animal and vegetable raw materials (39.3%).

Most of the exports in Q2 went to Italy, Bosnia-Herzegovina, Montenegro and Germany, which accounted for more than half of overall exports

It is interesting to also look at the geographic structure of the exports (Table T6-8).[7] The EU, to which 55.8% of the overall merchandise exports go, remains the most important foreign trade partner. Montenegro appears as an important export destination of the Serbian economy. It is noteworthy that Italy, B-H, Montenegro, Germany and Macedonia, the countries to which the bulk of the Q2 2007 exports went, absorb 51.8% of the total merchandise exports, which implies its high geographic concentration. In addition, it should also be noted that the overall export growth was mostly contributed to by exports to: B-H (13.9%), Montenegro (12.6%), Germany (8.7%), Slovenia (7.8%) and Italy (7.1%). Therefore, around half of the overall exports growth is made up of the growth of exports to these five countries. If Germany and Italy, the traditionally strategic export destinations, are excluded, it may be concluded that the Serbian economy relies greatly on the countries around it, republics of the former Yugoslavia.

7 The data on total exports and imports, obtained by the addition of exports by country, differ from the monthly data used in the analysis because of the retroactive corrections of the Serbian Bureau of Statistics.

Table T6-8. Serbia: Export, Structure by Countries

	Q2 2006	Q2 2007	Q2 2006	Q2 2007	Q2/Q2
	share in %		mil.euros		%
Italy	14.6	12.9	179	205	14.5
Bosnia and Herzegovina	12.4	12.7	152	203	33.5
Montenegro	10.8	11.2	133	179	34.9
Germany	10.0	9.7	123	155	25.9
Form. Yug. Rep. Macedonia	5.1	5.2	62	83	33.5
Slovenia	3.5	4.5	43	72	65.8
Russia	6.9	4.4	85	70	-17.8
Croatia	3.9	3.8	48	60	25.3
France	3.5	3.5	43	55	28.0
Austria	2.8	3.2	34	51	49.1
Other countries	26.5	28.9	325	461	41.8

Source: SBS.

There is no doubt that merchandise exports are continuing a rapid growth rate that will certainly have a multiplicative effect on economic activity. Also, the observed decelerations in individual segments are most probably temporary, in view of the strong growth of the Serbian economy.

Imports

Imports growth decelerated in Q2, but its rate remains high

Total merchandise imports in Q2 2007 considerably decelerated their growth (y-o-y growth of 23% in Q2 as against 31% in Q1, Table T6-9). If imports excluding energy are observed, the deceleration of growth is also evident (29.5% in Q2 compared with 36.2% in Q1), but the rate remains high. A significantly faster growth of exports compared to imports resulted in better coverage of imports by exports, which in Q2 reached 50.7%, the highest quarterly value in the last four years with the exception of Q3 2006. The deceleration of the y-o-y growth was due primarily to a seeming deceleration of the growth of capital goods imports, reduction of oil and oil products imports, and a slight deceleration of the growth of intermediary and non-durable consumer goods imports.

Table T6-9. Serbia: Imports, Y-o-y Growth, 2006–2007

	Imports share		2007		2006				2007	
	Q1	Q2	Q1	Q2	Q1	Q2	Q3	Q4	Q1	Q2
	in %		in mil.euros		y-o-y growth (%)					
Total	100.0	100.0	2,901	3,183	44.4	21.7	13.9	18.5	31.0	23.0
Energy	20.5	15.7	594	499	42.3	43.1	3.6	24.1	14.2	-3.0
Intermediate products	35.2	38.6	1,021	1,228	42.5	14.0	22.5	21.1	34.6	32.6
Capital products	23.9	25.8	693	820	54.1	21.4	15.4	13.7	51.1	32.9
Durable consumer goods	3.5	3.7	101	116	45.2	16.2	1.7	6.0	29.1	34.8
Non-durable consumer goods	13.9	13.8	403	440	45.9	22.1	11.2	19.3	23.3	19.2
Other	3.1	2.5	90	79	20.0	6.8	-2.9	7.0	24.3	7.0
Imports excluding energy	79.5	84.3	2,307	2,684	45.0	17.3	16.6	17.3	36.2	29.5

Source: SBS.

The growth of capital goods imports decelerates, but is still significant (32.9%)

Breaking down overall merchandise imports into groups according to their economic use, in line with the EU methodology, reveals the factors that contributed to the deceleration of growth. The main reason was the slower growth of *capital goods* imports (32.9% in Q2 as against 51.1% in Q1 of 2007); however, the import of these goods in Q1 was strongly impacted by the one-off growth of the import of telecommunications equipment (Telenor's mobile telephony switchboards). But the fact that a deceleration of imports of these products was noticeable in all three months of Q2 is somewhat disturbing (respective y-o-y rates of 54.4%, 26.7% and 23%). This import component has a direct effect on improving the technical capabilities of production, increasing efficiency and productivity, manufacturing better-quality products and, finally, heightening the competitiveness of the Serbian economy. Capital goods accounted for around 26% of overall imports and contributed to their growth with 34.1%.

Imports of energy were reduced in Q2 as a result of a major decline in the import of oil and oil products

Another category which significantly contributed to the deceleration of the y-o-y growth of overall imports was *energy* (-3.0% in Q2 2007.). The fall in the import of these products was achieved due to a significant decline in oil and oil products imports (y-o-y decline of 11.3%) and which can be ascribed to the reduction of the quantity imported, not the price. It is most probably of a temporary nature and the result of the uncommonly mild winter and increased imports in Q4 2006 which built up oil stocks. The remaining energy products not included in the category of oil and oil products recorded a y-o-y growth of around 14%. A slight growth in imports of energy was noticed in June 2007 (y-o-y rate of 6.6%), but not because of the recovery of the oil and oil products imports (y-o-y drop of 10%), but owing to the dynamic growth of imports of other energy. However, a clear recovery of energy imports was recorded in July (y-o-y growth of 21.6%).

Imports of intermediary goods maintained a stable and high growth rate

The third group of products which contributed in a minor way to the deceleration of the y-o-y growth of overall imports was *intermediary goods* (32.6% growth in Q2 relative to 34.6% in Q1). These imports have a stable high growth rate, which in Q2 2007 was in tune with the dynamic real growth of GDP and aggregate demand. Seasonally adjusted series show the y-o-y import growth of these products standing at a steady level of around 33%-34% in the first semester of 2007. The group accounts for around 38% of overall imports and contributes to its growth with 50.7%.

The fourth group of products to make a slight contribution to the deceleration of the y-o-y growth of total imports was *non-durable consumer goods* (19.2% in Q2 as against 23.3% in Q1 2007). Imports of these goods make up around 14% of overall imports and contribute to their growth with 11.9%.

The only component which accelerated its growth was durable consumer goods

Finally, the only import component which in Q2 2007 accelerated its y-o-y growth was *durable consumer goods* (34.8% in Q2 relative to 29.1% in Q1). In all three months of Q2, however, these imports slowed down their y-o-y growth (the respective rates were 46.6%, 35.3% and 25.2%). Durable consumer goods accounted for only 3.7% of total imports the overall import, owing to which they contributed to the overall growth with a modest 5%.

Most imports in Q2 came from the Russian Federation, Germany, Italy and China.

Besides the structure of imports according to economic use, it is customary also to monitor their geographic structure (Table T6-10). In this context, there have been no major changes in the last few years, or more precisely since 2004. Serbia's leading trade partners are the Russian Federation, Italy, Germany and China, with 37.3% of total merchandise imports in Q2 2007 originating there. A y-o-y reduction of imports from the Russian Federation was recorded and was most probably linked to the mentioned reduction of oil and oil products imports. The growth of imports in Q2 2007 was mostly contributed to by imports from: China (14.7%), Germany (9.2%), Italy (5.9%), and Ukraine (5.4%).

The structure of imports by country has not changed in the last three and a half years

Table T6-10. Serbia: Import, Structure by Countries

	Q2 2006	Q2 2007	Q2 2006	Q2 2007	Q2 07 /Q2 06
	share in %		mil.euros		%
Russia	15.4	12.4	399	397	-0.6
Germany	9.8	9.7	253	310	22.5
Italy	9.1	8.5	236	273	15.5
China	4.9	6.8	128	219	71.3
Bulgaria	2.9	3.1	74	100	35.9
Bosnia and Herzegovina	2.5	3.0	66	95	44.9
France	3.0	2.7	78	87	11.4
Hungary	2.1	2.7	55	86	57.1
Croatia	2.7	2.6	70	84	20.7
Ukraine	1.9	2.6	50	84	67.3
Other countries	45.7	46.0	1,183	1,476	24.8

Source: SBS

Data that will be coming in over the next few months will make it possible to establish whether the recorded deceleration of total imports is of a temporary or more durable nature. Still, the dynamic growth of economic activity, wages, credits to the non-government sector, companies' direct foreign borrowing, and public spending and the passage of time may lead to an acceleration of imports in the coming quarters.

7. Fiscal Flows and Policy

Relatively favorable developments continued in the field of public finances in Q2 2007. Consolidated public revenue was up 8% in real terms (y-o-y), while consolidated public expenditure was higher by 8.8%. Although total revenue rose faster than GDP in Q2, there was also a substantial slowdown in the y-o-y growth rate relative to Q1 2007. These developments in public revenue and expenditure produced a favorable net result, even if the proceeds from the sale of the third cellular telephony operator license are excluded from the revenue and the expenditure for servicing the domestic public debt (foreign exchange savings, the Loan for the Rebirth of Serbia, the debt to pensioners) and the loans approved by government (loans to agricultural households, students' loans, start-up loans and the like) are included in expenditure. Applying the definition of the fiscal deficit which measures the impact of government activities on aggregate demand (analytical balance), a surplus of 2.4 bn dinars was realized in Q2 2007. This means that fiscal policy brought about a decline in aggregate demand in the quarter.

General Tendencies and Macroeconomic Implications

The real rise in public revenue is decelerating and real expenditure is stagnating

Despite the substantial deceleration, government's consolidated revenue and expenditure continued recording a rather high rise in Q2 relative to the same period of 2006. In Q2, the y-o-y growth rate of consolidated public revenue was approximately half of what it was in Q1 (8% in Q2 relative to 15.9% in Q1, Table T7-2), while the y-o-y growth rate of public expenditure in Q2 remained approximately at the Q1 level (8.8.% in Q2 relative to 9.6% in Q1, Table T7-2). A similar deceleration of the y-o-y growth rate was also recorded in tax revenue, where the real rate of growth in Q2 2007 relative to Q2 2006 was 7.7 %, as against 15.5% in Q1 (Table T7-2). The y-o-y growth rate of consolidated public expenditure in Q2 2007 was 8.8 %, a little under the growth in the Q1 2007 (Table T7-2). The result of these revenue and expenditure movements was a 2.4 bn dinars surplus in Q2, compared with the deficit of 0.8 bn dinars in the same period a year ago (Table T7-1).

In Q2, the fiscal sector brought about a drop in domestic demand

The deceleration of the growth of consolidated public revenue probably reflects the deceleration of the growth of domestic aggregate demand. The substantial decline of the y-o-y growth rates of revenue from consumption taxes in Q2 relative to Q1 corroborates this view. The deceleration of the growth of demand could be an indication that the effect of the growth of public spending and wages in Q4 2006 on domestic demand was mainly exhausted over Q1 2007[1].

When the results of Q1 and Q2 are summed up, a minimal surplus of 0.5 bn dinars is obtained in the consolidated general government balance (analytical balance), whereas the same period a year ago saw a surplus of 4.7 bn dinars (Table T7-1). Consequently, the fiscal policy conducted in the first semester this year had a more or less neutral impact on domestic demand movements, while its impact in Q2 was restrictive. The factors which produced this fiscal result were identified in *QM*8 and they relate to the limitation of public spending in the period of temporary financing as well as to the growth of public revenue owing to the growth of domestic demand. The declining domestic demand, in its turn, through the fiscal surplus, had a favorable effect on slightly improving the coverage of imports with exports in Q2. The restrictive policy helped to keep core inflation at a low level of about 1% in the first semester of 2007 (Table T3-1).

Although fiscal policy did not additionally generate domestic demand[2] in the first half of 2007, domestic demand in the period was very high, which is evident not only from the high foreign trade deficit but also from the growth of GDP above its long term trend. There is no denying that 2007 started with a high level of public spending, but domestic demand movements in the

1 The deceleration of the growth of domestic growth and real public revenue was predicted in QM8 .

2 Taking into the consideration a time lag between fiscal variables and domestic demand, it is estimated that the rise in public expenidtures in Q4 2006 brought about the rise in domestic demand in Q1 2007.

first semester indicate the existence of other significant generators of domestic demand. This primarily refers to the achieved level and growth of the average wage in Serbia, as well as the accelerated expansion of domestic and foreign credit to companies and households. Therefore, curbing of domestic demand cannot be achieved only through fiscal policy but requires concerted action of economic policies (fiscal, credit and monetary, and wage policies).

Potential problems: deceleration of public revenue growth and the announced rise in public expenditure

An additional potential problem emerges with regard to the interacting movements of public revenue and expenditure. The adjustment of public expenditure to the high level of public revenue that arose as the result of a temporary and over the long run untenable growth of domestic demand will appear as a potential problem when demand slows, which is inevitably accompanied by the slowing of the public revenues. In fact, public expenditure is far more rigid in downward adjustment because its level is mainly determined by law and contracts, owing to which a decrease in public revenue results in a declining fiscal surplus or rising fiscal deficit.

The favorable picture of public finance movements in the first semester is marred by the growth of liabilities by approximately 7 bn dinars. The major part is the debt of the Serbian Roads public company, which in mid-2007 accounted for about 46% of the total stock of government arrears.

Table T7-1. Serbia: Consolidated General Government Fiscal Operations[1], 2005–2007

	2005			2006					2007	
	Q1	Q2	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2
						in billions of dinars				
I TOTAL REVENUE	146.0	168.4	701.6	175.4	201.6	207.5	240.6	825.0	215.1	228.1
II TOTAL EXPENDITURE	-141.1	-164.5	-667.8	-174.9	-185.3	-197.6	-255.42	-813.2	-202.9	-211.2
III "OLD" DEBT REPAYMENT AND NET LENDING	-2.5	-17.4	-36.6	-4.4	-17.1	-10.1	-17.519	-49.1	-14.1	-14.6
o/w III.3 Net lending [2]	*-0.3*	*-0.8*	*-4.9*	*-1.8*	*-0.8*	*-1.3*	*-3.2*	*-7.1*	-0.6	-1.2
IVa CASH BALANCE (I+II), MoF definition[3]	4.9	3.9	33.8	0.4	16.3	9.9	-14.8	11.8	12.2	16.9
IVc ANALYTICAL BALANCE (I+II+III), FREN's definition[3]	2.4	-13.4	-2.9	-3.9	-0.8	-0.2	-32.3	-37.3	-1.9	2.4
V FINANCING (FREN's definition)	12.9	-3.9	27.7	8.5	1.4	103.2	8.7	121.7	24.9	8.0
VI ACCOUNT BALANCE CHANGE (IVc+V)	15.3	-17.3	24.8	4.5	0.5	103.0	-23.7	84.4	23.0	10.4
MEMORANDUM ITEMS										
Government net position in banking system, change (NBS)	18.7	-3.8	36.0	10.6	6.7	90.1	-31.9	75.5	36.7	25.2
Enterprises' claims on VAT (FREN's estimate)[4]	3.0	3.1	17.1	-1.6	2.1	0.0	0.0	0.5	0.0	0.0
License fee[5]	..	..	..	..	..	27.0	..	27.0	25.5	0.0

Source: Table P-10 in Analytical 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 1. in QM3.
4) FREN's estimate based on informal information regarding VAT credits and on analysis of VAT redemption PFB data.
5) Regarding to the fact that fee from license for mobile is one off revenue, this fee was regarded in our table se financing item, dispite the definition of MoF, that threats this license as a non-tax revenue.
Note: Details are given in Table P-10 in Analytical appendix.

Analysis of Individual Tax Instruments and Expenditure Items

Where tax revenue is concerned, all categories with the exception of income tax recorded real growth in Q2 2007. In the course of Q2, however, there was a major deceleration of consumption tax revenue relative to Q1, whereas direct taxes (except wage taxes) recorded high real growth in Q2.

The real fall in income tax in Q2 (8% in real terms, Table T7-2) was conditioned by the fall in the wage tax (-15.5%), which is its most important component. Other income taxes, with the exception of the wage tax, recorded a real rise of 21% relative to the same period last year.

Box 1: Burden on Wage Tax Eased - The Effects Six Months On

At the beginning of 2007, the fiscal burden on wages was reduced by about 10 percentage points in order to cut labor costs and heighten demand for labor. Too little time has passed for a reliable assessment of what were the effects of this easing of the fiscal burden on employment. However it can now be estimated whether labor costs were cut in the last six months, and what were the effects of the wage tax reduction on public revenues. Since gross wages rose by 19% in real terms in the first semester of 2007, it may be concluded that the rise in real wages completely exceeded productivity growth and the reduction of wage taxation; hence unit costs were not cut (it should be recalled that the productivity growth was one of the objectives of this measure).

It is also possible to estimate the effect of the easing of tax burden on wages on overall fiscal revenue, on the basis of the difference between, on the one hand, the growth rate of revenue from wage tax (which would have been realized if there had been no fiscal easing) and, on the other, the growth rate recorded following the easing. Presuming that wage tax revenue, if there had been no modifications of the law, would have risen at a similar nominal growth rate as other tax revenue (about 21%), and that the fall of about 11% occurred in the first half of 2007, the conclusion is that lost fiscal revenue in the first half of the year amounted to about 14.5 bn dinars. This estimate can be seen as the lower end of lost revenue since the fiscal easing was one of the generators of a strong rise in the average wage (the rise in nominal net wages was 29.4% in the January-June 2007 period relative to January - June 2006), which mitigated the drop in wage tax revenue.

It follows from the above that with the present structure of the labor market and the policy on public sector wages that was applied in the preceding part of the year (Table T7-4), the easing of the fiscal burden did not lead to cutting labor costs, putting into question its effect upon employment. The effect, however, on fiscal revenue is quite significant and will amount to about 1.3% of GDP for the whole year.

Without an equivalent reduction in public spending, the wage tax cut prompted the growth of domestic demand as well as mounting imbalances in the Serbian economy. The fiscal easing brought about only a rise in net wages and personal spending, while government spending was not reduced, which, taken together, resulted in a growth of domestic demand.

Revenues from the corporate income tax in Q2 again recorded a very high real growth of 82.4% (Table T7-2) relative to Q2 2006, while the real growth in the first half of 2007 relative to the same period a year ago was 50.5%. If the growth in 2006 (relative to 2005) could be explained in part by the fact that company financial statements were for the first time in line with international accounting standards, which resulted in a more realistic presentation of business results, this time it can be attributed to the good performance of the economy. Nonetheless, there are indications that the high growth in corporate income tax can be partly explained by the very favorable treatment of profits, which led not only to less tax evasion but also to a reduction of the costs taxed at higher rates (e.g. wages), which, at least partially, increased profits artificially.

Significant slowdown in the growth of consumption tax revenues

The VAT grew in real terms by 7.2% relative to Q2 2006 (Table T7-2). In the first semester of 2007 the growth was as high as 14.5%. Net VAT revenues recorded growth of 11.3% in Q2, since companies had no outstanding claims for VAT refunds (unlike in the first half of 2006). The growth of the VAT revenue was primarily conditioned by the movement in domestic aggregate demand, with a certain time lag (1-3 months) between the rise/fall of demand and rise/fall of VAT. In this way the high growth of demand in November and December 2006 contributed to the growth of the VAT revenue in Q1 2007.

Table T7-2. Serbia: Consolidated General Government Fiscal Operations[1], 2005–2007

	in billions of dinars							Real growth (in %)						
	2005		2006			2007		y-o-y					Comparing to previous period	
								2006			2007		2007	
	Q1	Q2	Q1	Q2	Q1-Q4	Q1	Q2	Q1	Q2	Q1-Q4	Q1	Q2	Q2 2007 / Q1 2007	H1 2007 / H1 2006
I PUBLIC REVENUES	**146.0**	**168.4**	**175.4**	**201.6**	**825.0**	**215.1**	**228.1**	**4.3**	**3.8**	**4.7**	**15.9**	**8.0**	**3.4**	**11.7**
o/w: Public revenues excluding VAT liabilities to enterprises and offsets with SDF[2),3)]	*141.7*	*163.7*	*176.9*	*199.4*	*815.0*	*215.1*	*228.0*	*6.3*	*5.5*	*6.8*	*14.9*	*9.1*	*3.4*	*11.9*
1. Current revenues	144.4	166.6	173.3	199.3	814.8	211.9	225.4	4.7	3.6	4.6	15.5	8.0	3.8	11.6
Tax revenue	135.5	155.0	159.4	185.1	751.3	194.9	208.8	2.6	3.4	4.6	15.5	7.7	4.5	11.4
Personal income taxes	19.5	23.5	25.8	29.2	118.6	24.9	28.2	15.7	7.6	11.9	-8.9	-8.0	10.3	-8.4
Corporate income taxes	3.9	1.8	7.9	2.9	18.3	11.7	5.6	75.2	43.6	58.0	39.2	82.4	-53.4	50.5
VAT and retail sales tax	47.4	52.0	46.3	57.9	225.1	60.5	65.0	-14.8	-3.6	-7.3	23.4	7.2	4.8	14.5
o/w: Net VAT and retail sales tax[2)]	*44.4*	*48.9*	*47.9*	*55.7*	*224.6*	*60.5*	*65.0*	*-5.9*	*-1.3*	*0.4*	*19.3*	*11.3*	4.8	15.1
Excises	13.2	18.3	14.7	21.1	81.6	19.1	22.8	-3.2	-0.3	1.8	23.1	3.2	16.5	11.5
Custom duties	7.0	9.3	9.6	12.7	45.3	12.0	13.9	20.4	18.1	3.7	18.1	4.4	12.7	10.4
Social contributions	38.6	44.4	48.5	54.1	232.2	58.8	65.0	9.6	5.4	12.3	14.5	14.8	7.9	14.6
o/w: contributions excluding offsets with SDF[3)]	*37.3*	*42.9*	*48.4*	*54.1*	*222.7*	*58.7*	*64.9*	*13.3*	*9.3*	*11.0*	*14.6*	*14.6*	*7.9*	*14.6*
Other taxes	5.9	5.7	6.5	7.2	30.1	7.9	8.3	-2.9	9.7	11.0	14.4	10.0	2.5	12.2
Non-tax revenue	8.9	11.5	13.9	14.2	63.5	17.0	16.7	36.6	6.7	4.1	15.7	12.4	-4.4	14.1
2. Capital revenues	1.6	1.8	2.1	2.3	10.3	3.2	2.6	10.2	7.3	15.7	48.2	10.6	-20.6	28.8
II TOTAL EXPENDITURE	**-141.1**	**-164.5**	**-174.9**	**-185.3**	**-813.2**	**-202.9**	**-211.2**	**8.1**	**-2.4**	**8.3**	**9.6**	**8.8**	**1.5**	**9.2**
1. Current expenditures	-135.7	-155.4	-167.6	-174.4	-749.3	-187.4	-196.1	7.8	-2.8	5.0	5.7	7.3	2.0	6.5
Wages and salaries	-36.1	-41.0	-46.1	-45.8	-198.6	-51.9	-56.2	11.2	-3.4	6.2	6.5	17.3	5.7	11.8
Wages and salaries excluding severance payments[4)]	*-36.0*	*-40.7*	*-44.5*	*-45.5*	*-196.3*	*-51.9*	*-56.2*	*7.7*	*-3.2*	*6.2*	*8.7*	*17.3*	*5.7*	*13.0*
Expenditure on goods and services	-17.2	-22.2	-22.4	-25.3	-114.1	-25.6	-31.1	13.2	-1.2	10.3	8.0	17.5	18.7	13.0
Interest payment	-5.9	-5.0	-5.7	-4.9	-28.9	-5.7	-3.1	-14.7	-15.3	5.0	-5.5	-39.3	-46.7	-20.8
Subsidies	-11.1	-13.5	-10.1	-12.7	-54.4	-9.3	-10.4	-20.5	-18.6	-11.2	-13.2	-21.7	9.4	-17.9
Social transfers	-62.2	-69.8	-79.8	-81.2	-335.8	-91.1	-91.8	11.9	0.7	6.1	7.8	7.9	-1.7	7.8
o/w: pensions[5)]	*-41.9*	*-45.8*	*-52.7*	*-55.7*	*-227.7*	*-62.0*	*-63.3*	*9.8*	*5.4*	*8.8*	*11.0*	*8.5*	*-0.4*	*9.8*
Other current expenditures	-3.1	-3.9	-3.5	-4.6	-17.4	-3.9	-3.4	-1.8	2.2	-2.0	4.2	-28.2	-14.1	-13.8
2. Capital expenditures[6)]	-5.4	-9.0	-7.3	-10.8	-63.9	-15.5	-15.1	17.5	4.0	71.8	100.2	32.7	-5.1	60.5
III "OLD" DEBT REPAYMENT AND GOVERNMENT NET LENDING	**-2.5**	**-17.4**	**-4.4**	**-17.1**	**-49.1**	**-14.1**	**-14.6**	**52.6**	**-14.4**	**18.6**	**206.4**	**-18.9**	**0.3**	**28.1**
1. Debt repayment-FFCDs and LRS	-0.9	-15.1	-1.0	-14.6	-21.8	-4.6	-13.3	-8.5	-16.0	-13.2	345.9	-13.1	180.0	10.3
2. Pensions	-1.3	-1.5	-1.6	-1.7	-20.3	-8.9	0.0	7.5	-1.8	85.5	431.7	-100.0	-100.0	163.8
3. Net lending[7)]	-0.3	-0.8	-1.8	-0.8	-7.1	-0.6	-1.2	484.3	-9.1	30.8	-70.1	41.8	112.3	-35.5

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) FREN'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.

The real y-o-y growth of excise taxes in Q2 2007 was 3.2% (Table T7-2), or 11.5% in the first semester. It was caused by the rise in the consumption of products on which excises are paid, primarily oil derivatives. The rapid deceleration of the real level of excise revenue relative to Q1 2007 could be due to several factors, including a possible expansion of tax evasion or the delay in arrears clearance in the period while the caretaker government was in office. The introduction of excise tax on liquid petrol gas (LPG) will heave effects on fiscal revenues in the second semester of the year.

Customs revenue in Q2 2007 was up 4.4% in real terms relative to Q2 a year ago (Table T7-2), which is much lower than the y-o-y growth rate in Q1 (23.1%, Table T7-2). The growth of customs revenue and VAT on imports in first half of 2007 was in line with the movement of imports.

Revenue from contributions continued its fast growth

Revenue from contributions for mandatory social security grew in real terms by 14.8% in Q2 relative to Q2 2006 (Table T7-2). This revenue moved in line with the wage growth in the period and, unlike most other significant forms of fiscal revenue, did not record a slowdown of the y-o-y growth in Q2 relative to Q1.

Other tax revenues recorded a real growth in Q2 of 10% (Table T7-2) relative to the same period last year. These include taxes on goods and services that are collected by the Republic, property tax and other taxes on goods and services payable to the municipalities. Property tax revenues recorded the highest growth within this category (11% y-o-y in real terms).

Growth of capital revenues in Q2 (10.6% in real terms, Table T7-2) was determined by the higher collection of these revenues by municipal authorities – these revenues mainly come from property renting. Capital revenues in Q2, expressed in constant prices were about one-fifth below the revenues recorded in Q1 2007.

Consolidated public expenditure in Q2 was up 8.8% in real terms (y-o-y). Like in Q1, the real level of public expenditure in Q2 2007 was limited by the temporary financing regimen. Apart from the Republic and social security funds, the autonomous province of Vojvodina was also under this regimen, as well as some bigger municipalities and cities. Temporary financing resulted in restrictive spending by the government in the first semester of 2006, especially with regard to current expenditure.

Current expenditures in Q2 recorded 7.3% growth (y-o-y, in real terms). In the framework of current expenditure there were three categories which recorded a fall relative to the same period in 2006: subsidies, expenditure on interest rate payments and other current spending. Spending on subsidies has been on a downward trend over a longer period, although it is not rare for a decline in subsidies to be offset by a rise in budget loans. The budget loans, however, fell less steeply than subsidies in Q2 relative to the same period in 2006

The expenditure on employees and for the procurement of goods and services in Q2 rose in real terms by 17.3% and 17.5% respectively. The growth in the expenditure for employees would have been higher by about 10 percentage points if the tax burden on wages had not been cut at the beginning of 2007. The impact of easing the tax burden on wages on the government's expenditure on employees is evident when the growth of the average gross and net wages in the government sector is compared[3].

Expenditure for social welfare and transfers rose by 7.9% (y-o-y) in Q2 2007. The growth of expenditures for pensions (8.5% in real terms) was faster than the growth of the overall category, as a consequence of pension adjustment realized twice, in October 2006 and April 2007.

The growth in total public expenditure in Q2 (8.8%) was mostly the consequence of the growth of capital expenditure for the implementation of the National Investment Plan. Capital expenditures recorded real growth of 32.7% (y-o-y) in Q2 2006.

Table T7-3. Serbia: Government Position in the Banking Sector, 2004–2007

	2004	2005		2006				2007	
	Dec	Jun	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	in billions of dinars, stocks								
Total	-7.1	-22.0	-43.1	-53.7	-60.4	-150.5	-118.6	-155.3	-180.4
Republics and State Union	6.0	-1.6	-27.8	-31.1	-34.0	-124.2	-100.1	-128.9	-149.1
Municipalities	-13.1	-20.4	-15.3	-22.6	-26.4	-26.3	-18.5	-26.4	-31.3
	cummulative, from the beginning of the year								
Total	8.8	-14.9	-36.0	-10.6	-17.3	-107.4	-75.5	-36.7	-61.8
Republics and State Union	15.1	-7.6	-33.8	-3.3	-6.1	-96.3	-72.2	-28.8	-49.0
Dinar position	1.0	-10.1	-27.9	-3.1	-16.3	-13.1	13.6	-27.0	-53.5
Fx position	14.1	2.6	-5.9	-0.2	10.2	-83.2	-85.8	-1.8	4.5
Municipalities	-6.3	-7.3	-2.2	-7.3	-11.1	-11.0	-3.3	-7.8	-12.8
NBS	-3.8	-3.2	-0.8	-6.1	-5.3	-5.5	-3.5	-6.8	-13.5
Commercial banks	-2.5	-4.1	-1.4	-1.2	-5.8	-5.5	0.2	-1.1	0.7

Source: NBS.

Fiscal Policy in the Second Half of 2007 and Projections for 2008

With a six-month delay, the Serbian budget was adopted in late June 2007. It includes revenues and expenditures realized in the first semester of the year and the projection of revenues and expenditures for the second semester. In early July, the government adopted a Memorandum on the Budget and Economic and Fiscal Policy for 2008 with projections to 2010. Although they were adopted within 10 days of each other, the fiscal policies they speak of are significantly different. While the 2007 Budget Law announces a major fiscal expansion, the Memorandum calls for a restrictive fiscal policy in 2008 and the following years. This raises the issue of the macroeconomic consequences of such oscillations in fiscal policy.

3 See Section 4. Employment and Wages, Box 2.

Fiscal Policy in the Second Semester of 2007

A fiscal deficit is expected in 2007 ...

In contrast to the moderate surplus of the consolidated general government budget in the first half of 2007, a relatively high fiscal deficit is projected for the second half. Assuming that fiscal policy in the second semester will be implemented in conformity with the adopted budget and with the plans of the social security funds, the fiscal deficit in the whole 2007, from the standpoint of the impact on demand, would amount to 2.5% of GDP.

... but will probably be lower than "planned'.

Based on experience, it can be estimated that some of the elements of public expenditure, primarily investments and current purchases of goods and services, will not be completely realized, and that public expenditure will consequently be lower than planned. The Vojvodina budget will probably have a relatively significant surplus as its funds will rise in a major way over quite a short period (owing to the provision of the Serbian Constitution), and most likely will not be entirely spent. Likewise, retaining domestic demand at a high level, including by fiscal expansion, will result in somewhat higher growth in public revenue than was planned. The estimate, therefore, is that the consolidated fiscal deficit, viewed from the standpoint of the impact on domestic demand, will amount to 1%-1.5% of GDP in 2007.

The announced local and presidential elections carry a risk of rising public spending and, consequently, rising the deficit to somewhat above the estimated level (1.5%-2% of GDP). Fiscal policy in Q3 and Q4 2007 and the Serbian budget as its key element are constrained by the contractual and legal obligations undertaken in the second half of 2006. It was then that the government signed agreements with the education, health care and culture unions, which provide for a significant rise of wages in the second half of 2007. Furthermore, at the time when the government was formed, contracts for projects under the NIP had already been signed. Their total value is about 70% of the value of all projects planned for 2007. Campaign promises by the ruling political parties to cut tax rates and introduce exemptions, and carry out major investment and employment projects also had an impact on the Serbian budget.

The fiscal deficit in the second semester was mainly generated from the consumption side, though the tax reductions also had an effect. On the side of public expenditures, the most significant impact on the rise of consolidated public expenditure came from the rise in wages, public investments and current procurements of goods and services (Table T7-4). Under the agreements signed by the former government with the unions, wages in education and health care were hiked in September 2007 by 15.6% and about 5%, respectively. A rise in wages for employees in the public administration of 4.2% on the average was also agreed.

Table T7-4. Average Wages in the Government Sector

				Nominal growth index		Real growth index
	Jun 2006	Jun 2007	Nov 2007*	Jun 07 /Jun 06	Nov 07 /Jun 06*	Jun 07 /Jun 06
		in dinars				
Education	24.214	30.08	35.037	124.2	144.7	118.2
Health	26.211	39.475	41.536	150.6	158.5	143.3
Administration	29.668	35.602	37.098	120.0	125.0	114.2
Serbia average	21.777	26.981	…	123.9	…	117.9

Note: The Table shows only a portion of the wages financed from public revenue. The wages of the public sector employees are actually higher as a part comes out of own revenue.
* Projection based on contractual obligations.

Besides the growth in wages in the second semester, a major growth in total public investments is also planned, especially of investments within NIP framework. The fast growth of investments in the second semester can be in part ascribed to seasonal factors and in part to the temporary financing regimen owing to which the execution of some projects was slowed down or postponed. Generally, the planned growth in public investments is a positive change in fiscal policy, but

with two caveats. The first relates to the fiscal policy in which public investments in 2007 are growing concurrently with current public spending, meaning that the share of consolidated public spending in GDP is growing too. The second is the absence of clear prioritization and selection of projects, suspect procedures in the selection of contractors, and the poor quality of construction. In addition, a large part of the public investments are in projects with relatively weak positive external effects, while important ones like the Corridor 10 highway have been put on the back burner.

The expansiveness of fiscal policy was heightened by the cutting of tax rates and broadening of tax exemptions, which came into effect at the beginning of July 2007. The strongest impact on reducing tax revenue will come from the slashing of conveyance tax to 2.5%, as well as the abolition of VAT on first-apartment purchases[4]. The estimate is that the latter and the reduction of the VAT rate from 18% to 8% on computer equipment will not affect fiscal revenue all that much. But the changes in the VAT system prompted further demands for VAT exemptions, e.g. on baby food and clothes and related products. Meeting these demands could set off a flood of similar calls, which could put the tax system seriously out of kilter. Apart from the loss in tax revenue, the changes in the tax system will have negative effect on financial discipline and increase the costs of applying tax regulations.

2008 Fiscal Policy

Major fiscal restrictions planned in 2008

The government's Memorandum on the Budget, Economic and Fiscal Policy contains the guidelines for fiscal policy in 2008. The plan is to cut the share of public spending in GDP in 2008 by 1.7% percentage points, whereas the share of revenue would remain the same as in 2007. Consequently, the share of the fiscal deficit in GDP would go down from about 1.5 to 2.5 GDP in 2007 to 0%-0.5% GDP in 2008.. The fiscal policy presented in the Memorandum is seen as a step in the right direction toward reducing both the external and internal imbalances in the Serbian economy. The imbalances, however, have been so exacerbated that reducing them to a sustainable level will require further reductions in public spending even after 2008. The most important levers for the reduction of public spending and the fiscal deficit in 2008, according to the Memorandum are:

- a wage freeze in 2008 at the level reached after the implementation of the previously agreed rises (i.e. the level of November 2007),
- cutting public investments funded from the Serbian budget by about 20%,
- cutting current expenditure from the Serbian budget for procurement of goods and services by 10%,
- cutting subsidies by 5%.

In the event that these measures fail to produce the desired effect, the Memorandum states that some tax rates may be hiked.

Implementation of a restrictive fiscal policy is threatened by the demands for higher spending and cutting of taxes

Implementation of the planned fiscal policy for 2008 faces numerous challenges, the most important being:

- the unions' opposition to a wage freeze and threat of strikes,
- the demand that servicing of bonds for the purpose of restitution start in 2008 without delay,
- the legal stance that medical insurance for people without coverage be paid out of the Serbian budget from the beginning of 2008, without any change in the present rates of contributions paid by insured persons,
- the announced hiring of some 1,000 medical doctors and nurses,
- the demands for repayment of old debts and arrears within a short period,
- the demands for abolition of the VAT on baby food and related products.

4 Since this is a local tax, the cut in the rate and the abolition of tax for first-apartment purchases will result in drops in local revenues. Losses will be particularly high in Belgrade where the real estate market is the most developed.

All these demands would lead to increasing the expansiveness of fiscal policy, either through a rise in spending or a fall in revenue. Meeting them would seriously threaten the projected fiscal policy and the objectives it aims to achieve (decreasing the foreign trade deficit and the inflationary pressures). Just how great a threat they represent to fiscal and macroeconomic policy can be seen from the estimate that meeting only the demands for medical insurance, restitution and payment of the Serbian Roads debt would raise the share of public spending in GDP by about two percentage points. Hence, if macroeconomic stability is to be maintained, the Ministry of Finance, backed by the government, must adopt a firm stance that consolidated public spending and fiscal deficit in 2008 will be kept within the limits projected by the Memorandum. In practice, this means that the majority of the demands should not be met, or at least put off until 2009. The likelihood of them being met in 2008 at the expense of the reduction of other budget items is slight, given that the Memorandum has already factored in a major reduction of the share of public spending in GDP.

A restrictive fiscal policy in 2008 would reinforce macroeconomic stability

The relevant question is what macroeconomic results are expected from the fiscal policy laid down in the Law on the 2007 Budget and the Memorandum for 2008. The starting point for assessing the effects of fiscal policy in 2007 is the estimate that the fiscal deficit, owing to the smaller growth in expenditure and higher growth in revenue in 2007, will amount to 1%-1.5% GDP instead of the projected 2.5%. Likewise, taking into consideration the stipulated dynamics of expenditure growth as well as seasonal component in the developments of revenue and expenditure, it is estimated that a significant fiscal expansion will start in October 2007. In view of the agreed pace of the growth of spending as well as the seasonal component in the movements of revenue and expenditure, the estimate is that a significant fiscal expansion will start in October 2007.

Provided that the fiscal policy laid down in the Memorandum is implemented in 2008, the growth of expenditure in Q4 2007 will be a one-off event, and will be followed by fiscal restrictions (i.e. the wage freeze, cutting of subsidies and of spending on procurement and of investments and the like).

Major divergence from the planned restrictive policy would lead to a rise in the external deficit and/or inflation

Based on the above assumptions and projections, a moderate deficit in the consolidated balance is expected in Q3 2007 and a higher one in Q4, defined from the standpoint of the effect on domestic demand. As 2008 will start, according to the Memorandum, with a high and constant level of wages in the government sector, but with a lower level of other spending, the deficit in 2008 is estimated to be much lower than in 2007, and will also be on a downward trend over the year. Consequently, fiscal policy in the second half of 2007 will be similar to the fiscal policy in the same period in 2006. And if the policy set out in the Memorandum is implemented, fiscal policy in 2008 will be similar to the fiscal policy in the first half of 2007 and considerably different from the fiscal policy of the second semesters of 2006 and 2007.

Based on the above, the estimate is that the fiscal expansion expected in the second half of 2007 and especially in Q4 will generate an additional rise in domestic aggregate demand which, with a firm monetary policy, will be manifested in the elevation of the external deficit. If the policy set out in the Memorandum is implemented in 2008, the effect of the fiscal expansion on domestic demand will be relatively short-lived and it will appear mainly in Q4 2007 and Q1 2008. Following the short-lived fiscal expansion in the second semester of 2007, it will be crucial to continue the fiscal restrictions in 2008 in order to maintain macroeconomic stability. It is also crucial for the government to be continually committed a firm fiscal policy and that it prevent fiscal policy being ridden over roughshod during election campaigns, as was unfortunately the case in late 2006 and late 2003.

8. Monetary Flows and Policy

After accelerating in the previous two quarters, monetary supply began to slow year-on-year in Q2 2007. Credit to the non-government sector, however, surged again, recording a y-o-y growth of 30.2% in nominal terms (26.3% in Q1 2007, adjusted flows). Expansion was recorded primarily by credit to enterprises, both through the domestic banking system – approximately €550 mn in new loans (€313 mn in Q1 2007), and direct foreign borrowing – over €1,200 mn in new loans to local companies in Q2, or €550 mn if a €650 mn credit to Telekom Serbia is excluded (€450 mn in Q1 2007). Sources of banks' new lending were mainly from capital increases (some €600 mn in Q2, -€25 mn in Q1) as well as domestic deposits. For liquidity, they drew on maturing repo instruments to an amount exceeding what they invested in that market in Q2 (totalling -€200 mn). Where monetary policy was concerned, the NBS was more passive than in the previous period, which resulted in a growth of primary money. The NBS issued dinars both through the repo market and the foreign exchange market (purchases from exchange offices and only a few interventions on the inter-bank foreign exchange market). The reference rate was cut twice, from 10.5% at end-Q1 to 9.5% where it stayed from May to August when it has symbolically increased to 9.75%. Government was nonetheless restrictive in Q2, increasing its dinar deposit with the NBS by as much as 26 bn dinars.

Monetary System: Structure and Flows of Monetary Supply

Growth of nominal and real M2 begins to slow

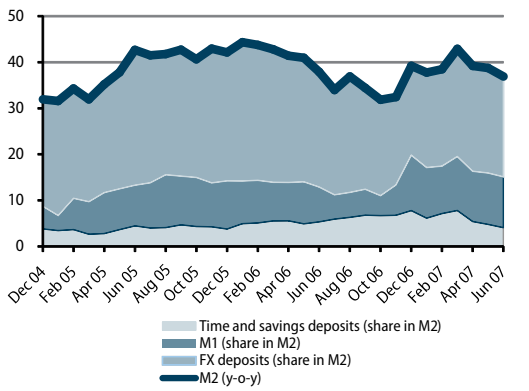
The 12-m growth of total monetary supply began to slow in Q2 following the acceleration recorded in the preceding two quarters. Thus nominal M2 had a 12-m growth rate of 37.4% (42.9% in Q1 2007), and real M2 increased by 30.7% (35.4% in Q1, Table T8-2). When the contributions of different forms of use of monetary supply are considered, it is noticeable that there was no change in structure in Q2 2007 relative to the preceding two quarters, with foreign exchange deposits providing the greatest contribution (Graph T8-1).

Monetary growth in Q2 was the result of the expansion of credit to the private sector...

... and the net foreign exchange reserves

The total increase of monetary supply in Q2 2007 (5.1% of M2 at the beginning of the year calculated as the difference between the 11% cumulative increase from the beginning of the year to end-Q2 and the 5.9% cumulative increase to end-Q1) was the upshot of the growth of NFA in Q2 (6.8% of opening M2) and the decrease of NDA (1.7% of opening M2). NDA went down in Q2 in spite of the expansion of credit to the non-government sector by 13% of opening M2 (difference between the cumulative increases at end-Q2 and Q1, expressed in percentage of M2 at the beginning of the year), which was exceeded in favor of the reduction in NDA primarily owing to the capital increase of the monetary sector (-5.2% of opening M2) and reduction of the net position of government with the monetary sector – increase in the government deposit (-3.6% of opening M2, Table T8-2). The remainder of the NDA growth relates to other items, not all of which are specified in the table. *QM* therefore concludes that the main source of the growth of monetary supply in Q2 2007 was credit to enterprises and households. Credit to enterprises and households was the main driver of the monetary supply growth in Q1 as well as all quarters in 2005 and 2006 with the exception of the pre-election Q4 of 2006 when the growth of monetary supply was driven by increased spending of the government deposit.

Graph. T8-1. Serbia: Money and Component Aggregates[1], 2004–2007



Source: Table P-11. in Analytical Appendix.
1) 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).

Credit to non-goverment sector continues to accelerate

In Q2 2007 credit to the non-government sector continued the acceleration re-established in Q1, recording a 12-m nominal growth rate of 23.9% (21.6% in Q1) and a real rate of 17.8% (15.2% in Q1, Table T8-2). The growth is evident also when observed on the basis of flows adjusted for exchange rate movements (for details on methodology, see footnote 3 in Table T8-2 or Box 2, part 8 in *QM*6): the 12-m growth at end-Q1 stood at 30.2% (26.3% at end-Q1). The expansion of credit to the non-government sector was the result of the strong acceleration of 12-m growth of credit to enterprises (20.2% in Q2 2007, compared to 14.2% in Q1, and 11.1% in Q4 2006, adjusted flows, Table T8-2), which exceeded the mild slowing of another major component of total credit to the non-government sector – households (54.7% in Q2 2007, compared to 58.4% in Q1). In spite of the slowdown in its 12-m growth rate, credit to households remained concerningly high.

Table T8-2. Serbia: Monetary Survey, Selected Indicators, 2004–2007

	2004	2005				2006				2007	
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
						y-o-y, in%					
M2[1]	31.9	37.0	42.6	42.7	42.1	42.8	37.9	34.4	39.2	42.9	37.4
Credit to the non-government sector[2]	44.3	50.9	46.0	48.7	51.3	45.3	44.4	34.6	17.5	21.6	23.9
Credit to the non-government sector[2], adjusted[3]	30.6	39.2	34.6	38.6	45.6	39.6	41.6	38.0	24.1	26.3	30.2
Households	107.0	100.2	94.7	91.3	92.5	100.6	96.6	80.8	62.2	58.4	54.7
Enterprises	19.8	29.7	24.2	27.6	34.3	25.0	26.9	24.7	11.1	14.2	20.2
						real y-o-y, in %					
M2[1]	10.4	16.3	22.1	22.4	20.8	24.7	19.8	20.5	30.6	35.4	30.7
Credit to the non-government sector[2]	27.4	28.0	25.0	27.6	28.6	26.9	25.4	20.7	10.3	15.2	17.8
Credit to the non-government sector[2], adjusted[3]	28.2	28.2	28.2	28.2	28.2	21.5	22.7	23.6	16.4	19.8	24.1
Households	59.1	59.1	59.1	59.1	59.1	74.8	70.4	61.9	52.2	50.2	47.4
Enterprises	18.2	18.2	18.2	18.2	18.2	8.8	9.9	11.7	4.2	8.3	14.5
						cumulative, in % of opening M2[4]					
M2[1]	31.9	2.6	15.9	30.8	42.1	3.1	12.4	23.8	39.2	5.9	11.0
M2 dinar[1]	8.7	-0.8	4.4	10.5	14.2	-0.5	3.6	8.8	19.8	-0.1	0.8
Foreign deposits (households and enterprises)	12.8	2.5	9.2	16.1	22.5	2.6	8.4	18.1	25.7	4.0	10.1
Valuation adjustments[5]	10.5	0.8	2.3	4.3	5.4	1.0	0.4	-3.1	-6.4	1.9	0.0
NFA, dinar increase	-3.8	0.5	7.0	17.1	18.0	-4.0	2.4	30.9	41.1	5.2	12.0
NFA, fx increase	-13.3	-0.2	5.0	13.3	13.5	-4.7	2.1	34.3	48.4	3.1	12.0
Valuation adjustments[6]	9.5	0.7	2.0	3.8	4.4	0.7	0.3	-3.4	-7.3	2.2	0.0
NDA	35.8	2.1	8.9	13.7	24.2	7.1	10.0	-7.1	-1.9	0.6	-1.1
o/w: credit to the non-government sector[2], adjusted[3]	15.9	6.7	12.5	21.2	34.1	5.1	15.6	25.0	27.3	6.6	19.6
o/w: net credit to government[7]	6.1	-3.9	-2.4	-5.0	-10.4	-0.7	-1.3	-21.8	-17.4	-4.1	-7.7
o/w: NBS and com. banks capital and reserves	-10.2	-5.6	-8.2	-10.7	-12.1	-1.2	-7.5	-8.5	-13.2	-2.2	-7.4
						cumulative, in % of GDP[8]					
Net credit to government[7]	1.1	-0.8	-0.5	-1.0	-1.9	-0.2	-0.3	-4.8	-3.4	-1.3	-2.2
o/w: dinar credits	0.1	-0.5	-0.6	-1.0	-1.6	-0.2	-0.9	-0.7	0.6	-1.2	-2.4
Credit to the non-government sector[2], adjusted[3]	7.3	2.3	4.2	6.8	10.0	1.6	3.8	4.8	4.3	2.6	5.5

Source: Table P-11. in 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.

Banking Sector: Credits and Sources of Financing

Q2 sees an expansion of credit to companies...

After reviving in Q1 2007, credit to enterprises started flourishing in Q2. It currently accounts for almost two-thirds of total new bank credits, with one-third going to households.

... both through the domestic banking system...

In Q2 banks granted a new €550 mn in loans to enterprises (€313 mn in Q1) while households received €350 mn (€195 mn in Q1). Of the loans to enterprises, as much as €350 mn was in short-term (up to one year), and some €200 mn in long-term loans (Table T8-4). Direct foreign borrowing hit a record of approximately €1,200 mn in Q2 (€260 mn in Q2 2006, €438 mn in Q1 2007). One single loan taken by Telekom Serbia, however, accounted for some €650 mn

... and through direct foreign borrowing

and was used to buy into Telekom Republika Srpska. The remaining €550 mn still constituted a very large amount of new loans to enterprises, especially since now, in contrast to the preceding period, those companies do not redirect them trough banks into NBS repo transactions. This time all the funds apparently went into the economy.

Table T8-3. Serbia: Monetary Survey, 2005–2007

	2005				2006				2007	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	in millions of dinars, end of period									
STOCK										
NFA	162,488	183,484	216,183	218,886	200,462	229,984	360,685	407,565	441,048	484,388
o/w: NBS gross reserves	274,136	304,386	362,216	424,844	465,497	549,529	648,946	715,114	719,381	730,668
o/w: commercial bank foreign liabilities	-98,169	-114,781	-131,090	-191,124	-229,081	-302,170	-300,781	-307,742	-318,598	-286,848
NDA	168,841	190,622	206,257	239,985	272,642	285,856	207,195	231,055	234,991	224,279
Net credit to government [1]	-6,864	-1,602	-10,242	-27,831	-31,129	-33,954	-124,159	-100,061	-128,909	-149,081
Net dinar credit	-1,823	-4,583	-11,268	-22,332	-25,479	-38,649	-35,438	-8,776	-35,782	-62,290
Net fx credit	-5,041	2,981	1,026	-5,499	-5,650	4,695	-88,721	-91,285	-93,127	-86,791
Credit to the non-government sector [2]	376,883	409,397	456,541	518,298	547,564	591,270	614,698	609,171	666,007	732,402
Other items, net	-201,178	-217,173	-240,042	-250,482	-243,793	-271,460	-283,344	-278,055	-302,107	-359,042
M2 [3]	331,331	374,106	422,441	458,870	473,103	515,840	567,881	638,620	676,039	708,667
M2 dinar [3]	143,768	160,351	180,043	192,180	189,911	208,606	232,506	283,116	282,299	288,329
Fx deposits (households and economy)	187,563	213,755	242,398	266,690	283,192	307,234	335,375	355,504	393,740	420,338
STRUCTURAL INDICATORS										
Currency outside banks/Dinar deposits (households and economy), in %	37.7	35.9	35.6	38.7	31.8	30.6	28.9	31.9	26.2	29.1
Fx deposits (households and economy) / M2 (%)	56.6	57.1	57.4	58.1	59.9	59.6	59.1	55.7	58.2	59.3
Velocity (GDP [4]) / M2)	4.6	4.3	4.0	3.8	3.9	3.7	3.5	3.3	3.2	3.2
M2 / GDP [4]	0.22	0.24	0.25	0.26	0.26	0.27	0.29	0.30	0.31	0.32
Credits to the non-government sector / GDP [4]	0.25	0.26	0.27	0.30	0.30	0.31	0.31	0.29	0.30	0.33
Non-perofrming loans [5] (in % of total loans)	..	..	..	..	..	..	..	4.7	4.9	4.7
Money multiplier (dinar M2/H)	1.8	2.0	2.0	1.9	2.1	2.1	2.1	2.0	2.4	2.0

Source: Table P-11. in 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 January, 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.

Banks cut stock of investments in NBS securities in Q2

In Q2 banks decreased their investments in NBS securities, primarily repos and 6-month bills, by €211 mn, Table T8-4. This practically means that a larger amount of their investments matured than banks put into them in the period observed. The relatively lower investment in NBS papers in Q2 relative to the preceding period was probably prompted by the falling yield (lowering of the reference interest rate, more details in Box 2 and Graph T9-4 in part 9. Financial Markets), Table T8-4. The observed disinvestment in repos and the record investment in loans to enterprises indicates that banks directed the liquidity freed from repos mostly into short-term loans to companies.

Banks find sources for new credits in capital increases...

... and new household deposits

The banking sector's capital was considerably increased in Q2 2007, by some €600 mn (reduction of €25 mn in Q1, increase of €360 mn in Q2 2006), and this represented the predominant source of new bank loans in Q2. Among other things, this was probably prompted by the NBS's earlier prudential measure under which the total amount of credit to households was limited to 200% of banks' capital (it has been announced that the limit will be further reduced to 150% by the end of 2007). Besides capital, banks also found a source in new household deposits – about €400 mn in Q2. Thus far, they have decreased their foreign liabilities by some €280 mn net (the balance of payments registers a net decrease of about €130 mn, Table P-5, Analytical Appendix: the difference lies in the fact that the data shown in Table T8-4, Foreign Liabilities, also registers the net changes in the balances of non-residents' accounts with banks and the data originates from the consolidated balance of the banking sector and cannot be broken down into subcomponents). On the one hand, the slower trend of foreign borrowing, which in Q2 turned into a decrease of liabilities, and the growing share of domestic deposits in new sources on the other, have been present since mid-2006. Besides the mentioned freeing of liquidity from repos, banks in part financed new credits through the reduction of net credit to government by around €180 mn (net increase of government deposits with banks, Table T8-4). Company deposits rose only moderately, by some €100 mn, which is expected with these kinds of deposits since they

are not traditionally a significant source of bank financing (to recall, these deposits recorded a sudden rise toward the end of 2006 by about €500 mn in Q4, while this ceased in Q1 2007.

Table T8-4. Serbia: Funding, Credit and Investment Activity, Adjusted[1] Flows, 2005–2007

	2005				2006				2007	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	in millions of euros, cumulative from the beginning of the year									
Funding(-, increase in liabilities)	-377	-1,051	-1,712	-2,783	-539	-2,208	-3,468	-5,237	-325	-1,061
Domestic deposits	-73	-488	-913	-1,314	-116	-550	-1,322	-2,245	-339	-757
Households deposits	-144	-350	-575	-884	-178	-413	-795	-1,200	-329	-652
dinar deposits	1	-27	-40	-46	-13	-54	-51	-124	-35	-57
fx deposits	-145	-323	-535	-838	-165	-359	-744	-1,076	-295	-595
Enterprise deposits	71	-138	-338	-430	63	-137	-527	-1,045	-10	-105
dinar deposits	29	-92	-223	-363	36	-52	-295	-739	23	112
fx deposits	43	-46	-115	-68	27	-85	-232	-307	-33	-218
Foreign liabilities	-169	-345	-506	-1,194	-401	-1,278	-1,433	-1,660	-10	266
Capital and reserves[1]	-134	-218	-293	-275	-22	-380	-713	-1,331	25	-569
Gross foreign reserves(-,decline in assets)	-89	-3	-27	-29	-190	-191	-36	-77	-14	5
Credits and Investment[1]	402	802	1,369	2,058	417	1,193	1,906	3,100	687	1,294
Credit to the non-government sector, total	337	651	1,147	1,893	272	847	1,320	1,541	575	1,508
Enterprises	274	437	697	1,172	85	390	557	536	313	865
short term	217	385	597	835	85	254	258	194	195	549
long term	57	52	101	337	1	136	299	341	118	315
Households	63	214	450	721	187	457	763	1,006	263	644
short term	8	18	38	81	50	106	169	194	36	101
long term	54	196	412	640	137	351	594	811	226	543
Placements with NBS (Repo transactions and treasury bills)	20	196	235	185	162	448	740	1,637	200	-11
Government, net[2]	25	-64	-21	-43	-20	-107	-157	-79	-89	-203
MEMORANDUM ITEMS										
Direct foreign liabilities of enterprises and banks' credits to enterprises	353	799	1,281	2,035	325	897	1,599	2,102	762	2,539
o/w: direct foreign liabilities of enterprises	79	363	583	863	239	507	1,043	1,567	450	1,674
Mid and long term	75	349	589	846	224	479	979	1,523	438	1,630
Short term	5	14	-6	17	15	29	64	43	12	44
Required reserves and deposits	24	241	438	945	216	1,182	1,535	1,813	-146	242
Other net claims on NBS[3]	-38	-5	-3	54	-56	-75	-46	0	13	-44
o/w: Excess reserves	-32	-21	-19	12	-55	-59	-73	-50	20	-56
Other items[4]	61	1	-61	-158	168	130	166	499	-110	-464
Effective required reserves (in %)[5]	26	27	28	31	32	38	38	36	34	37

Source: Table P-12. in 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)Repo transactions include treasury bills and NBS bills, which were initially substituted by T-bills in January 2005, only to be introduced anew nine months later. Repo transactions include treasury bills and NBS bills, which were initially substituted by T-bills in January 2005, only to be introduced anew nine months later.

3) 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.

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

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

6) 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.

The €320 mn increase in household deposits in Q2 (€230 mn in Q2 2006, €329 mn in Q1 2007) is an indication of their stable growth. It relates to the rise in new foreign exchange savings by €300 mn (€295 mn in Q1 2007, €195 mn in Q2 2006) and the growth of dinar deposits by €20 mn, Table T8-4.

Central Bank: Balance and Monetary Policy

Money base grew in Q2 as a consequence of the issuance of dinars through the foreign exchange market...

In Q2 money base grew by 14.5% of opening H, which at the same time represented an acceleration of the nominal 12-m growth of 37.2% at end-Q2 (31.3% at end Q1 2007), Table T8-5.

... and repo maket...

Primary money grew as the result of the following net changes in the stocks of its components: an increase in NBS net own reserves by 23.3% of opening H (34.5% at end-Q2 minus 11.2% at end-Q1) and the lower negative increase in the NBS's NDA of only -8.7% of opening H (43.3% minus 34.6%), Table T8-5. The fall in NDA led to an increase in the government dinar deposit of -19.3% of opening H, a reduction of NBS liabilities to banks on the basis of sales of NBS papers of 10.9% of opening H, and a fall in other assets net of 0.3% of opening H.

... and the withdrawal of dinars through the government deposit with the NBS

What this means is that the NBS in Q2 placed some 31 bn dinars through foreign exchange transactions (purchases from exchange offices and transactions with banks, and some 14 bn dinars through the repo market (up to now it had always made net withdrawals of dinars through repo operations and outright sales of T-bills (details in Box 2). Simultaneously, the monetary base H was reduced by increasing the dinar deposit of the government (including local governments) with the NBS by some 26 bn dinars. Thus, for the second consecutive quarter, government behaved restrictively. In contrast to the preceding period when the entire increase of the dinar deposit was due to the conversion of funds in the government's foreign exchange account, this time only a portion of the inflow of some 8 bn dinars had to do with the conversion of about €100 mn from the government's foreign exchange deposit with the NBS (the difference between the increase in Q2 of the NBS net own reserves of €387 mn, Table T8-9) and total foreign exchange purchases from the public of €288 mn, Table T8-8, relates to the NBS purchase of

Government behaved restrictively...

... increasing its dinar deposit with the NBS

Table T8-5. Serbia: NBS - Foreign Exchange Purchases and Dinar Sterilization, 2005–2007[1)]

NBS assumes more passive role in Q2...

	2005				2006				2007	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
FLOW										
	in millions of dinars, cumulative from the beginning of the year									
NBS own resreves[2)]	9,949	29,646	48,293	63,136	4,628	49,014	78,899	145,315	15,055	46,176
NBS own reserves (in euros)	*123*	*364*	*587*	*759*	*53*	*564*	*933*	*1,783*	*188*	*577*
NDA	-18,426	-35,268	-44,208	-46,040	-20,755	-54,348	-74,989	-105,744	-46,267	-57,974
Government, dinar credits	-284	-4,883	-5,506	-6,077	-1,595	-1,856	-1,858	120	-710	-735
Government, dinar deposits	-12,538	-8,482	-14,796	-18,576	-4,789	-14,422	-10,572	17,540	-30,939	-56,748
o/w: municipalities	-5,259	-3,213	-4,965	-824	-6,068	-5,339	-5,505	-3,500	-6,768	-13,485
Repo transactions[3)]	-3,206	-17,607	-19,804	-16,829	-14,258	-39,152	-63,335	-132,903	-16,675	-2,094
Other items , net[4)]	-2,398	-4,296	-4,102	-4,558	-113	1,082	776	9,499	2,057	1,603
H	-8,477	-5,622	4,085	17,096	-16,127	-5,334	3,910	39,571	-31,212	-11,798
o/w: currency in circulation	-5,797	-2,849	2,118	8,485	-7,825	-4,724	-1,540	14,811	-9,792	-3,395
o/w: excess liquidity	-2,403	-3,675	-1,753	3,518	-8,643	-7,916	-2,106	16,516	-13,061	-3,309
INCREASE										
	cumulative, in % of opening H[4)]									
NBS own resreves[2)]	14.9	43.9	72.4	93.4	7.9	52.5	73.5	135.1	11.2	34.5
NDA	-25.9	-51.1	-67.1	-71.2	-25.0	-58.1	-69.4	-93.2	-34.6	-43.3
Government, dinar deposits	-16.2	-11.0	-19.2	-24.0	-5.1	-15.3	-11.2	19	-23.1	-42.4
Repo transactions[3)]	-4.1	-22.8	-25.6	-21.8	-15.1	-41.5	-67.1	-141	-12.5	-1.6
Other items , net[4)]	-5.5	-17.4	-22.3	-25.4	-4.8	-1.4	9.0	29	1.5	1.2
H	-11.0	-7.3	5.3	22.1	-17.1	-5.7	4.1	41.9	-23.3	-8.8
o/w: currency in circulation	-7.5	-3.7	2.7	11.0	-8.3	-5.0	-1.6	16	-7.3	-2.5
o/w: excess liquidity	-3.1	-4.8	-2.3	4.6	-9.2	-8.4	-2.2	18	-9.8	-2.5
MEMORANDUM ITEMS										
Gross fx reserves (flow, cumulative from	273.3	568.3	1,167.5	1,860.0	387.7	1,420.9	2,945.0	4,083.1	-233.3	193.9
the beginning of the year, in euros)	33.3	72.5	147.4	228.4	43.1	132.1	237.5	307.6	3.2	11.6
Gross fx reserves (in % of opening H in euros)	18.0	15.0	26.6	22.1	13.7	24.3	20.8	41.9	31.3	37.2
H (growth rate, y-o-y, in %)	3.6	4.9	11.4	18.8	16.4	15.6	10.2	27.6	28.0	33.0
Currency in circulation (growth rate, y-o-y, in %)										

Source: Table P-13. in Analytical Appendix.
1) Government include: Republic level and cities and municipalities.
2) Net own reserves definition - see Box 4 in QM5.
3) Up to December 2004, this category included NBS bills, in the January-February 2005 period NBS bills and repo transactions, and as of March 2005 only 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).

... reducing the scope of its operations on both the foreign exchange...

... and repo markets

foreign exchange from government. Although exact data is not available, it would appear that the remainder of the inflow amounting to 18 bn dinars in the government's dinar deposit most probably relates to the liquidity withdrawn from the system. If so, together with the eventual payment of budget expenditures from the government foreign exchange account (for FFCDs), it should correspond to the quarterly budget balance of the consolidated government sector (Table T7-2, part 7. Fiscal Flows and Policy) of 2.4 bn dinars. In other words, the government foreign exchange deposit was reduced in Q2 by about €100 mn, i.e. approximately 8 bn dinars (-€1,160 mn at end Q2 2007 less -€1,247 mn at end Q1 2007, Table T8-9) for the payment of FFCDs (Table T7-2, part 7. Fiscal Flows and Policy). We thus arrive at an inflow of 10 bn dinars into the government (including local governments) dinar deposit with the NBS, which should correspond to the fiscal surplus of 2.4 bn dinars (Table T7-2). *QM* was unable to determine the origins of the remaining 7.8 bn dinars of inflow into the dinar acount (10 bn less 2.4 bn). It might represent an inflow of local government funds that did not come from tax revenue, e.g. bank credits or the transfer of deposits from banks to the NBS. The monetary accounts do not clarify this inflow.

Of the total rise of the monetary base (H) to the amount of 20.5 bn dinars in Q2, banks held back about 10 bn as free dinar reserves with the NBS. This sharp rise in banks' free reserves cannot fully be explained as an increase of liquidity in the system since it most probably relates to the recapitalization of either of two local banks (AIK Bank and Agrobanka) through initial public offer of shares in Q2. Regulations on the issuance of shares by way of initial public offer under which the deposits of would-be shareholders are kept in an account with the NBS until the whole procedure is completed (for more details see *QM*7, Part 8, Box 3) has been changed. Now the deposits are held in the issuing bank's account with another bank in the system, which may use them as any other received deposit. It is possible, however, that because of two recapitalizations, a portion of the funds was held in the free reserves account with the NBS of the bank that opened an account for the issuing bank.

Box 1. Cash Loans to Households – Reasons for and Effects of NBS Measure of August 2007

A NBS measure aimed at slowing the growth of cash loans to households went into effect on 27 August 2007. It stipulates that these loans will now have to be for a maximum of two years, unlike the practice so far when banks resorted to extending the period in order to grant more loans since longer repayment periods enable reduction of the monthly instalments and bypassing of the regulation that instalments cannot exceed 30% of the household's monthly earnings. Total bank claims relating to the cash loans thus grew to 48.5% of total credit at end-Q2 2007 (Table T8-6). At the same time, although these are traditionally short-term loans, the records show cash loans of up to one year accounting for only 18.8% of total credit (Table T8-6). This is an indication of a potentially serious problem from the aspect of prudential supervision. With regard to the impact on demand, it is illustrative that the quarterly increase of credit to households in Q2 reached 5.3% of the quarterly GDP (Table T8-4), which represents the biggest contribution to demand so far. Knowing that more than half of the increase in quarterly stocks is directed into cash credits, it is clear that the share of newly approved cash loans in total demand amounting to some 3% of quarterly GDP is not at all negligible.

In announcing the measure, the NBS justified it as the multiple-aim measure. First, prudential, in view of banks' exposure to risk from this kind of loans. A second aim is to help deal with the mounting problem of the foreign trade deficit since demand for imported products is being spurred by the cash loans. Last, the measure aims to reduce the gray economy as the cash made available through these loans is mostly used to purchase goods on which tax has not been paid.

Analysis of the measure and its possible effects brings out that in its nature it is mainly designed for prudential supervision (adjusting the time frame of the structure of loans). Effects in this area may be expected to be achieved with regard to specific loans. Since the cash loans are insufficiently se-

cured, and those who take them use the money mainly to purchase consumer goods, the two-year limit makes sense. As a side effect, it will probably also help in the legalization of monetary flows.

However, it can with justification be viewed as a monetary policy measure since it is also an attempt to dampen demand, although this is not explicitly stated as a priority. Such a measure is not usual in the context of monetary policy in market economies and it may seem inappropriate, akin to an administrative measure, as it introduces certain limitations on what banks can and cannot do with their money. To recall, the central bank's interest rate is designated in the new framework of monetary policy as the basic instrument and in practice is considered to be the desirable instrument for exerting an influence on demand and, ultimately prices, while a break is being made with all administrative regulation in the implementation of monetary policy. In the current circumstances, however, if a market mechanism such as hiking the repo rate were to be used to try to rein in cash loans, it would a) affect all credits, not only cash loans, whereby the whole economy could suffer, and b) pressures would mount for appreciation of the exchange rate, which would further threaten the foreign trade balance. In the circumstance, the measure seems to be the logical choice as well as a necessary evil. It is unclear, however, if it will produce any significant results or have only a marginal effect on foreign trade, since it is hard to say with any accuracy what percentage of the cash loans is spent on imported consumer products and how big a share these products have in total imports. Banks always find a way to get around administrative restrictions and meet the demand for credit, which is currently high here since the population is strapped for cash. Hence the extension by banks of the period for which these loans are granted was a reaction to the limitation (also a prudential measure) of monthly installments to no more than 30% of a household's income. Similarly, the major recapitilization of banks in Q2 (Table T8-4) can be partly seen as a reaction by banks to yet another earlier prudential measure under which total credit to households cannot exceed 200% of a bank's total capital (it has been announced that this will be tightened to 150% by the end of the year).

All this shows that, on the one hand, even though not explicitly indicated, limitation of the terms of cash credits tough being in its nature a prudential measure, has also being used in monetary policy (limiting demand in order to exert an effect on the ultimate goal of monetary policy – inflation). Even if the usual danger of banks bypassing non-market measures and thus rendering them ineffectual is disregarded, the issue arises of the appropriateness and risk of harnessing prudential measures into monetary policy. But in view of all the above, some administrative measures aimed at reining in credit expansion in certain cases and during limited periods of time can make sense and should not be a priori rejected.

Table T8-6. Structure of Loans to Households, at the end of Q2 2007

	in bilions of dinars	in % of Total
*By maturity**		
Short-term (up to one year)	47.8	18.8
Long-term (more than one year)	206.6	81.2
Total 1	**254.3**	**100.0**
*By purpose***		
Cash loans	118.8	48.5
Consumption loans	21.3	8.7
Mortgage loans	66.8	27.3
Other	38.0	15.5
Total 2	**244.8**	**100.0**

Source: *NBS; **Credit bureau
Note: Due to two different data sources, there is a discrepance in two totals.

Box 2. No Essential Change in Restrictiveness of Monetary Policy Relative to Q1 2007

For the first time in Q2, the NBS issued dinars through the repo market...

... and twice cut the repo rate

The NBS did not change the reserve requirement ratio in 2007. In Q2 the reference interest rate was lowered from 10.5% in March 2007 to 10% at the end of Aril, and to 9.5% in late May and remained there until it was raised to 9.75% in late August, at which level it stayed until this issue of *QM* went into print. In Q1, the exchange rate appreciated by some 3% in real terms (more details in Part 3). When all these factors (reserve requirements, NBS interest rate and exchange rate) are taken into account, it may be concluded that monetary policy was more passive than in the preceding period, and that there was no essential change in the degree of restrictiveness relative to the earlier period. On the contrary, it may be said that it was relaxed slightly.

For the first time since the repo market was established, the NBS in Q2 issued dinars through repo operations and outright sale of its T-bills. In that quarter, banks withdrew from the repo market to such an extent that their matured earlier investments in the market exceeded the amount they invested in new repos and 6-m T-bills. The NBS sold to banks 6-month T-bills (outright sales) but in net terms repurchased from them an amount of repos sold earlier in excess of the first invesments. Thus the total stock of bank investments with the NBS at end-Q2 fell by some €200 mn eurps (dinar equivalent) relative to end-Q1.

Table T8-7. Banks' Reserve Requirements with NBS[1], 12/ 2004 - 9/ 2007

	12/2004	05/2005	07/2005	10/2005	11/2005	03/2006	04/2006	05/2006	11/2006	12/2006
Rate on:										
					in %					
DINAR DENOMINATED BASE	21	20	20	18	18	18	18	18	15	10
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
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
SUBORDINATED CAPITAL						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 10th 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.

Box 3. NBS Recorded Loss in 2006

According to publicized financial statements, the NBS recorded a major loss of 30 bn dinars in its overall operations in 2006, which had never been the case until then (14.8 bn dinars profit in 2005). This negative result was the outcome of the extraordinarily high expenditures in 2006 and in excess of revenue the NBS makes from investing foreign exchange reserves: interest on deposits with banks abroad (8.6 bn dinars in 2006), and securities trading (9.6 bn dinars in 2006). The very high expenditures in 2006 had to do with the net negative exchange rate differentials of 23.9 bn dinars and expenditure on interest paid to banks on repo instruments (10.9 bn dinars). The negative exchange rate differentials are an accounting category mostly and do not entail any payments in money since they are a result of the traditionally large open position of the NBS (more foreign exchange assets – reserves – than foreign exchange liabilities in the corresponding currencies), which at the end of 2006 amounted to the equivalent of 293.8 bn dinars (or 37% of the total assets). Furthermore, the dinar appreciated considerably in 2006 (about 9% nominally) relative to end-2005. The major expense of interest on repo instruments due to large scale sterilization by way of short-term sale of NBS securities, which expanded particularly in the second semester of 2006, rising from a total stock of 16 bn dinars at end-2005 to 141.8 bn at the end of 2006 (more details on sterilization in 2006 in *QM6* and *QM7*, Part 8, Monetary Flows and Policy). It also implicitly represents the cost of monetary policy in 2006 when inflation was rapidly cut from the y-o-y rate of 13.1% in late August to 6.6% in late December 2006.

Under the Law on the National Bank of Serbia, if the NBS goes into the red, the loss is covered from the special reserves and, if these are insufficient, from the state budget or the issuance of securities for this purpose by the Republic, which are then transferred to the NBS. The NBS's reserves accumulated from earlier revenue amounting to 10 bn dinars at end-2006 are insufficient to cover the 2006 loss in entirety. No information was available on how the loss will be covered and whether this will entail an reduction of the central bank's core capital.

NBS almost absent from the interbank forex market

Table T8-8. Net Monthly Transactions on Foreign Currency Market, NBS-Banks and Exchange Offices

(-, net sale of foreign currency by NBS)	Interbank fx market (NBS-commercial banks)	Exchange offices	Total	
	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	

Source: NBS.

In Q2, the NBS had only few minor interventions on the interbank foreign exchange market, in keeping with the new framework monetary policy of August 2006. In accordance with this policy, the NBS on 4 June 2007 adopted the decision stating that it would get involved in interbank trade in foreign exchange to return a proportion of the foreign currency onto the market by selling it to banks at the most favorable quoted exchange rate and without any intent to exert an influence on the rate formed in trading among banks. The NBS thus contributes to the ultimately formed exchange rate being based on the relationship of the total supply and demand for foreign exchange.

Table T8-9.Serbia: Foreign Exchange Reserves, Stock and Flow, 2005–2007

	2005				2006				2007	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
					stock, in millions of euros					
NFA of Serbia	2,028	2,241	2,548	2,544	2,303	2,674	4,403	5,164	5,413	6,130
Commercial banks, net	-487	-577	-761	-1,451	-2,042	-2,921	-2,920	-3,188	-3,213	-2,918
Gross foreign reserves	724	810	787	784	594	593	748	707	693	712
Foreign liabilities	-1,211	-1,387	-1,548	-2,235	-2,636	-3,514	-3,668	-3,895	-3,906	-3,630
NBS, net	2,515	2,818	3,309	3,995	4,345	5,595	7,323	8,352	8,626	9,048
Gross foreign reserves	3,382	3,677	4,276	4,969	5,357	6,390	7,914	9,052	8,819	9,246
Foreign liabilities	-868	-859	-967	-974	-1,011	-795	-591	-700	-193	-198
IMF	-654	-630	-765	-748	-787	-575	-373	-181	6	1
Other liabilities	-213	-229	-202	-226	-225	-220	-218	-519	-200	-199
NBS, NET RESERVES-STRUCTURE										
1. NBS, net	2,515	2,818	3,309	3,995	4,345	5,595	7,323	8,352	8,626	9,048
1.1 Commercial banks deposits	-877	-1,083	-1,262	-1,725	-1,995	-2,858	-3,126	-3,210	-3,358	-3,478
1.2 Government deposits	-223	-79	-170	-220	-247	-123	-1,213	-1,309	-1,247	-1,160
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	1,415	1,656	1,878	2,050	2,103	2,614	2,983	3,833	4,021	4,410
					cumulative from the beginning of the year, in millions of euros					
NFA of Serbia	19	233	540	535	-240	131	1,859	2,620	249	967
Commercial banks, net	-258	-348	-533	-1,223	-591	-1,469	-1,468	-1,737	-24	270
Gross foreign reserves	-89	-3	-27	-29	-190	-191	-36	-77	-14	5
Foreign liabilities	-169	-345	-506	-1,194	-401	-1,278	-1,433	-1,660	-10	266
NBS, net	278	581	1,072	1,758	350	1,600	3,328	4,357	274	696
Gross foreign reserves	273	568	1,167	1,860	388	1,421	2,945	4,083	-233	194
Foreign liabilities	4	13	-95	-102	-37	179	383	274	507	502
IMF	50	75	-61	-44	-38	173	375	567	187	182
Other liabilities	-46	-62	-34	-58	1	6	8	-294	320	320
NBS, NET RESERVES-STRUCTURE										
1. NBS, net	278	581	1,072	1,758	350	1,600	3,328	4,357	274	696
1.1 Commercial banks deposits	-56	-263	-441	-904	-270	-1,133	-1,401	-1,485	-148	-269
1.2 Government deposits	-98	46	-45	-95	-27	97	-993	-1,089	63	149
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	123	364	587	759	53	564	933	1,783	188	577

Source: NBS.

Note: NBS fx liabilities are treated differently in the monetary survey and in 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 bank's fx deposits (reserve requirements funds and other fx deposits).

9. Financial Markets

The turnover on the stock market in Q2 rose by 20%, and 42.7% more transactions were performed than in Q1 2007. In contrast to the preceding period, this time it was the discontinuous market segment that drove the rise. The average transaction in Q2 was by 15.9% lower than in Q1, an indication of the rising participation of smaller, individual investors. Many believe the unrealistically high market growth since the beginning of the year came to an end in Q2 when, triggered by the political crisis, a price adjustment took place in May. On May 9, BELEX15 and BELEXline[1] realized record daily losses in value of 6.53% and 5.24%, respectively. After a brief recovery, the downward trend resumed a few days later and continued into Q3. Both investment funds in Serbia, Delta Plus and FIMA ProActive, followed the market movements but with milder changes. The combination of a cut in the NBS reference rate and accelerated inflation led to a further decline in real yields on repo operations, which in Q2 fell from 5.88% to 4.39%. Yields on treasury bills dropped to 6.04%, and continued decreasing on the FFCD bond market too. The A2008 and A2009 bonds recorded the highest drop in Q2, about 52bp and 48bp, respectively. At the same time, an all-time high in FFCD bond trading volume was achieved, €78.4 mn, a rise of 52.1% relative to Q1 2007. Data on foreign investors' participation on the domestic market in Q2 shows that domestic investors drove the increased volume on the FFCD market.

Record turnover and record number of transactions on BELEX in Q2

With 95,000 performed transactions totalling about 47 bn dinars in value, the Serbian stock market continued the growth trend into Q2 2007 (Graph T9-1). Relative to Q1, the number of performed transactions grew by 42.7%, and the total turnover in dinars recorded a rise of 20%. Relative to Q1 2006, 250% more transactions were performed whose value was higher by 163%.

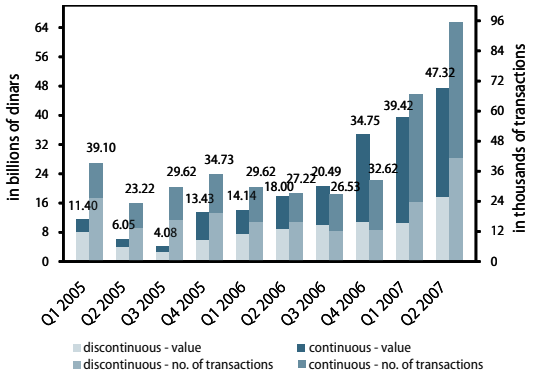
Value of average transaction decreases further in Q2

In Q2 2007, "fragmentation" of transactions, i.e. an increase in the participation of smaller, individual investors on the stock market continued. The average transaction in the quarter amounted to 496.5 thousand dinars, or 15.9% less than in Q1 2007, and 53.4% less than in Q4 2006.

The discontinuous market segment propelled the increased turnover in Q2

Contrary to the preceding quarters, when the market segment with the continuous trading method drove the increased turnover on the Belgrade Stock Exchange, Q2 brought a turnaround in the trade structure trend – now the discontinuous market segment mostly contributed to the increase in turnover. On the discontinuous market segment, as many as 72.5% more transactions were performed, whose turnover value was higher by 68.9% than in Q1. In the continuous trading segment, however, the total value of shares traded was only 2.4% higher than in Q1 2007, while the number of transactions grew by 26%. Relative to Q1 2006, the continuous segment continued to propel the trading volume upwards with an increase of 221% and 381% more performed transactions, whereas on the discontinuous segment the increase was 102% and 158%, respectively. The following months will show whether this turnaround in the trading structure is only temporary or the start of a new trend.

Graph T9-1. Stock Trading Volume, Value and Structure, 2005–2007



Source: www.belex.co.yu.

The basket of five most traded shares still accounted for more than half of the total turnover on the continuous market segment,

1 BELEXline is the new index of the Belgrade Stock Exchange, which replaced the BELEXfm index. For a description of index construction see Box 1 in this section.

specifically 61%. Of them, one share alone, AIK Banka a.d. Niš (AIKB), accounted for almost 20% of the turnover on the continuous market. The trading volume of the basket of five shares which in Q2 2007 were always at the top of the market remained the same as in the previous quarter[2].

Q2 2007 was a turbulent period on the Serbian capital market – a price adjustment anticipated long ago finally took place, ending the upward trend that started back in July 2006. As in 2006, the price adjustment on the Belgrade Stock Exchange started in Q2, as is usual on stock exchanges in the region and the world capital markets. The extraordinary increase of Belex from the beginning of the year was not entirely based on the strengthening of domestic companies and economy in general, but was rather caused by investors' expectations, which were not fulfilled when the business results of many companies were made public. There were reasons for growth, but not by this much, which inevitably led to the adjustments. The first adjustment was in late April when the BELEX15 index lost about 8% of its value, and BELEXLine lost about 4% in three days. But both indices recovered and even reached new all-time highs. On 3 May, BELEX15 went up to 3,335.20 index points, and BELEXLine to 5,007.34 index points, following which a new adjustment took place and there were record daily movements of index value. On 9 May, Belex15 lost as much as 6.53%, and BELEXline 5.24% of its value. One of the reasons for the abrupt drop was the political crisis in the country. When the crisis was resolved over the next few days, the market responded accordingly. On 11 May, there was a record daily growth of both indices, with BELEX15 and BELEXLine going up 11.44% and 6.79% respectively. In *QM*8 we indicated that the increased participation of smaller, individual investors leads to more accurate formation of share prices, as well as to the better efficiency of market. This May's episode indicated the increased sensitivity of these small investors, which provoked an effective if slightly panicky response of the market to the situation in the country. The presence of larger foreign institutional investors rose, which, on the one hand, cut short the trend of prevailing "one-way" trading[3] and on the other led to the normalization of the market. These investors responded more calmly during the short-lived political crisis and did not succumb to panic, thereby having a stabilizing effect on the market. Unfortunately, the May political crisis did not cause only a temporary stock market decline. The next few months showed it was only the initial trigger for the market adjustment predicted long before. After initially recovering, the market took a downward turn so that the BELEX15 index, from 3,231.18 index points on 14 May, dropped by 15.91% to its minimum of 2,717.04 points by 13 June. Between 16 May and 12 June, BELEXLine lost 10.62% of its value and plunged to a minimum of 4,403.06 index points. The decline of both indices ended at this time and they continued to move within a narrow value range.

Box 1: General Index of the Belgrade Stock Exchange - BELEXline

On 2 April, the Belgrade Stock Exchange started to calculate a new index, BELEXline,[1] which completely replaced BELEXfm. BELEXline presents the price movements of a representative sample of shares, while BELEXfm showed the prices of all shares with which there was at least one transaction. As a result of this methodology, BELEXfm did not reflect market activity realistically because its basket was mostly dominated by non-traded shares. At the time of its abolition, BELEXfm included 988 shares, whereas no more than 120 shares are traded daily on the average. This is why that index substantially decreased the effect of the most liquid shares, as was amply evident during the period of the strong growth of the stock exchange when BELEXfm showed much weaker market growth than BELEX15 index.

1 Basis index date is 30 September, 2004, with a basis value of 100 index points. On the first day of its application, the index value was 4,240.91 index points.

2 The basket of shares comprises: AIKB (Aik Banka), MTBN (Metals Banka), AGBN (Agrobanka), SJPT (Soja Protein and ENHL (Energoprojekt Holding), which during Q1 and Q2 2007 were always among the top ten shares in terms of trading volume value.

3 Refers to trading aimed at taking overss of companies privatized by distribution of shares to workers and which was reflected in the sale of these shares to future owners.

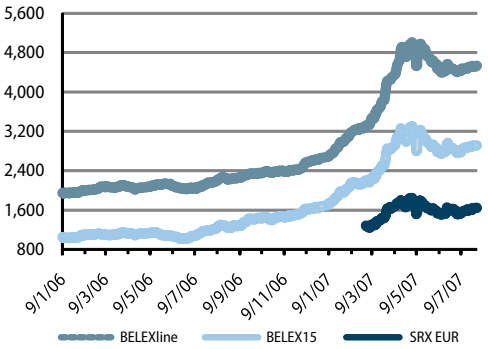
The idea of the Belgrade Stock Exchange is that BELEXLine should describe as closely as possible the broad market movements and underlie the creation of structured products and derivatives on the domestic and foreign markets.[2] The BELEXfm index was unsuitable because it could not serve as a basis for creating these products because of the methodology used to construct it. Each BELEXfm index basket differed from the preceding one and it was impossible to anticipate the change in the structure of the index basket structure, which in turn made replication impossible.

The BELEXLine index basket is constructed in a way to meet two basic goals: to illustrate the movement of the prices of traded shares to minimum 10% of the total scheduled trading in the previous quarter, and to describe the movements of as large a possible percentage of the total market capitalization of shares on the Belgrade Stock Exchange. The index is weighted by the total market capitalization and is not adjusted for dividends paid. The number of issuers whose shares make up the basket cannot be less than 70 and is constant during the period between two index revisions. Even though there is no limit on the maximum number of components, the Belgrade Stock Exchange will aim to form a representative sample with no more than 150 index components. During Q2 2007 the basket had 100 components.

2 Methodology for calculation of the BELEXline index Ver 1.0, Belgrade Stock Exchange, March 2007, *www.belex.co.yu*

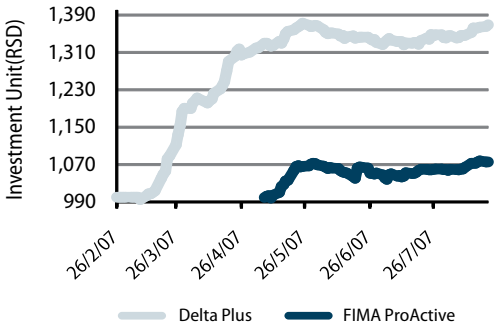
Record daily movements of index value and beginning of long downward trend in Q2

Graph T9-2. BELEXfm, BELEX15 and SRX EUR Indices, 2006–2007



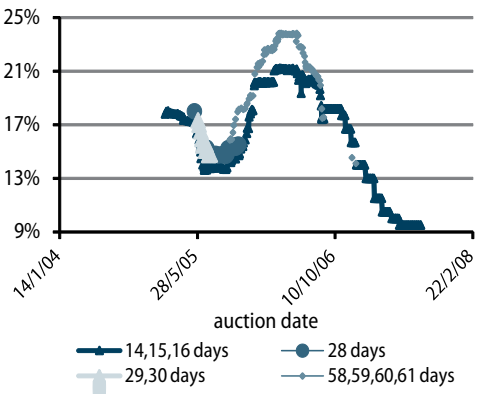
Source: www.belex.co.yu.

Graph T9-3. Delta Plus i FIMA ProActive Investment Funds, 2007



Source: www.deltainvestments.co.yu, www.fimainvest.com

Graph T9-4. Repo Yields by Maturity, 2004–2007



Source: NBS.

Both investment funds in Serbia, Delta Plus and FIMA ProActive, moved in line with the capital market in Q2, but with considerably milder changes. When the daily yields of both funds are considered relative to the daily yields of both indices of the Belgrade Stock Exchange, a positive correlation is noticeable. More specifically, the coefficient of correlation between the daily yields of the Delta Plus fund and the BELEX15 and BELEXfm indices is 0.073 and 0.128 respectively, and in the case of Fima ProActive fund, 0.156 and 0.133.[4] This coefficient shows that although the funds follow the market, fluctuations in their values are milder than market movements. The maximum value of of the Delta Plus fund investment unit in Q2 2007 was 1,372.91 dinars, and Fima

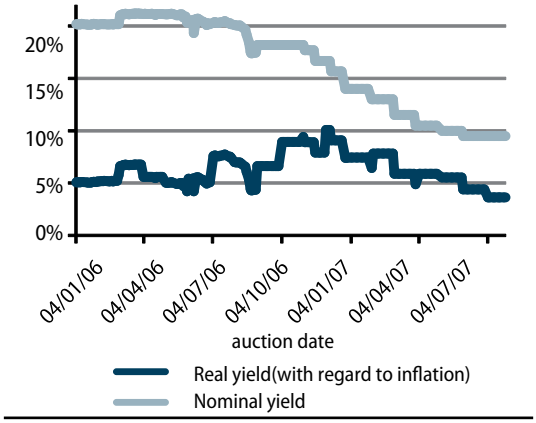
4 Series of daily yield sin the period between May 7 and August 17 were used to calculae the correlation coefficient.

NBS continued cutting yield rate on 2w repos

ProActive's 1,072.71 dinars[5]. Much more time will have to pass before any serious analysis can be made of the movements of the funds' values.

Graph T9-5. Real and Nominal REPO Yields, 2006–2007

Real yield on repo transactions at the end of Q2 continued to fall due to rise in inflation



Source: NBS.

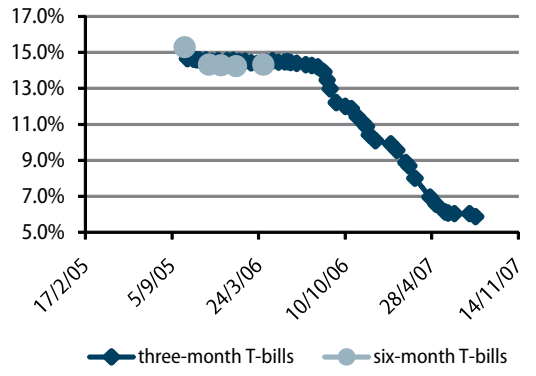
The NBS continued to pursue a policy of cutting the interest rate on 2w repo transactions Q2. The reference interest rate, which was 10.5% at the beginning of the quarter, was first reduced to 10%, and then to 9.5% where it stood until mid-Q3 (Graph T9-4). Real yields relative to the inflation rate also continued to fall with a reduced nominal rate (Graph T9-5). From 5.88% early in Q2, real yields decreased by 149 bp, to 4.39%, only to fall further in the first part of Q3 to 3.63%. The drop in real yields on repo operations led to a further slackening of investors' interest in this market. Hence, in Q2 the stock of repos and NBS T-bills decreased by €200 m relative to the previous quarter (For more details see Section 8, Monetary Flows and Policy). Since the NBS did not change the reference rate since June, the main cause for the further drop in real yields on repo operations was the accelerated inflation rate in June and July.

Further decline in yields on T-bills of the Republic of Serbia

The downward trend in yields on treasury bills of the Republic of Serbia remained unchanged in Q2 2007 (Graph T9-6). The highest yield of 6.95% was achieved at an auction held on 24 April, and the lowest of 6.04% at the 19 June auction. From the end of May 2006, yields on T-bills went down by about 800bp. The values of three-month T-bill issueds were, as usual, either 500 mn or 1 bn dinars. The total nominal value of all T-bills issued in Q2 amounted to 4.5 bn dinars, or 500 mn dinars more than in Q1 2007.

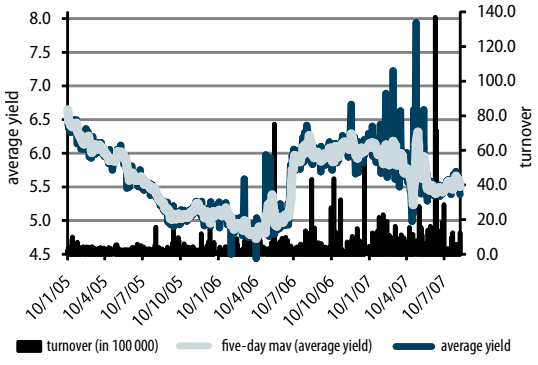
Graph T9-6. T-Bill Yields, 2005–2007

Milder drop of average yield on FFCD bonds in Q2 may be an indication of a change in trend



Source: MoF.

Graph T9-7. Average Yield and Total Turnover on FFCD Bonds[1], 2005–2007



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.

Record trading volume in FFDC bonds of €44 mn in June

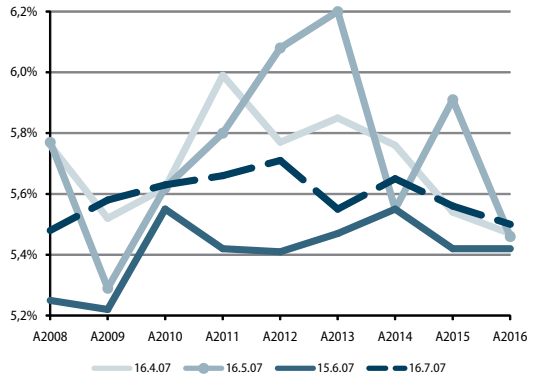
The drop in yields on FFCD bonds continued in Q2 2007 (Graph T9-7), although at a somewhat milder pace than in Q1. This may be an indication that the trend will change in the months ahead. Relative to Q1, the bonds lost about 37 bp on average. The biggest drop in yields was

5 The initial value of investment unit in both funds amounted to 1,000 dinars

recorded by shorter maturity bonds, A2008 and A2009, which in average lost about 52bp and 48bp respectively. This was something new since up to now bonds with shorter maturities had the highest yield rises. Instability and the stock market's decline in Q2, as well as lower real yields on NBS repos made investors turn to the FFCD bond market. Most likely investors found a safe haven primarily with short-maturity bonds owing to the lower risk they entail. This led to an accelerated increase in their prices, and thus to a decline in yields. During all of Q2, the curves for short-term bonds were inverted, but with an ever smaller difference between A2008 and A2009: In early Q3, the yield curve for bonds maturing in 1 to 5 years was normal, and was mainly on a downturn for those with longer maturities (Graph T9-8).

The biggest drop in yields is on shorter maturity bonds

Graph T9-8. FFCD Bonds Yield Curves



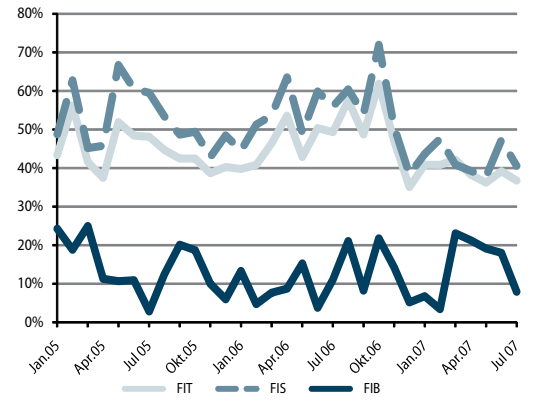
Source: www.belex.co.yu.

The volume and turnover on the FFCD bond market grew substantially in Q2. Relative to Q1, the volume grew by 52.1% and amounted to some €78.4 mn, the highest since Q1 2005, while turnover with a value of €61.2 mn grew by 67.5%.[6] At the annual level, relative to the same period in 2006, volume and turnover rose by 91.94% and 113.78%, respectively. This substantial rise in FFCD bond trading in took place in Q2, the mostly accountable is the month of June when it hit the record since January 2005. In June 2007, bond trading valued €44mn, or 70% higher than the second largest trading volume ever recorded, in October 2006, which valued €25.9 million.

Increased participation of foreign investors on FFCD bond market continues, but domestic investors propel the rising volume

The participation of foreign investors on the Serbian capital market dropped during the first two months of Q2 2007 (Graph T9-9). On the stock market (the FIS curve, Graph T9-9) participation declinedd by about 3% to 37.82%, a continuation of the mild downward trend from the end of Q1 2007, which was probably caused by political instability in connection with the elections and problems with regard to the forming of the new government. On the other hand, there was an rise in turnover relative to Q1, indicating that increased turnover on the stock market continued to be driven by domestic investors, and in view of the size of the average transaction, by smaller individual investors. Following the political stabilization in June, foreign investors increased their by 9.45%. On the bond market (the FIB curve, Graph T9-9) the high participation of foreign investors relative to preceding periods continued and it was around 20%. Since June brought a mild decrease in their participation of 1% relative to May, at the very time of the record rise in volume, it may be concluded that in absolute values foreign investors continued to increase their presence on FFCD market, but, nevertheless, domestic investors are to b credited with bringing about the substantial increase in trading volume.

Graph T9-9. Foreign Investor Participation, 2005–2007



Source: www.belex.co.yu.
Legend: FIT- Foreign Investors Participation in Total Turnover, FIS-Foreign Investors in Equity Market, FIB- Foreign Investors in Bond Market.

6 Achieved volume on FFCD bond market, although expressed in euros, in essence represents the number of bonds traded because the nominal value of one bond is €1.

SPOTLIGHT ON:

Hanibal Ante Portas or Challenges and Possibilities of Applying Basel II Standards

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Branko Urošević**
Boško Živković***

The evolution of banking has been followed by a strong conflict of interest ever since central banks and fiat money appeared. Banks, and in particular, their owners strive towards, naturally, decreasing own investments (bank capital) and increasing revenues. This sort of moral hazard, which is typical for banking as an activity, undermines stability of an individual bank and the banking system as a whole. A regulator, with acquired experience from difficult banking crises where the highest losses were borne on deposit owners, will attempt to achieve security and reliability of the banking system. Such conflict has been substantially weakened by virtue of regulation, but still remains quite deep because its fundamental causations are active as well: existing information asymmetry in credit markets and its severe consequence – adverse selection when bank resources are invested. The loss that a bank may suffer in striving for maximum revenue may be shifted to deposit owner or the state, in case the state insures deposits. This appearance is also a special type of risk originating from the moral hazard problem, which has been identified and described in banking long ago. These banking specificities in relation to other activities are essential reasons to put banking, in almost all countries of the contemporary world, under strong regulation of state and quasi-state agencies.

1. Introduction

The globalization of banking during the last three decades of the 20th century has also led to the globalization of crisis phenomena, as well as the stabilization measures. Huge global crises concerning debts during 1980s led to adoption of Basel I Standards in 1988. Another, possibly even more important reason for introducing Basel I was to level conditions for banks operating on the global market. The Japanese banks at that time had significantly lower reserve levels than banks in Western countries. Other big players perceived this to be unfair competition. The essential group of regulations from Basel I was mainly related to credit portfolio of the bank as a largest share of the bank's revenue assets. Basel I had standardized risk management practice within the bank and practice for the supervision of national banking systems. Although a big step ahead, Basel I soon showed serious weaknesses. Both risk management within the bank and supervision of banking activity, methodologically based on Basel I Standard, were not efficient enough to prevent emergence of new banking crises. The regulators, as well as bank management, needed a more precise, flexible and objective methodology of risk assessment, and regulatory rules based thereof. The biggest discontent, particularly with large banks, was caused by Basel I applying the same standard for all types and amounts of credits – Capital Adequacy Ratio (CAR), a minimum 8% (in European Union and USA). In countries with higher risk exposure that percentage was higher (i.e., 10% in Croatia, 12% in Serbia), in line with the supervisor's assessment of the risk level on the market in question.

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The first important step out of the Basel I Standard was to identify market risk as a significant component of the overall bank risk, and introduction of Value at Risk (VaR) thereafter, as a measure of risk for market portfolio[1].

2. The Main Ideas of Basel II Standards

Further development of banking and financial markets has made it necessary that a new methodology framework is formulated for the safety concept for each bank as well as for the banking system as a whole. In January 1999, the Basel Committee set forth a proposal of the New Agreement, known as Basel II Agreement. The final version of the New Agreement was published in June 2004 and was enacted and entered into force in December 2006 (within the EU, Basel II has been legally binding since January 2007, whereas its application in the USA started in July 2007). Basel II contains three interconnected sets of rules or the three *pillars*: the capital adequacy norms make the first pillar, the second pillar deals with prudential monitoring of changes in capital adequacy, as well as with control over the methodology for risk surveillance used by banks, whereas the third pillar is a market discipline, which entails the identification of necessary information on main risks the bank is faced with and making the foundation for the evaluation of the particular bank's capital adequacy by other market participants. The Basel II Agreement basically retains the definition of capital and bank reserves referred to in the 1996 Basel Agreement Amendment, but it is adjusted in many ways. First, apart from the market and credit risks, operational risk is also explicitly quantified. Second, by the standard approach, all companies in the banks' credit portfolio are listed according to the ratings awarded to them by a qualified external rating agency (ECAI) and certain coefficients are assigned to them. According to these coefficients they are then entered into a bank's reserves and capital. On the other hand, and opposite to Basel I, banks, compliant to Basel II, have the right to develop their own internal methodology for risk assessment which is, then, subject to confirmation to be obtained by the auditor. Naturally, the regulatory body must be capable of carrying out a quality assessment, i.e. of verifying such models. New generations of internal models offer a possibility of more precise assessment of investment risk and better methods of assessing the possibilities of failure to fulfill credit liabilities.

Will the models really fulfill the expectations depends, however, to a large extent on both quality of the model and the data 'fed' to the model. Currently, the tendency is the convergence of different ways of risk assessment developed in the 90s. The convergence point is VaR as a risk assessment and management concept. This leads to quantitative measures of risk assessment being perceived as a lot more significant than with Basel I standard.

From the banks' point of view, the main novelty brought by Basel II standards is the change in the concept of regulation: what becomes perceived as important, instead of the à priori given minimum capital or capital adequacy ratio, is the process of risk management within a particular bank. In order to meet the needs, VaR is used. The system is being protected from risk by harmonization of the risk level and the amount of capital and bank reserves. Economic capital of a bank is defined as the difference between VaR and the expected loss, which, in the framework of Basel II, are considered to be incorporated in the price of the product (credit) issued by the bank. Additionally, in the framework of Basel II, three kinds of separate risks are recognized: market, credit and operational risk. For each of them the bank is under obligation to calculate the corresponding VaR, and define corresponding economic capital. The key for making the

1 VaR is a measure of economic loss which may, at a given probability, occur in a bank transaction or operation. VaR, hence, indicates risk in every potential investment and total bank risk. Today, VaR is a standard measure for quantification of the largest number of risks. Presently, this methodology has many purposes of application: from the risk management within individual bank to definition of regulatory requirements. The term VaR has not appeared in finance before early 1990s. In 1980s, large financial institutions (Bankers Trust, Chase Manhattan Bank, Citibank and others) started to publish the use of VaR in the risk management system. J.P. Morgan Riskmetrics database created the biggest public impact of this idea in 1990s providing basic statistic data for VaR calculation of derivative instruments. Since J.P. Morgan's Riskmetrics was published in 1994, there was a prompt expansion of research in the field of VaR methodology. Although the main scope of VaR application remained within assessment and analysis of market risk exposures, application extended to other types of risks as well. In terms of methodology, VaR is a natural progression of portfolio theory by H. Markowitz. More details on VaR methodology and its application in banking can be found in: M. Vujnovic,VaR analysis of bank credit portfolio, Trag, Belgrade, 2007.

system work safely is risk assessment capacity building of the bank and of the supervisor. The banks are enabled to develop and apply their own or internal models for calculating their needs for capital in addition to the classical, i.e. the so-called standardized approach. This big change enables banks to make a difference between high and low risk transactions, and to define, on the basis of this choice, capital adequacy founded on the risk of each individual transaction. It is necessary, therefore, to develop models to be applied in the process of measuring the contribution of each individual transaction to the total risk of the bank in order to make it possible for this big advantage of Basel II standards to be used in any particular case.

Further on, Basel II directs banks towards tracking the risk and profit relations. When the banks are capable of adding the risk measured by VaR to each and separate transaction, they will also be capable of defining the amount of the requisite capital. The next useful application of VaR is defining the expected profit for the given risk. Based on these results, banks can choose the most profitable products and banking branches by the criterion of the expected profit-risk relation, and also choose the best way to decide upon the prices of the products. Finally, such an approach enables banks to choose their risk reduction techniques.

VaR models are used for forecasting exposure of a financial institution to risks within the defined period in the future (a day, ten days, a month, a year) and within the particular statistical confidence interval. For example, a statement that the daily VaR of the portfolio is 800,000 euros with the 99% confidence interval means that it can be expected that, on average, the bank's portfolio will have a loss that exceeds 800,000 euros per day once every 100 days. Having this measure at disposal, financial institutions can calculate capital adequacy and set risk limits for certain investment types. Capital was previously allocated by distributing the defined amount to segments of the business carried out by banks and other financial organizations. With the introduction of VaR, the space was created for integrated approach to making the total assessment of the risk exposure and a more precise allocation of the available capital to the segments of doing business made in accordance with the recorded risk of given activities. Thus, the concept of nominal limits in this context becomes irrelevant.

The application of Basel II standards represents a true revolution in banking. The main reason: Basel II is logically a far more complicated structure than Basel I standard. Many procedures in banking will either be radically changed or significantly modified. It will take a new generation of banking experts to answer the needs of both banks and regulators. The new generation banking experts will have to possess a high level command of mathematics and statistics but also full comprehension of how to apply the knowledge in banking practice. Both banks and regulatory bodies will have to possess not only formal, legal, but also professional competency. Introducing professional licenses in risk management such as Professional Risk Manager (PRM), the license issued by the Professional Risk Managers International Association (PRMIA) and Financial Risk Manager (FRM) issued by the Global Association of Risk Managers (GARP) is one way of standardizing the knowledge necessary in the period to come. Another way is conducting the reforms of educational programs within the studies of mathematics and economics including the development of Quantitative Finance and Risk Management studies.

Apart from the radical cut made in the employment policy of banks and regulators and turning towards qualifications necessary in the years ahead of us, it will be necessary to put a lot more efforts into acquiring or developing adequate technological solutions within the banking system in our region, and, first of all, collecting an entire set of high quality and adequate data. To be precise, the development of adequate databases is the prerequisite for calibration and the development of risk management models, both regulatory and internal models of banks. Obviously, adaptation to Basel II will require substantial expenditures from the banks in the region. It can be expected, therefore, that some banks will have an urge to bring the costs to minimum, in order to minimize the expenditures. In this case, the changes to be introduced would be minimal, aiming at making the regulator content only formally, without essentially changing the mindset of bankers, and it is precisely this change that can be perceived as the real goal of Basel II. Such banks would consider risk management as a cost center.

But risk management systems can, provided they are set properly, become the actual profit centers. To be precise, Basel II has a great advantage to offer to banks – it provides them with an opportunity to calculate themselves their capital needs by applying internal processes and risk management models (Pillar I). Doing so, they would potentially, not only reduce the reserves, but also, and first of all, direct them towards activities making the highest profit per incurred risk unit. Such approach directly leads to the increase in the value of the bank. Naturally, the reliability of the model is particularly important. It will, therefore, apart from the regulators (Pillar II), be assessed by market competitors (Pillar III) as well. The big change enables the banks to make the distinction between high and low risk transactions at any moment (in relation to the already existing portfolio) and to define, on the basis of this choice, the appropriate capital adequacy. It is necessary, however, to develop adequate models and have competent experts not only in the risk management team, but also among the top bank management, in order to make use of the big advantage of Basel II. In particular, the essence of Basel II can be represented in the following way: instead of the formal approach to risk management as an obligation towards the regulator, risk management must become the basis for bank management, and all decisions on the business operations of the bank must be made on the basis of high quality risk management systems. In this way the entrepreneurial spirit is being "freed" in banking, which was confined by Basel I standards, and, potentially, capital is being allocated in a far, far more efficient manner.

3. Serbian Experience up to Date

Serbian experiences with applying the Basel I Standard are almost tragic. Although introduced fairly early into national legislation, this group of regulations was unsuccessfully «applied» throughout the whole decade. The first legal formalization of the capital adequacy principle, classification of assets according to the level of risks and reserves for potential losses, is found in the SFRY Banking Law from the late 1980s. The banking legislation reform in 1993 more extensively explicates Basel I principles: capital census, net capital, capital adequacy. Unfortunately, none of these basic principles were applied. First, inflation devaluated capital census, therefore entry into banking activity depended exclusively upon discretionary decision of the central bank. Such decisions were not motivated by the protection of national banking system stability; hence players introduced into this activity later caused dramatic damage to public interest (pyramid schemes of Dafiment and Jugoskandik Banks). By-law regulation, supposed to ensure implementation of the law, was unfinished and controversial. The Serbian experience registered moral hazard both in banks and regulators to a dramatic extent. Banks, faced with conditions of extremely high risks, and with silent consent by regulators and supervisors, shifted credit risks to deposits. Outcome: insolvency of the banking sector. In the final phase of the Serbian banking crisis, credit supply amounted to merely 10% of their pre-crisis level.

The supervisor, throughout the whole crisis, regularly received financial reports that showed not only high values of banks' net capital, but also high values of capital adequacy ratio. The essential distortion in the supervision mechanism was due to arbitrary classification of banks' assets. Sometimes, absurd situations happened: banks with CAR (indicator of capital adequacy) higher than 9% fell into technical and factual insolvency.

After 2000, the banking system in Serbia began to recover intensively. As well as in other countries of the region, apart from Slovenia, banks seated in the EU took charge of Serbian banking. Simultaneously, the process of introducing modern credit instruments was ongoing, although the market was still insufficiently competitive. Current regulation and supervision of banking in Serbia predominantly relies on Basel I Standards. The basic technical solutions and definitions were innovated in June 2006, after enactment of the new Banking Law, at the end of 2005. In general, the Law itself declares some principles of Basel II Standards (risk based supervision), but does not change fundamental principles of current supervision based on aggregate reports on the basis of international accounting standards. In order to explain vital deficiency of the current reporting practice towards the central bank, let us mention a very simple example. Namely, we can find in reports only aggregate amount in dinars of all securities into which the bank invested

on a market. This, certainly, does not tell a word about risk nor the market value of that part of bank's trading portfolio. Similar goes for interest rate and currency risks.[a)] Therefore, although banks are made to invest significant efforts in order to respond to regulator's requirements in terms of reporting to the central bank, the reports prescribed by the central bank are not yet functional for measuring risk faced by the banks. In brief: it is not enough only to collect large quantities of data, it is much more important to collect relevant data. There, obviously, lies the regulator's key role.

a) It is interesting that the Serbian banking regulation in that respect lags behind Pension Fund regulation, although both are regulated by the same institution, National Bank of Serbia (NBS).

The regulation in Serbia still does not recognize the notion of three capital levels nor internal models for risk assessment. System for weighing different types of assets basically represents, together with some specificities related to indexed credits, the Basel I concepts and the amendments to the standards from 1998. Furthermore, innovations in regulation during 2006 and 2007 also introduced new risk definitions referred to in the amendments to Basel I Standards from 1998. The most interesting innovations are identification of new risk types and new notions such as operational and diverse types of market risks. The regulation also stipulated banks to establish special risk management departments.

In short: a more serious implementation of Basel II Standards in Serbia has not started yet. Still, there is no publicly available strategy of its application. On the other hand, some commercial banks, due to pressure put forth by their home offices, started to create teams for implementing Basel II.

4. A Very Useful Experience: Application of Basel II Standard in Croatia[b)]

b) This part of the text is contributed by Dr. Evan Kraft, Advisor to HNB Governor concerning introduction of Basel II.

Croatia, like Serbia, inherited elements of Basel I approach from the Yugoslav 1989 Banking Law. Croatia amended that law in 1993 by adopting a new Banking Law. Supervision of banks, however, has not succeeded to prevent Croatian banks from becoming highly indebted in the 1990s. Rapid growth of crediting financed through a dangerously high level of interest rates on deposits, as well as the high level of country's external debt, led to a banking crisis in 1998-99. In order to resolve that crisis, a new, more rigorous Banking Law was introduced in 1999. The resolving of crisis marked progress in bank supervision and in the quality of implementing Basel I. In 2002, Croatia adopted another Banking Law, this time for the purpose of harmonizing Croatian legislation with the new EU Directive 12/2002.

The process of Croatian accession to the EU, however, has started to develop full speed ahead only since October 2005. Ever since, the EU also moved from Basel I to Basel II Standard.

The accession process to the European Union dictates the pace of Basel II implementation in Croatia. Because Croatian authorities undertook liability to harmonize all resident laws with European Union laws (*acquis comunautaire*) by the end of 2008, and since implementation of Basel II became legal requirement for all EU member states as of January 2007, Croatia is planning to implement Basel II until 1st January 2009, since EU accession is scheduled for that date. Practically, Croatia committed to adopt new Law on Credit Institutions (LOCI) during 2008 as part of a wider action for harmonizing its legislation with EU laws in the field of financial services.

In fact, the pure coincidence that Croatia became an EU candidate country exactly when Directive 48/2006 was adopted in the EU, creating a liability for EU members to introduce Basel II, substantially narrowed maneuvering space for implementing these provisions in Croatia. Namely, while Croatia has to fully implement this Directive prior to accession to the Union, countries that were already EU member states, at the point of adopting this Directive, had certain flexibility with view to its implementation. On the other hand, countries that are currently not EU members, including countries which have signed or are preparing to sign Stabilization and Association Agreement with EU (such as Western Balkan countries including Serbia) are entirely free to postpone implementation of segments or even the whole Basel II.

It is clear that pace of implementation circumstantially imposed to Croatia represents great challenge and commitment, primarily for the regulators but also, for the banks themselves. For the regulators, initial challenge was simply of legal character – how to decipher quite technical Directive with over 200 pages and turn it into text which is comprehensible for country's lawmakers. The first version of the law was disclosed on Croatian National Bank's website in July 2007. A large number of bylaws were written as well. In all of this, details are very important since detailed instructions related to implementation of new legal framework for risk management are complex, extensive and potentially controversial.

Time frame between adoption of the Directive in June 2006 and date by which Croatian law and bylaws have to be adopted and implemented (end of 2008) is actually relatively short. Also, Croatia has a very small number of countries to look upon. That is, out of 27 Union countries, only Slovenia and Austria have timely (by 1st January 2007) introduced adequate amendments in order to harmonize their legislation with the Directive. Many countries, Germany for instance, opted for slower pace of Basel II implementation, therefore delaying adoption of respective laws by mid 2007.

Opportunity cost of effort that regulator has to make in order to harmonize legislation with Basel II, in this case the Croatian National Bank (HNB), must not be underestimated. In transition countries regulators do not have large numbers of highly qualified employees at their disposal, which could be separated from their everyday activities in order to work on Basel II implementation. Also, it is hard to imagine to what extent lawmakers are able to understand and have qualified discussions concerning complex technical issues such as those related to the introduction of Basel II. The only comfort for the regulator is that this entire process is something that does not have to be redone, hopefully, for a number of years. Let us be reminded: 18 years has passed from the adoption of Basel I until adoption of Directive 48 in 2006.

From the mid-term point of view, a bigger problem for regulators is how to build and maintain a team of highly qualified experts in the field of risk management, as well as to develop work methodology, information systems and databases which would allow them to make objective assessments of methodologies and models from the Basel II angle, which will be used for risk management by the banks on Croatian market. In that respect, the Croatian National Bank has already hired a number of mathematicians. In fact, this is an extremely good moment for people with a degree in mathematics or statistics who acquired particular knowledge in finance or economy. The problem is, however, that HNB has to compete with commercial banks on a small and relatively shallow market for such human resources. Although many perceive work in quasi-state institution such as HNB to be attractive due to relatively lower risk of losing a job, HNB, as well as other regulatory agencies, may not compete with private sector in salaries. As a result, these institutions are exposed to high pressure in terms of human resources.

The next question is particularly important: what shall be the quality of risk assessment model, and what is the extent of moral hazard issue with regard to misuse of such models? Banks are, namely, offered carrot in the form of decreased reserves if they manage to demonstrate, based on own models, that such level of reserves is sufficient. On the other hand, regulators do not have enough experience to estimate whether banks have realistic risk assessment models or if the banks are being "smart" enough to obtain desired results by manipulating models. How to assess realistically whether the banks in that respect abuse models? This is not easy to discover and currently local regulators do not have much experience in that sense (in time, we can naturally expect such experience to develop). Experience of other countries, in that sense, can be very useful. Hence, the cooperation through the Committee of European Banking Supervisors (CEBS) as well as with the Basel Committee, in that respect can prove critical at this point, but possibly in mid-term period as well.

It is clear that Croatia has no freedom to categorically prohibit licensing of advanced internal risk models. As an EU member state, it shall have to accept reviewing of all models as soon as LOCI regulation is adopted. Some banks have already invested substantial amounts in developing own

models. Two questions come out. First, a very important question is: Do the banks have adequate data required for model calibration. As far as we know, banks in Croatia have not started to collect respective data prior to 2000. It means that the time frame for existing data is limited (according to Basel, minimum 5 years). What is more important, data comprise incomplete business cycle. This is a serious limitation.

The second important question is whether the banks – members of multinational banking groups should apply models developed in home country, in all other countries where such bank operates, or it is necessary to develop a special model in each of the countries or group of countries, suitable to concrete market conditions in that country. Directive 48 enables use of a single model on the banking group level, and, in fact, facilitates national regulators to accept models by allowing regulator in the home country to reverse negative decisions of the regulators from other countries where bank operates in terms of single model application. On the other hand, such right to overturn the national regulator decisions may turn hazardous. For instance, exposure to risk of Austrian banks is completely different than exposure to risk of the banks in Croatia or Serbia. Moreover, since many regional banks generate their highest profits in transitional and Western Balkan countries, there is also a feedback effect, because operating risks in those countries are becoming more and more important risk component to which the whole group is exposed to.

We have to mention that the cooperation between Croatian and EU supervisors has been, so far, very constructive. Nothing could cause suspicion that supervisors in home countries wished to make Croatian supervisors reverse their decisions. Banks should, of course, have motive to develop own models adjusted to the Croatian market, due to great difference in the level of economic and market development, but also due to difference in banking practice and culture between home country and Croatia. Realistically saying, however, it is uncertain that the large banks operating in many markets would have enough motivation to develop individual model for each market. Some may choose not to use models at all, or to use simplified Standardized Approach in weighing respective risks. Such procedure would logically, although probably less precise and flexible, be cheaper, reliable to certain extent and less controversial with regard to internal models. We may definitely, however, expect appearance of the banks that wish to use the same model in all countries. In that case, consultation between regulator in the home country and regulators in other countries where bank operates shall become inevitable part of the model approval process.

It may happen that, in short terms, banks in Croatia do not use freedom in opportunistic manner, brought in by Basel II, in order to decrease capital reserves. There are two reasons. First, in the beginning many banks might not want to invest in development of own models. Namely, development costs can easily be higher than potential benefit. In time, inasmuch as the banking services market in Croatia converges towards EU requirements, the need to generate special model for Croatia, as well as the costs of using common model on the group level shall gradually decrease.

The other reason is that Croatian banks currently have high capital buffer. Although the minimal capital adequacy equals 10%, the largest number of banks holds reserves exceeding 12%, and some large banks even have reserves amounting to 15% or more. Smaller banks even have bigger reserves. This behavior is partially influenced due to requirements of the rating agencies, which look at Croatian banks that have reserves below 12% with criticism. Another reason is that banks themselves make risk assessments. In any case, since banks capitalized themselves without being forced by the regulators, their motive to implement expensive risk assessment models, solely in order to possibly decrease reserves, might not be that strong. On the other hand, naturally, quality systems for risk assessment and management may help companies to make business decisions with considerably more quality.

Although, as we already discussed, it is unclear whether the banks have capability to develop and use complex models of market, credit or operational risk, it is, however, clear that the Basel II shall have significant role with regard to banks focusing on development of quality systems for

risk management. Basel II specifies more types of risks than Basel I, and requirements for banks to develop strategies and processes for managing each of these risk types. Although, perhaps some of the banks may wish simply to "throw dust in regulator's eyes" and only do things to which they are absolutely compelled by the regulators, however, as a result of introducing Basel II, the risk management quality shall improve in time, most probably in the mid-term period.

When discussing about Basel II in Croatia we may not skip one issue. This process is firmly linked with country's EU accession process. After the banks in Croatia acquire right to become branches of home country banks, the banks which decide to do so would be directly regulated in the home country. This may cause considerable shock to Croatian banking system, although we have to admit that even now there are substantial cross-border banking transactions.

Therefore, in the new law on Basel II, subject to review in Croatia, the Croatian National Bank had to balance carefully between the estimate that banks in Croatia are more risky than in EU countries and that too much of restrictive policy may stimulate conversion of resident banks into branch status. It also had to avoid making Croatian banks operate at more unfavorable terms in view of stringency of the criteria applied with respect to multinational banks. Proposal for a law, actually, maintains the minimal level of reserves at 10%, and in that sense the law recognizes higher risk in Croatia comparing to EU. On the other hand, the major part of the law simply implements the Directive 48. The national regulator's discretionary space, as EU proscribes, is strictly defined, and in practice, greatly restricted.

To summarize, Croatia was, due to circumstances, forced to enter into implementation of Basel II quite rapidly. Obviously, difficulties and conflicts in the process of its implementation may be expected, in particular, because the regulator and banks compete for relatively small contingent of the work force qualified for complex process such as implementation of Basel II. After initial "baby steps", we can be, nonetheless moderately optimistic in thinking that the Basel II shall raise the level of risk management among banks in Croatia, without high costs caused by possible opportunistic moves from the banks. But, at this point, since there are no precedents in other countries, nothing can be claimed with certainty.

5. Concluding Remarks

The key novelty in Basel II standards, with respect to Basel I standards, is that the regulator provides freedom to the bank to participate actively in determining modalities for the calculation of reserves. But, in addition to these benefits, new liabilities also appear both for the banks and regulators. On one hand, the banks will have to invest substantial material and human resources in order to set qualitatively higher level of risk management in their institutions. On the other hand, the supervisors shall also have to develop both HR and technological capacities in order to have successful supervision of systems developed by the banks.

Although, as previously pointed out, expected costs of adjustment are considerable, potential benefits of introducing a system for precise identification of credit, market and operational risk may be huge. Namely, if the risk management culture penetrates through all activities and management of the bank, much more competent business decisions will be made, the quality of management over bank and its parts will rise considerably, and eventually, its market value will increase.

It is realistic to assume that full implementation of Basel II Standard will, in Serbia, as well as Croatia, be related to the process of EU accession. Presumably, if optimistic forecasts for the completion of that process are set for 2012, the question is: Is that enough, little or too much time?

The answer to this question is as follows: the remaining time is quite short and intensive preparations for the implementation must start immediately. Arguments in favor of this position are as follows: First, no matter what, we must not repeat the experience of implementing Basel I Standards in Serbia. Flaws in application would be much more expensive today than they were

before, because the present Serbian banking system is strongly integrated into European banking system through ownership relations.

A key practical problem in applying Basel II Standard is the freedom of choice between the so-called Standardized Approach and internal models for risk assessment. Although the advantages of developing a system for risk assessment and control are apparent, such process requires investments into HR, technology, as well as the change in mindset and procedures both in our banks and the NBS. Optimistic signal: though the supervisor here has still not requested application of VaR methodology, a number of banks have already started to develop VaR model in order to increase precision of risk assessment to which bank is exposed to and/or for the purpose of satisfying home office requirements. It is interesting that among those innovative banks, there are banks of various size, market share and ownership structure. Majority of other banks in Serbia, however, are waiting for "order from above", that is, from supervisors. On the other hand, supervisor is limited by objective state of own HR structure, as well as HR structures of the banks. Therefore, there is not at all a sense of urgency to introduce Basel II. Such a "balanced delay" has multiple perils. Because, though suitable to some, Basel II cannot be avoided, at least not in mid-term aspect. First, the majority of banks in our market are owned by banks seated in the EU and have to operate in line with Basel II. Second, Basel II will have to be introduced into our legislation within the EU accession process (in case of Croatia, as we have previously seen, it will become binding in 2008 due to expected accession in 2009). Also, instead of the abundance of the purely accounting data that NBS currently collects from the banks, data which can ensure precise risk assessment has to be gathered. As Basel II requires minimum 5 years of relevant data for adequate application of risk assessment models (and it is desirable to have data comprising at least one business cycle), if we wish to implement Basel II until 2012, we have to start immediately to collect *relevant* data at both individual banks and NBS level (in Croatia it is being done since 2000). Furthermore, both NBS and the banks have to start immediately a real campaign for the acquisition and development of human resources and technology able to cope with Basel II challenges. Due to the complexity of the task, the banks that first started to develop sophisticated risk management systems will be in great advantage in comparison with the competition.

The Quality of Financial Regulations[1]

Katarina Veljović*
Tijana Ječmenica**

The reform of securities regulation and institutions, although conforming to modern solutions in its essential provisions, was not a consequence of natural evolution of the Serbian market. Thus, the Serbian Securities Law consists of mostly "imported" regulations governing securities markets in developed countries, while frequently disregarding the Serbian legal tradition and its previous principles. Ours is the first analysis of financial regulation based on empirical research, extensively considering the question of investor protection on the stock market and the enforcement of The Securities Law in Serbia, and this is where its greatest scientific and practical contribution lies. The research findings show the basic problem to be advancing efficiency in the implementation of laws and regulations, though the regulations themselves lack legitimacy, because they ignore reality and are not lucid and synchronized enough. Apart from these legitimacy problems, the key problem lies in the weak institutional capacity of the supervisory body which should ensure that laws and regulations are respected without exception and that all malpractice is adequately sanctioned (ensuring legal security).

1. Introduction

A comprehensive and impressive reform of the regulations governing the financial market and investor protection in transition countries has led to the convergence of these economies' formal legal rules, as they in fact adopted the developed countries' regulations. However, the main problem in nearly all transition countries is effective law enforcement, which is actually the core focus of this article, based on the research conducted in Serbia. The expression "law enforcement" refers to practical actions towards the implementation of legal norms, and above all to those actions that coercion authorities administer or have the discretion to administer. Law enforcement can be based on private or public enforcement mechanisms. Private enforcement mechanisms lean on the judicial system, whereas the public ones are based on direct initiative from the regulatory or supervising body. On the other hand, the term "regulation" is usually used to denote laws and by-laws, essentially representing the written law. Whether laws are implemented through public or private enforcement depends first of all on the ability of the State to elicit more efficient outcomes and smaller social expenses i.e. its ability to ensure functionality of the judicial system while conditioned by the country-specific circumstances.

This article is based on the research which was part of the regional project of the Stockholm Institute for Transitional Economies (SITE) conducted by Pajuste et al (Pajuste)[a)] on the sample of 26 countries. The research findings were presented in the paper "The Securities Laws Enforcement in Transition Economies." Having as basis the SITE methodology and taking into consideration a number of specific features which we faced in the course of our research, we developed our own methodology in order to reach surprising results. In the circumstances in which the market is not functioning, the rules are not being applied and the judiciary is "dead", the public regulator, although not ideal, represents a superior solution to the problem of law enforcement, at least in the short-run, until the judiciary is reformed.

a) Cerps U., Mathers G., Pajuste A., 2006 "Securities Laws Enforcement in Transition Economies".

The primary goal of the existence of securities regulation is to protect the investor on one hand,

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1 The authors would like to thank Jasna Dimitrijević and Anka Jakšić for their useful comments.

and maintain integrity of the market on the other. The precondition for investor (shareholder) protection is precise, complete and timely information on the condition of his/her investment. The role of securities regulation is to provide that information. That information is provided by regulating a firm's entry into the stock market (i.e. at the moment when the firm begins to offer its securities publicly on the market) and by regulating continuous information flows (i.e. transparent business dealings and disclosure of relevant information by the publicly listed company).

The preservation of market integrity implies prohibition of insider trading and market manipulations. In that way price efficiency and the participants' confidence in the market itself are being protected - a market, which, on its part, generates information which forms the basis for decision-making when it comes to distribution of household income between savings and consumption as well as on the choice of investment projects offered by companies. Any participant's conduct in financial markets, leading to issuing "warped" bits of information which then affect the price level, brings about the wrong decisions.

Speaking of Serbia, legislation rules which protect the shareholders are dispersed through various regulations. There are two systemic laws which represent the core of their protection - The Corporate Law and The Law on Securities and Other Financial Instruments. The Corporate Law regulates the internal (inside a firm) aspect of shareholder protection i.e. the relationship between shareholders and managers (principal-agent problem). The Law on Securities and Other Financial Instruments (The Securities Law in further text) regulates shareholders' position in the stock market (external aspect of protection) i.e. it regulates investors exiting a company by selling their shares on the market as well as investors entering a firm (company's access to capital). The subject of this particular research was only The Securities Law and its application, i.e. the external aspect of shareholder protection.

Our analysis showed that The Securities Law accepted to a large degree regulatory solutions of the developed capital markets (although there is still room for further enhancements), but the stock market remains undeveloped nevertheless, as well as non-liquid and non-efficient in terms of information and prices. Furthermore, investors in Serbia do not enjoy a high level of protection on the stock market. The results confirmed that in Serbia, just like in most transition countries and countries in the region, although the regulations and laws conform the international standards, they are not being applied in a satisfactory manner in everyday practice. The main cause for the low level of willful application of the law on behalf of economic agents lies in the fact that imported and prescribed norms which do not take into consideration the reality of the Serbian capital market and specific features of Serbian corporations do not have legitimacy in Serbia. Therefore, whether it be by means of private enforcement (via courts), where private initiative of citizens directly influences the courts to enforce securities norms, or by means of public enforcement, coercive law enforcement is coming to be of key importance.

2. Methodology

The methodological approach applied in our research is an adapted version of the basic questionnaire developed by La Porta et al[2]. These authors developed a questionnaire which was delivered to attorneys in all surveyed countries, requesting them to answer questions which would describe the characteristics of The Securities Laws. The questionnaires had been adapted to each country for the purposes of the Stockholm Institute's research on behalf of Pajusta et al in order to obtain a comparative analysis of The Securities Laws enforcement in transition countries. Based on the existing methodologies and taking into consideration several specific characteristics of the Serbian market, we developed a methodology for the assessment of legal rules' enforcement through which institutions protect investors.

The basic conceptual parts included in the Questionnaire completed by the attorneys consist of: the assessment of regulations on the stock market, the assessment of sanctions as the basic means

2 La Porta Reaffael, Lopez-De-Silanes Florencio and Shleifer Andrei (2006) "What Works in Securities Laws?" - "The Journal of Finance", Vol.61, Issue 1 (02), p.1-32.

of application of legal rules, the assessment of private enforcement (courts) and the assessment of public enforcement (The Securities Commission), in further text: the Commission).

The assessment of *regulations on securities market* is structured around the assessment of:

1. *Protection of investors* through regulation of two of the following key aspects:

(a) entry into the capital market;

(b) continuous information dissemination.

2. *The protection of market integrity* threatened by unlawful Stock Exchange operations, i.e:

(a) trading based on confidential information (insider trade);

(b) market manipulation.

For the purpose of *analyzing sanctions and quality of law enforcement* (above all private enforcement) the attorneys were asked about four hypothetical cases which illustrate violation of each described key aspect of regulation.

The sanctions were analyzed from three aspects (see Table L2-1):

(1) Depending on the liability of parties in each specific case (the issuer, the distributor, the accountant)

(2) Depending on the supervisory body (i.e. the Supervisor) who can deliver a sanction - the Commission, the Court, the Stock Exchange.

(3) Depending on the type of sanction: civil (non-criminal) sanctions vs. criminal ones.

Civil (non-criminal) sanctions, for the purpose of this analysis, include the different order measures taken against the liable parties, above all on behalf of the Commission, for the offenders to conform to information disclosure requirements, introduce the modifications recommended by the supervisory authorities, stop a certain activity etc. Restitution was particularly analyzed because it is carried out in the course of court proceedings and is tightly connected with liability standards. Thus, the Order Index is primarily concerned with public enforcement, whereas the assessment of restitution is concerned with private enforcement. Criminal sanctions were analyzed taking into consideration whether they were envisaged at all, as well as towards whom and for which reason. Table L2-1. sums up the cases which represent the subject of analysis with all the relevant dimensions of categorization. Civil (non-criminal) sanctions can be imposed as a sentence by all three authorities, whereas the criminal ones can be imposed only by court.

Private enforcement analysis was based on interviews with judges, attorneys and the Stock Exchange. They were all requested to assess every possible legal remedy which an investor has at their disposal. Each legal remedy was to be assessed from the aspect of its real (factual) efficiency (whether an investor would be able to make the other party respect the supervisory body's decision) as well as from the aspect of costs (in terms of time and money). The attorneys were asked to focus first of all on those legal remedies which an investor can use in court.

The assessment of ***public enforcement*** considered five key aspects: institutional characteristics of the Commission, its regulatory power and the possible control of that power on behalf of the executive authorities, the efficacy of investigative powers of the Commission (the power of the regulator to issue an order commanding all persons to deliver certain documents or testify), the assessment of civil sanctions and the role of the Commission in a criminal prosecution.

As a final result, two scores were obtained - the legal one and the factual one. The *legal score* assesses the conformity of our legislative regulations to international regulatory standards, whereas the *factual score*, obtained on the basis of interviews and legal practice analysis, serves in its essence to examine the application of our regulations. The scores are defined through indices, whose values are obtained on the basis of the Questionnaire with possible answers "yes" and "no", and their values can vary within the interval from 0 (as the least desirable solution) up to 1 (as the most desirable solution).

Table L2-1. Matrix of analyzed cases in the Questionnaire

Factual state			Supervisory body		
			Commission	Court	Stock Exchange
Case 1	Investorsufferslossesdue totheomissionofmaterial informationfrom the prospectus	Liable parties	Issuer/Issuer's responsible persons	Issuer/Issuer's responsible persons	Issuer/Issuer's responsible persons
			Distributor	Distributor	Distributor
			Accountant/Auditor	Accountant/Auditor	Accountant/Auditor
Case 2	Investorsufferslossesdue totheomissionofmaterial informationbythelistedc ompany(ongoingdisclos ure)	Liable parties	Issuer/Issuer's responsible persons	Issuer/Issuer's responsible persons	Issuer/Issuer's responsible persons
			Distributor	Distributor	Distributor
			responsible persons	Accountant/Auditor	Accountant/Auditor
Case 3	Investor suffers losses due to insider trading (insider trading)	Liable parties	Issuer/Issuer's responsible persons	Issuer/Issuer's responsible persons	Issuer/Issuer's responsible persons
			Distributor	Distributor	Distributor
			responsible persons	responsible persons	responsible persons
Case 4	Investor suffers losses due to market manipulation	Liable parties	Issuer/Issuer's responsible persons	Issuer/Issuer's responsible persons	Issuer/Issuer's responsible persons
			Distributor	Distributor	Distributor
			responsible persons	responsible persons	responsible persons

3. Assessment of Securities Regulation

3.1. Investor Protection

(a) Entry into the Capital Market

According to the adopted methodology, regulations regarding entry into the organized stock market are assessed by the Disclosure Index. Two key questions were assessed by this index: (1) can the company issue securities without a previously presented prospectus and (2) what is, according to regulations, the mandatory quality of information in the prospectus?

Regarding regulations on entry into the organized market, the big problem consists in a set of paradoxes created by these regulations. The Securities Law prescribes that the distribution of securities can be effectuated only through a public offering, on the organized market (stock exchange), after presenting the prospectus and emitting a public call for enlisting and payment of securities, except in several specific cases prescribed in the Law itself. The very same Law, however, declaratively "opened" *all* joint-stock companies through a provision that considers all shares issued before the beginning of the Law's application as shares issued through public offering. This provision automatically includes them into the stock market, thus ignoring the economic reality and common sense. A paradoxical situation is then created, in which the companies that cannot be corporations in their economic essence (one-shareholder stock companies, small and medium enterprises) had to take part in the organized capital market - stock exchange. Later approved and effectuated The Corporate Law tried to reconcile the legislative and economic world by introducing two categories of joint stock companies - the closed and the open ones. The closed joint stock companies (which can have at most 100 shareholders) have become in their nature similar to the societies with limited liability, having the possibility to introduce a limit on the transfer of shares to the internal acts of the societies. This, on one hand, left room for exclusion of free transferring and trading from the stock market, and, on the other hand, it created a legal possibility to trade outside the stock market, which is in conflict with The Securities Law. Open joint stock companies (with over 100 shareholders as well as those which have less shareholders but are open due to own choice), are treated under The Corporate Law as "public companies".

An additional paradox is present on the Stock Exchange itself. As a matter of fact, two formal listings of the Belgrade Stock Exchange (A and B) have been empty for years and all the shares traded at the Stock Exchange are listed on the so-called unregulated market of the Belgrade Stock Exchange (BSE) (at the time of research, it included about 1300 enterprises). The unregulated market of the BSE is regulated through internal regulations of the Stock Exchange, and, strictly speaking in terms of legislation, the firms at that market are not publicly listed companies according to The Securities Law definition of publicly listed companies. The legislator's intention (when adopting The Securities Law) was to make all the companies trading on the organized market subject to liabilities prescribed by The Securities Law for public societies and supervised by the Commission. The companies listed on the unregulated market of the BSE, however, are not subject to the strict liabilities designed for companies on the A and B listings of the Belgrade Stock Exchange, which means that they can take part on the unregulated market of the BSE without presenting the prospectus, and being only labeled in a special manner - WP (without prospectus). In this way it remains unclear whether the unregulated market of the BSE, although being factually organized by the Stock Exchange, is indeed also an "organized market" according to law. The Commission itself has a contradictory and unclear attitude towards the firms on the unregulated market of the BSE and it has not been clear until now who and to what extent supervises them.

With regards to investor protection upon entry of firms into the organized capital market, Serbia scored lowest (it was zero, see Appendix 1), as it is possible for companies to enter the market without publishing the prospectus. Having no adequate solution within The Securities Law, no conformity to the regulations and mass disrespect of the legal framework by market participants, the regulator is unable to sanction entry of firms without the Prospectus into the organized market. Considering the quality of information published in the prospectus, Serbia scored pretty well (0.58), because the regulations adequately prescribe obligatory content of the prospectus. The final score i.e. the index assessing entry into the Serbian market, which represents the arithmetic mean of the defined variables is 0.58. Taking into account that our legal system is a mixture of the German system (the strong influence in the parts of the country once under the Austro-Hungarian Empire) and the French one (the strong influence in the parts of the country once under the Ottoman Empire), the index value is above the average value inherent to the countries with the French legal system (0.45) and a little bit lower than the average in the countries with the German legal system (0.60)[3]. The countries with the Anglo-Saxon legal system scored an index value of 0.78. However, in reality, no company has been officially listed on the Stock Exchange (there are now two on the A listing), and the supervisors have not yet managed to find a way to sanction such behavior and force the firms to respect regulations, and that in Serbia, shares can be traded only on the unregulated market of the BSE where investors take a conscious risk and renounce their rights to information and the protection it should give them.

(b) Ongoing Disclosure

The obligation of ongoing disclosure is reflected above all in the obligation to make public the annual report and the list of relevant information contained in it. Ongoing disclosure, like the prospectus, is of essential importance to the investor assessment and choice among various investment alternatives. The rules of ongoing disclosure are satisfactorily defined by the actual regulations and they include all the essential elements in terms of the required reports, with an already shown tendency to be disclosed in an increasingly timely manner (i.e. to shorten the period of time in which the information of significant importance for the company's business and for the securities prices is disclosed). Even in this case, however, it is possible not to sanction the issuer if he/she does not respect this legal liability. Actually, the firm which initially enters the market with a prospectus, and does not perform the obligation of ongoing disclosure later on, gets sanctioned only by getting a WP (without prospectus) status afterwards. On the Serbian

3 La Porta Reaffael, Lopez-De-Silanes Florencio and Shleifer Andrei (2006) "What Works in Securities Laws?" - National bureau of Economic Research, Working Paper 9882.

market, in the beginning of 2007, only 42% of the firms were labeled WP (2% went in without a prospectus and the others did not respect the obligation of ongoing disclosure).

The mere existence of The Securities Law, on the other hand, does not guarantee its adequate application, which is confirmed by the fact that in 2004 only 5 % of the registered companies submitted their annual reports to the Commission. Despite its legal obligation to keep the Register of Publicly Listed Companies, until now the Commission has not been able to ensure this Register. The Commission can at the moment only make formal complaints against law violations when it is first addressed by a joint-stock company for some other reason. In that occasion the Commission can ascertain that the company does not respect its reporting obligation. This is a highly frustrating situation, because, ironically, the company ends up being sanctioned while in the process of seeking help from the Commission. This practice further stresses the importance of strengthening those institutions in charge of supervising and controlling the application of legal regulations.

3.2. Market Integrity Protection

Market integrity protection secures informational/price market efficiency and investor confidence. Two practices threatening market integrity to a large extent are:

(a) Insider trading and

(b) Manipulations of securities` prices on behalf of stock market participants.

(a) Trade Based on Confidential Information (Insider Trading)

Trade based on confidential, privileged information is, together with market manipulation, a key question for assessing market integrity and securing its efficient functioning. The New Securities Law (June 2007) has recognized the importance of the existence of a list of insiders of a company, which is publicly available. That is a big step forward in prevention of insider trading because in that way the "outsiders" gain an insight into who might possibly threaten their interests.

Generally speaking, the legal provisions addressing prevention of insider trading can be regarded as satisfactory. The regulator, however, has not been successful in regulating this field. According to the Commission's practice exercised until now, the privileged bits of information in gaining shares have been most often used by the members of Management Boards and only in one case have criminal charges for legal proceedings been pressed.

The Commission's opinion is that it should have wider authority, a possibility to punish directly and to annul transactions based on confidential information, and more controllers. For the entire financial market of Serbia, the Commission has only five controllers, whereas, the National Bank of Serbia controls around 33 banks and has about 150 controllers of various kinds.

(b) Market Manipulation

Market manipulation threatens the integrity of financial markets because it leads to a distorted and false image of the stock market through various forms of share price manipulation. Both the legislation and Stock Exchange Statute precisely define actions considered to be market manipulation, as well as a joint legal liability for the loss occurred, both for persons participating in manipulation and those spreading false information. The greatest problems in relation to market manipulation are associated with the powers of the Commission, while the institution with which the greatest responsibility for combating market manipulation rests is the Stock Exchange.

A universally known market manipulation practice with shares is prior matching of sell-and-buy orders. The whole transaction of share purchase and sale is prearranged between the buyer and the seller, and the broker(s) perform(s) the transaction in a couple of minutes, so it is very difficult to prove that the (two) brokerage firm(s) engaged in prior matching of the orders. In

fact, this type of manipulation is most easily discovered by the Stock Exchange which informs the Commission that there were some unusual price movements. In such a case, the Commission institutes a procedure and carries out a check. If it discovers that there was market manipulation, the broker(s) will be punished.

According to the Commission, up to now there have not been any subtle manipulations, but there have been open frauds and pressures upon small shareholders, mainly exercised on those employed in the firm whose shares are being traded and have become attractive because of potential takeovers. In such circumstances, various methods of intimidation are being used (most often the job loss etc.) with the aim of obtaining shares at a lower price. When such threats and formal small shareholders' complaints for violation of The Corporate Law occur, the Commission should issue a formal complaint to the police and the responsible prosecution authority. In practice, however, this has never happened, although there have been many cases of such coercions and manipulations.

4. Assessing Quality of Regulation Enforcement

The quality of regulation enforcement was assessed through:

(a) Assessment of sanctions;

(b) Assessment of regulation enforcement: private enforcement;

(c) Assessment of regulation enforcement: public enforcement - the Securities Commission.

(a) Assessment of Sanctions

If the regulations are to be applied, their violation must be followed by an adequate sanction. A sanction is what makes the difference between an obligatory legal conduct and an ethical one. In order to make a sanction credible, it must fulfill certain conditions:

- there must be high probability that the violator will be caught,

- a sanction must incur expenses significant enough for the violator,

- a sanction must be applied *at all times*.

For the assessment of the quality of civil (non-criminal) sanctions, according to the adopted La Porta's methodology, two indices are relevant – the Order Index and the Burden of Proof Index (see Appendix). The Order Index in its essence assesses public enforcement whereas the Burden of Proof Index is directed towards private enforcement.

Order Index[4] includes the assessment of the possibility of the Supervisor to command a liable person to do something (issue order) or to stop a certain activity (stop order). The Burden of Proof Index assesses difficulties in a procedure which the investor faces in an attempt to secure the recovery of the damage in a civil lawsuit for the suffered loss due to non-disclosure of the materially important facts in the prospectus.

The Securities Law does not provision enough normatives, penalty and protection mandates for the Commission towards corporations on the unregulated market of the BSE, and it does not provide a regulator with the possibility to protect investor interests on the Serbian financial market. Thus, the Commission has no mandate to order a company on the unregulated market of the BSE to terminate actions which are causing damage and pay a corresponding penalty within the determined period of time. Therefore, both sub-indices, when it comes to the Commission, get the minimum score.

Taking into consideration all sub-indices (see Appendix 1), the final variable of the factual possibility of the Commission to react towards the potentially liable persons in the hypothetical case of market entry and protect the investor equals 0 (public enforcement score), whereas the

4 See Addition 1 for the manner in which the Index is being calculated

legal score would be 0.67. For the application of law, however, what remains relevant is the score of factual applications of the regulator's legal mandates.

On the other hand, the Stock Exchange gains the maximum score because it is empowered to de-list, to issue the order to carry out concrete activities aimed at the removal of detected irregularities, to give the order to the issuer to undertake certain activities and even to punish the issuer with pecuniary penalty. The Stock Exchange is "more powerful" than the Commission as a consequence of the fact that the unregulated market of the BSE remains after all a market of the Stock Exchange itself, and it is therefore up to the Stock Exchange to prescribe and sanction the rules of the game on the unregulated market of the BSE.

Although the survey showed that the legal score of the regulation assessment was favorable, everyday practice shows that nobody considers themselves indisputably and clearly in charge of Serbian corporations whose securities are being traded publicly (the Commission does not - because they are mainly listed on the unregulated market of the BSE, the Stock Exchange - because the law formally denotes the Commission as an authority over listed companies), which makes the score for factual public enforcement and for the application of sanctions minimal.

The score for criminal sanctions (Criminal Index) is obtained by averaging sub-indices (see Appendix 1). The assessment of the Criminal Index refers to both private and public enforcement, because a criminal sanction is imposed by the judiciary, but the perpetrator of a criminal offence is prosecuted by the state ex officio. Owing to the unavailability of reliable data on the quality of actual criminal protection we registered only the legal assessment of the Criminal Index.

Restitution, as a special type of civil sanction, implies legal means available to the investor with the aim to secure compensation for the incurred losses and other damages (including suffered moral damage) which are caused by either intentional or negligent violation of legal regulations, and thereof the violation of investor interests as well. According to the attorneys' assessment, this Index equals 0.33 in Serbia (Appendix 1), being a little below the value characteristic of the countries of our legal "milieu".

(b) Assessing Application of Private Enforcement Regulations

Considering conditions in courts and judicial practice in relation to questions dealing with securities in the broadest sense, the general assessment is that the judicial system is undeveloped[5]. The lack of practice encompasses the widest circle of participants of the legislative system including judges, prosecutors, lawyers, forensics etc. It is a fact that in everyday practice there is an almost negligibly small number of persons from these fields of activity who have enough experience and adequate knowledge of specific features of corporate management laws, especially those of the laws related to securities business activities. This circumstance - although being logical with regard to the fact that only a short time has passed since the capital market started to develop again and since the trading and stock exchange activities emerged in our economic system - still imposes, as a basic necessity, additional education, in other words, a particular specialization of human resources from the above mentioned fields of activity which would make them experts in performing jobs within subjects related to the securities businesses.

(c) Assessing Application of Public Enforcement Regulations - the Securities Commission

The assessment of public enforcement included five vast fields[6]:

1. The main *characteristics of the regulator* i.e. its institutional independence. An efficient regulator must be protected from interference, especially from the Government, but also from the industry which the regulator supervises. This is necessary not only to make the Commission free to engage experts and professionals, but also to protect it from political pressures behind which there are powerful issuers.

5 For the analysis of the condition of legislature in transitional countries see: Gray, C.W. et al. 1993, "Evolving legal frameworks for private sector development in Central and Eastern Europe" (World Bank Discussion Paper No. 209).
6 The score of public enforcement is the arithmetic mean of five indices which assess each of the five fields.

2. *Regulatory independence of the Commission* - is to ascertain whether the Commission's authority to regulate the capital market is inherent or delegated by the Ministry of Finance.

3. *Effective power of the regulator* in the investigation - is to ascertain why the information given to investors was not correct, complete and timely. If the Commission has the power to order the issuer, the distributor and/or the accountant to deliver relevant documentation i.e. if the Commission can command the relevant persons to testify, the Commission has effective power to ascertain reasons for inaccuracy or lack of timely disclosure to investors.

4. *Effective power of the regulator in issuing (non-criminal) sanctions* - is to ascertain if the regulator (public enforcement) can order the liable persons of the issuer to do something or stop an activity.

5. The role of the Commission in the criminal legal proceedings.

Following the adoption of the Law on Securities and Other Financial Instruments, the Commission loses its regulatory independence, as all rules and bylaws have to be submitted to the Ministry of Finance for opinion. This occurs because the Commission performs activities for which it is authorized as if these activities were entrusted by the Government, and this drastically worsens its position.

Aiming at adequate application of regulations through public enforcement, the Commission should be (and it is not) operatively and financially independent, it should have enough knowledge to perform regulatory functions and enough authority as well as political support (it has neither) to perform effective supervision. It should operate in a transparent and responsible way. Influences and open pressures upon the Commission on behalf of the executive authorities of the State were registered even when it was founded. The principle of belonging to a certain political party was dominant in choosing the members of the Commission (despite the explicitly stated legal provision which prohibits this) and the chosen persons consequently (with the exception of one person) were characterized in public as the representatives of political parties[7]. The pressures on behalf of the Government upon the Commission were especially evident in the case of takeover of the manufacturer of mineral water "Knjaz Milos". In its Annual report for the year 2004, the Commission does not even mention the case of "Knjaz Milos," despite the fact that at the time of decision-making related to the takeover of "Knjaz Milos", the members of the Commission, making their appearances in the media, talked in a remarkably open manner about the pressures they were subject to.

In spite of the fact that the legal provisions provided the Commission with the necessary tools needed to obtain wanted information in the course of supervising, the Commission declared, during our research interviews, that it is not in a position to carry out its supervision efficiently and that its effective powers in supervising are, with respect to the regulators in comparative legal systems, very modest. The main problem, according to the Commission itself, is the insufficient regulatory authority of the supervising function, the fact that its employees do not enjoy immunity while performing the supervision and the inadequate sanctions for the committed violations of law.

5. Conclusion

It can be concluded that the basic problem in Serbia is reflected mostly in finding out the ways to improve efficiency in the application of legal regulations, although the mere set of regulations lacks legitimacy because it ignores the reality and is not clear and harmonized enough. Beside the legitimacy problem, the key issue lies in weak institutional capacity of the supervising authorities which would insure that legal provisions are complied with without exception, and that any violation is followed by an adequate sanction which would provide legal security.

7 Interview with the president of the Commission Milko Stimac, "Blic", August 2004, p. 9, and "The doctor's resignation note" November 26, 2004, p. 9.

As far as law application is concerned, whether it be damage caused by non-disclosure of relevant information in the prospectus (on the occasion of market entry or as a consequence of the violation of the ongoing disclosure obligation), or the use of privileged information or market manipulation, sanctions are the same towards liable persons in each case. The liability of the issuer, distributor or accountant/auditor is the same and it differs only in the extensiveness of the harmful consequence.

Taking into consideration the fact that judicial practice with regards to the application of regulations through private enforcement is extremely undeveloped, the Commission remains the first and the last line of defense. The reality of public enforcement, according to the assessment of the Commission itself, is that the Commission, being the main supervising body, is very limited in the sense of effective sanctioning of the perpetrator. Research showed that the existing situation concerning the coercive application of law is very bad despite the high legal score obtained in this research. In practice, the cases in which the Commission sets off any legal proceedings are extremely rare. It occurs more often that administrative lawsuits are set off before the Supreme Court of Serbia against the Commission's solutions, but that is very rare as well.

Concerning private enforcement, the factual score was not possible to ascertain because the judges, unlike the Commission, refused to give their opinion on the quality of the protection provided by judiciary. They gave only a general assessment that the judicial practice regarding the application of securities regulations is almost inexistent. The final conclusion is that there is a distinct gap between the law and the factual state. This proves that the issue of investor protection in Serbia lies in noncompliance with the law, as well as in institutional deficiencies, rather than in legal norms.

Appendix 1

Disclosure Index - defined using two variables:

Prospectus variable - equals 1 - if the law prohibits listing securities on the organized stock exchange of the country without delivering a prospectus to potential investors: equals zero otherwise.

The assessment of the quality of information in the prospectus - performed through 5 variables, where each of them can equal 0, 1/2, 1, depending on the degree of fulfillment of the required criteria: the compensation of directors and key officers, the data on the ownership by the main shareholders, the obligation to state the participation of each insider individually in the equity of the issuer, the description of contracts which are being concluded outside the regular course of business, significant business transactions between the issuer and the related parties (the members of the administrative or supervising board, big shareholders, parties related to the members of management and supervising board in the last year).

Sanctions

Order Index - equals the arithmetic mean of three sub-indices: (1) Order issuer, (2) Order distributor and (3) Order accountant/auditor. Each of these sub-indices represents a collective score of the Supervisor's possibilities to issue to each of three potential perpetrators an order to do something or to stop an activity if there are problems with the prospectus.

The assessment is performed in the following manner: a **do order** can equal 0, 1/2, 1 depending on the possibility of issuing orders on behalf of the regulatory body; a **stop order** can equal 0, 1/2, 1 depending on the possibility of issuing the order to stop an activity to a liable person.

The legal score of Order issuer (i.e. orders directed to the issuer) and Order distributor sub-indices on behalf of the Commission equals 1, and Order accountant/auditor equals 0, so that the legal score (regulations) for the Orders Index would be 0.67.

The Burden of Proof Index equals an arithmetic mean of three sub-indices each of which assesses the concrete difficulties of the investor in an attempt to provide compensation for damage from the 1) issuer, 2) distributor, 3) accountant / auditor. The value of each sub-indices can equal 0, 1/3, 2/3, and 1, depending on the problem of proving that we relied upon the wrong information in the course of decision making, which is why we suffered loss, and there is also the possibility of compensation for that loss.

The Criminal Index equals the arithmetic mean of three sub-indices of criminal sanctions towards liable persons in each particular case - the sub-index of the 1) issuer, 2) distributor, 3) accountant / auditor. In line with the La Porta's methodology, each of the sub-indices can equal 1, 1/2 or 0, depending on how difficult it is to prove criminal liability.

Table L2-2. Obtained Indices - Summarized Scores

Order Index	**Score**	
	Legal	Fact-based
1. Sub-index orders issuer	1	0
2. Sub-index orders distributor	1	0
3. Sub-index orders accountant/auditor	0	0
ORDER INDEX	**0.67**	**0**
ORDER INDEX (final) [1)]	**0.33**	
Index of Burden of Proof	Legal (Securities Law)	Legal New Law)
1. Sub-index of burden for the issuer	0.33	0.33
2. Sub-index of burden for the distributor	0.33	0.33
3. Sub-index of burden for the accountant/auditor	0.33	0.33
INDEX OF BURDEN OF PROOF (Securities Law)	**0.33**	
INDEX OF BURDEN OF PROOF (New Law)	**0.33**	
Criminal Index	Legal (Securities Law)	Legal New Law)
1. Sub-index criminal issuer	0.5	0.5
2. Sub-index criminal distributor	0.5	0.5
3. Sub-index criminal accountant/auditor	0.5	0.5
CRIMINAL INDEX (Securities Law)	**0.5**	
CRIMINAL INDEX (New Law)	**0.5**	

1) The score refers to the liabilities of the Commission. As it is a score of law enforcement, the final score of each index is an arithmetic mean of factual scores of relevant sub-indices.

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Restructuring and Privatization of Public Enterprises in Serbia[1]

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Establishing and introducing an adequate regulatory framework for restructuring of public enterprises and their partial or full privatization and the infrastructure development – these are key goals in the process of developing a modern market economy in Serbia over the following years. Since early 2001, certain progress has been made in enacting and implementing relevant regulations, as well as in the restructuring of public enterprises, but the privatization process in this field remains by and large in its initial stage. According to an EBRD estimate[1] for mid 2006, which still applies, the progress Serbia made in public enterprise restructuring and privatization is seen as relatively modest – out of possible four, the country scored two points on infrastructure reforms. While it cannot be disputed that the actual performance could have been better, this situation is not quite so unusual for a country in its sixth/seventh year of transition. Indeed, reforms and privatization of infrastructure companies in other transition economies were mostly implemented in the so-called second phase of transition and are still underway in most of those countries.

1. Introduction

This aim of this text is to review the *regulatory framework*, *privatization strategies* and *prospects* of large State-owned enterprises in Serbia, in light of the experiences and knowledge accumulated in other transition economies. As Serbia is entering the so-called second phase of transition, and as the privatization of socially-owned enterprises is about to be completed, it is our view that the time has come for the State to focus on large State-owned infrastructure systems - the so-called public enterprises - and to bravely tackle their restructuring and partial or total privatization. This is necessary because, from the economic point of view, those enterprises are inefficient and insufficiently modernized and, as such, hamper the modernization and growth of the Serbian economy. Economic arguments seem to suggest that total or partial privatization is an adequate solution for virtually all public enterprises, save for those identified as natural monopolies. Regrettably, Serbian politicians defy economic sense and invoke an array of justifications – ranging from protection of national interests, through protection of "domestic ownership" and "our" enterprises, to potential emergence of such enterprises as regional leaders – to directly and blatantly prevent any further reform. The underlying motivation for such discourse is, on the one hand, a lack of knowledge of rudimentary economic postulations on which modern economies operate, and, on the other hand, short-sighted economic nationalism as well as strong political-party interests, because it is the public enterprises, with their size, considerable budgets and sheer numbers of voters they employ, that are used as levers of political party clout.

The nomenclature of enterprises in Serbia distinguishes between private enterprises, socially-owned enterprises, which are undergoing privatization and are to be fully privatized in 2008, state-owned enterprises and mixed-ownership enterprises, i.e. those which have are partially privatized. Recently, the public and the politicians have been very much focused on the so-called

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1 We use the term "Public Enterprise" referring to a company in the public sector (being owned by national, regional or local government). The term "Public Enterprise" or "Public Company" may also refer to a company that is permitted to offer its securities (stock, bonds, etc.) for sale to the general public, typically through a stock exchange. However, in this article we use the former definition of the term.

2 "Transition Report 2006", European Bank for Reconstruction and Development

public enterprises. This term, however, often raises uncertainties and confusion as to what type of enterprise it actually denotes. Under the Law on Public Enterprises and Activities of Common Interest[3], a public enterprise is defined as follows:

"A public enterprise shall be an enterprise pursuing an activity of common interest, founded by the State or a local self-government unit."

The same Law also defines activities of common interest:

"Activities of common interest, within the meaning of this Law, shall be any activities identified as such, under the law in the fields of: electricity generation, transmission and distribution; coal extraction and processing; exploration, extraction, processing, transport and distribution of oil and natural and liquefied gas; sale of oil and oil products; railway, postal and air traffic; telecommunications; publication of the official journal of the Republic of Serbia; information; textbook publication; utilization, management, protection and enhancement of common resources (waters, roads, mineral raw materials, forests, inland waterways, lakes, river banks and lake shores, spas and game animals); and utilities.

The activities referred to in paragraph 1 above shall also include any activities of strategic importance for the Republic, as well as any activities necessary for the operation of public authorities and local self-government bodies under the law."

Serbia has a total of about 550 public enterprises. Of these, 17 were founded by the Republic or by an Autonomous Province, while the remaining (local) public enterprises were founded by city and municipal authorities.

Of this total number, 487 public enterprises submitted their reports to the NBS Solvency Centre in 2006[4]. Key performance indicators of these enterprises are presented in Table L3-1.

Table L3-1. Public Enterprises, Key Performance Indicators, 2005 and 2006

	2006	2005	2006	2005	% of all enterprises in Serbia in 2006
No. of enterprises	487	488	…	…	0.6
No. of employed	137,310	145,716	…	…	12.4
	in millions of dinars		in millions of euros		
Total revenue	413,938	316,400	4,917	3,816	8.6
Total expenditure	421,550	343,810	5,007	4,146	9.0
Net profit	-7,815	-28,778	-93	-347	-7.2
Fixed assets	1,296,488	1,141,993	15,400	13,772	33.1
Equity	1,087,021	985,980	12,912	11,891	33.6

Source: "Performance of companies and cooperatives in the Republic of Serbia", National Bank of Serbia, 2006.
Notes: Table includes only companies that are formally registered as public enterprises. It does not include companies like Telekom and NIS as they are formally registered as joint stock companies.
Dinar amounts are converted into euros using the average exchange rate for the given year.

The 17 Republic-owned public enterprises are of particular importance: "Elektroprivreda Srbije – EPS" (Serbian Power Utility Company), "Elektromreža Srbije – EMS" (Serbian Power Transmission Network), "Javno preduzeće za podzemnu eksplotaciju uglja Resavica – JP PEU Resavica" (Public Enterprise for Underground Coal Exploitation "Resavica"), "Naftna industrija Srbije – NIS" (Oil Industry of Serbia), "Srbijagas," "Transnafta," "Železnice Srbije" (Serbian Railways), "Jugoslovenski aerotransport – JAT" (Yugoslav Airlines), "Nikola Tesla" Airport, "JP Putevi Srbije" (Public Enterprise "Serbian Roads"), "JP PTT saobraćaja 'Srbija'" (national postal service), "Telekom Srbija" (national telecommunications operator), "Skijališta Srbije," "Srbijašume," "Vojvodinašume," "Srbijavode" and "Vode Vojvodine." According to the data provided by Republic Bureau of Development, these companies employed 108.845 workers and

3 "Official Gazette of the Republic of Serbia", No. 25/2000

4 The remaining public enterprises report to the Treasury Administration, in accordance with the Budget System Law ("Official Gazette of the Republic of Serbia" Nos. 9/02, 87/02 and 66/05).

generated RSD 801.7 billion of total income (or about 9 billion euros) in 2006. In the same year, these enterprises, for the first time since the commencement of transition, reported a net profit[5] of RSD 31.3 billion (the economy overall also generated a net profit for the first time in 2006).

In terms of volume of operations, three enterprises stand out: EPS, NIS, and Telekom Srbija (Table L3-2).

Table L3-2. Selected Public Enterprises, Key Performance Indicators, 2003 and 2006

	EPS		NIS		Telekom		Železnice Srbije		JAT	
	2003	2006	2003	2006	2003	2006	2003	2006	2003	2006
No. of employed	43,186	31,147	17,669	13,152	13,060	10,639	29,852	21,604	3,870	1,930
					in millions of euros					
Equity	6,137	7,830	645	1,113	1,684	1,173	3,826	2,012	15	0
Total assets	8,122	9,706	2,879	3,098	1,817	1,521	4,417	2,732	268	245
Investments	117	181	75	67	248	256	68	33	7	1
Total revenues	2,724	3,288	2,937	3,348	672	794	293	314	196	200
Net profit	-71	194	102	82	103	176	-197	-85	0	4

Source: "Analysis of public enterprise operations in 2006", Republic Bureau of Development.
Note: Dinar amounts are converted into euros using the average exchange rate for the given year.

2. Public Enterprise Reform in the Period 2001–2007

The overall direction of public enterprise reform since early 2001 focused on the following goals: price adjustment in relation to actual costs, non-core activities spin-off and privatization, settlement of debts and receivables, downsizing and redundancies lay-offs.

In most Republic-owned public enterprises, what was formerly a single enterprise has been restructured into separate units responsible for network development and maintenance and units responsible for service provision[6].

Most infrastructure activities carried out at the state level (energy, telecommunications, railways) have been covered by laws enacted to harmonize the regulation of infrastructure activities with the practice of market economies[7]. Furthermore, independent regulatory bodies have been set up for the fields of telecommunications (Republic Telecommunications Agency, Republic Broadcasting Agency) and energy (Energy Agency of the Republic of Serbia, Energy Efficiency Agency). Thus a basic regulatory framework for economic operation of public enterprises has been set up, but this framework is still not complete. The necessary bylaws are still being developed, and it is precisely the responsibility of independent regulatory bodies to develop them.

Reforms implemented so far have enabled improvements in the operations of public enterprises, as well as better accessibility and enhanced quality of services. But Serbian infrastructure activities still lag behind both developed EU Member States and neighboring countries (in terms of network development and service accessibility and quality) and hamper economic growth. An example of this is the absence of competition in certain infrastructure activities, such as the monopoly exercised by NIS in the field of oil refinement and production of oil products[8]. Catching up with European standards in infrastructure activities will require substantial investment, improved regulations and reinforced independence of regulatory bodies. Measured

5 In 2006, 14 of the large public enterprises generated net profit, while the remaining three incurred net loss: "Železnice Srbije", "Putevi Srbije" and "PEU Resavica".

6 In case of railways, there is still a single enterprise "Železnica Srbije" responsible both for infrastructure maintenance and development and for passenger and cargo transport. The current arrangement, pursuant to which the single enterprise includes separate directorates of infrastructure and transport, hamper competition in the field of transport and is not compliant with relevant EU Directives. In order to establish a competitive environment in the railway sector, it will be necessary to set up a separate enterprise for infrastructure maintenance and development and one or more enterprises for passenger and cargo transport services etc.

7 E.g.: Energy Law, Official Gazette of the Republic of Serbia No. 84/04; Telecommunications Law, Official Gazette of the Republic of Serbia No. 44/03; Railways Law, Official Gazette of the Republic of Serbia No. 18/05

8 Import of oil products into Serbia is prohibited, with certain exceptions, under the Decree on Specific Requirements for and Method of Importing and Refining Oil and Oil Products, Official Gazette of the Republic of Serbia Nos. 37/03, 90/03, 56/05. This Decree creates an artificial monopoly position for NIS in oil refinement and oil product wholesale.

against the European standards in the field of energy (oil industry, electricity), Serbia appears to be facing huge environmental problems which will require considerable investment in order to be addressed properly. Apart from the need for compliance with environmental standards, there is also the problem of product quality. For example, the quality of oil products produced by NIS is far below the European norms and Serbia is one of the four European countries that still allow leaded petrol to be sold.

The capacity of the State to manage public enterprises remains low, even against the not always high international level. Indeed, the Government sometimes seems to lose basic control over public enterprises in some respects, e.g. control of salaries and borrowing. Furthermore, there is a tendency to use these companies as sources of funding for political parties and corruption and bad stewardship practices are widespread.

It is exactly this insufficient capacity of the State that should, in the case of Serbia, act as a key driver of privatization of public enterprises. However, this assumption contradicts the underlying reason for absence of privatization – in Serbia, public enterprises are centers of political party clout.

On the other hand, one of the main reasons why State-owned infrastructure enterprises in Europe were privatized in the 1980s was not only to cover high budget deficits and unsatisfactory performance of such enterprises, but also the inability of the State to address trade union demands and to manage those companies properly.

3. Main Directions of Future Reform of State-owned Public Enterprises in Infrastructure

Key objectives of infrastructure activities reform include: improved service availability and quality, introduction of new services, realistic alignment of prices with actual costs and reduced environment pollution. In short – the aim is modernization of infrastructure activities in Serbia. Infrastructure development and modernization are an essential prerequisite and incentive for private investments in other industry sectors.

These objectives can be achieved through *improvements of the regulatory framework* and, most emphatically, through changes of ownership structure in infrastructure enterprises. The regulatory framework should provide for competition, where applicable, or potential competition in other market segments. Partial or total privatization of individual public enterprises within a new regulatory framework is a way to ensure higher efficiency in the use of existing resources, and to secure new funds for investment, modernization etc. On the other hand, total or partial privatization of public enterprises will render them depoliticized, or de-feudalized[9]. Namely, public enterprises are currently not managed by high-quality professional managers; instead, they serve as a political "prey" of sorts, which is used not only for indirect funding of political parties and allocation of party members to top positions, but also as an important voting mechanism. Such unprofessional management of public enterprises deteriorates their value, delays their modernization and results in low efficiency, resulting in losing the market game. In this context, privatization is the only effective remedy for non-economical management of these enterprises. It is also a way to professionalize management and to empower them to exert better control of the enterprise. Furthermore, privatization and recapitalization of public enterprises opens up new investment opportunities for the wider public and for institutional investors, which in itself will contribute to the development and deepening of the securities market in Serbia and provide additional opportunities for increasing domestic saving.

Laws regulating infrastructure activities, e.g. laws on telecommunications, energy, railways etc., enacted since 2000, constitute a major step toward the harmonization of regulations with EU standards. However, most of these laws need additional improvements. As general legislative arrangements are usually made operational through bylaws, which are passed by regulatory bodies, it is vital to adopt bylaws implementing technical standards, tariff systems and service

9 See: Vesna Pešić, 2006: "Partijska država kao uzrok korupcije u Srbiji"

quality, enabling competition etc. as soon as possible, and to ensure that arrangements contained therein are applicable and compliant with the practices of developed market economies.

The new Constitution provides for a possibility to rescind the irrational provision under which the Republic owned not only the capital, but also the assets of all public enterprises (including local public enterprises)[10]. The law containing that provision effectively prevented any systematic approach to public enterprise privatization. Just to start the preparatory process for the privatization of the Oil Industry of Serbia, a step urged by the International Monetary Fund (IMF), it was necessary to draft a special legislative instrument which, once enacted by the Serbian Parliament, transformed the ownership structure of NIS. Sadly, almost a whole year after the enactment of the Constitution, the said provision is still in force and there have been no indications as to when it might be repealed.

An important element of forthcoming reforms is further *reinforcement of independence of regulatory bodies* and enhancement of their competences. Regulatory bodies should be independent both from the Government and the infrastructure enterprises whose activities they regulate, as well as from the stakeholders dealing with those enterprises or contemplating their takeover in the privatization process. Independence of regulatory bodies from enterprises and stakeholders is vital for ensuring equality of all market players.

Infrastructure companies will remain under significant or majority ownership of the State over a certain period, and some of them even indefinitely. It is therefore vital – in particular for those enterprises which, in line with the prevailing practice in Europe, remain indefinitely under majority State ownership, as well as for those enterprises which are not scheduled for privatization in the short-term perspective – to improve the ownership and management role of the State. Improvement of the management role of the State includes a wide range of measures, from strategic documents to control of key indicators of operational performance (salaries, prices, employment, investment and borrowing). In light of the current experience, it is particularly important to develop mechanisms to prevent different forms of economic mismanagement (damaging contracts, low quality of investment works, dispersion of activities) often associated with corruption, as well as to ensure continual volume growth and expansion of the range of services offered. It is also necessary to improve employment procedures, with a view to eliminating nepotism and the widespread practice of employing political party activists in public enterprises under privileged terms. In this context, it is necessary to "depoliticize" State-owned public enterprises. Namely, the existing election system at the national level results in coalition governments which, as part of their distribution of power, allocate between them the positions in public enterprises along vertical lines and thus, by means of inter-party agreements, preclude the exertion of any parliamentary control over the operations of such enterprises.

4. Public Enterprise Privatization Strategy: Current Options

Experiences from all over the world show there is no single, universal privatization model suitable for all countries and all infrastructure activities. Moreover, experience proves that it is necessary to establish an adequate regulatory framework before privatization in order to achieve positive effects. The establishment of an adequate regulatory framework is vital because certain activities (or part thereof) in the field of infrastructure are natural monopolies. If a State monopoly is replaced by a private one at a time when the State is incapable of controlling the monopolist properly (inadequate regulatory framework, corrupt government) often produces a number of adverse effects (price increase, stagnation of business and quality of services), which compromise the very process of privatization; in some cases, e.g. in Latin America, this even resulted in re-nationalization of infrastructure enterprises. Of course, the need to create a regulatory framework should not be used as a pretext for delaying privatization.

10 Law on Assets owned by the Republic of Serbia, Official Gazette of the Republic of Serbia Nos. 53/1995, 3/1996, 54/1996 and 32/1997.

Furthermore, in some capital-intensive activities with very long investment cycles and high investment values, e.g. electricity production and distribution, the establishment of a liberal market has at times resulted in lower prices and profits, which resulted in underinvestment and lead to electricity shortages (e.g. California in the USA). This potential problem is even more prominent in developing countries, where very high investments are needed to ensure high levels of availability and a reliable supply of electricity.

Over the recent years, the public and the Government of Serbia, both the previous and the current one, have put forth different ideas concerning the *scope*, *method* and *scheduling* of public enterprise privatization. Discussions of privatization have taken the limelight off the analysis of regulatory framework and market structures that would emerge in the wake of the privatization process.

In connection with privatization of public enterprises in Serbia in mid 2007, the following questions are of particular relevance:

- Which enterprises should indefinitely[11] remain in majority State ownership?

- Which regulatory, structural and other reforms should precede public enterprise privatization?

- Whether free shares should be distributed to the employees and citizens, and if so, how many and when?

- When, for which companies and in how many steps is it justified to sell a majority package to a strategic partner?

- Which enterprises should be privatized through the stock exchange and to what extent?

Answers to the above questions and options for restructuring and privatization of Serbian public enterprises will be analyzed using examples of major Republic-owned public enterprises in the fields of: oil and gas (NIS), electricity (EMS and EPS), telecommunications (Telekom Srbija), postal services (PTT), railway transport (ŽTP) and air transport (JAT and "Nikola Tesla" Airport) and underground coal extraction (PEU).

4.1. What to Privatize and to What Extent?

It is estimated that majority State-ownership, at least for a certain period, should be retained in enterprises whose activities are typical natural monopolies and where any introduction of actual or potential competition with the current technology appears unreasonable in economic terms. Accordingly, it is estimated that State ownership will be retained in PTT (national postal service), in the enterprise in charge of electric power transmission (EMS) and in enterprises in charge of international gas pipelines (Srbijagas) and oil pipelines (Transnafta) running through Serbia. Also, it is considered justifiable to permanently retain majority State ownership in the enterprise in charge of railway network development and maintenance, which would be separated from the currently integrated railway company "Železnice Srbije." Of course, spin-off and privatization of non-core activities from enterprises performing these activities would be continued. In the case of PTT – an enterprise which provides a number of different services – the State would remain the majority owner, but most of those services would also be open to private competitors. On the other hand, there is a possibility that, from a longer perspective, changes in technology and replacement of letter post by electronic mail, as well as the emergence of private companies delivering packages etc., there might no longer be a need for a postal enterprise with majority State ownership.

Based on the experiences of other countries, the current situation in the regulatory field, reforms implemented and operating performance of infrastructure enterprises in Serbia, it is estimated

11 The term "indefinitely" should be taken with reservations, because technological or institutional changes could fundamentally change their operating conditions, so that reasons for majority State ownership in some infrastructure companies might no longer pertain.

that the following enterprises could undergo *majority privatization* in the mid term: oil production and distribution (NIS), air transport (JAT), fixed and mobile telephony (Telekom Srbija) and underground coal extraction (PEU). Given the current situation in the said enterprises, reforms implemented so far in the regulatory field and the level of interest among potential investors, it is estimated that NIS, JAT and Telekom Srbija are first on the list for majority privatization. It is also estimated that the underground coal exploitation enterprise should be privatized as soon as possible, as a whole or certain parts, while any parts that cannot be privatized should be wound up. An additional reason for urgent privatization of PEU is the fact that this enterprise is the only one apart from "Železnice Srbije" and "Putevi Srbije" to use government subsidies since its separation from EPS.

According to estimates, over a longer period of time, privatization of the following would be economically justifiable: electricity generation and distribution (EPS); "Nikola Tesla" Airport; and a part of "Železnice Srbije" which would perform the activities of cargo and passenger transport. Of course, there is no economic justification for delaying the entry of the private sector into these activities in the short term, e.g. through the construction of private power plants or through the entry of private transport companies in the field of railway transport.

4.2 Regulatory Measures for Public Enterprise Privatization

If privatization of public enterprises is to achieve the aforesaid positive social objectives, it will be necessary to enact a number of amendments to laws and secondary legislation to facilitate the emergence of a competitive environment in infrastructure activities. A key element of reforms for all public enterprises, including local ones, is rescinding of the legislative provision pursuant to which the Republic is the owner of both capital and assets of all public enterprises. Before privatization, it is also important to enact regulatory measures specific to certain fields and regulating specific characteristics of certain markets and technologies. The overview of necessary measures presented below is illustrative rather than exhaustive.

Prior to the privatization of NIS, it is necessary to reexamine the rationale for maintaining the extremely low charge for oil and gas extraction in Serbia[12] and to introduce market restrictions to prevent the dominant position of an oil product distributor (e.g. it could be regulated that the enterprise and its affiliates may not have more than, say, 40 % of all petrol stations in Serbia). Also, and perhaps most importantly, it will be necessary to repeal the Decree prohibiting import of oil products, which has effectively hampered competition in oil product wholesale in Serbia. The purpose of the said Decree is to ensure the monopoly position of NIS by artificial means, thereby protecting the enterprise from market pressures and leaving it unmotivated to introduce any improvements in its operations. The cost of such a situation and of the lack of modernization and economic operation of NIS is borne by all Serbian citizens, while NIS, because of its slackening modernization, is losing the market game in the retail market as well. It is estimated that NIS has lost about 15 % of its retail market share since 2003. Researchers have tracked and attributed the inefficiency of NIS both to its monopoly position and to the inadequate charges for exploitation of domestic natural resources, amounting to 300 million euros per annum[13]. Drafting of a high-quality regulatory framework and subsequent majority privatization would help to overcome the problems faced by NIS, including lack of investment, mismanagement, inadequate borrowing and interventions of politicians and political parties. The examples of neighbouring countries seem to suggest that most states waived their majority package in oil industries, but usually retained a minority package (Table L3-3). Oil industries in developed countries are usually 100% privately owned.

12 See Vuk Đoković, Goran Radosavljević , "Vađenje sirove nafte u Srbiji: za sada bez adekvatne nacionalne politike" ("Crude oil extraction in Serbia: no adequate national policy so far"), *Quarterly Monitor*, issue No. 7, October – December 2006.
13 See Udovički et al: "Stvarna i moguća performansa NIS-a: koliki je jaz?" ("Actual and potential performance of NIS: how large is the gap?"), *Quarterly Monitor*, issue No. 7, October – December 2006.

Table L3-3: Selected Oil Industries in Neighboring Countries: Ownership Structure

	Hellenic Petroleum	OMV	MOL	INA	Petrom	PKV- Orlen
	Greece	Austria	Hungary	Croatia	Romania	Poland
State (directly and indirectly)	35.5	31.5	9.9	51.9	40.7	27.5
Institutional investors	35.9	17.6	10.0	25.0	51.0	...
Other	28.6	50.9	80.1	23.1	8.3	72.5

Source: Annual Reports of the respective companies

Before the privatization of the fixed and mobile telephony operator, Telekom Srbija, it is necessary to rebalance the fixed telephony toll system in order to bring it in line with the costs and to enact a number of bylaws to enable effective competition in the field of fixed-line telephony (interconnectivity, free access to local nodes, pre-selection of numbers, transferability of numbers etc.). Furthermore, before the privatization of Telekom Srbija it would be necessary to establish a direct ownership link between the State and Telekom, instead of the existing indirect link through PTT (national postal service). Namely, Telekom Srbija is already a joint-stock company with two shareholders: JP PTT Srbija (80 %) and OTE, a Greek telecommunications company (20%). The State participates in the ownership of Telekom indirectly, via PTT.

Privatization of the power generation and distribution enterprise (EPS) should be preceded by an electricity price increase to a level which would enable generation of funds needed to finance large-scale investments. The effects of privatization of power generating companies are seldom positive in environments that lack sufficient capacities for power generation, which is exactly the case with EPS in Serbia. Also, it will be necessary to lay off redundant workers and to address the issue of debts of EPS in order to improve its efficiency. Although the problem of mismanagement by the State is present in all public enterprises, its addressing is particularly important in those enterprises that will not be privatized in the short term, such as EPS or the part of Železnice Srbije in charge of passenger and cargo transport.

4.3 Distribution of Free Shares

There have been various suggestions and requests as to *when*, *how many* and *to whom* free shares of public enterprises should be distributed. Apparently, the best solution is to distribute free of charge 10–15 % of shares of all public enterprises – including those which are intended to remain in majority State ownership. All Serbian citizens of age who have not received shares in any of the earlier privatizations would be entitled to receive such shares. It is thought that there is no economic or social justification for giving the employees of public enterprises any advantages over other Serbian citizens. These are monopolies, capital-intensive enterprises whose assets were built mainly from loans repaid by all citizens of Serbia. Also, employees of public enterprises, except those of ŽTP, as a rule, had higher salaries than those paid for identical jobs in other enterprises – which means that, through their salaries, they also participated in the rent.

4.4. A Strategic Partner or Diversified Ownership Structure

One of the issues receiving much attention is also the question which public enterprises should be sold to a strategic partner – which would in all probability be a foreign company. In general, strategic partners should be sought for those enterprises that require significant investments, which they cannot provide from their own sources and potential large-scale borrowing abroad would only go to increase the already high indebtedness of the enterprise concerned, and of the State, as the guarantor, as well. Such enterprises can survive on the Serbian market only in a monopoly situation and any attempts to penetrate the market of Southeast Europe would only result in high debts to finance it. From the foregoing criteria it follows that privatization in the form of sale to a strategic partner is best suited for NIS, PEU and JAT. Given the expected values of privatization transactions and the amount of necessary subsequent investments, it is estimated that the new owners of these enterprises would most likely be foreign companies (regional leaders

or large European or world companies). In the case of NIS, the State would probably retain a majority package, or alternatively it would specify in detail in the privatization agreement which decisions the future owner would not be allowed to make without the agreement of the State.

Another issue in connection with the opinion presented above is whether the optimal choice would be to sell the majority package to a strategic partner in a single step or in several steps. The advantage of the first option is that the majority owner is immediately made responsible for the improvement and modernization of the enterprise, which is likely to result in expedited growth, improved efficiency, higher product quality and faster addressing of environmental problems. Majority privatization de-stimulates the introduction of potential measures aimed at preventing new entries and competition. The advantage of the second option is that it creates opportunities for a significant increase in the value of State-owned capital in future years, owing both to improved performance of the enterprise itself and to the growth of demand in Serbia.

There is, however, a doubt that is not unjustified: if the State retained majority packages, it could result in a decline in market liberalization. This is one of the reasons why urgent majority privatization of NIS is recommended. When an enterprise is not exposed to strong competition, the combination of majority State holding and minority private holding often results in underinvestment in the infrastructure enterprise. Under such circumstances, minority owners are more focused on delaying liberalization and becoming majority owners under privileged terms, than in modernizing and improving the enterprise, which the State could then sell to another owner. An example of this is the minority holding of Hungarian MOL in the Croatian company INA.

Judging from the performance of the enterprises, their strategic importance, expected market growth etc., there is no doubt that majority packages in JAT and PEU should be sold to majority owners already in the first step. In the case of NIS, it is rather difficult to weigh the advantages of each option, but it seems that the sale of a majority package in the first step, provided that a competitive environment has been established in advance and that the buyer's obligations in terms of environment protection have been adequately specified, would be the better solution.

In the cases of Telekom Srbija and EPS, it is estimated that there is no need for a strategic partner with majority holding which would prospectively acquire majority ownership. Of course, it is conceivable that the need for a majority partner might arise after a longer period of time has elapsed.

Telekom Srbija generates high profit and is currently expanding regionally, so it is estimated that the best way to privatize it would be to successively sell State-owned shares and to carry out a number of recapitalizations which would result in a diversified ownership structure, with majority holding owned by domestic and foreign companies, banks, insurance companies, institutional investors (pension and investment funds) and Serbian citizens. It is, of course, possible that foreign telecommunications companies emerge as minority owners, as is already the case with the Greek company OTE, which already holds 20% of Telekom Srbija. Short return periods (high rates of return) and moderate investment (compared with e.g. energy) are advantages conductive to attracting foreign private investors. New technology solutions, first in mobile telephony and recently in fixed-line telephony, have stripped most of this sector of its natural monopoly status. For segments which are still characterized as natural monopolies there are well-developed regulatory arrangements, many of them contained in EU Directives, providing for free access for different operators.

In the case of EPS, privatization could commence in a couple of years through free distribution of shares and sale of minority packages held by the State. As the power industry in Serbia requires substantial investment and EPS lacks own resources to carry out such investment, the best option would be to delegate the construction of new power plants or power plant blocs to foreign and domestic private companies. In this context, functional liberalization of the market is required in order to enable interested investors to invest in Serbia without EPS imposing its conditions on them. By leaving a share of the domestic market to private (probably foreign) companies, EPS

itself could act as a co-investor in small- and medium-scale projects in the region of Southeastern Europe (e.g. in Bosnia and Herzegovina – the Republic of Srpska). If EPS attempted to retain its key role in the construction of new capacities in Serbia, while at the same time aiming at regional expansion, this would adversely affect both the enterprise itself and Serbian economy in a number of ways. As it lacks own resources for investment, the already indebted enterprise would take additional loans, probably guaranteed by the State – a situation which would result in higher debt of the enterprise and higher indirect debt of the State. Furthermore, if this scenario were to be applied, the enterprise itself would probably exert pressure to delay the liberalization of the electricity market.

Box 1: Serbian Enterprises as Regional Leaders?

Since the second half of 2006, public enterprise managers and representatives of the Government have frequently advocated the idea of State-owned public enterprises of Serbia becoming regional leaders, with the State holding majority or significant interest in such enterprises. These opinions have apparently been spurred by the acquisition of Telekom Srpska by Telekom Srbija, as well as by green field investments made by Telekom Srbija in mobile and wireless fixed-line telephony in Montenegro. Furthermore, successful expansion of the Czech Power Company and Hungarian MOL in the region are often cited as examples to be followed by Serbian public enterprises. There is no accurate list of enterprises eligible for becoming regional leaders, but among the most frequently mentioned candidates are Telekom Srbija, EPS, NIS and occasionally JAT[1].

Such ambitions stem, on the one hand, from superficial knowledge of the actual situation in those companies, disregard for the financial aspects of regional expansion, lack of information about other markets in the region etc., and, on the other hand, from determination to shift the focus from regulatory reforms in infrastructure and public enterprise privatization and to delay these processes indefinitely. Statements and opinions of this kind also reflect the ambitions of certain political structures to preserve the *status quo*, because they find the current political-party-based management of these enterprises along vertical lines of responsibility quite beneficial, and also because it enables them to employ "their" staff and to control large numbers of voters employed by these enterprises.

It is therefore necessary to thoroughly reexamine the idea of several Serbian public enterprises, State-owned at that, becoming regional leaders, taking into account both the capacities of those enterprises and of the Serbian economy, as well as the best interest of Serbian citizens. More to the point, the financial and technological performance of EPS, NIS and JAT has been rather modest; indeed, the level of their development falls short of meeting the needs and demand of Serbian citizens and economy. On the other hand, these enterprises are privileged in the sense that laws and other regulations protect them from competition to a higher or lesser extent, which boosts their performance in the short term.

Apart from Telekom Srbija, only EPS has some limited potential for regional expansion, primarily through small-/medium-scale investments in the Republic of Srpska. In order to avoid a situation in which such expansion might hamper the growth and modernization of enterprises in Serbia or prolong the monopoly position of EPS, a number of conditions should be met, in particular:

– Electricity prices in Serbia should be raised to a level that ensures funds for long-term investments,

– The enterprise should be restructured and its efficiency improved,

– Private (probably foreign) investors should be included in the construction of power facilities in Serbia.

1 However, it remains unclear how Serbia, after all difficulties experienced during the 1990s (sanctions, conflicts), ambitiously aims at three to four regional leaders, when the Czech Republic and Hungary, countries often used as examples, have only one regional leader each.

4.5 Privatization through the Stock Exchange

It is estimated that, in the cases of Telekom Srbija, NIS, EPS and "Nikola Tesla" Airport, a portion of shares should be offered through the Stock Exchange. At that, stock exchange offering would be the main privatization model in the case of Telekom Srbija and EPS, while in the case of NIS and the Airport it would be an auxiliary privatization method in which minority packages would be offered for sale. It is also possible to sell through the Stock Exchange minority share packages in enterprises which are intended to remain State-owned in the long term (PTT, power transmission etc.). According to the estimates, State-owned shares in PEU and JAT would not be attractive for Stock Exchange investors due to the modest performances of these enterprises. Offering high-quality, liquid shares is necessary in order to create new investment opportunities for Serbian citizens, investment and pension funds and other legal entities, which in turn would contribute to the development and deepening of the financial market in Serbia.

5. Conclusion

The progress achieved in the development of a regulatory framework of infrastructure activities on the one hand, and the restructuring of public enterprises on the other hand, have resulted in more or less favorable conditions for the liberalization of those activities and for the commencement of public enterprise privatization. Taking into account the regulatory reforms and reforms implemented in the enterprises, NIS, JAT and PEU have been identified as first candidates for privatization. On the basis of the characteristics of their business activities, their performance, global tendencies in their respective fields etc., the best privatization method for these three public enterprises is deemed to be sale of a majority State-owned package to a strategic partner. According to the estimates, privatization of Telekom Srbija and EPS will be possible within several years (five at most), once the necessary changes have been made in the applicable regulations and in the enterprises themselves. In light of the importance of those activities, the performance of the two enterprises etc., it is estimated that, in the mid term, there would be no need for a strategic investor who would acquire a majority holding. These two enterprises would be privatized during the following several years through successive sales of minority share packages through the stock exchange and possible distribution of a part of shares to Serbian citizens. In parallel with the privatization of Telekom and EPS, it is necessary to create functional regulatory conditions for the liberalization of fixed-line telephony and power generation in a relatively short period (one to two years). It is estimated that, in the mid term, conditions for privatization of the (future) public enterprise for railway passenger and cargo transport will not be met, but it is necessary to create effective conditions for the liberalization of the activity itself. From the prevailing practice in the world, it can be concluded that conditions for the privatization of PTT Srbija will not be met for a relatively long period, but postal services will already have to be liberalized in the short term.

Annex:

Table L3-4. Ownership Structure in the Electricity and Fixed Telephony Sectors in Selected European States as of 2005

	Electricity	Fixed-network telephony
Austria	Public ownership prevails, particularly by the provinces. The main operator (Verbund) is majority-owned by the state (51%). Fully liberalized since October 2001.	The state owns a minority stake in Telekom Austria (47%). There are other public investors active in the sector. Liberalized in 1998.
France	The state is dominant owner in Electricité de France (EDF) (it had 100% ownership until 2005). Liberalization started in 1998.	The state owns a minority stake in France Telecom (43%). Liberalized in 1998 and in 2002 for local calls.
Germany	Public ownership prevails. In three of the four leading operators (RWE, EON, and EnBW), local authorities hold controlling stakes. Liberalized in 1998.	The federal state owns a minority stake (23%) in Deutsche Telekom. Liberalized in 1998.
Greece	The state owns 51% of the Public Power Corporation (DEI). Sector reform started in 1999, but DEI remains the only electricity provider.	The state owns a minority stake (34%) in Hellenic telecommunications Organization (OTE). Liberalization started.
Hungary	Generation 40% public ownership; distribution 20%. Major privatizations in 1995-6. The state still owns the main operator (MVM).	Private ownership largely prevails (the state owns a residual stake of 1% in MATÁV). Privatization and liberalization took place in 1993-5.
Italy	The state owns some 43% of Enel. Liberalization started in 1996. Since July 2004, the market is fully liberalized for non-household consumers	There is no residual public ownership in Telecom Italia. Liberalization was completed in the early 2000s.
Poland	Public ownership prevails. The main energy producers (BOT and PKE) are publicly owned. Other important energy companies have been privatized. Liberalization and privatization started in the second half of the 1990s.	Private ownership largely prevails (the state still holds some 4% of Telekomunicacja Polska (TP)). Privatization occurred over 1992-2000. Liberalization started in 1990s and completed in 2000s.
Slovakia	The state is minority partner in generation. There are three regional monopolies for distribution, which are state majority joint ventures with EON, RWE and EDF. Liberalization started.	The state owns a minority stake (49%) in Slovak Telecom. Liberalized in the second half of 1990s.
Slovenia	Generation 90%-100% public ownership; distribution 75%. Liberalization started in late 1990s.	The state owns 63% of Telekom Slovenije. Liberalization started by legislation in 2001.
Spain	Private ownership dominant. The state holds a 3% stake in Endesa. Sector reform started in 1994 and liberalization in 1997. Fully liberalized in 2003.	There is no residual public ownership in Telefónica. Liberalized.
Scandinavia	Public ownership prevails. Local authorities in Finland are also important players in generation and sale.	The state owns a minority stake in Sweden and Finland and a principal stake in Norway (51%).
UK	Private ownership largely prevails. Electricity distribution and generation were privatized in 1990-2. Liberalization was completed in 1998.	Private ownership. British Telecom was privatized in 1985. Liberalization was completed by around 1991.

Source: Roberto Pedersini, 2005, „Industrial relations in the public utilities", European Industrial Relations Observatory, http://www.eurofound.europa.eu/eiro/2005/02/study/tn0502101s.html

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ANALYTICAL APPENDIX

Table P-1. Serbia: Retail Price Index (RPI), 2003–2007

	RPI			RPI components				
	base index (avg. 2005 =100)	y-o-y growth	cumulative index[1]	GOODS	Agricultural products	Industrial foodproducts	Industrial non-foodproducts	SERVICES
				y-o-y 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
				quarterly indices[2]				
2005								
Q1	95.1	116.9	105.1	114.9	112.7	116.6	114.7	122.6
Q2	97.9	117.2	108.0	115.5	127.8	117.0	115.0	121.9
Q3	101.4	117.1	111.8	114.9	130.9	114.4	115.1	123.2
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
				monthly indices				
2005								
March	96.1	117.4	105.1	115.9	118.3	117.6	115.4	121.7
June	98.8	116.8	108.0	114.9	127.2	116.7	114.0	122.1
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
April	111.9	115.5	104.0	115.8	126.0	112.1	117.1	115.1
May	113.7	116.1	105.7	116.2	125.5	112.2	117.7	116.0
June	113.7	115.1	105.7	115.1	119.6	112.2	116.5	115.2
July	113.6	112.8	105.6	112.5	108.9	112.8	112.1	113.4
August	114.4	113.1	106.3	113.2	107.9	112.9	113.4	112.7
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

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, 2003–2007

	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
					quarterly indices[1)]			
2005								
Q1	95.1	116.9	94.8	115.9	108.2	113.5	113.2	106.4
Q2	97.9	117.2	98.7	116.4	111.0	113.3	114.7	104.4
Q3	101.4	117.1	101.0	115.5	116.0	114.1	116.9	109.5
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	…	…
					monthly indices			
2005								
March	96.1	117.4	96.2	116.9	109.1	113.8	115.0	105.9
June	98.8	116.8	99.8	115.8	111.7	112.9	114.8	104.6
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
April	111.9	115.5	111.2	114.5	112.2	116.0	105.4	106.2
May	113.7	116.1	113.4	114.5	113.8	116.5	107.1	106.2
June	113.7	115.1	113.4	113.7	114.0	116.2	108.4	108.7
July	113.6	112.8	112.4	111.7	115.5	115.6	108.7	110.0
August	114.4	113.1	112.7	111.9	115.8	115.2	111.5	111.4
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	…	…
July	120.2	105.8	117.0	104.1	…	…	…	…
August	121.6	106.3	120.5	106.9	…	…	…	…

Source: SBS.

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

Table P-3. Serbia: Euro / Dinar Exchange Rate, 2003–2007

	Nominal					Real			
	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]	CPI in Euro area[4] (avg. 2005 = 100)
					annual exchange rate[5]				
2003	64.9743	78.4	107.1	110.5	1.1241	96.8	97.6	104.5	95.9
2004	72.6215	87.6	111.8	115.6	1.2392	100.5	103.8	103.9	97.9
2005	82.9188	100.0	114.2	109.3	1.2433	100.0	99.5	94.9	100.0
2006	84.1879	101.5	101.5	91.7	1.2537	92.1	92.1	87.9	102.2
					quarterly exchange rate[5]				
2005									
Q1	80.2421	96.8	115.9	102.7	1.3145	100.6	101.2	98.1	98.8
Q2	81.8942	98.8	115.7	105.0	1.2606	100.9	100.7	98.3	99.9
Q3	83.8302	101.1	114.2	107.5	1.2199	100.0	99.8	97.8	100.3
Q4	85.7085	103.4	111.3	109.3	1.1898	98.8	96.6	94.9	100.9
2006									
Q1	87.0875	105.0	108.5	101.4	1.2031	97.1	96.6	99.6	101.0
Q2	86.8674	104.8	106.1	101.0	1.2552	94.8	94.0	97.0	102.3
Q3	83.2482	100.4	99.3	96.7	1.2745	90.3	90.3	92.6	102.6
Q4	79.5486	95.9	92.8	91.7	1.2893	86.4	87.5	87.9	102.9
2007									
Q1	79.9849	96.5	91.8	102.7	1.3105	86.2	88.7	101.9	103.2
Q2	81.0734	97.8	93.3	103.0	1.3482	86.3	91.0	100.3	104.5
					monthly exchange rate				
2005									
March	80.7498	131.2	116.1	102.7	1.3074	100.6	100.9	98.1	
June	82.5172	134.1	115.3	105.0	1.2180	100.8	100.7	98.3	100.1
September	84.4958	137.3	113.6	107.5	1.2265	100.3	99.9	97.8	100.7
December	85.9073	139.6	109.3	109.3	1.1861	97.3	94.9	94.9	101.0
2006									
January	86.9033	141.2	108.8	101.2	1.2122	97.6	96.7	100.3	100.6
February	87.2558	141.8	108.9	101.6	1.1960	96.9	96.8	99.6	100.9
March	87.1033	141.5	107.9	101.4	1.2013	96.9	96.3	99.6	101.4
April	86.5391	140.6	106.4	100.7	1.2239	95.2	94.3	97.9	102.1
May	87.3023	141.8	106.7	101.6	1.2750	94.8	94.1	97.5	102.4
June	86.7609	140.9	105.1	101.0	1.2677	94.4	93.6	97.0	102.5
July	83.7931	136.1	101.0	97.5	1.2684	91.1	91.7	93.7	102.4
August	82.8893	134.7	98.7	96.5	1.2803	89.7	89.3	92.2	102.6
September	83.0621	134.9	98.3	96.7	1.2748	90.1	89.8	92.6	102.7
October	80.9242	131.5	95.0	94.2	1.2615	88.2	88.5	90.6	102.7
November	78.9404	128.2	91.7	91.9	1.2876	85.4	86.0	87.8	102.8
December	78.7812	128.0	91.7	91.7	1.3210	85.5	87.9	87.9	103.2
2007									
January	79.6587	96.1	91.7	101.1	1.2993	85.8	87.9	100.3	102.8
February	79.3993	95.8	91.0	100.8	1.3075	85.6	88.4	100.2	103.1
March	80.8968	97.6	92.9	102.7	1.3246	87.1	89.9	101.9	103.7
April	80.5768	97.2	93.1	102.3	1.3516	86.5	90.9	101.2	104.3
May	81.4770	98.3	93.3	103.4	1.3512	86.5	91.2	101.2	104.6
June	81.1665	97.9	93.6	103.0	1.3420	85.8	90.9	100.3	104.7
July	80.6204	97.2	96.2	102.3	1.3716	84.5	92.7	98.8	104.4
August	80.0703	96.6	96.6	101.6	1.3622	83.1	92.7	97.2	104.7

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 T3-5.

4) Harmonized indices of consumer prices. Due to official revisions, this index differs slightly from values published in previous QM issues.

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

Table P4. Serbia: Registered Employment, 2004–2007

	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	2,050	1,577	473	210	263	1,840
Q1	2,050	1,589	461	207	253	1,842
Q2	2,059	1,592	468	208	259	1,851
Q3	2,045	1,570	475	209	266	1,836
Q4	2,048	1,559	489	216	273	1,832
2005	2,061	1,540	521	228	293	1,833
Q1	2,065	1,557	507	225	283	1,840
Q2	2,062	1,544	518	228	289	1,833
Q3	2,063	1,536	527	229	298	1,834
Q4	2,055	1,521	533	230	304	1,825
2006	2,022	1,472	562	239	323	1,795
Q1	2,035	1,500	535	228	307	1,806
Q2	2,017	1,481	550	234	316	1,797
Q3	2,012	1,462	571	243	328	1,790
Q4	2,023	1,445	590	249	341	1,786
2007						
Q1	2,002	1,432	570	241	329	1,761
			monthly data - in thousands			
2006						
January	2,037	1,506	531	229	305	1,810
February	2,029	1,497	533	228	307	1,805
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	572	242	330	1,773
December	2,012	1,440	572	242	330	1,770
2007						
January	2,005	1,432	572	242	330	1,762
February	1,997	1,425	572	242	330	1,755
March [1)]	2,004	1,438	566	239	327	1,765
April[2)]	2,002	1,436	566	239	327	1,763
May[2)]	1,999	1,433	566	239	327	1,760

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 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.

Notes:

1) The March data have been updated with RAD-1 for March 2007.

2) The number of entrepreneurs and their employees for April and May are March 2007 data.

Table P-5. Serbia: Employees by Activities, 2004–2007

	2004	2005	2006	2006												2007		
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar[1)]
Employees in enterprises, institutions and organizations, by sections of activities	In thousands																	
Agriculture, hunting and forestry	69	64	58	61	60	60	59	59	59	58	58	57	57	56	56	56	56	55
Fishing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mining and quarrying	32	31	27	29	29	28	28	28	28	28	28	29	25	24	24	24	23	23
Manufacturing	484	460	419	439	434	432	429	425	421	419	415	409	407	403	400	400	396	399
Electricity, gas and water supply	46	46	45	45	45	45	45	44	44	44	44	43	47	46	46	46	45	45
Construction	88	88	86	87	86	86	86	86	86	86	85	85	86	86	86	84	83	83
Wholesale and retail trade, repair	208	205	198	201	202	203	202	202	200	200	201	192	192	193	193	192	191	197
Hotels and restaurants	28	27	25	26	26	25	25	24	24	24	24	24	24	24	24	23	23	24
Transport, storage and communications	119	116	110	113	111	112	111	111	110	110	110	109	108	108	108	107	109	109
Financial mediation	29	29	30	29	30	30	29	30	30	30	30	30	30	30	30	30	30	30
Real estate, renting activities	59	63	67	66	66	67	67	67	67	67	68	68	67	67	67	63	63	65
Public administration and social insurance	71	71	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	68
Education	131	129	127	128	127	126	126	126	126	126	125	125	128	129	129	130	130	130
Health and social work	165	166	158	160	160	159	157	158	158	158	158	157	156	155	156	155	156	156
Other communal, social and personal services	49	51	52	52	52	52	52	52	52	52	52	51	51	51	51	51	51	52

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) Data for March have been corrected with RAD-1.

Table P-6. Serbia: Average Monthly Wage and Wage Index, 2005–2007

	Average monthly wage		Average Monthly Real Wage Index, y-o-y	
	Gross, in dinars	Net, in dinars	Gross	Net
2005				
August	26,252	17,928	108.9	109.2
September	26,818	18,345	110.6	110.6
October	26,720	18,265	107.1	107.4
November	27,379	18,696	106.6	106.6
December	32,243	22,078	108.5	108.7
2006				
January	26,603	18,191	110.4	110.6
February	28,657	19,567	111.5	111.5
March	29,367	20,094	111.2	111.3
April	30,572	20,887	106.2	106.1
May	30,305	20,713	108.3	108.2
June	31,864	21,777	109.9	109.8
July	31,738	21,774	110.3	110.6
August	32,098	21,925	109.3	109.3
September	32,555	22,259	109.7	109.6
October	32,668	22,340	113.4	113.4
November	33,892	23,148	115.1	115.1
December	41,294	28,267	120.9	120.8
2007				
January	33,770	24,122	120.0	125.3
February	35,219	25,228	117.6	123.4
March	36,148	25,960	118.1	124.0
April	37,117	26,632	117.4	123.3
May	37,668	26,981	120.6	126.4
June	38,916	27,882	118.0	123.7
July	38,712	27,752	117.2	122.4

Source: Serbian Bureau of Statistics (SBS).

Table P-7. Serbia: Average Gross Monthly Wage - Public Sector, 2004–2007

	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
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

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

Table P-8. Serbia: Wage Bill - Public Sector, 2004-2007

	in thousands dinars	% of total wage bill	% of GDP
2004	157,123,004	34.6	11.5
2005	185,419,552	33.0	10.9
2006	213,363,152	31.2	10.5
2005			
Q2	45,954,434	33.4	11.3
2006			
Q1	48,667,357	31.8	11.2
Q2	51,223,897	30.7	10.3
Q3	52,296,835	30.3	9.8
Q4	61,175,063	31.8	10.7
2007			
Q1	59,822,269	32.3	12.0
Q2	62,933,517	31.4	11.5

Source: SBS.

Table P-9. Serbia: Balance of Payments, 2003–2007[1)]

	2003	2004	2005				2006				2007	
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	flows, cumulative from the beginning of the year, in millions of euros											
CURRENT ACCOUNT	**-1,355**	**-2,197**	**-324**	**-615**	**-1,134**	**-1,805**	**-680**	**-1,155**	**-1,780**	**-2,892**	**-1,141**	**-2,115**
GOODS AND SERVICES	**-3,621**	**-5,156**	**-708**	**-1,755**	**-2,970**	**-4,284**	**-1,132**	**-2,384**	**-3,536**	**-4,999**	**-1,416**	**-2,886**
Goods	-3,808	-5,311	-683	-1,772	-2,987	-4,279	-1,101	-2,357	-3,524	-4,950	-1,412	-2,891
Exports , f.o.b.[2)]	2,447	2,991	813	1,824	2,843	4,006	1,039	2,282	3,662	5,146	1,401	3,000
Imports , f.o.b.	-6,415	-8,302	-1,496	-3,596	-5,830	-8,285	-2,140	-4,638	-7,186	-10,096	-2,813	-5,891
Exports/ Imports (%)	*38*	*36*	*54*	*51*	*49*	*48*	*49*	*49*	*51*	*51*	*50*	*51*
Services	187	155	-25	17	17	-5	-31	-27	-12	-49	-4	5
Receipts	906	1,171	251	594	951	1,319	306	697	1,188	1,670	439	955
Expenditures	-719	-1,016	-276	-577	-934	-1,324	-338	-724	-1,200	-1,719	-443	-950
Income, net	-180	-172	-59	-141	-198	-260	-58	-155	-236	-314	-84	-169
Earnings	61	64	12	32	53	80	32	66	105	154	40	87
Payments	-241	-235	-71	-174	-250	-339	-91	-221	-341	-468	-124	-256
Current transfers	2,020	2,728	410	1,200	1,886	2,471	474	1,302	1,868	2,240	318	860
Private remittances, net	332	340	35	167	225	281	-21	90	120	110	-19	70
Inflow	690	796	184	424	683	955	95	95	200	512	271	603
Outflow	-358	-456	-149	-256	-457	-674	-283	-450	-715	-1,037	-289	-533
F/X accounts of non-residents	308	568	37	108	259	460	183	276	494	561	111	117
F/X purchases, net	1,106	1,592	320	884	1,329	1,631	289	882	1,166	1,447	196	608
Other[3)]	274	228	17	41	73	99	23	54	87	123	30	65
Official grants	425	403	33	82	148	268	36	82	124	181	41	79
ERRORS AND OMISSIONS	**44**	**168**	**-184**	**-75**	**-205**	**-384**	**-31**	**-63**	**-147**	**-165**	**-358**	**-289**
CAPITAL AND FINANCIAL ACCOUNT	**1,898**	**2,377**	**710**	**1,173**	**2,276**	**3,863**	**1,100**	**2,687**	**4,935**	**7,353**	**1,296**	**2,599**
Financial account	1,898	2,377	710	1,173	2,276	3,863	1,100	2,687	4,935	7,353	1,296	2,599
Foreign direct investment (FDI)	1,198	773	262	502	998	1,248	164	738	2,409	4,077	887	1,039
Other investment	701	1,604	448	671	1,278	2,615	936	1,949	2,526	3,276	409	1,560
Medium/long term loans[4)]	628	1,221	159	602	988	1,820	443	1,685	2,456	3,140	494	1,480
Government	206	229	15	44	108	192	73	84	132	132	19	12
Commercial banks	106	417	68	209	292	729	146	1,122	1,346	1,484	37	-162
Other	317	574	74	348	588	886	224	479	979	1,523	438	1,630
Short-term loans	14	164	94	28	33	330	212	-189	25	170	-223	-123
Extraordinary debt and interest repayment[5)]	0	0	0	0	0	0	0	-189	-377	-1,060	-177	-177
Other assets and liabilities	18	187	120	11	186	378	136	115	446	839	312	339
Commercial banks F/X reserves (increase,-)	-3	33	77	30	71	100	144	146	-25	1	3	40
NBS reserves, net[4)], (increase,-)	**-587**	**-349**	**-202**	**-483**	**-937**	**-1,675**	**-390**	**-1,469**	**-3,008**	**-4,296**	**202**	**-195**
IMF disbursements	246	192	0	0	151	151	75	75	75	75	0	0
IMF amortization[5)]	0	-188	-47	-93	-133	-166	-22	-22	-22	-32	-10	-10
MEMORANDUM ITEMS												
NBS reserves excl. com. banks deposits	-765	-293	-51	-422	-668	-1,335	-92	-433	-613	-2,811	288	-364
						in % of GDP						
Exports of goods and services	19.5	21.1	23.2	24.9	24.9	25.2	26.0	26.8	27.4	27.4	28.5	29.0
Imports of goods and services	-39.6	-47.2	-38.7	-43.0	-44.4	-45.5	-47.8	-48.3	-47.4	-47.5	-50.4	-50.1
Balance of goods and services	-21.1	-26.9	-14.9	-18.3	-19.6	-20.3	-21.3	-21.2	-19.9	-19.9	-21.9	-21.2
Current account	-7.5	-11.1	-7.1	-6.3	-7.5	-8.6	-13.1	-10.4	-10.1	-11.6	-17.7	-15.5
GDP in euros[7)]	18,008	19,723	4,578	9,703	15,220	21,108	5,181	11,095	17,675	24,886	6,456	13,648
	18,008	19,723	4,578	9,703	15,220	21,108	5,181	11,095	17,675	24,886	6,456	13,648

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 Q1 2007: FREN estimate.

Table P-10. Serbia: Consolidated General Government Fiscal Operations[1], 2004–2007

	in billions of dinars													% in GDP			
	2004	2005					2006					2007					
	total	total	Q1	Q2	Q3	Q4	total	Q1	Q2	Q3	Q4	Q1	Q2	2003	2004	2005	2006
I TOTAL REVENUE	**589.4**	**701.6**	**146.0**	**168.4**	**177.0**	**210.2**	**825.0**	**175.3**	**201.6**	**207.5**	**240.6**	**215.2**	**228.1**	**40.3**	**41.2**	**40.1**	**38.9**
o/w: Public revenues excluding government VAT liabilities and offsets with SDF[2,3]	*580.6*	*679.0*	*141.7*	*163.7*	*172.7*	*200.9*	*815.0*	*176.8*	*199.5*	*203.6*	*235.1*	*215.1*	*228.0*	*40.3*	*41.2*	*38.8*	*38.4*
1. Current revenue	583.4	693.7	144.4	166.6	174.9	207.8	814.7	173.2	199.3	204.9	237.3	212.0	225.4	39.9	40.8	39.6	38.4
Tax revenue	540.8	638.9	135.5	155.0	162.6	185.8	751.3	159.4	185.1	188.5	218.2	195.0	208.8	37.3	37.8	36.5	35.4
Personal income tax	76.9	94.3	19.5	23.5	24.1	27.2	118.5	25.8	29.2	29.2	34.3	24.9	28.2	6.5	5.4	5.4	5.6
Corporate income tax	6.9	10.3	3.9	1.8	1.8	2.8	18.3	7.9	2.9	3.5	4.0	11.7	5.6	0.5	0.5	0.6	0.9
Value added tax and retail sales tax	159.1	215.9	47.4	52.0	54.3	62.2	225.2	46.3	57.9	57.0	64.0	60.5	65.0	10.8	11.1	12.3	10.6
o/w: Net VAT and retail sales tax[2]	*159.1*	*198.8*	*44.4*	*48.9*	*50.8*	*54.7*	*224.7*	*47.9*	*55.8*	*57.0*	*64.0*	*60.5*	*65.0*	*10.8*	*11.1*	*11.4*	*10.6*
Excises	69.1	71.3	13.2	18.3	19.8	20.0	81.7	14.7	21.1	21.7	24.2	19.1	22.8	5.0	4.8	4.1	3.9
Custom duties	34.3	39.0	7.0	9.3	10.4	12.3	45.2	9.6	12.7	9.9	13.1	12.0	13.9	2.5	2.4	2.2	2.1
Social contributions	159.0	184.0	38.6	44.4	46.4	54.6	232.2	48.5	54.1	59.4	70.2	58.9	65.0	2.2	11.1	10.5	10.9
o/w: contributions excluding offsets with SDF[3]	*150.2*	*179.1*	*37.2*	*42.9*	*45.7*	*52.8*	*222.7*	*48.4*	*54.1*	*55.5*	*64.7*	*58.8*	*64.9*	*9.9*	*10.5*	*10.2*	*10.5*
Other tax	35.5	24.1	5.9	5.7	5.7	6.8	30.1	6.5	7.2	7.9	8.5	7.9	8.3	9.9	2.5	1.4	1.4
Non-tax revenue	42.6	54.8	8.9	11.5	12.4	22.0	63.4	13.8	14.2	16.3	19.1	17.0	16.7	2.6	3.0	3.1	3.0
2. Capital revenue	6.1	7.9	1.6	1.8	2.1	2.4	10.3	2.1	2.3	2.6	3.3	3.2	2.6	0.4	0.4	0.5	0.5
II TOTAL EXPENDITURE	**-572.0**	**-667.8**	**-141.1**	**-164.5**	**-167.1**	**-195.1**	**-813.0**	**-174.9**	**-185.1**	**-197.6**	**-255.4**	**-202.9**	**-211.2**	**42.7**	**40.0**	**38.2**	**38.3**
1. Current expenditure	-535.0	-634.8	-135.7	-155.4	-159.4	-184.3	-749.1	-167.6	-174.3	-184.4	-222.8	-187.4	-196.1	40.9	37.4	36.3	35.3
Wages and salaries	-138.0	-166.3	-36.1	-41.0	-41.5	-47.7	-198.6	-46.1	-45.7	-47.1	-59.6	-51.9	-56.2	9.9	9.6	9.5	9.4
o/w: wages and salaries excluding severance payments[4]	*-0.26*	*-1.31*	*-0.1*	*-0.4*	*-0.5*	*-0.2*	*-3.19*	*-1.54*	*-0.28*	*-0.43*	*-0.94*	*0.3*	*0.4*	..	..	*0.1*	*0.2*
o/w: Health Insurance Bureau severance payments[5]	*0.00*	*-2.17*	*0.00*	*0.00*	*0.00*	*-2.17*	*-2.28*	*-0.90*	*0.00*	*-1.38*	*0.0*	*0.0*	*0.0*	..	..	*0.1*	*0.1*
Expenditure on goods and services	-78.3	-92.2	-17.2	-22.2	-23.1	-29.7	-114.1	-22.4	-25.3	-29.0	-37.5	-25.6	-31.1	6.2	5.5	5.3	5.4
Interest payments	-24.6	-24.5	-5.9	-5.0	-5.8	-7.8	-28.9	-5.7	-4.9	-8.8	-9.4	-5.7	-3.1	0.9	1.7	1.4	1.4
Subsidies	-63.8	-54.5	-11.1	-13.5	-14.1	-15.8	-54.4	-10.1	-12.7	-13.602	-18.0	-9.3	-10.4	5.0	4.5	3.1	2.6
Social transfers	-217.0	-281.5	-62.2	-69.8	-70.8	-78.7	-335.8	-79.8	-81.1	-81.7	-93.1	-91.1	-91.8	18.0	15.2	16.1	15.8
o/w: pensions[6]	*-151.1*	*-186.1*	*-41.9*	*-45.8*	*-46.9*	*-51.5*	*-227.7*	*-52.7*	*-55.7*	*-58.501*	*-60.8*	*-62.0*	*-63.3*	*10.8*	*10.6*	*10.6*	*10.7*
Other current expenditure	-13.3	-15.8	-3.1	-3.9	-4.2	-4.6	-17.4	-3.5	-4.6	-4.1	*-5.2*	-3.9	-3.4	0.8	0.9	0.9	0.8
2. Capital expenditure[7]	-37.0	-33.0	-5.4	-9.0	-7.8	-10.8	-63.9	-7.3	-10.8	-13.2	-32.6	-15.5	-15.1	1.9	2.6	1.9	3.0
III "OLD" DEBT REPAYMENT AND GOVERNMENT NET LENDING	**-25.2**	**-36.7**	**-2.5**	**-17.4**	**-8.9**	**-7.9**	**-49.1**	**-4.4**	**-17.1**	**-10.1**	**-17.5**	**-14.1**	**-14.6**	**2.7**	**1.8**	**2.1**	**2.3**
1. Debt repayment - FFCDs and LRS	-18.9	-21.9	-0.9	-15.1	-5.1	-0.8	-21.7	-1.0	-14.6	-4.8	-1.4	-4.6	-13.3	1.6	1.3	1.3	1.0
2. Pensions[8]	-4.5	-9.8	-1.3	-1.5	-1.4	-5.6	-20.3	-1.6	-1.7	-4.0	-13.0	-8.9	0.0	0.3	0.3	0.6	1.0
3. Budget credits, net[9]	-1.8	-4.9	-0.3	-0.8	-2.3	-1.5	-7.1	-1.8	-0.8	-1.3	-3.2	-0.6	-1.2	0.8	0.1	0.3	0.3
IVa CASH BALANCE (I+II), MoF definition[10]	**17.5**	**33.8**	**4.9**	**3.9**	**9.8**	**15.2**	**12.0**	**0.4**	**16.5**	**9.9**	**-14.8**	**12.2**	**16.9**	**2.4**	**1.2**	**1.9**	**0.6**
Republic budget	-0.78	26.8	-0.9	4.7	6.0	17.0	3.3	-9.1	7.5	4.9	0.0	2.2	14.0	..	-0.1	1.5	0.2
Pension and Disability Insurance Employee Fund	-0.8	-0.5	-1.0	0.0	1.2	-0.7	5.0	1.8	1.4	0.1	1.7	-2.2	-1.6	..	-0.1	0.0	0.2
Pension and Disability Insurance Self-employed Fund	2.7	2.5	0.2	0.1	-0.1	2.3	5.2	0.6	1.2	1.3	2.1	1.3	0.9	..	0.2	0.1	0.2
Pension and Disability Insurance Farmers Fund	0.0	0.0	0.2	-0.1	0.0	-0.1	0.1	0.1	0.0	0.0	0.0	-0.1	0.0	..	0.0	0.0	0.0
Health Insurance Fund	1.4	-0.5	1.3	-0.7	1.1	-2.2	3.1	1.0	2.4	1.8	-2.1	3.5	0.8	..	0.1	0.0	0.2
National Employment Service	0.8	0.8	-0.3	0.3	-0.4	0.0	0.2	0.3	0.8	0.2	-1.2	-0.6	0.1	..	0.1	0.0	0.0
Vojvodina budget	-0.6	-1.8	0.3	-0.1	-0.1	-1.9	-2.7	0.7	0.0	-1.1	-2.3	0.7	0.0	..	0.0	-0.1	-0.1
Local government	..	3.8	5.4	0.0	1.3	-2.9	1.3	5.7	3.4	0.3	-8.2	7.5	2.9	..	…	0.2	0.1
IVb OVERALL BALANCE (IVa+III.3.), IMF definition, MoF data[11]	**15.7**	**28.9**	**4.6**	**3.1**	**7.5**	**13.7**	**4.9**	**-1.4**	**15.7**	**8.6**	**-18.0**	**11.6**	**15.7**	**-3.2**	**1.1**	**1.6**	**0.2**
IVc ANALYTICAL BALANCE (I+II+III), FREN's definiton[12]	**-7.7**	**-2.9**	**2.4**	**-13.4**	**0.8**	**7.3**	**-37.2**	**-4.0**	**-0.6**	**-0.2**	**-32.3**	**-1.9**	**2.4**	**-5.1**	**-0.4**	**-0.2**	**-1.8**
V FINANCING (FREN's definition)	**23.9**	**27.8**	**12.9**	**-3.9**	**11.8**	**7.0**	**121.8**	**8.5**	**1.4**	**103.2**	**8.7**	**24.9**	**8.0**	**3.8**	**1.7**	**1.6**	**5.7**
Grants[13]	0.9	0.2	0.0	0.0	0.1	0.1	0.7	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.1	0.0	0.0
Privatization receipts[14]	14.2	21.7	12.1	-2.1	14.0	-2.3	106.1	9.1	1.3	103.0	-7.3	26.6	8.6	2.8	1.0	1.2	5.0
Domestic financing[15]	5.9	5.0	1.5	1.7	0.7	1.1	21.0	1.4	0.2	1.4	18.0	0.5	0.5	0.2	0.4	0.3	1.0
Foreign financing[16]	7.4	6.7	0.0	1.5	1.9	3.3	2.0	-0.4	1.4	1.0	0.1	-0.4	-0.3	0.8	0.5	0.4	0.1
Expenditures for principal repayments to domestic and foreign creditors[17]	-4.5	-5.8	-0.7	-5.0	-4.9	4.8	-8.1	-1.7	-1.7	-2.4	-2.3	-1.8	-0.8	0.1	0.3	0.3	0.4
VI ACCOUNT BALANCE CHANGE (IVc+V)	**16.2**	**24.9**	**15.3**	**-17.3**	**12.6**	**14.3**	**84.6**	**4.5**	**0.7**	**103.0**	**-23.7**	**23.0**	**10.4**	**1.3**	**1.1**	**1.4**	**4.0**

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) Cash surplus/deficit under (GFS 2001) represents the difference between current revenue and receipts from the sale of non-financial property (i.e. capital revenues) and current expenditures and spending on acquisition of non-financial property (i.e. capital expenditures). See discussion on

methodology in Box 1, QM 3 for more details. The unconsolidated (total of results at all levels of government) and consolidated results should, by definition, agree but differences exist due to inconsistencies in the fiscal data.

11) 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.

12) 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.

13)Information from IMF CR 06/58. There is no data on grants in the PFB.

14) 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.

15) 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.

16) Foreign financing in the budget of the Republic has been increased by 30% (an allowance for unknown local financing).

17) Expenses for debt amortization from the PFB, which are not included in Section III.

Table P-11. Serbia: Monetary Survey, 2005–2007

	2005				2006				2007	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	in millions of dinars, end of period[1]									
Net Foreign Assets (NFA)	**162,488**	**183,484**	**216,183**	**218,886**	**200,462**	**229,984**	**360,685**	**407,565**	**441,048**	**484,388**
Net Foreign Assets (NFA) (in euros)	2,005	2,217	2,552	2,560	2,307	2,674	4,399	5,159	5,407	6,130
Assets	332,844	371,427	428,842	491,883	517,118	600,522	710,311	770,999	775,921	786,952
Assets (in euros)	*4,107*	*4,487*	*5,063*	*5,753*	*5,951*	*6,983*	*8,662*	*9,759*	*9,512*	*9,958*
NBS	274,136	304,386	362,216	424,844	465,497	549,529	648,946	715,114	719,381	730,668
NBS (in euros)	*3,382*	*3,677*	*4,276*	*4,969*	*5,357*	*6,390*	*7,914*	*9,052*	*8,819*	*9,246*
Commercial banks	58,708	67,041	66,626	67,039	51,621	50,993	61,365	55,885	56,540	56,284
Commercial banks (in euros)	*724*	*810*	*787*	*784*	*594*	*593*	*748*	*707*	*693*	*712*
Liabilities (-)	-170,356	-187,943	-212,659	-272,997	-316,656	-370,538	-349,626	-363,434	-334,873	-302,564
Liabilities (-) (in euros)	*-2,102*	*-2,271*	*-2,511*	*-3,193*	*-3,644*	*-4,309*	*-4,264*	*-4,600*	*-4,105*	*-3,829*
NBS	-72,187	-73,162	-81,569	-81,873	-87,575	-68,368	-48,845	-55,692	-16,275	-15,716
NBS (in euros)	*-891*	*-884*	*-963*	*-958*	*-1,008*	*-795*	*-596*	*-705*	*-200*	*-199*
Commercial banks	-98,169	-114,781	-131,090	-191,124	-229,081	-302,170	-300,781	-307,742	-318,598	-286,848
Commercial banks (in euros)	*-1,211*	*-1,387*	*-1,548*	*-2,235*	*-2,636*	*-3,514*	*-3,668*	*-3,895*	*-3,906*	*-3,630*
Net Domestic Assets (NDA)	**168,841**	**190,622**	**206,257**	**239,985**	**272,642**	**285,856**	**207,195**	**231,055**	**234,991**	**224,279**
Domestic credits	370,019	407,795	446,299	490,467	516,435	557,316	490,539	509,110	537,098	583,321
Net credits to goverment[2]	-6,864	-1,602	-10,242	-27,831	-31,129	-33,954	-124,159	-100,061	-128,909	-149,081
Credits	46,961	41,744	43,492	40,106	40,311	37,919	31,415	34,896	29,559	25,652
Dinar credits	30,237	25,285	23,313	21,272	18,381	16,408	15,322	18,271	16,193	16,102
NBS	22,123	17,524	16,901	16,330	14,735	14,474	14,472	16,450	15,740	15,715
Commercial banks	8,114	7,761	6,412	4,942	3,646	1,934	850	1,821	453	387
Fx credits	16,724	16,459	20,179	18,834	21,930	21,511	16,093	16,625	13,366	9,550
Fx credits (in euros)	*206*	*199*	*238*	*220*	*252*	*250*	*196*	*210*	*164*	*121*
NBS	0	0	0	181	184	182	0	0	0	0
NBS (in euros)	*0*	*0*	*0*	*2*	*2*	*2*	*0*	*0*	*0*	*0*
Commercial banks	16,724	16,459	20,179	18,653	21,746	21,329	16,093	16,625	13,366	9,550
Commercial banks (in euros)	*206*	*199*	*238*	*218*	*250*	*248*	*196*	*210*	*164*	*121*
Deposits (-)	-53,825	-43,346	-53,734	-67,937	-71,440	-71,873	-155,574	-134,957	-158,468	-174,733
Dinar deposits	-32,060	-29,868	-34,581	-43,604	-43,860	-55,057	-50,760	-27,047	-51,975	-78,392
NBS	-30,245	-28,235	-32,797	-40,718	-39,439	-49,801	-45,785	-19,678	-43,849	-62,941
Commercial banks	-1,815	-1,633	-1,784	-2,886	-4,421	-5,256	-4,975	-7,369	-8,126	-15,451
Fx deposits	-21,765	-13,478	-19,153	-24,333	-27,580	-16,816	-104,814	-107,910	-106,493	-96,341
Fx deposits (in euros)	*-269*	*-163*	*-226*	*-285*	*-317*	*-196*	*-1,278*	*-1,366*	*-1,305*	*-1,219*
NBS	-18,088	-6,571	-14,392	-18,806	-21,464	-10,586	-99,498	-103,443	-101,705	-91,685
NBS (in euros)	*-223*	*-79*	*-170*	*-220*	*-247*	*-123*	*-1,213*	*-1,309*	*-1,247*	*-1,160*
Commercial banks	-3,677	-6,907	-4,761	-5,527	-6,116	-6,230	-5,316	-4,467	-4,788	-4,656
Commercial banks (in euros)	*-45*	*-83*	*-56*	*-65*	*-70*	*-72*	*-65*	*-57*	*-59*	*-59*
Credit to the non-government sector	376,883	409,397	456,541	518,298	547,564	591,270	614,698	609,171	666,007	732,402
Households	72,489	86,340	108,053	132,146	150,290	172,185	190,378	203,631	230,775	254,803
Enterprises	304,394	323,057	348,488	386,152	397,274	419,085	424,320	405,540	435,232	477,599
Other item, net[3]	-201,178	-217,173	-240,042	-250,482	-243,793	-271,460	-283,344	-278,055	-302,107	-359,042
o/w: Capital and Reserves (-)	-160,723	-169,226	-177,165	-181,772	-187,095	-216,178	-220,712	-242,254	-256,429	-289,801
NBS	-39,068	-38,085	-36,571	-41,450	-42,531	-42,364	-27,662	-7,454	-15,993	-9,923
Commercial banks	-121,655	-131,141	-140,594	-140,322	-144,564	-173,814	-193,050	-234,800	-240,436	-279,878
Broad money: M2[4]	**331,331**	**374,106**	**422,441**	**458,870**	**473,103**	**515,840**	**567,881**	**638,620**	**676,039**	**708,667**
Dinar denominated M2[5]	143,768	160,351	180,043	192,180	189,911	208,606	232,506	283,116	282,299	288,329
M1	110,073	120,481	134,727	144,949	137,800	148,694	158,452	200,090	193,187	205,564
Currency outside banks	39,368	42,316	47,283	53,650	45,825	48,926	52,110	68,461	58,669	65,066
Demand deposits (households and economy)	70,705	78,165	87,444	91,299	91,975	99,768	106,342	131,629	134,518	140,498
Time and savings deposits (households and economy)	33,695	39,870	45,316	47,231	52,111	59,912	74,054	83,026	89,112	82,765
Fx deposits (households and economy)	187,563	213,755	242,398	266,690	283,192	307,234	335,375	355,504	393,740	420,338
Fx deposits (households and economy), in euros	*2,314*	*2,582*	*2,862*	*3,119*	*3,259*	*3,572*	*4,090*	*4,500*	*4,827*	*5,319*
o/w: households[6]	124,107	141,477	162,667	190,136	207,609	222,105	243,328	260,661	293,195	307,783
o/w: households[6] (in euros)	*1,531*	*1,709*	*1,921*	*2,224*	*2,389*	*2,583*	*2,967*	*3,300*	*3,594*	*3,895*

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) 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, 2005–2007

	2005				2006				2007	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	in millions of dinars, end of period[1]									
Net foreign reserves	**-39,461**	**-47,740**	**-64,464**	**-124,085**	**-177,460**	**-251,177**	**-239,416**	**-251,857**	**-262,058**	**-230,564**
Net foreign reserves (in euros)	-487	-577	-761	-1,451	-2,042	-2,921	-2,920	-3,188	-3,213	-2,918
Gross foreign reserves	58,708	67,041	66,626	67,039	51,621	50,993	61,365	55,885	56,540	56,284
Gross foreign reserves (in euros)	*724*	*810*	*787*	*784*	*594*	*593*	*748*	*707*	*693*	*712*
Gross reserve liabilities (-)	-98,169	-114,781	-131,090	-191,124	-229,081	-302,170	-300,781	-307,742	-318,598	-286,848
Gross reserve liabilities (-) (n euros)	*-1,211*	*-1,387*	*-1,548*	*-2,235*	*-2,636*	*-3,514*	*-3,668*	*-3,895*	*-3,906*	*-3,630*
Net Domestic Assets (NDA)	**39,461**	**47,740**	**64,464**	**124,085**	**177,460**	**251,177**	**239,416**	**251,857**	**262,058**	**230,565**
Domestic credits	206,895	230,533	263,230	331,378	375,536	481,132	483,067	509,090	534,592	569,540
Net claims on goverment[2]	10,731	3,600	7,558	5,838	4,295	-3,369	-8,219	-2,492	-9,261	-18,611
Claims	25,948	25,396	28,062	25,803	27,837	26,044	20,745	23,479	19,134	15,314
Dinar credits	9,220	8,932	7,878	7,145	6,086	4,710	4,652	6,854	5,768	5,764
Fx credits	16,728	16,464	20,184	18,658	21,751	21,334	16,093	16,625	13,366	9,550
Fx credits (in euros)	*206*	*199*	*238*	*218*	*250*	*248*	*196*	*210*	*164*	*121*
Liabilities (-)	-15,217	-21,796	-20,504	-19,965	-23,542	-29,413	-28,964	-25,971	-28,395	-33,925
Dinar deposits	-11,506	-14,859	-15,702	-14,399	-17,382	-23,171	-23,630	-21,496	-23,592	-29,212
Fx deposits	-3,711	-6,937	-4,802	-5,566	-6,160	-6,242	-5,334	-4,475	-4,803	-4,713
Fx deposits (in euros)	*-46*	*-84*	*-57*	*-65*	*-71*	*-73*	*-65*	*-57*	*-59*	*-60*
Net claims on NBS	99,551	136,668	159,585	204,896	235,986	340,148	382,531	467,869	483,231	482,321
Claims	101,304	137,187	160,321	205,631	236,443	341,952	382,974	468,312	483,620	482,561
Cash	3,812	4,430	4,822	7,053	6,793	6,799	8,654	10,206	9,889	10,958
Required reserves	20,676	21,855	24,673	26,046	26,387	33,352	33,602	34,290	25,931	29,196
Excess reserves	-1,076	-211	-76	2,621	-2,109	-2,473	-3,440	-1,524	49	-5,973
Deposits (-)	74,685	93,482	111,094	153,016	174,078	247,994	263,765	273,808	280,284	298,088
o/w: dinar deposits	3,679	3,827	5,317	5,274	948	2,564	7,535	20,189	6,651	22,804
NBS bills/repo[3]	3,207	17,631	19,808	16,895	31,294	56,280	80,393	151,532	167,467	150,292
Liabilities (-)	-1,753	-519	-736	-735	-457	-1,804	-443	-443	-389	-240
Net claims on the rest of the economy	96,613	90,265	96,087	120,644	135,255	144,353	108,755	43,713	60,622	105,830
Claims	367,552	399,378	446,022	507,171	536,214	579,880	593,628	589,303	645,429	711,313
Households	72,261	86,064	107,781	131,860	150,007	171,904	190,098	203,318	230,357	254,319
Long-term claims	54,699	67,600	87,403	107,724	121,378	138,539	151,998	163,638	187,445	206,568
Short-term claims	17,562	18,464	20,378	24,136	28,629	33,365	38,100	39,680	42,912	47,751
Enterprises	295,291	313,314	338,241	375,311	386,207	407,976	403,530	385,985	415,072	456,994
Long-term claims	134,122	136,572	143,875	165,442	168,212	178,091	183,205	179,842	195,326	204,816
Short-term claims	161,169	176,742	194,366	209,869	217,995	229,885	220,325	206,143	219,746	252,178
Liabilities (-)	-270,939	-309,113	-349,935	-386,527	-400,959	-435,527	-484,873	-545,590	-584,807	-605,483
Dinar deposits	-84,305	-96,457	-108,557	-121,022	-119,059	-130,309	-150,239	-191,040	-191,962	-186,591
Households	-12,624	-14,931	-16,017	-16,542	-17,688	-21,273	-20,972	-26,729	-29,482	-31,264
Enterprises	-71,681	-81,526	-92,540	-104,480	-101,371	-109,036	-129,267	-164,311	-162,480	-155,327
Fx deposits	-186,634	-212,656	-241,378	-265,505	-281,900	-305,218	-334,634	-354,550	-392,845	-418,892
Households[4]	-124,107	-141,477	-162,667	-190,136	-207,609	-222,105	-243,328	-260,661	-293,195	-307,783
Households (in euros)	*-1,531*	*-1,709*	*-1,921*	*-2,224*	*-2,389*	*-2,583*	*-2,967*	*-3,300*	*-3,594*	*-3,895*
Enterprises	-62,527	-71,179	-78,711	-75,369	-74,291	-83,113	-91,306	-93,889	-99,650	-111,109
Enterprises (in euros)	*-771*	*-860*	*-929*	*-882*	*-855*	*-966*	*-1,113*	*-1,188*	*-1,222*	*-1,406*
Other item, net[5]	**-167,434**	**-182,793**	**-198,766**	**-207,293**	**-198,076**	**-229,955**	**-243,651**	**-257,233**	**-272,534**	**-338,975**
o/w: capital and reserves	-121,655	-131,141	-140,594	-140,322	-144,564	-173,814	-193,050	-234,800	-240,436	-279,878

Source: NBS, Statistical Bulletin.

1) Unless otherwise indicated.

2) Government include: Republic level and cities and municipalities.

3) Repo transactions include treasury bills and NBS bills, which were initially substituted by T-bills in January 2005, only to be introduced anew nine months later.

4) Household savings.

5) 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, 2005–2007

	2005				2006				2007	
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	in millions of dinars, end of period[1]									
Foreign assets , net	**132,749**	**143,615**	**173,447**	**194,094**	**204,236**	**235,394**	**344,129**	**406,226**	**429,702**	**440,156**
Foreign assets, net (in euros)	1,638	1,735	2,048	2,270	2,350	2,737	4,197	5,142	5,268	5,570
Gross foreign reserves	274,137	304,386	362,216	424,844	465,497	549,529	648,946	715,114	719,381	730,668
Gross foreign reserves (in euros)	*3,382*	*3,677*	*4,276*	*4,969*	*5,357*	*6,390*	*7,914*	*9,052*	*8,819*	*9,246*
Gross foreign liabilities (-)	-141,388	-160,771	-188,769	-230,750	-261,261	-314,135	-304,817	-308,888	-289,679	-290,512
Gross foreign liabilities (-) (in euros)	*-1,744*	*-1,942*	*-2,229*	*-2,699*	*-3,006*	*-3,653*	*-3,717*	*-3,910*	*-3,551*	*-3,676*
o/w: fx deposits of commercial banks	-71,063	-89,662	-106,865	-147,467	-173,371	-245,784	-256,325	-253,563	-273,927	-274,871
o/w: fx deposits of commercial banks (in euros)	*-877*	*-1,083*	*-1,262*	*-1,725*	*-1,995*	*-2,858*	*-3,126*	*-3,210*	*-3,358*	*-3,478*
Net Domestic Assets (NDA)	**-63,970**	**-71,980**	**-92,104**	**-99,741**	**-126,011**	**-146,374**	**-245,869**	**-272,302**	**-326,990**	**-318,030**
Domestic credits	-37,295	-41,763	-58,665	-64,206	-87,578	-110,436	-220,997	-264,055	-310,446	-311,683
Net claims on government[2]	-36,568	-25,594	-40,352	-48,936	-57,975	-56,993	-142,239	-116,094	-146,005	-161,819
Claims	22,123	17,524	16,901	16,511	14,919	14,656	14,472	16,450	15,740	15,715
o/w: other dinar credits	22,123	17,524	16,901	16,330	14,735	14,474	14,472	16,450	15,740	15,715
Deposits (-)	-58,691	-43,118	-57,253	-65,447	-72,894	-71,649	-156,711	-132,544	-161,745	-177,534
Dinar deposits	-40,603	-36,547	-42,861	-46,641	-51,430	-61,063	-57,213	-29,101	-60,040	-85,849
o/w: municipalities	-10,358	-8,312	-10,064	-5,923	-11,991	-11,262	-11,428	-9,423	-16,191	-22,908
Fx deposits	-18,088	-6,571	-14,392	-18,806	-21,464	-10,586	-99,498	-103,443	-101,705	-91,685
Fx deposits (in euros)	*-223*	*-79*	*-170*	*-220*	*-247*	*-123*	*-1,213*	*-1,309*	*-1,247*	*-1,160*
Net claims on banks	-1,214	-16,782	-18,830	-15,875	-30,218	-53,912	-79,337	-149,252	-165,948	-151,528
Claims	1,992	825	974	954	869	2,069	827	488	467	306
o/w: other dinar credits	1,669	471	612	946	493	1,710	489	481	453	292
o/w: Fx credits	323	354	362	8	376	359	338	7	14	14
o/w: Fx credits (in euros)	*4*	*4*	*4*	*0*	*4*	*4*	*4*	*0*	*0*	*0*
Liabilities (NBS bills, repo transactions) (-)	-3,206	-17,607	-19,804	-16,829	-31,087	-55,981	-80,164	-149,740	-166,415	-151,834
Net claim on the rest of the economy	487	613	517	605	615	469	579	1,291	1,507	1,664
Claims	514	640	732	670	674	653	639	1,353	1,509	1,666
Dinar and fx credits	514	640	732	670	674	653	639	1,353	1,509	1,666
Liabilities (-)	-27	-27	-215	-65	-59	-184	-60	-62	-2	-2
Dinar deposits	-27	-27	-215	-65	-59	-184	-60	-62	-2	-2
Other items, net[3]	-26,675	-30,217	-33,439	-35,535	-38,433	-35,938	-24,872	-8,247	-16,544	-6,347
Reserve money (H)	**68,780**	**71,635**	**81,342**	**94,353**	**78,226**	**89,019**	**98,263**	**133,924**	**102,712**	**122,126**
Currency in circulation	39,368	42,316	47,283	53,650	45,825	48,926	52,110	68,461	58,669	65,066
Commercial bank's reserves	29,412	29,319	34,059	40,703	32,401	40,093	46,153	65,463	44,043	57,060
Required reserves allocated	20,676	21,855	24,673	26,046	26,387	33,352	33,602	34,290	25,931	29,196
Excess reserves	8,736	7,464	9,386	14,657	6,014	6,741	12,551	31,173	18,112	27,864
Overnight deposits	4,924	3,034	4,564	7,604	-779	-58	3,897	20,967	8,223	16,907
Giro account and cash	3,812	4,430	4,822	7,053	6,793	6,799	8,654	10,206	9,889	10,957

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.