

quarterly monitor

of economic trends and policies in serbia

april-june 2008
13

FREY

quarterly monitor

OF ECONOMIC TRENDS AND POLICIES IN SERBIA

Issue 13 • April–June 2008

Belgrade, September 2008

PUBLISHER

The Foundation for the Advancement of Economics (FREN)

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300 copies

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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, Q3, 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



Inflation in Serbia continues running at a high rate. Nonetheless, since the external factors that triggered the inflationary wave - the rise in the prices of food, oil and agricultural products - have now reversed their trend, Serbia has been given a chance to put its inflation under control swiftly and with minimal costs to production. A threat to economic stability, however, now lies in the political sphere from which tremendous pressures are being exerted to increase public spending, which would further fuel inflation. The adjustment of the 2008 budget, and planning of the 2009 budget will indicate which direction the Serbian economy will take. A stable economy with a low inflation rate is conducive to savings and investments, particularly foreign, and thereby to economic growth. After the virtual standstill in 2008, it is now essential that the country see a strong inflow of FDIs, in particular greenfield investments, since they would make Serbia's still huge foreign trade deficit sustainable and, with time, boost production.

As set out in previous issues of *QM*, the high inflation in Serbia was precipitated by hikes in the prices of oil, food and agricultural products, and in the first semester of 2008 reach 6.1%, or almost 13% annually. There was a reversal in July and August, with a fall in the prices of oil and agricultural products, which brought down the inflation rate to only 2% annually. Though the outlook is still uncertain, the price of oil is not expected to rise significantly up to the end of the year. The fall in the prices of agricultural products was expected to result in their dropping mildly in Serbia, or at least halting their growth. Sadly, this did not happen in July and August, indicating that poor competition in the production and trade of these products may still be present. Nonetheless, the drop in costs is evident and probably sustainable, and thanks to this "gift certificate," inflation in the second half of the year may be expected to run at around an annual 7%, or half the figure in the first semester of 2008, a major slowdown. Should Serbia start the year 2009 with a 7% inflation rate, it would get the chance to definitively rein it in.

Crucial to whether or not inflation will *really* be cut is the further movement of public spending. Its growth would fan inflation, while curbing it would make it possible to halt inflation. What can be expected in this area?

Although it is still not known how the 2008 budget will be adjusted, some major new items of spending are public knowledge (see Section 7, Fiscal Flows and Policy in this *QM*). To mention just a few of these items: pensions will undergo an extra increase of 10%, fortunately in just two instead of four months of 2008, but will still cost the budget an additional 8 bn dinars; the government's "assistance" in the realization of the contract on FIAT's investment in the Zastava automotive plant to the tune of some 6 bn dinars; bigger budget allocations for salaries of employees in Kosovo; allocations for budget-financed salaries before the April elections. All these together total between 20 bn and 25 bn dinars, or almost 1% of GDP. Since government revenues also are somewhat higher than projected, there is a good chance that the government deficit could be kept at 2% of GDP, slightly over the planned 1.7%. The Serbian economy would naturally benefit from a lower deficit, but even one of 2% would be acceptable from the standpoint of inflation if it were to prove to be a step toward a reduction of the fiscal deficit in 2009. A reduction of this deficit next year is extremely uncertain, as it is uncertain whether the 2008 budget will be increased by only 20 bn to 25 bn dinars. There have already been demands for pay rises in the public sector, repayment of government debts falls due shortly, military reservists have renewed demands for payment of the daily allowances they are owed, and the like.

The planned 2009 budget should be geared to reducing the the fiscal deficit. But realization of this goal hangs in the balance as certain expenses have already been factored in. The estimate, hence, is that the deficit can be no lower than 1.5% of GDP, considerably higher than the 0.4% announced by the government in April this year. But even a 1.5% deficit could be considered a success in the new political circumstances. The 10% rise in pensions will have a major effect on the growth of public spending in 2009 - on this basis alone expenditure will increase by 1.2% of GDP, and pensions will amount to over 60% of the average wage. Funding of the construction of the Corridor 10 highway can no longer be delayed, and these two major items alone mean a deficit of 1.5% in 2009.

The list of demands put forth by various social groups and institutions for additional budget allocations is truly impressive, and will be hard to withstand given the political backing they have. Again, the main threat is from the growth of pensions, i.e. the demand to raise them to 70% of the average wage by the end of 2009. This would mean increasing expenditure by a new 1.1% of GDP, and pose an intolerable burden on spending on pensions in 2010 and for years afterwards. The next major threat is the demand for the collective contract valid for companies to be applied to the government administration, which would result in a huge 25% rise in budget-financed salaries (84 bn dinars). Should these demands for wage and pension rises be accepted, the deficit would soar by 2.6% of GDP. The fiscal deficit would run out of control in 2009 and exceed 5% of GDP and, instead of being curbed, inflation would spiral. Nor does this exhaust the list of demands. For some time now, for example, there have been proposals to cut the wage tax from 12% to 10%. This would be a welcome measure, but only if accompanied by a reduction in expenditures and not, as is the case here, by an increase in the deficit by 0.8% of GDP. Also on the list are the repayment of debts incurred by previous governments (Putevi Srbije public enterprise, military pensions, etc.), the reservists' demands for the payment of their daily allowances, and so on.

Announcements that the new Serbian coalition government will honor its election promises, which would seriously threaten the country's macroeconomic stability, perhaps more than ever before, resulted in the fiscal and monetary authorities (Ministry of Finance and NBS) publicly stating their determination to conduct rational economic policies. This is why *QM* for the first time departs from strict economic analysis and considers the broader political context in which economic policy is formulated in an article by Lj. Madžar titled "The

Difficulties Faced by Economic Policy in Serbia: Institutional Constraints" (Spotlight on: 3). Somewhat more concretely, the issue is also dealt with in Section 7, Fiscal Flows and Policy.

If the growth of public spending runs out of control, besides spurring inflation, it will also have a negative impact on the growth of exports and result in an *even higher current account of the balance of payments deficit*. The foreign trade deficit continued to rise in 2008, putting Serbia, together with Bulgaria, at the top of the list of transitional countries with high deficits of around 18% of GDP. Such a high deficit constantly threatens to engender a balance of payments crisis. If it is to be sustainable over a medium period, it is crucial for it to be financed primarily from FDI, of which there was no major inflow in 2008. Curbing inflation and establishing macroeconomic stability in general are important prerequisites for the growth of foreign investments in the future.

In their article G. Radosavljević and A. Ilić turn the spotlight on "Serbia's Energy Efficiency: Lagging Far Behind Developed Countries," (Spotlight on: 1) while K. Stanić in "Old-age Income Replacement by Pension System in Serbia – Measurement and International Comparison" examines the problems of the Serbian pension system (Spotlight on: 2). Both topics have a direction connection to the current inflation and macroeconomic imbalance in Serbia, and to the important question of how to establish economic stability over the medium term. As we have shown, expenditure on pensions could become economically unendurable over the medium term, while the high price of oil requires that far better use be made of expensive energy.



TRENDS

1. Review

Economic activity in Q2 2008 remained high, but with internal and external imbalances that seriously undermine macroeconomic stability. Inflation, the measure of internal imbalance, reached a two-year high. If the quarterly figure were annualized, the inflation rate would be 13.4%. The measure of external imbalance, the current account deficit, amounted to almost 20% of quarterly GDP in Q2, and was the largest since the beginning of the transition process. In such circumstances, the responsible thing to do would be to conduct a restrictive economic policy that would in a controlled way reduce the increasing imbalances. But fiscal policy in Q2 was expansive and will apparently continue that way until the end of the year.

Slowing of economic activity is the price that is usually paid to do way with such imbalances. Serbia was lucky that its macroeconomic environment helped to minimize the slowdown in the economic activity. The key question now is whether the current political situation will make it possible for Serbia to seize the opportunity at hand; almost the entire issue of this *QM* is devoted to analyses of the responses to this question.

At the beginning of the year, *QM* pointed to the first circumstance that would make 2008 a good year for relatively painless adjustment. After an exceptionally poor agricultural season in 2007, even average results in 2008 would be enough for solid overall economic growth even if the rest of the economy slowed down substantially. The situation allows for a restrictive policy without fears of serious consequences in the form of major slowing of growth.

Another favorable circumstance still lies ahead. The prices of oil and agricultural products are declining. Owing to these exogenous factors, total inflation in July and August slowed appreciably. If more restrictive economic policies directed at cutting domestic demand – primarily by reducing public spending – were applied in concert with the slowing of total inflation, Serbia would be on track to rein in inflation over a longer term. Unless this is done, as soon as oil and food prices stop going down, inflation, which is at present “camouflaged,” will take center stage again. If the prices of agricultural products and oil were excluded from the total inflation in July and August, the rise in the prices of other products and services would be on the trend of double-digit annual growth.

Macroeconomic movements in Q2 do not indicate that the chance to rein in inflation and the current account deficit will be taken. Even though it slowed slightly, domestic demand remained high in Q2. For long-term elimination of the imbalances, the share of domestic demand in GDP must be substantially reduced. The increased expansiveness of fiscal policy in Q2, however, was not conducive to slowing domestic demand. Consolidated public revenues in Q2 recorded a modest y-o-y growth of only 1.6%, while the y-o-y real growth of consolidated expenditures accelerated and reached 18.7%. Based on this and the announcement of a further expansion of public spending in the second semester, domestic demand will most probably remain high.

Though high, the growth of economic activity in Q2 was still somewhat lower than in Q1. The y-o-y growth of GDP in the quarter is estimated at about 7.3%, and of non-agricultural GVA at some 7.6%. An overview of the essential aspects of economic activity brings out no major changes in Q2. Economic growth was still high and there were no signs of any fundamental changes in the period ahead. Agriculture will probably record a double-digit growth rate in 2008. The y-o-y growth of industrial production in Q2 was 2.3%, with the manufacturing industry recording 4.4%. Construction was about 5% up on the same period last year.

High domestic demand relative to production, low exports, and the drop in current transfers were the reasons for the excessively high growth of the current account deficit. Imports grew

faster than exports in Q2, and the current account deficit hit a record of 19.5% of GDP. This time, its growth was accompanied by a worsening of Serbia's balance of payments position. Following quite a long period (the last 15 quarters with the exception of Q1 2007) in which the foreign exchange reserves grew strongly, and after only mild growth in Q1 2008, Q2 saw a turnaround and a reduction of these NBS reserves by €310 mn. This implies that the inflow of financing from abroad (either through FDI's or foreign borrowing) was insufficient to cover the growing current deficit.

In spite of the worrisome tones in this overview of macroeconomic movements in Q2, some positive trends should be noted. The labor market recorded a rise in employment in the quarter. For the first time since QM has been monitoring the series, the employment growth was with legal entities, not entrepreneurs, which could be a sign of a long-expected watershed on the labor market. The impression would have been even more favorable if the growth was not concentrated in the services sector, i.e. only in domestic demand-oriented sectors. Another positive development was that the accelerating inflation was not accompanied by a similar acceleration in wages in Q2. The real growth of wages declined in the quarter, and amounted to 3.1% y-o-y, relative to 5.2% in Q1. Unit labor costs (ULC) in dinars continued to decrease substantially owing to real wages growing at a slower pace than productivity.

ULC in euros, the measure of the economy's international competitiveness, remained almost unchanged in Q2. With all the reservations an analysis like this one calls for, the movement of euro-ULC in somewhat more than a year indicates that the Serbian economy is managing to cushion the negative impact of the long-standing trend of the dinar's appreciation on competitiveness with the help of market mechanisms – growth of productivity and slower wage growth. There are, however, indications that euro-ULC will rise in Q3 owing to the rapid appreciation of the dinar, which will negatively affect the international competitiveness of the Serbian economy. Since the end of May, the dinar has been growing ever stronger, and in August the exchange rate fell to below 76 dinars for a euro. From January to August 2008, the dinar appreciated against the euro by 7.5% in real terms.

In Q2, the NBS raised its reference interest rate from 14.5% at end-Q1 to 15.25% and then to 15.75%. Thanks to a combination of higher interest rates and the dinar's appreciation, real yields on repo operations, calculated relative to the movement of the euro/dinar exchange rate, reached very high values in Q2 (and new all-time highs in Q3). Q2, however, saw banks withdraw some €140 mn from repo operations, an indication that high yields are not the only reason for investment in the repo market.

Credit to the non-government sector, mainly companies, expanded in Q2. Companies received some €510 mn in new loans, but nonetheless continued to borrow heavily abroad. The bigger growth of credit to companies than to households is a positive trend. But the increasing direct foreign borrowing limits the ability of the NBS to control monetary trends. The growth of credit to households slowed considerably in Q2, to €290 mn. It is good news that the structure of credit to households has changed. The component that recorded a rise was housing loans, while the growth of cash and consumer loans, which spill over directly into consumption, was halted.

In Q2, the turnover volumes on the Belgrade Stock Exchange surged by almost 69%, but the number of transactions performed was down by 9%, indicating that the value of some transactions was high. This can be seen as a consequence of the increased activity of major players, especially on the discontinuous segment of trading where the value of turnover in Q2 tripled, while trading on the continuous segment declined. The Belgrade Stock Exchange indices recorded growth ranging from 2.7% to 12.8%, depending on the index. But the values of the indices started to decline again in Q3, with all-times lows being recorded in August. Hence, it cannot yet be said that the market has recovered.

Serbia: Selected Macroeconomic Indicators, 2004-2008¹⁾

	Annual Data				Quarterly Data					
	2004	2005	2006	2007	2007				2008	
					Q1	Q2	Q3	Q4	Q1	Q2
Prices and the Exchange Rate										
Retail Price Index - total	10.1	16.5	12.7	6.8	y-o-y ²⁾					
Retail Price Index - core inflation ³⁾	7.9	14.8	10.3	3.9	5.8	4.7	6.5	9.1	11.3	12.0
Real fx dinar/euro (avg. 2005=100)	100.5	100.0	92.1	98.4	4.7	3.0	2.9	4.6	6.4	9.1
Nominal fx dinar/euro (period average) ⁴⁾	72.62	82.92	84.19	79.97	86.2	86.3	83.2	80.8	82.5	79.7
					79.98	81.07	80.03	78.81	82.65	81.07
Economic Growth										
GDP (in billions of dinars)	1,431	1,747	2,042	2,393	y-o-y, real growth ²⁾					
GDP	8.4	6.2	5.7	7.5	...	...	...	...	...	...
Non-agricultural GVA	7.5	6.3	7.9	9.5	8.1	7.5	7.2	6.9	8.2	7.2
Industrial production	7.1	0.8	4.7	3.7	8.9	9.5	9.0	10.0	8.7	7.6
Manufacturing	9.7	-0.7	5.3	4.2	4.8	5.2	3.5	0.4	6.0	2.3
Average net wage (per month, in dinars)	14,108	17,478	21,745	27,785	8.5	4.9	3.3	-0.1	4.4	3.7
Registered Employment (in millions)	2.047	2.056	2.028	1.998	25,103	27,165	28,019	30,855	30,007	32,452
					2.002	1.999	1,997	1,995	1,995	2.002
Fiscal data										
		in % of GDP			y-o-y, real growth					
Public Revenues	41.2	42.1	42.4	42.1	15.2	8.4	7.9	6.2	6.5	1.6
Public Expenditures	40.0	39.7	42.7	42.8	11.0	7.1	11.3	10.5	6.0	18.7
					in billions of dinars					
overall fiscal balance (GFS definition)	17.5	11.5	-36.5	-43.0	1.7	18.2	-8.8	-54.2	3.4	-34.3
Balance of Payments										
					in millions of euros, flows					
Imports of goods	-8,302	-8,286	-10,093	-12,858	-2,829	-3,098	-3,236	-3,695	-3,506	-3,995
Exports of goods	2,991	4,006	5,111	6,444	1,383	1,594	1,731	1,736	1,665	1,974
Current account	-2,197	-1,805	-3,137	-4,994	-1,186	-806	-1,346	-1,656	-1,299	-1,736
in % GDP ⁵⁾	-11.1	-8.6	-12.6	-16.7	-18.4	-11.3	-17.5	-19.3	-17.0	-19.5
Capital account ⁵⁾	2,377	3,863	7,635	7,635	1,161	1,233	1,705	2,027	1,376	1,536
Foreign direct investments	773	1,248	4,348	1,942	614	-5	539	795	755	564
NBS gross reserves (increase +)	229	1,857	4,240	941	-191	407	465	260	29	-310
Monetary data⁶⁾										
					in billions of dinars, e.o.p. stock ²⁾					
NBS net own reserves ⁶⁾	103,158	175,288	302,783	400,195	327,997	348,471	361,861	400,195	420,508	417,579
NBS net own reserves ⁶⁾ , in mn of euros	1,291	2,050	3,833	5,051	4,021	4,410	4,589	5,051	5,109	5,287
Credit to the non-government sector	342,666	518,298	609,171	842,512	666,007	732,402	786,873	842,512	908,598	953,977
FX deposits of households	110,713	190,136	260,661	381,687	293,195	307,783	336,109	381,687	410,836	419,824
M2 (y-o-y, real growth, in %)	10.4	20.8	30.6	27.8	35.4	30.7	29.7	27.8	26.2	19.2
Credit to the non-government sector (y-o-y, real growth, in %)	27.3	28.6	10.3	24.9	15.2	17.8	19.1	24.9	22.0	16.2
Credit to the non-government sector, in % GDP	23.9	29.6	28.6	35.0	30.5	32.6	33.0	35.0	36.9	38.6
Financial Markets										
BELEXline (in index points) ⁷⁾	1,161	1,954	2,658	3,831	4,220	4,456	4,431	3,831	3,068	3,092
Turnover on BSE (in mil. euros) ^{8) 9)}	423.7	498.8	1,166.4	2,004.4	529.4	644.8	386.7	443.5	210.8	365.7

Source: FREN.

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

2) Unless otherwise indicated.

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

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

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

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

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

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

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

2. International Environment

The global economy is facing pressure caused by falling demand in the developed countries and rising inflation at the global level, mainly in the developing nations. US economic growth was higher than expected in Q2 (3.3%), while the euro zone and Japan recorded negative growth rates and may be on the brink of recession. The developing countries have seen their economic growth slow slightly, but are still immune to the negative influences spilling over from the developed nations. China is still recording double-digit growth, albeit slightly lower than up to now. The major challenge for most countries is how to rein in inflation while not jeopardizing economic growth. Central banks have generally opted to keep interest rates unchanged. The dollar has gained slightly in value, while oil prices fell to below \$120.

Table T2-1. World: GDP Growth and Inflation, 2006–2008¹⁾

	Real GDP						Inflation			
	real growth		real growth, seasonally adjusted				y - o - y			
	2006	2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2007	Q4 2007	Q1 2008	Q2 2008
World total	3.6	3.4	4.4	2.7	2.6	1.9	2.3	3.5	4.0	4.4
of which:										
USA	3.0	2.2	4.9	0.6	0.9	3.3	2.5	4.0	4.1	4.3
Canada	2.8	2.5	2.9	0.8	-0.8	0.3	2.6	2.4	1.8	2.4
Japan	2.2	2.1	1.3	3.7	3.2	-2.4	-0.1	0.5	1.0	1.4
China	11.1	11.4	8.9	9.1	11.7	11.5	4.2	6.6	8.0	7.8
India	9.4	8.7	8.4	5.3	8.8	5.9	5.8	5.5	5.8	7.8
Euro area	2.9	2.7	3.1	1.4	2.9	-0.8	1.9	2.9	3.4	3.6
Germany	3.1	2.6	2.7	1.1	5.2	-2.0	1.4	3.1	3.1	3.0
France	2.2	1.9	3.2	1.4	1.6	-1.2	1.5	2.5	3.3	3.7
UK	2.8	3.1	2.7	2.4	1.1	0.8	2	2.1	2.4	3.4
Italy	1.9	1.7	1.7	-0.8	2.0	-1.1	1.9	2.6	3.3	3.8
Russia	6.7	8.1	7.4	13.0	0.9	9.0	7.8	11.5	12.9	14.0
Bulgaria	6.0	6.1	4.5	6.9	7.0	6.3	11.1	11.2	12.4	15.0
Romania	6.9	6.0	5.7	6.6	8.2	9.3	5.5	6.7	8.0	8.6
Hungary	3.8	1.3	0.8	0.4	1.3	2.0	7	7.1	6.9	6.8
Croatia	5.0	5.6	5.1	3.7	4.3	...	2.9	4.9	5.9	6.5
FYR Macedonia	4.0	5.0	...	...	...	...	...	...	...	...
BIH	6.2	5.8	...	...	...	...	0.9	4.5	6.5	8.4
Serbia	5.7	7.5	7.5	6.9	8.2	7.2	6.6	9.1	11.3	16.6

Source: Eurostat, JPMorgan, National Bank of Bulgaria, National Bank of Romania, National Bank of the Republic of Macedonia, National Bank of Croatia.

¹⁾ GDP rates for Serbia, Macedonia, Bosnia and Croatia are year-on-year rather than seasonally adjusted annual.

World

US growth has exceeded expectations in Q2...

...unlike Japan and the euro zone, which have seen a contraction

Although US economic growth in Q2 was better than expected, global growth rates fell from 2.6% in Q1 to under 2% in Q2. The drop was concentrated in the euro zone and Japan, which saw a major contraction in Q2 after recording high growth in early 2008. It is still unclear whether the slowdown in these countries will continue and for how long. On the other hand, economic growth in the developing countries has remained steady at close to a high 6% in Q2. China led the way, again recording double-digit GDP growth. The high pace of growth in the developing countries slowed down only slightly, again corroborating the fact that the developing countries have greatly reduced their dependence on the developed economies.

Risks to global growth are still present, however, as financial markets are still fraught with uncertainty. Mounting losses caused by the crisis in the US real estate market, coupled with the slowing economies in the euro zone and Japan, may lead to a further deterioration in credit terms and liquidity. A positive development is that demand in both the developed and developing countries has proved to be more resistant to rising food and energy prices than had first been thought.

Inflation has continued to rise at the global level, but more so in the developing countries

Inflation is on the rise, both in the developed and developing countries. Q2 inflation in the developing countries reached almost 8% annually. Both US and euro zone inflation outgrew comfort zones and prevented possible anti-recession action by monetary authorities. The situation is even less favorable in the developing countries due to differing compositions of local consumer baskets. The central banks of most developing countries intend to keep reference interest rates unchanged until the end of the year.

United States

Personal consumption and exports drive GDP growth

Real GDP has grown by 3.3% (SAAR),¹ after the initial assessment of 1.9% was revised. This growth exceeded expectations (as more optimistic forecasts had predicted a growth of some 2.9%). The main driving forces behind GDP growth have been exports and personal consumption, while low business inventories have had a negative impact. Q3 is expected to see a lower contribution by exports and personal consumption, but inventories are expected to grow.

Total US inflation stood at an annual 4.3% in Q2. The US Federal Reserve cut the reference interest rate by one-quarter of a percent in April, and then left it at 2%. Any further cuts in the reference rate are unlikely because of the acceleration of inflation, but a hike is also less than probable.

As falling inventories and personal consumption cancelled each other out, the main reason for the positive result in the US was high exports. For the first time since 1980, exports made such a major contribution to GDP growth. The trade deficit was slashed from \$462 bn in Q1 to \$376 bn in Q2. Y-o-y export growth stood at 13.2% in Q2, compared to a mere 5.1% in Q1. At the same time, import growth dropped from 7.6% in Q1 to 0.8% in Q1, primarily due to a reduction in corporate investment.

US companies are bracing for a possible recession

Fearing recession, unlike their European counterparts, US companies have already revised their inventories and started shedding excess workers. Payrolls are thus expected to drop by about 100,000 in August, more than twice the average Q2 reduction. A rise in unemployment is also expected, from June's 5.5% to some 5.8% in August. Due to these measures, productivity grew by 4.2% in Q2.

The fiscal package has proven useful in boosting personal consumption

Personal consumption grew by 1.5%,² the quickest acceleration since Q3 2007. Consumption by the public was boosted by the package of tax incentives in place since early April. As most tax rebate cheques have already been mailed, the impact of these measures is set to decline gradually,³ meaning that personal consumption will likely decrease in the second half of the year. Personal consumption is exactly what economic growth in the second half of 2008 will mainly depend on, but is expected to decline.

The positive impact of exports on economic growth is also expected to taper off, since the dollar has strengthened in the meantime. On the other hand, the significant drop in inventories in Q2 is a positive signal for Q3 economic growth, as levels will have to be corrected upwards. If inventories had not seen such a drop and remained at the same level, GDP growth in Q2 would have been higher by 1.9 percentage points.⁴ Fearing recession and inflation, US companies decided to reduce inventories in case demand plummeted, which has not happened.

Investment in housing fell by 15.6% after an average drop of 26% over the past two quarters. Home prices continued falling, albeit at a slower pace, resulting in a reduction in the fall in new home construction in Q2. Investment in housing is expected to remain in the red until early 2009, when home supplies will be low enough in relation to demand.

The Fed had to intervene to save Fannie Mae and Freddie Mac from bankruptcy

The problems faced by companies that invested in real estate derivatives again destabilized financial markets. The shares of two of the most reputable federal agencies engaged in refinancing

1 JP Morgan, seasonally adjusted annual rate (SAAR). All growth rates below conform to this definition.

2 SAAR.

3 Presidential candidate Barack Obama is in favor of yet another stimulation package.

4 Source: JP Morgan.

mortgage loans, Fannie Mae and Freddie Mac, plummeted. Their market capitalization fell by about 90% this year.⁵ Losses due to investment in mortgage loans were unavoidable, as home prices kept falling. The role of these two agencies is crucial to the stability of the US financial system, as they together hold, either directly or in guarantees, close to 45% of all mortgage loans, or some \$5,000 bn. They are now hard pressed to refinance their debts, since the income from non-performing investment is not enough. The federal government took control of the companies, decided to invest \$100 bn to underwrite their debts, which helped to avert a turn of events that could have caused widespread panic among investors. The IMF, as before, supported these measures, but was also critical of the government's attitude towards companies it financed (i.e. Fannie Mae and Freddie Mac). Transparency and operating requirements were too loose, while investors were convinced that the government would have to get involved if anything went wrong. This did indeed happen, but the IMF suggested that such companies should henceforth be subject to controls very similar to those faced by commercial and investment banks.

Euro Zone

All major euro zone economies, except Spain, have recorded negative growth

Euro zone economies have seen their GDP growth contract by 0.8%⁶ in Q2. The drop was due in most part to the exceptionally high growth over the last quarter, of 2.9%. This is the first quarterly contraction since the early 1990s, which bears out the fact of a significant slowdown in these economies. All major countries except Spain have seen negative growth.

Germany's GDP dropped by 2%, primarily due to low construction activity and falling personal consumption. This negative Q2 growth was partly caused by very high Q1 economic growth, of as much as 5.2% after the statistics (GDP growth) were revised.

In France, GDP fell by 1.2% in Q2, although slight growth had been forecast. Unlike Germany, however, personal consumption had a positive impact on France's economy, growing by 0.5% in Q2. Still, capital investment witnessed a serious drop. Housing construction fell by an annual 11%, a significant change in relation to the slight drop of 0.6% in Q1.

Spain's slight positive growth comes as a surprise

The greatest surprise came in the form of Spain's GDP, which grew by 0.4%, although most economists had forecast a contraction. The forecasts were based on the shrinking of industrial production, construction and retail. As detailed GDP data is not available yet, it remains to be seen how this positive growth came about in spite of the drop in industrial production.

Inflation in the euro zone stood at 4.1% at the y-o-y level, the highest it has been since the introduction of the euro. Fears abound of a "second round" of inflation, which would come in the form of demands for higher wages. In July, the European Central Bank (ECB) decided to raise its reference interest rate to 4.25%. The ECB will in all likelihood wait for economic growth to recover before raising the reference rate again to curb inflation. A downward correction of the interest rate is also possible; this would happen if inflationary risks were to decline and would be aimed at boosting economic growth. Both a rise and a drop in the reference interest rate are, therefore, possible scenarios for the future, making it difficult to gauge what the direction and timing of the next change will be. The reference rate will in all likelihood stay at the same level until further developments are evident.

The labor market in the euro zone remains unchanged. Unemployment stazed at 7.2% in Q2. Germany's unemployment dropped to 7.9%, while Spain's rose to 11%. These figures indicate that, unlike their US counterparts, European companies have not begun to adjust to a more pessimistic growth scenario.

The crisis that shook the world's credit markets began in the US. As European banks invested significantly in the US market, the problem, in almost equal measure, impacted the euro zone. The difference is that the euro zone, financial costs and instability notwithstanding, has not seen any direct consequences to the real economy, as the US has. However, financial markets in both

⁵ Source: BNP Paribas.

⁶ SAAR.

regions are facing broadening ranges and increasingly more restrictive credit terms arising from a fall in liquidity, which is indirectly leading to a slowdown in economic growth.

Although the roots of the crisis are in the US, the euro zone economy has been harder pressed...

Although the problems may be similar, monetary policy measures could hardly differ more among the two regions: the Fed has cut its reference rate by 3.25 base points over the past year, while the ECB raised its rate by 0.25 base points. The yields on US bonds have consequently dropped by nearly a whole base point, in contrast to European bonds, whose yields have increased by 0.15 base points. The company borrowing interest rate in the euro zone increased more than in the US, while share prices fell sharply. According to an IMF model,⁷ the negative impact of the financial crisis on US economic growth amounted to 1.4% at the annual level, while the impact on the euro zone is estimated at 2.8-5%. The worsening of credit terms in the euro zone led to a more marked slowdown in economic growth, although the crisis originated in the US.

East, Central-east, and South-east Europe

Notwithstanding the cut in oil production, Russia's economic growth is set to remain strong...

GDP growth in East Europe's largest economy, Russia, seems to be slowing down slightly, but still remains high. Russian GDP statistics come out fairly late, which is why *QM* has relied on a JP Morgan forecast that estimates Russian GDP growth in Q2 at about 9%. Industrial production indices, somewhat lower this year than in 2007, indicate a slowdown in the Russian economy. Some analysts interpret this data as pointing towards a more significant slowdown, as crude oil production has peaked. The last quarter saw oil production fall at an annual level for the first time in the past ten years.

Russia's economic growth will in all probability remain strong, although at a slightly lower level than in 2007. The government is planning tax cuts for oil companies to stimulate production. Crude oil exports were lower by 7% over the first six months of 2008 than in 2007, but exports of oil products rose by 5%. Therefore, even if oil production dropped, a continuation of this trend would increase Russia's profit from exporting oil products through higher margins.

Russia's June inflation rose by 1% at the monthly level – the first time since August 2007 that annual inflation has not risen, remaining instead at 15.1%. The reference interest rate now stands at 7.5%, and, as it is in reality negative, in spite of four successive hikes this year, can be expected to rise further before the year is out.

Exports skyrocket owing to extremely high oil prices...

High oil prices have led to record-breaking commerce growth levels. Over the first six months of 2008, exports grew by 50% in relation to the previous year. The trade surplus now stands at \$103 bn, 70% more than last year, primarily due to high oil prices.

The Georgia conflict will not affect Russia's economic growth...

The single biggest political event was the conflict in Georgia. After Russian troops entered South Ossetia, Russia experienced a flight of foreign capital, and changes in the money market and the exchange rate. However, the panic was short-lived, share prices stopped falling relatively quickly, and now stand at nearly pre-conflict levels. Interest rates rose on the interbank market, but the central bank increased the volume of its loans to the banking sector. It may be concluded that, in spite of its impact on the financial market, the Georgia conflict will not have major consequences on Russia's economic growth.

Central European growth will see major corrections only in case of a serious recession in West Europe

Central European countries still record good results in spite of the negative growth seen in West Europe. According to JP Morgan estimates, if a recession in West Europe fails to materialize, Central European growth should remain fairly resistant to the current circumstances. Real exports to West Europe continue growing, albeit at the lowest rate seen in five years. If a "real" recession does hit West Europe, Central European exports will fall considerably, which will cause a noticeable slowdown in the growth of those economies. In addition, the possible drop in external demand is not the only problem faced by the East European countries. Local currencies have appreciated, thus raising both product and labor prices expressed in euros. As inflation is an ongoing problem, interest rates cannot be cut to effect an immediate boost to growth and reduce

⁷ IMF Working Paper, "A US financial conditions index: Putting credit where credit is due", Andrew Swiston.

2. International Environment

the exchange rate. If inflation growth calms down, the Hungarian and Polish central banks plan to reduce their reference rates, with the Czech Republic possibly doing so as early as the end of 2008.

The labor market has had an impact on inflationary expectations. The factors contributing to the “overheating” were a rapid drop in unemployment, a rise in real income, and the lack of trained workers. In Poland and the Czech Republic, unit labor costs in euros (euro-ULCs) grew by 20% at the annual level, their highest growth in the past ten years. However, in spite of the high growth, labor costs in these two countries are still only a third of what they are in Germany. For now, if euro-ULCs continue to increase at the same pace, rising labor costs will not pose a major challenge to these economies.

Growing domestic loans do away with negative effects of falling external demand

One advantage of the East European countries in relation to West Europe is that falling external demand has been compensated for by robust growth in domestic loans. The relation of the total sum of loans to GDP remains significantly lower than in West Europe, while banks’ balance sheets are still stable. This does not mean that the situation could not take a turn for the worse, as there are still risks. Companies investing in real estate have faced a correction of their share prices. If it turns out that housing prices have peaked, and bank liquidity falls due to growing interest rates, a drop in credit growth may occur. Such a scenario requires time, however, so there will be no significant changes up to the end of this year.

A possible slowdown of Russian and euro zone growth would not adversely affect Serbia’s economic growth because of the structure of Serbian exports

The slowdown in West Europe has so far had only a modest impact on East European economies, while its negative effects will generally be annulled by domestic demand. Europe saw negative growth in Q2, and a slight slowdown is anticipated in Russia. Since Serbia’s main trading partners are the West European countries and Russia, it makes sense to query what effects this will have on the growth of the Serbian economy. The structure of Serbia’s exports is, however, specific in that they comprise mainly semi-manufactures, the demand for which is less elastic when an economy slows down. It may be concluded, hence, that the effects of the slowdown seen so far in West Europe and Russia will not affect Serbian exports to any major extent.

The IMF’s Simon Johnson recently published an article⁸ saying that high inflation could potentially trigger a crisis in the developing countries. The economies at the greatest risk are those with the highest inflation rates and fixed exchange rate arrangements. Central banks that have pegged their currencies to the dollar are confronted with high inflation rates. They, virtually inevitably, “import” US monetary policy, which is at present expansive. The ever weaker dollar, to which their currencies are pegged, leads to more expensive exports and “imported” inflation. Serbia does not face this imported inflation caused by the weak dollar, but nevertheless records the region’s highest inflation – equal to or higher than countries with exchange rates pegged to the dollar. The only country in the region whose inflation is similar to that of Serbia is Bulgaria, but it has in place a fixed currency exchange regime; the Bulgarian lev is not pegged to the dollar, but to the euro. It is contradictory, therefore, that Serbia, with its flexible currency exchange regime, is dealing with inflation comparable to that of countries whose inflation is caused by exogenous influences.

Asia: Japan and China

Japan

Japan is most probably in recession...

Real GDP grew at a negative rate in Q2 (2.4%), as against 3.2% in Q1. This slowdown in economic growth was expected – the indicators were poor export performance and industrial production, which generally behave pro-cyclically – but it came as a surprise that investment in housing dropped by 13%. Demand fell across all components of GDP, except in the government sector.

Recession has most probably already begun in Japan; the only question is whether it will be

⁸ Simon Johnson: “Straight talk: Emerging markets emerge”, September 2008.

...the only question being how long it will last

longer, or shorter and milder. Consumer confidence has been rapidly eroding for some time, and has reached record depths, lower even than during the recession of the early 1990s. Unlike that recession, however, when the confidence of large companies plumbed even greater depths than consumer confidence, the situation now has been reversed. Large companies cut their investment by a mere 0.9% in Q2, whereas the figure exceeded 15% during earlier recessions. If confidence indicators continue falling rapidly, and investment suffers a major drop, the risk of long-term recession will increase.

The Japanese Prime Minister has instructed his new cabinet to draft a package of fiscal incentives to dampen the economic slowdown. This package will be similar to the one adopted in the US, although it is mainly intended for low-income families. Its effects are, however, predicted to be marginal.

China

China's growth has slowed slightly, but remains in the double digits

China's GDP grew by 11.5% in Q2, slightly less than its Q1 growth of 11.7%. Several factors contributed to the slowdown in the Chinese economy. Reduced external demand caused by the global downturn has adversely impacted China's exports, though they remain very high. Events such as the winter storms and the Sichuan earthquake, also contributed. Nevertheless, China's growth still remains fairly resistant to global financial trends, while strong domestic demand will have a positive influence on growth at the global level.

Inflation has quietened in July

Inflation recorded a slight drop in Q2 (7.8%) in relation to average price growth in Q1, which amounted to 8%. July's price growth was unexpectedly low, at 6.3% at the y-o-y level, so it is possible to use economic measures to boost growth if global demand slows down. The 2007 fiscal budget recorded a surplus for the first time since 1985; over the first seven months of the year, revenues rose by 30.05% at the annual level, while expenditure grew by 29.7%, meaning that the surplus is higher than last year's by a third. This is all the more impressive if the expenses of clearing up after storms, floods, and earthquakes and the cuts in bases for several taxes targeting both the public and corporations are taken into account. If external demand falls, and if inflation does not start to rise, China can thus invest in public works and infrastructure to improve its growth prospects.

The surplus has been reduced

The foreign trade surplus has been reduced by the slower export growth and rising import prices. Over the first six months, it declined by 12% in relation to 2007, with the drop amounting to 21% in June. Export growth declined from 28% to 22%, while imports rose from 13% to 31%. The rise in imports was caused by rising prices of energy and raw materials, but also by rising domestic demand. In contrast, demand for Chinese products is falling in the US, China's main foreign trade partner. For the first time in a long while, exports from the European Union to China grew more than Chinese exports to the EU.

Currencies and Commodities

The dollar gained in value against the euro, as was expected

The dollar gained against the euro, rising from 1.55 to nearly 1.45, probably because of strong US exports and its improving balance of trade.

Oil prices fell from over \$140 to under \$120 due to reduced demand, less pressure from speculative capital, as well as the rise of the dollar.

A drop in demand caused oil to fall below \$120 a barrel

Cereal prices fell by some 30% from the peak in March, primarily because of expectations of a better harvest this year. Unfavorable weather conditions reduced the supply in 2006 and 2007, which led to the strong price growth of grain and substitutes (primarily rice). Food prices should drop in the medium term, as capacities are less limited than for oil, and especially if economic policy measures are applied to encourage production.

3. Prices and the Exchange Rate

Inflation in Q2 was a high 13.4% annually, which was the highest level of quarterly price growth over the last two years. The biggest contribution to the price growth was by industrial foodstuffs and oil products. These two groups accounted for about two-thirds of the total price growth in Q2, indicating that the main pressure on price increases was still coming from the expenditure side. Agricultural produce prices kept growing in the first two months of Q2, but declined in June, July and August. Based on the movements on the world exchanges and the preliminary results of the domestic agriculture, stabilization or a further decline in the prices of agricultural produce may be expected, followed by other foodstuffs. Core inflation in Q2 accelerated strongly and reached 15.7% annually, the highest level of quarterly core inflation since 2005. Foodstuffs contributed the most to core inflation (over 50% of its rise), as well as a rise in the prices of construction materials. Non-food core inflation in Q2 was also at a record level of 10% annually. Core prices went up by as much as 5.2% from the beginning of the year to June, and core inflation came very close to the ceiling of the band targeted by the NBS (3%–6%) as early as the mid-year. July and August saw a strong deceleration in overall inflation, but core inflation remained high. The dinar exchange rate was very unstable in Q2. At the beginning of the quarter the dinar strengthened, only to weaken considerably in mid-May during the run-up to the elections. Since end-May the dinar has continuously strengthened, and in August, the exchange rate fell to below 76 dinars for one euro. Real appreciation against the euro from the beginning of the year to August amounted to 7.5%.

Inflation in Q2 stands at a high 13.4% annually

Inflation in Q2, measured by the retail price index, was 3.2%, or as much as 13.4% annually. This is a continuation of the high inflation trend recorded in several preceding quarters (Table T3-1). Moreover, it should be noted that Q2 was a quarter with the highest price rises over the last two years. Unlike in Q1, when a monthly price growth rate of more than 1% was recorded in one month alone, in Q2 the price growth rates in all three months went above that limit (Table T3-1). The y-o-y inflation rate in Q2 was also high and stood at 12.0% on average (as against 11.3% in Q1).

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

	Retail Price Index				Core Inflation			
	base index (avg. 2005 =100)	y-o-y growth	monthly growth	3m moving average, annualized*	base index (avg. 2005 =100)	y-o-y growth	monthly growth	3m moving average, annualized*
2005								
Dec	107.6	17.6	2.2	22.5	106.3	14.6	0.9	18.6
2006								
Mar	110.0	14.4	0.3	9.1	108.1	11.7	0.8	7.0
Jun	113.7	15.1	0.0	14.4	110.4	11.3	0.6	8.7
Sep	114.1	11.6	-0.2	1.4	112.1	10.1	0.6	6.6
Dec	114.7	6.6	0.1	2.1	112.5	5.8	0.0	1.2
2007								
Mar	116.1	5.6	0.8	5.1	112.4	4.0	0.1	-0.4
Jun	119.5	5.1	0.6	12.0	113.4	2.7	0.5	3.7
Sep	122.6	7.4	0.8	10.9	115.9	3.4	1.0	9.4
Dec	126.3	10.1	1.3	12.6	118.6	5.4	0.9	9.5
2008								
Jan	127.5	10.7	0.9	14.2	118.9	5.7	0.3	7.7
Feb	128.3	11.3	0.7	12.2	119.6	6.5	0.6	7.1
Mar	129.8	11.8	1.2	11.6	120.3	7.0	0.6	5.8
Apr	131.2	12.0	1.1	12.2	121.7	8.1	1.2	9.7
May	132.6	11.7	1.1	14.1	123.0	9.0	1.1	12.0
Jun	134.0	12.1	1.0	13.4	124.7	10.0	1.4	15.7
Jul	134.2	11.6	0.1	9.3	125.3	10.3	0.5	12.5
Aug	134.5	10.6	0.2	5.8	126.6	10.3	1.0	12.1

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).

Inflation in Q2 remains driven by supply-side factors

Two-thirds of the price growth in Q2 was concentrated in two groups of products only (industrial foodstuffs and oil products), which indicates that inflation in that quarter remained primarily driven by supply-side factors (Table T3-2). Prices of industrial foodstuffs in Q2 increased by as much as 6.7% and accounted for around 41% of the total price growth in the quarter. The prices of oil products went up by 9.0% in Q2, with their contribution to the overall price growth amounting to around 24%. Although these groups of products account for 28% of the retail price index, their contribution to the overall price growth was as high as 65%.

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

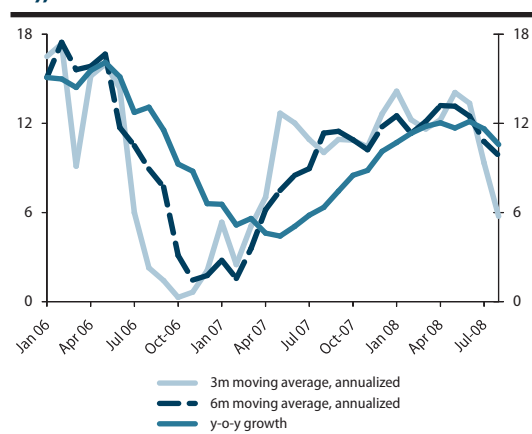
	Share in RPI	Contribution to RPI growth in Q1 2008	Contribution to RPI growth in Q2 2008	Contribution to RPI growth in 2008 January-August
in %				
Total	100.00	100.0	100.0	100.0
Goods	72.34	90.6	87.1	82.2
Agricultural products	3.63	16.5	-1.6	-7.0
Industrial products	68.71	71.3	89.5	89.9
Industrial food products	19.71	17.5	40.7	33.6
Bread and pastry	2.17	3.9	9.1	6.4
Fresh meat	1.94	2.0	10.6	6.9
Milk and dairy products	3.56	4.3	2.1	3.3
Vegetable fats	0.95	0.4	4.2	2.8
Beverages	4.42	5.2	3.6	5.6
Industrial non food products	40.43	49.0	44.2	50.3
Electricity	7.62	9.6	0.2	15.0
Liquid fuels and lubricants	8.74	29.7	24.2	19.3
Services	27.66	9.4	12.9	17.8

Source: SBS.

The oil price peaks in late Q2 but has been declining since July

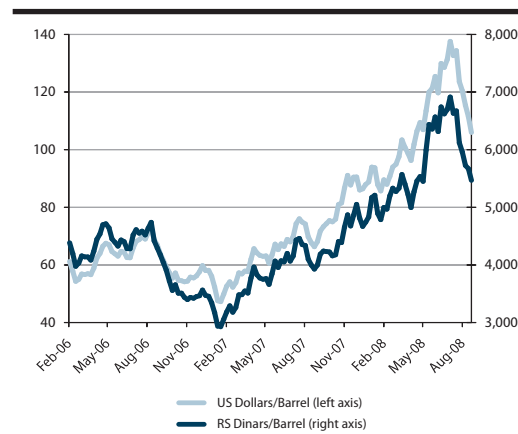
Oil prices on international markets grew strongly throughout Q2, reaching all-time highs in late June and early July (Graph T3-4). Thus, the price of a barrel of Ural oil, which is relevant for setting the prices of oil products in Serbia, in early July reached 137 dollars. Still, as of mid-July, oil prices started to decline, so in late August Ural came down to 106 dollars per barrel. In all likelihood, a slowdown in the growth of the world economy contributed first to the decline, and then to the stabilization of oil prices. Even events such as the conflict in Georgia and the hurricane in the Gulf of Mexico, which would have strongly impacted oil prices until recently, did not bring about any price hikes.

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



Source: SBS.

Graph T3-4. World: Weekly Ural Crude Prices in Dollars and Dinars, 2005–2008

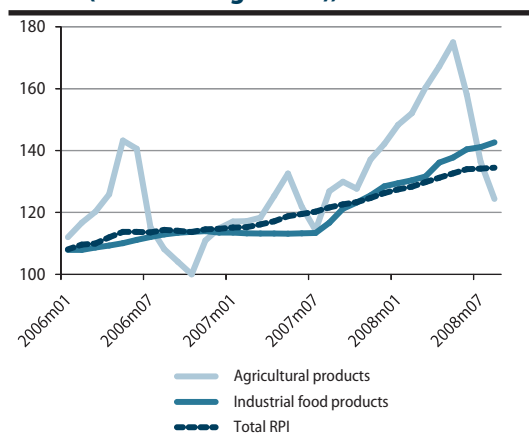


Source: Energy Information Administration, U.S. Department of Energy.

3. Prices and the Exchange Rate

Since end-Q2 the prices of agricultural produce decline, in tune with seasonal patterns

Graph T3-5. Serbia: Agriculture and Food Prices (2005 average=100), 2005–2008



Source: SBS.

The prices of agricultural produce in April and May continued their rise at a high rate, only to fall sharply in June, July and August. Although the drop in these prices was in tune with the seasonal patterns, it seems that a change occurred in the several-months long trend of continuous increases in the prices of agricultural produce. On the one hand, this is indicated by the fact that the prices of agricultural produce are falling steeply on world exchanges,¹ as a consequence of a very good year harvests all over the world. Additionally, according to the latest estimates, yields will globally be even higher than expected several months ago. On the other hand, according to the first indications, this year was very successful for agriculture in Serbia too,

hence relaxation of the pressure towards price increases can be expected from that side as well for agricultural produce, to be followed by other foodstuffs. This is also confirmed by a strong decline in the prices of wheat and corn on the Novi Sad commodity exchange.

Inflation decelerates strongly in July and August

Inflation in July and August was significantly lower than in the previous months, amounting to a mere 0.1% and 0.2% respectively (Table T3-1). A steep decline in the prices of agricultural produce was recorded in July, as well as further increases in the prices of oil products, construction materials, and certain groups of foodstuffs. In August electricity prices went up by 8.9%, but on the other hand, the decline in the prices of agricultural produce continued, as did the sharp decline in the prices of oil products. These price reductions practically annulled the electricity price increase, as well as the increases in the prices of other goods and services. It should be noted here that after several months, August saw a relatively high increase in the prices of services, predominantly in transport and finance. After August, inflation since the beginning of the year stood at 6.5%.

Inflation at end-2008 will probably not be higher than 10%–11%

A further stabilization of inflation can be expected until the end of 2008, and it should not be higher than 10%–11% at the year-end. This assessment is based on examination of the impact of several factors. Unlike the end of 2007 and the first half of this year, this time supply-side factors will contribute to the containment of inflation. Namely, the prices of oil products and agricultural produce can be expected to stagnate or even decline in the remainder of the year. It remains to be seen whether the prices of foodstuffs will finally decline after the fall in the prices of agricultural produce. Demand-side factors will have an ambivalent impact on the price increases. First, real wage growth appears to have remained relatively low;² hence no pressures on inflation will come from that direction. Second, despite the fact that credit continued to grow relatively fast in Q2, it was concentrated in enterprises. Retail credit growth was mainly contained³. Therefore, it is still unclear whether and to what extent demand financed by credit will contribute to inflation growth. And third, the greatest uncertainty from the demand-side remains related to fiscal policy. After a neutral fiscal policy in Q1, Q2 saw a strong expansion, so the consolidated deficit in that quarter amounted to as much as 3.5% of quarterly GDP⁴. In all likelihood, a fiscal deficit can be also expected in the rest of the year, so pressures for price increases will certainly come from that quarter. Finally, it is necessary to also mention the strong appreciation of the dinar since May this year. Relative to mid-May, when the dinar was at its weakest in the course of the year, it appreciated by as much as 8.9% to the end of August. The dinar's appreciation should contribute to curbing inflation, but it remains to be seen in which direction the exchange rate will go until the end of the year.

1 Information from the Chicago Board of Trade (CBOT), dated 21 August: corn, from the record level in June, fell by about 25%; wheat, from the record level in March, fell by almost 30%; rice, from the record-level in April, fell by almost 20%; soybeans, from the record level in July, fell by about 25%; soybean oil, from the record level in July, fell by about 20%; milk, from the record level in June and July, fell by more than 20%. Still, the prices of all products have remained significantly higher than those from last year.

2 See Section 4 "Wages and Employment".

3 See Section 8 "Monetary Flows and Policy".

4 See Section 7 "Fiscal Flows and Policy".

Core inflation in Q2 was at a record high

Core prices went up in Q2 by as much as 3.7%, or as much as 15.7% annually. This was the highest core inflation in a single quarter since 2005 (Table T3-1). Thus core inflation from the beginning of the year to June reached 5.2%, getting very close to the ceiling of the band (3%–6%) targeted by the NBS already in the middle of the year (Graph T3-7). The y-o-y core inflation rate in Q2 amounted to as much as 9.1%, relative to 6.4% in the previous quarter.

Core inflation is pushed by prices of foodstuffs...

As with overall inflation, the highest contribution to core inflation was that of foodstuffs (Table T3-5). In addition, the rise in the prices of construction materials should also be underlined, which went up by as much as 8.4% in Q2.

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

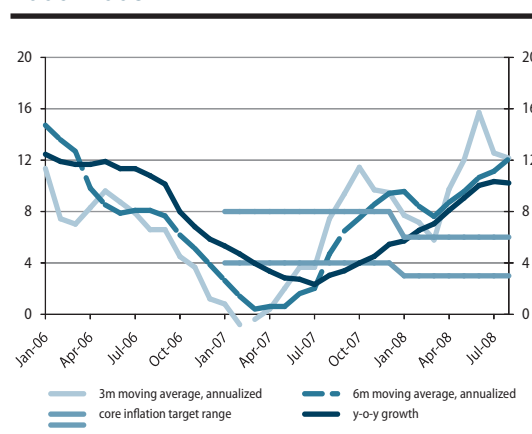
	Share in Core Inflation	Contribution to Core Inflation growth in Q1	Contribution to Core Inflation growth in Q2	Contribution to Core Inflation growth in July and August
	in %			
Core inflation	100.0	100.0	100.0	100.0
Goods	85.6	96.0	92.9	87.2
Industrial food products	34.5	52.0	59.6	45.8
Cereals	1.5	14.9	4.0	1.6
Fresh meat	4.3	8.7	21.3	5.2
Milk and dairy products	3.2	17.1	2.5	3.2
Vegetable fats	2.3	2.4	9.0	5.3
Beverages	9.2	21.9	6.8	12.7
Industrial non food products	41.9	22.2	26.5	28.7
Services	14.4	4.0	7.1	12.8

Source: SBS.

...but in Q2 the non-food component of core inflation also accelerates

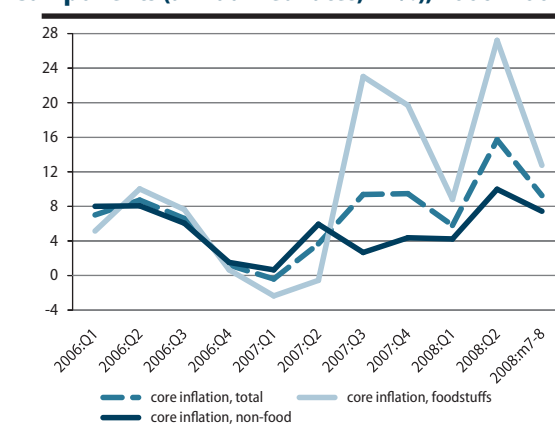
In Q2, a strong acceleration of the non-food component of core inflation was also recorded. It stood at around 2.4% in Q2, or at 10% annually (Graph T3-8). This is by far the highest rate of non-food core inflation in the last ten quarters. Such a high rate indicates that the wave of inflation is spreading to a larger range of products. It should also be mentioned that the y-o-y rate of non-food core inflation in Q2 was around 6%, which was on the ceiling of the band targeted by the NBS.

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



Source: SBS.

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



Source: QM.

Core inflation records a slight deceleration in July...

July core inflation was 0.5%, which is still relatively high (11% annually), but nevertheless constituted a deceleration relative to the previous three months. This deceleration of core inflation was a consequence of the decline in the growth rate of the prices of foodstuffs, as well as of the discontinuation of increases in the prices of all other components of core inflation apart from construction materials. The y-o-y core inflation rate in July was 10.3% (Graph T3-7).

3. Prices and the Exchange Rate

...but is again very high in August

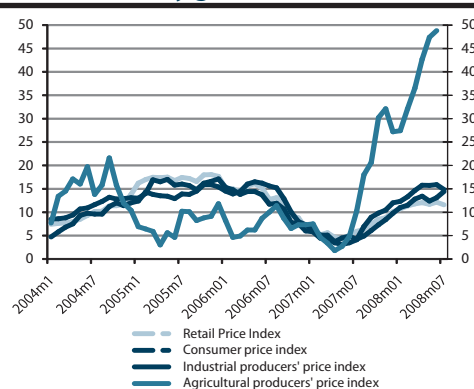
The cost-of-living index goes up at a very high rate in Q2...

...while the industrial producer price index decelerates slightly

After a slight deceleration in July, core inflation was high again in August and stood at 1.0%. The y-o-y August core inflation rate was 10.2% (Table T3-1). The high core inflation in that month was the result of further increases in the prices of foodstuffs, as well as of the rises in the prices of the majority of other components of core inflation. An especially high contribution to core inflation in August was made by the increases in the prices of beverages, financial services and construction materials. The latter went up by as much as 20.6% over this year. After the high core inflation in August, it reached 6.7% relative to the beginning of the year. Accordingly, in order for core inflation to return into the band targeted by the NBS (3%–6%) by the year-end, its rate needs to be negative in the coming months.

Other price indices continued to rise at very high rates (Table T3-10) in Q2. The cost-of-living index (COLI) went up by as much as 3.9% in the quarter, or 16.6% annually. The higher growth rate of the cost-of-living index than of the retail price index was due to the fact that foodstuffs have higher shares in the COLI. The y-o-y growth rate of the cost-of-living index in Q2 stood

Graph T3-9. Serbia: Selected Price Indices, 2004–2008 (Y-o-y growth), 2005–2008



Source: SBS.

at 15.8%, compared to 13.4% in the preceding quarter (Graph T3-9). The industrial producer price index decelerated in Q2 relative to the previous quarter. This index went up by 3.4% in Q2 (i.e. by 14.5% annually), while the increase in the preceding quarter was as much as 5.1% (21.9% annually). The y-o-y growth rate of the industrial producer price index in Q2 was 13.0%, while in the previous quarter it amounted to 11.8%. The producer price index of agricultural products continued to grow in Q2 at an extremely high rate. The increase in this index in the quarter amounted to as much as 11.6% or 55.1% annually. The y-o-y rise in the producer price index of agricultural products in Q2 amounted to as much as 46.3% (39.2% in Q1).

Table T3-10. Serbia: Comparative Price Growth, Selected Indices, 2005–2008

	Retail Price Index			Consumer Price Index		Industrial Producers' Price Index		Agricultural Producers' Price Index	
	base index (avg. 2005 = 100)	y-o-y growth	monthly growth	y-o-y growth	monthly growth	y-o-y growth	monthly growth	y-o-y growth	monthly growth
2005									
Dec	107.6	17.6	2.2	17.1	1.6	15.4	0.4	11.8	1.0
2006									
Mar	110.0	14.4	0.3	13.8	0.6	14.4	0.6	4.9	1.1
Dec	114.7	6.6	0.1	6.0	0.1	7.3	-0.2	7.3	1.1
2007									
Mar	116.1	5.6	0.7	4.2	0.4	5.1	0.6	3.4	-0.5
Jun	119.5	5.1	0.6	3.5	0.4	4.9	0.7	4.8	2.8
Sep	122.6	7.4	0.8	8.9	1.8	6.1	0.8	20.6	3.1
Dec	126.3	10.1	1.3	12.0	1.5	9.8	1.0	27.2	-0.6
2008									
Jan	127.5	10.7	0.9	12.3	0.8	11.0	2.6	27.4	2.4
Feb	128.3	11.3	0.7	13.3	0.6	11.5	0.7	32.1	1.9
Mar	129.8	11.8	1.2	14.6	1.6	12.8	1.7	36.5	2.8
Apr	131.2	12.0	1.1	15.8	1.8	13.4	1.0	42.7	2.1
May	132.6	11.7	1.1	15.7	1.6	12.4	1.2	47.4	4.9
Jun	134.0	12.1	1.0	15.9	0.5	13.1	1.2	48.8	4.2
Jul	134.2	11.6	0.1	14.9	-1.1	14.4	1.0	...	...

Source: SBS.

Exchange Rate

The dinar's rate is highly unstable in the course of Q2, but it has steadily strengthened since early June

The dinar exchange rate was highly unstable in Q2, moving within a wide band of 78.98 to 83.87 dinars for one euro (Graph T3-11). Such sharp variations of the exchange rate in Q2 were most likely a consequence of the uncertainties related to the results of the parliamentary election and the forming of the new government. From the beginning of June, the dinar had a constant trend of appreciation, which lasted all through August. Thus in late Q2 the exchange rate against the euro more or less returned to the value it had early this year, while the real exchange rate in late Q2 was by 2.8% stronger relative to the end of last year (Table T3-10). The nominal appreciation against the euro from the beginning of the year to end-August amounted to 3.5%, while the real appreciation in 2008 up to August was around 7.5% (Graph T3-12).

The appreciation of the dinar since June is a consequence of several factors. First, less political uncertainty and the forming of the government definitely influenced the perception of political risk. Second, NBS measures (multiple increases in the reference interest rate and amendment of regulations governing the reserve requirement⁵) resulted in higher demand for dinars. Third, in Q2 the banking sector was strongly recapitalized from foreign sources⁶ which led to a higher inflow of euros into the country. The combination of demand for dinars and a higher quantity of disposable euros led to the strengthening of the dinar.

Further movements in the exchange rate will largely depend on the inflow of capital into the country, as well as on the NBS's policy. The high NBS reference rate certainly contributed to the strengthening of the dinar. The level of the reference interest rate, and consequently of the dinar exchange rate, too, will depend on whether the current exchange rate is in line with the projected core inflation, both in this and in the following year. To recall, in 2006, when the dinar suddenly nominally appreciated, overall and core inflation started to fall very quickly (Graph T3-14). It seems that so far the dinar's appreciation has not yet had the desired effect on the containment of inflation. Still, further significant increases in the reference interest rate are not likely because it is already at a relatively high level, and it remains an open question whether any new tightening would have an impact on core inflation at all this year.

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

	Nominal				Real			USD/EUR Rate ⁶
	exchange rate (FX) ¹	base index ² (avg.2005 = 100)	y-o-y index ³	cumulative index ⁴	real FX ² (avg.2005 = 100)	y-o-y index ³	cumulative index ⁴	
monthly exchange rate								
2005								
December	85.9073	103.6	109.3	109.3	97.4	94.9	94.9	1.1861
2006								
March	87.1033	105.0	107.9	101.4	97.0	96.4	99.6	1.2013
June	86.7609	104.6	105.1	101.0	94.4	93.6	96.9	1.2677
September	83.0621	100.2	98.3	96.7	90.0	89.7	92.5	1.2748
December	78.7812	95.0	91.7	91.7	85.4	87.7	87.7	1.3210
2007								
March	80.8968	97.6	92.9	102.7	87.0	89.7	101.9	1.3246
June	81.1665	97.9	93.6	103.0	85.6	90.7	100.3	1.3420
September	79.3999	95.8	95.6	100.8	81.8	90.9	95.8	1.3884
October	77.6627	93.7	96.0	98.6	79.9	90.8	93.6	1.4227
November	79.1979	95.5	100.3	100.5	81.1	95.1	95.0	1.4689
December	79.5669	96.0	101.0	101.0	80.7	94.6	94.6	1.4563
2008								
January	81.8460	98.7	102.7	102.9	82.0	95.8	101.5	1.4719
February	82.9685	100.1	104.5	104.3	82.8	96.9	102.6	1.4755
March	83.1319	100.3	102.8	104.5	82.8	95.2	102.6	1.5516
April	81.0287	97.7	100.6	101.8	80.1	92.7	99.2	1.5770
May	81.9403	98.8	100.6	103.0	80.6	93.4	99.9	1.5569
June	80.2460	96.8	98.9	100.9	78.5	91.7	97.2	1.5556
July	78.3728	94.5	97.2	98.5	76.5	90.8	94.8	1.5773

Source: NBS, Eurostat.

1) Month average, official daily NBS mid rate.

2) Ratio of fx in column 1 and average fx in 2005.

3) Ratio of fx in column 1 and fx for the same period in previous year.

4) Cumulative is the ratio of given month and December of previous year.

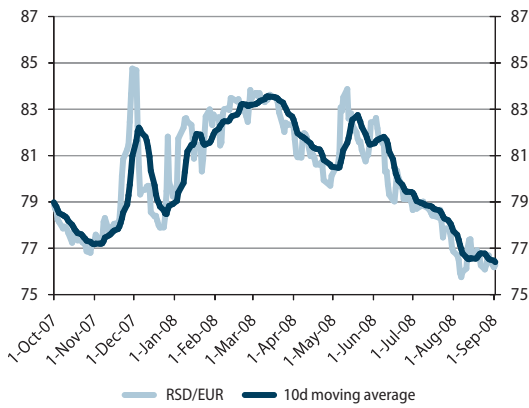
5) Includes Euro area inflation. Index calculation: RE=(NE/p) x p* RE - real fx index NE -nominal fx index p - Serbia RPI index p* -Euro area CPI index

6) Period average.

5 See Section 8 "Monetary Flows and Policy", as well as the previous issue of QM.

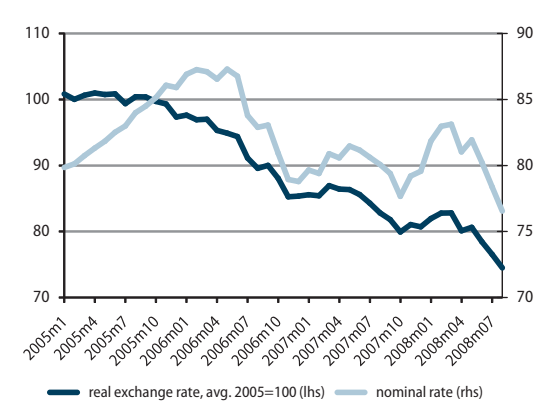
6 See Section 6 "Balance of Payments and Foreign Trade".

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



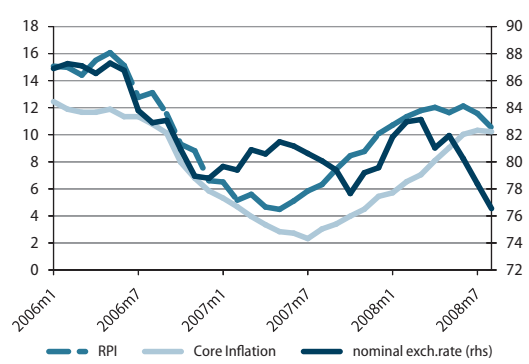
Source: NBS.

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



Source: SBS and NBS.

Graph T3-14. Serbia: Nominal Dinar/Euro Exchange Rate and Inflation (y-o-y, in %), 2006–2008



Source: SBS and NBS.

4. Employment and Wages

The total number of employed rose by some 5,000 between September 2007 and March 2008; this was the first rise in employment by legal entities since *QM* started monitoring the series. Significant growth was recorded by legal entities engaged in commerce, followed by the real estate and education sectors. Employment in the manufacturing industry continued on a downward trend. On the other hand, the services sector (commerce, real estate operations, etc) has been absorbing a growing percentage of the workforce and, together with rising employment in the public sector, compensating for the fall in employment recorded by manufacturing. If this trend were to continue, the long-awaited turn in the labor market would take place. For this to happen, however, the employment growth needs to spread to the industry as well – in other words, to be viable in the medium term, it cannot remain concentrated in domestic-demand-oriented sectors. Finally, employment growth with entrepreneurs has slowed significantly over the past year, only to stagnate completely in the last six months. Real wage growth dropped in Q2 to a y-o-y level of 3.1% as opposed to 5.2% in Q1, while the July y-o-y wage growth stood at 3.7%. Therefore the good news is that the accelerating inflation has not been accompanied by wage indexation to compensate for it. Unit labor costs continued on a significant downward trend since real wages grew at a slower pace than productivity. Wage growth in the public sector slowed, which had the positive impact of reducing public spending; however, employment in this sector grew, which diminished to some extent the significance of the slowdown in public sector wage growth.

Employment

Total employment grows by some 5,000, which can be ascribed to the rise in employment with legal entities

The total number of employees rose by some 5,000 between September 2007 and March 2008, to 2.006 million (Table T4-1). This figure, based on final March employment data, represents the first rise in total employment since March 2005.

Table T4-1. Serbia: Registered Employment, 2004–2008

	Total no. of employed (employees and entrepreneurs)	Employees in legal entities	Entrepreneurs			Total no. of employees
			Total	No. of entrepreneurs	No. of employees with entrepreneurs	
	1 (=2+3)	2	3 (=4+5)	4	5	6 (=2+5)
in thousands						
2003						
March	2,046	1,628	418	198	220	1,848
September	2,036	1,595	441	202	239	1,834
2004						
March	2,065	1,601	464	208	255	1,856
September	2,037	1,560	477	210	267	1,827
2005						
March	2,070	1,557	513	228	285	1,842
September	2,067	1,536	531	230	300	1,836
2006						
March	2,032	1,496	536	228	308	1,804
September	2,019	1,447	572	242	330	1,777
2007						
March	2,004	1,438	566	239	327	1,765
September	2,001	1,428	573	245	328	1,756
2008						
March	2,006	1,432	574	245	329	1,761

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

Notes:

1) By registered employment, we refer to the formal economy, i.e. those employees with employment contracts and for whom social security contributions are being paid.

2) Data on employees in legal entities are uncorrected data for January 2008 and data on entrepreneurs and their employees are from September 2007. These are the most recent data available.

Notes by column:

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

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

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

4) Owners of small businesses and self-employed persons (entrepreneurs).

5) Employees of small businesses (entrepreneurs).

Commerce, real estate operations and education all see significant employment growth

Employment with legal entities recorded significant growth in a number of sectors between September 2007 and March 2008: in commerce,¹ with an additional 6,000 jobs, or a 3% growth within the sector; in real estate operations,² also with 6,000 new jobs, or an 8% growth, and in education, with 5,000 new jobs, or a 4% growth. Employment also rose in health and social welfare (some 2,000 jobs), electricity production (about 1,000 jobs), financial services (about 1,000 jobs) and other public utilities and personal services (some 1,000 jobs; Table P-5 in the Appendix).

The largest drop in employment has again been recorded by manufacturing, followed by agriculture, transport and construction

The steepest decline in employment with legal entities between September 2007 and March 2008 was recorded by the manufacturing industry, which shed 10,000 jobs, a fall of 3% at the sector level. Agriculture lost some 4,000 jobs (a fall of 8% at the sector level), followed by transport with a loss of 2,000 jobs (or a 2% fall at the sector level), with construction shedding about 1,000 jobs (a drop of 1% at the sector level; Table P-5 in the Appendix). These trends indicate that the process of privatization and restructuring of socially owned companies has not yet been completed.

Employment with entrepreneurs has been stagnating

The hitherto growth of employment with entrepreneurs has halted, and contributed almost nothing to the employment growth between September 2007 and March 2008: total employment growth by entrepreneurs was some 1,000 jobs (Table T4-1).

A rise in the total number of employees based on growing employment by legal entities can be observed for the first time (Table T4-1). Although it is still too early for any definite conclusions, it may be that March 2008 saw the long-awaited turning point in the labor market, and that total employment is embarking on longer-term growth. If this is indeed the case, it would mean that Serbia's economy managed, between September 2007 and March 2008, to create enough new jobs to absorb the job losses stemming from privatization and restructuring.³

It is however evident that employment has grown only across a limited number of services sectors as well as in the public sector. This fact fits in with economic activity growth trends, where services also lead the way.⁴ Notwithstanding the undoubtedly positive changes in the labor market, employment growth could have been rated even more favorably had it also occurred outside sectors that rely on domestic demand. Employment growth needs to spread to the industry as well, and cannot remain based solely on domestic-demand-oriented sectors if it is to be viable in the medium-term.

1 The commerce sector comprises of exclusively legal entities, excluding entrepreneurs.

2 Under statistical classification this sector also includes equipment rentals, computer-based activities, research and development, and other business activities (architectural firms, management, advertising and marketing, etc).

3 See Employment and Wages, QM 12.

4 For more details on economic growth and domestic demand, see Section 5, Economic Activity, in this issue of QM.

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

	Employees in legal entities						
	Public sector					Public sector - total	Other ¹⁾
	From the budget		Public enterprises				
	Administration - all levels	Education and culture	Health and social work	National public	Local public	6	7
	1	2	3	4	5	6	7
in thousands							
2003							
March	60	116	147	129	54	506	1,122
September	62	114	147	127	55	505	1,090
2004							
March	63	117	147	125	57	509	1,092
September	63	116	148	124	57	508	1,052
2005							
March	63	119	148	122	61	513	1,044
September	61	117	147	112	61	498	1,038
2006							
March	60	118	141	105	61	485	1,011
September	58	117	138	102	60	475	972
2007							
March	58	121	138	100	59	476	962
September	59	120	139	100	58	476	952
2008							
March	60	124	140	99	58	481	951

Source: SBS.

Note: Those employed in the Ministry of Defense and the Ministry of the Interior, even though financed from the budget do not enter the total balance of the employed persons presented in this table. Their numbers are estimated at around 80,000, and they add another 4% to the total number of employed in Serbia. The data on their exact numbers and wages are not published by the SBS because of national security concerns.

Footnotes:

1) Private, socially-owned and mixed ownership enterprises (without entrepreneurs). This column is not disaggregated further due to data availability limitations. The number presented in column 7 is calculated by subtracting the total number of employees in public enterprises and those financed from the budget from the total number of employees in legal entities from Table T4-1

The number of employed in the economy as a whole, excluding the public sector (Table T4-2, Column 7) saw a slight decline (by about 1,000 jobs) between September 2007 and March 2008.

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

	Official number of unemployed 15-64 (NES)	Official unemployment rate 15-64 (NES & RAD, SBS) ¹⁾	Number of unemployed 15-64 (LFS, SBS)	Unemployment rate 15-64 (LFS, SBS) ²⁾
	1	2	3	4
2004				
March	...	26.0	...	...
September	842,775	23.9	664,002	19.5
2005				
March	884,111	25.0	...	...
September	897,724	25.3	718,773	21.8
2006				
March	920,031	26.6	...	...
September	914,564	26.6	691,877	21.6
2007				
March	913,299	26.7	...	...
September	808,200	24.5 ²⁾	585,472	18.8
2008				
March	795,081	24.2 ²⁾	432,730	14.0

Source: National Employment Service (NES); Labor Force Survey (LFS), SBS.

Notes:

1) Labor Force Survey was, until 2008, conducted once per year - in October, thus the September data are in fact October data for that year. Since LFS is being conducted twice per year from 2008, in April and October, March 2008 data (columns 3 and 4) are in fact LFS data for April 2008.

2) Population aged 15-64 is considered working-age population.

3) RAD survey and LFS are equally official sources of data and they both come from SBS, but LFS is the only source of internationally comparable data on the labor market sectors and indicators.

Footnotes:

1) The SBS unemployment rate stems from dividing the number of unemployed with the total active population, where the active population consists of the total number of employees from the SBS statistics (column 1 in Table T4-1), the number of unemployed 15-64 from the NES statistics (column 1 in this table) and the number of agricultural workers from the LFS.

2) In order to calculate this unemployment rate we used the number of agricultural workers from LFS 2007.

The unemployment rate for the working-age population, according to the LFS, was 14% in April 2008

As of this year, more frequently collected, and in all likelihood more reliable unemployment data will be available (Table T4-3), as the Labor Force Survey (LFS) is now conducted twice yearly, in April and October, as opposed to only in October thus far. In addition, certain changes were made to methodology to bring the LFS in line with Eurostat standards.

According to the LFS, the unemployment rate for the working-age population fell from 18.8% to 14% between October 2007 and April 2008 (Table T4-3). Such a significant drop can be ascribed partly to changes in SBS methodology, and partly to seasonal factors affecting the labor market in April and October – which is why the data is taken with some caution.⁵

Wages

Real wage growth falls to 3.1% in Q2

Although nominal wages continued a trend of y-o-y growth similar to Q1 (some 19%), real y-o-y growth of gross wages has slowed, and stood at 3.1% in Q2. This continuing deceleration of real wage growth can be ascribed to the rising costs of living (CPI), which saw a y-o-y rise of 15.8% in Q2. Wage growth has not fully accommodated for this rise, which means that real wage growth is slowing.

Table T4-4. Serbia: Average Monthly Wage and Real Y-o-y Wage Indices, 2004–2008

	Average Monthly Wage				Average Gross Monthly Wage Index ²⁾	
	Total labour costs ¹⁾ , in dinars	Net wage, in dinars	Total labour costs, in euros	Net wage, in euros	nominal	real
	1	2	3	4	5	6
2004	24,234	14,108	334	194	123.7	111.4
2005	30,142	17,478	364	211	124.4	107.1
2006	37,493	21,745	445	258	124.4	111.3
2007	45,723	27,785	572	347	121.9	114.6
2005						
Q2	29,516	17,122	360	209	125.3	107.6
2006						
Q1	33,258	19,284	382	221	127.3	111.0
Q2	36,447	21,126	420	243	123.5	108.1
Q3	37,882	21,986	455	264	122.3	109.7
Q4	42,387	24,585	533	309	124.9	116.6
Dec	48,686	28,267	618	359	128.1	120.9
2007						
Q1	41,319	25,103	517	314	124.2	118.5
Q2	44,684	27,165	551	335	122.6	118.6
Q3	46,108	28,019	576	350	121.7	114.1
Q4	50,781	30,855	644	392	119.8	108.2
Dec	56,736	34,471	713	433	116.5	104.1
2008						
Q1	49,291	30,007	596	363	119.3	105.2
Q2	53,369	32,452	658	400	119.4	103.1
July	54,370	33,058	694	422	119.1	103.7

Source: Serbian Bureau of Statistics (SBS).

Footnotes:

1) Total labor costs include employer's total average expense per worker, including all taxes and social security contributions. TLCs amount to around 164.5% of the average net wage.

2) Gross wage indices are equal to total labor cost indices, because the average TLC is larger than the average gross wage by a fixed 17.9%.

⁵ After changes to methodology are examined in detail, the next issue of QM will present a closer analysis of this significant drop in unemployment.

In July, real wage growth increased to a y-o-y rate of 3.7%

Real y-o-y wage growth stood slightly higher in July than in Q2, at 3.7%. This growth can, however, be partly explained by a fall in the y-o-y rise in costs of living in July to 14.9%, while nominal wages continued growing at nearly the same pace – 19.1% (Table T4-4).⁶ If wages continue to grow at a nominal 19%, taking into account the expected slowdown in inflation, y-o-y wage growth will see a significant acceleration in the second half of the year.

Table T4-5. Serbia: Labor Costs and Real Y-o-y Wage Bill Indices, 2004–2008

	Labour Costs			Wage Bill Index ⁴⁾	
	Wage bill, in 000 din ¹⁾	Unit labour cost (GDP) ²⁾	Unit labour cost (GVA) ³⁾	nominal	real
	1	2	3	4	5
2004	534,294,604	38.6	41.7	123.4	111.2
2005	661,108,425	38.8	40.2	123.7	106.6
2006	805,517,464	40.0	39.3	121.8	109.1
2007	963,461,574	41.9	38.9	119.6	112.4
2005					
Q2	162,339,458	39.7	40.3	124.0	106.5
2006					
Q1	180,227,329	41.9	40.2	125.9	109.9
Q2	196,486,925	39.6	38.9	121.0	106.0
Q3	203,348,767	38.6	38.7	119.3	107.1
Q4	225,454,442	40.0	39.3	121.4	113.3
2007					
Q1	218,080,843	44.6	40.6	121.0	115.4
Q2	235,889,439	42.8	38.5	120.1	116.2
Q3	242,525,692	40.1	38.3	119.3	111.8
Q4	266,550,004	40.0	37.3	118.2	106.7
2008					
Q1	258,727,651	43.6	38.0	118.6	104.6
Q2	281,359,333	41.1	36.1	119.3	103.0

Source: Serbian Bureau of Statistics (SBS).

Note: The presented data suffer from methodological imprecision because SBS does not collect data on wages with entrepreneurs. This is why the values in Table T4-6 should not be observed in nominal terms, but rather their general trends should be followed as realistic indicators of wage mass movements.

Footnotes:

1) The wage bill is an inferred value representing the multiple of the total number of employed and the average total labor cost, including all taxes and social security contributions. Data on employment and wages with legal entities are from SBS, whereas the average wage of the employed with entrepreneurs was gauged from the taxing authorities data.

2) Wage bill participation in total GDP.

3) Wage bill participation in GVA, without agriculture and government.

4) Gross wage indices are equal to total labor cost indices, because the average TLC is larger than the average gross wage by a fixed 17.9%.

Unit labor costs have seen a significant reduction

Unit labor costs (ULCs) continued to decline in Q2 – from 42.8% in Q2 2007 to 41.1% in Q2 2008, mainly due to slower wage growth. When government and agriculture are excluded from GVA, y-o-y ULCs can be seen to drop from 38.5% in Q2 2007 to 36.1% in Q2 2008 (Table T4-5).⁷

⁶ For more details on inflation, see Section 3, Prices and the Exchange Rate, in this issue of QM.

⁷ For more details on labor costs, see Section 5, Economic Activity, in this issue of QM.

Table T4-6. Serbia: Average Gross Wages by Activities, Y-o-y Real Indices, 2005–2008

	2005	2006	2007	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	July 2008
Total	106.8	111.3	114.6	118.6	118.6	114.2	108.2	105.2	103.1	103.7
Agriculture, forestry and water works supply	112.2	114.7	107.6	110.2	105.6	108.2	106.3	113.0	113.0	105.7
Fishing	116.2	92.6	86.7	78.8	63.6	101.5	103.0	118.0	179.7	114.3
Mining and quarrying	100.4	113.5	118.5	135.4	121.1	111.3	106.4	91.9	98.9	103.8
Manufacturing	109.1	113.7	111.6	114.9	114.7	109.7	106.8	108.3	103.2	103.9
Electricity, gas and water supply	104.1	106.3	118.7	143.0	117.7	110.1	103.8	82.4	98.8	102.6
Construction	104.5	112.9	117.2	123.9	126.0	112.9	106.1	108.7	105.0	107.1
Wholesale and retail trade, repair	111.6	114.5	113.1	118.7	115.1	113.5	105.1	109.4	107.4	104.8
Hotels and restaurants	108.3	109.5	112.9	112.0	114.7	115.6	109.2	110.0	104.1	100.4
Transport, storage and communications	104.2	108.5	108.9	108.5	111.9	108.4	106.9	105.8	102.6	102.7
Financial intermediation	110.5	112.4	109.1	112.9	111.4	105.2	106.7	93.4	95.6	106.1
Real estate, renting activities	111.6	103.4	119.6	122.0	120.8	116.6	119.0	105.2	95.3	95.5
Public administration and social insurance	105.0	109.2	111.3	111.5	118.3	113.2	102.2	98.3	100.6	100.7
Education	108.2	108.9	114.3	111.9	118.5	116.3	110.5	110.2	106.1	103.7
Health and social work	100.0	108.5	123.9	125.5	130.8	127.2	112.0	105.6	99.4	99.6
Other community, social and personal service	102.6	105.0	107.4	106.2	111.7	110.6	101.0	102.1	100.5	102.8

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

The highest y-o-y wage growth in Q2 is recorded by commerce (7.4%), followed by education (6.1%)

Real y-o-y gross wage growth in Q2 was lower than y-o-y growth in Q1 2008 for almost all activities. In addition to agriculture and fisheries, which are susceptible to major seasonal fluctuations, the highest y-o-y wage growth was recorded in commerce, by 7.4%, followed by education, by 6.1%. Some activities have actually recorded drops in the y-o-y real gross wage growth rate, with the most significant fall being in financial intermediation (4.4%) and real estate operations (4.7%). Construction saw the highest y-o-y real gross wage growth in July – 7.1%, followed by financial intermediation, which grew by 6.1% (Table T4-6).

Table T4-7. Serbia: Gross Wages in Public Sector 2004-2008, Y-o-y Real Indices

	From the budget			Public enterprises		Other ¹⁾²⁾	Serbia average
	Administration - all levels	Education and culture	Health and social work	National public	Local public		
	1	2	3	4	5		
2004	107.4	107.7	110.9	107.9	113.4	113.7	111.4
2005	105.9	106.0	100.8	100.5	103.0	106.9	107.1
2006	109.1	107.2	109.4	110.8	102.9	113.7	111.3
2007	111.1	114.7	123.8	116.7	105.0	114.1	114.6
2005							
Q2	103.0	108.4	102.9	98.1	104.1	103.2	107.6
2006							
Q1	111.5	111.1	102.2	108.9	97.0	115.0	111.0
Q2	102.2	100.8	103.1	109.6	102.8	111.3	108.1
Q3	108.0	104.2	105.0	108.4	102.7	112.4	109.7
Q4	110.5	106.4	98.2	103.4	98.8	116.0	116.6
2007							
Q1	111.5	112.6	125.4	129.8	113.8	117.3	118.5
Q2	118.6	119.2	131.5	118.9	104.5	117.4	118.6
Q3	114.1	116.7	127.5	112.5	104.1	112.5	114.1
Q4	100.1	110.3	111.0	105.8	97.4	109.0	108.2
2008							
Q1	99.2	109.5	105.6	94.3	98.5	107.3	105.2
Q2	99.6	104.8	99.4	103.0	89.0	104.2	103.1

Source: SBS.

Footnotes:

1) Column 6 includes private, socially-owned and mixed ownership enterprises (without entrepreneurs).

2) Column 6 represents the value for each time period inferred from difference between the total wage bill and the public sector wage bill, which is then divided by the number of employees in the economy (column 7, Table T4-2).

Y-o-y real gross wage growth in the public sector slows

Y-o-y real gross wage growth in the public sector has slowed in comparison with Q1. Only salaries in national public enterprises grew in relation to Q1, a quarter in which they actually fell (Table T4-7).

5. Economic Activity

Economic activity in Q2 grew rapidly, albeit at a slightly slower pace than in Q1. The y-o-y GDP growth in the quarter is estimated at around 7.2%, and non-agricultural GVA – a more reliable measure of economic activity because it excludes agriculture – at about 7.6%. A review of the most important aspects of economic activity brings out that no major changes occurred in Q2. Economic growth was still high and there were no signs of any significant deviations in the period ahead. Domestic demand was high despite the slight deceleration recorded, and will probably remain so until the end of the year. Nor were there any signs of change from the side of export demand. The international competitiveness of the Serbian economy remained unchanged in Q2, although there were signs of it worsening somewhat in Q3. Agricultural production will probably record two-digit growth rates in 2008. Industrial production in Q2 grew at a rate of 2.3% y-o-y, while the manufacturing industry had a y-o-y growth rate of 4.4%. Construction activity in Q2 was up about 5% on Q2 2007.

Gross Domestic Product

**GDP growth in Q2
estimated at 7.2%...**

According to QM's preliminary estimate, based on the available data on the results of economic activity¹, the y-o-y real GDP growth in Q2 stood at around 7.2% (Table T5-1), which was about one percentage point lower than in Q1. Non-agricultural GVA, which is considered a more reliable measure of economic activity since agriculture is subject to exogenous influences, also decelerated its growth in Q2 relative to Q1 2007 by about one percentage point. The real y-o-y growth of non-agricultural GVA in Q2 stood at around 7.6%, according to the QM estimate.

**...and non-agricultural
GVA at 7.6%**

When observed from the production side, growth deceleration was recorded in a limited number of sectors of the economy, while other sectors continued with similar or slightly higher levels of y-o-y growth compared to Q1. The only sectors whose growth decelerated significantly in Q2 were the wholesale and retail trades and the production and distribution of electricity, gas and water – which are classified in the heterogeneous group of sectors named “other” (Table T5-1).²

**Only trade decelerates
sharply**

The growth deceleration trend in the wholesale and retail trades, which started in Q1, continued into Q2. This could be a good indication of slackening domestic demand. As for the other sector whose growth decelerated – generation and distribution of electricity, gas and water – it cannot be said that there were any indicative changes in Q2; rather, the development was associated with a return to a more long-term trend in electricity generation and distribution after the very high, but one-off, two-digit growth in Q1. In these two sectors, a somewhat lower y-o-y growth of the tax component of GDP in relation to Q1 was also observed in Q2 (Table T5-1).³

**High growth is expected
in agriculture in 2008**

Table T5-1 also shows a higher growth rate of agriculture in Q2 in relation to Q1. But since quarterly data on agriculture is subject to revision, the SBS's conservative estimate of the value of agricultural production in Q1 will probably be adjusted upwards. Although it is still difficult to quantify growth in agriculture both in Q2 and in the whole of 2008, it is clear that last year's bad season, marked by a y-o-y fall of 8%, will not be repeated. Preliminary results of wheat production indicate that it was higher in relation to 2007 by about 14%, although the harvested area was smaller this year than in 2007. QM's estimate of growth in agriculture over the whole of 2008 remains unchanged in relation to the previous quarter – and amounts to a high 10%.

1 The methodology used for estimating GDP is based on the estimates of real growth in the GVA of individual sectors of the economy according to the production principle, which were then summed up and the tax component was added. The modifications in relation to the SBS are partly connected to the indicators on the basis of which sectoral growth is estimated, and which we consider more reliable indications of actual sectoral growth in certain cases (e.g. cement production in construction). Likewise, since we have fewer available indicators than the SBS, we include in the estimate indirect indicators that are not an integral part of the official methodology, and we also carry out more in-depth analyses of trends in individual sectors as well as a demand analysis.

2 This group includes economic sectors with somewhat lower shares in GVA: production and distribution of electricity, gas and water, mining and quarrying, tourism and catering and other services.

3 For more details see Section 7, Fiscal Flows and Policy, in this issue of QM.

Table T5-1. Serbia: Gross Domestic Product, 2004–2008¹⁾

	Y-o-y indices									Base index (jan-mar) _{08/} (jan-mar) ₀₂	GDP share 2007
	2005	2006	2007	2007				2008			
				Q1	Q2	Q3	Q4	Q1	Q2 ²⁾		
Total	106.2	105.7	107.5	108.2	107.6	107.5	106.9	108.2	107.2	143.8	100.0
Taxes minus subsidies	110.2	99.8	108.8	112.7	106.6	111.3	105.6	109.4	105.0	161.5	15.5
Value Added at basic prices	105.5	106.8	107.3	107.5	107.8	106.9	107.2	107.9	107.6	141.0	84.5
Non agricultural Value Added	107.3	107.9	109.5	108.9	109.6	109.5	110.0	108.7	107.6	147.7	89.2 ³⁾
Agriculture	95.1	99.8	92.0	94.9	92.8	91.3	91.0	100.5	108.0	95.9	10.8 ³⁾
Manufacturing	99.9	105.6	104.8	109.4	104.9	104.6	101.6	103.9	104.5	118.4	15.7 ³⁾
Construction	102.0	107.7	109.1	128.8	110.6	102.6	101.2	104.3	105.0	145.7	3.5 ³⁾
Transport, storage and communications	123.4	129.3	124.0	117.7	122.6	125.1	129.4	120.9	120.0	290.0	15.1 ³⁾
Wholesale and retail trade	122.0	110.3	119.3	121.5	119.3	118.1	118.9	111.8	106.0	233.5	12.7 ³⁾
Financial intermediation	117.4	117.2	120.3	119.2	120.0	119.9	121.9	118.3	119.0	237.4	8.4 ³⁾
Other	102.1	100.5	101.0	99.1	101.6	101.4	101.8	103.0	101.3	107.8	33.7 ³⁾

Source: SBS.

1) In constant prices in 2002.

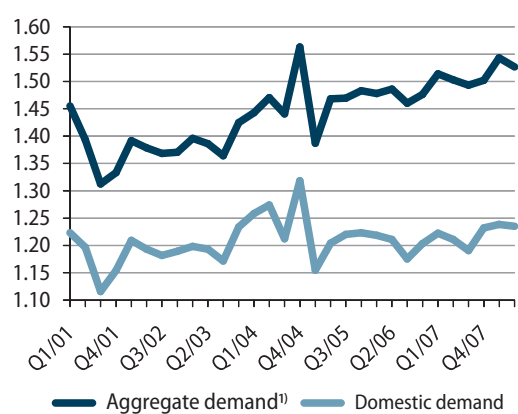
2) QM estimate.

3) Share in VA.

Services decelerate growth...**...and material production accelerates**

If the economy is divided into two segments – services and material production – it is evident that the y-o-y growth of services has retained the leading position in relation to material production, but the gap has been decreasing from one quarter to another⁴. In Q2 the real y-o-y services growth stood at around 9.1%, while material production growth was 4.7%. Such monitoring of the economy is prompted by the fact that services are under the dominant influence of domestic demand, while material production, besides domestic demand, is also affected to a significant extent by export demand, as well as exogenous influences⁵. Since the beginning of the transition process, services had a much higher growth rate than material production. In Q2, the gap between their growth rates became smaller, mainly because of the deceleration in the growth of services, which can be entirely attributed to the slowdown in the growth of the wholesale and retail trades.

Further forecasts of the growth of economic activity mostly depend on future movements in domestic demand, which has now reached a turning point. It must be stressed that economic growth would remain high even in the event of a domestic demand growth slowed down even more strongly. The continuation of the stable growth of exports and high growth in agriculture

Graph T5-2. Serbia: Aggregate and Domestic Demand Ratio to GDP, 2001–2008**Domestic demand reaches a turning point in Q2**

Source: QM based on SBS data.

1) Aggregate demand = domestic demand + export.

in 2008, due to the comparison with the low 2007 base, would be quite sufficient to maintain economic growth in 2008 at a level of 6%, as projected by the Ministry of Finance in late 2007.

Domestic demand, when observed at the quarterly level, was still high in Q2, although its rapid acceleration since Q4 2007 (Graph T5-2), was arrested. This is in line with the trends in the main generators of domestic demand: (1) real wage growth slowed down in 2008, with wages now growing more slowly than GDP, (2) credit activity was, indeed, slightly higher in Q2 in relation to Q1, but was still at a level similar to those in the preceding several quarters⁶ and (3) fiscal policy in the first semester of the year was relatively balanced. However, Q2 is still too

early to look for indications of a full reversal of the trend toward the deceleration of growth in domestic demand in relation to GDP (Graph T5-2). The acceleration of domestic demand

4 Services – wholesale and retail trade, transport, storage and telecommunications, financial intermediation, hotels and catering, real estate transactions and other services. Material production – agriculture, industrial production and construction.

5 Exogenous factors affect agriculture and construction the most.

6 For more details see Table T8-6, in Section 8 "Monetary Flows and Policy" of this issue of QM.

growth in the coming period may be crucially affected by the expected fiscal expansion in the second semester of the year, which can be additionally aggravated by the announced revision of the budget⁷.

GDP growth in 2008 slightly higher than planned

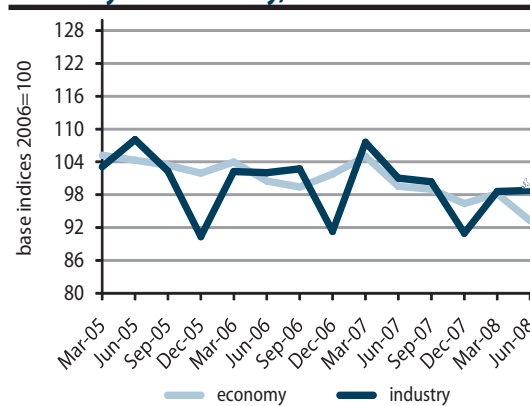
Now, when it is almost certain that domestic demand in the second semester of the year will not be substantially reduced after all, GDP growth in 2008 will probably exceed 7%, higher than the 6% estimated by the Ministry of Finance at the beginning of the year.⁸ Although 2008 was, from the perspective of economic activity, probably ideal for the conduct of more restrictive economic policies as favorable exogenous influences alone would have maintained solid economic growth, this will probably not materialize. The price that Serbia pays for high economic growth is an additional exacerbation of the internal and external imbalances.

Unit labor costs fall markedly

Dinar-denominated unit labor costs (ULCs) recorded a sharp y-o-y drop, while euro-denominated ULCs remained at a similar level as in Q2 2007. The drop in dinar-denominated ULCs came about owing to the high rise in productivity and the deceleration of real wage growth. The acceleration of inflation in Q1 did not fully pass through into wage growth, which resulted in the decline in ULCs. Graph T5-3 shows ULCs in the economy (excluding general government and agriculture) and industry. ULCs, with seasonal fluctuations⁹, are following a declining trend that has been in evidence for several years (Graph T5-3).

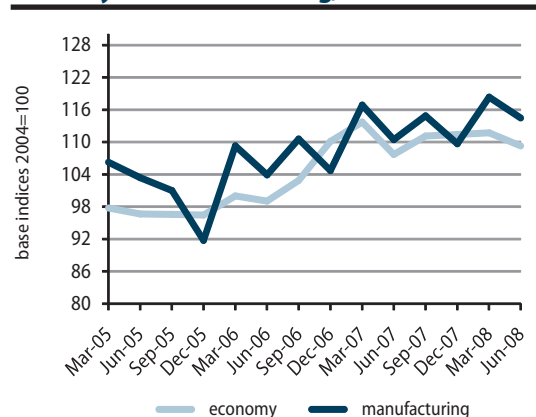
Competitiveness does not decline

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



Source: QM based on SBS and NBS data.

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



Source: QM based on SBS and NBS data.

Euro-denominated ULCs are an indication of the international competitiveness of the Serbian economy since they define the highest domestic component of costs (labor costs) in relation to value added. Euro-denominated ULCs are calculated for the manufacturing industry, which produces by far the largest quantity of tradables, and for the total economy¹⁰. It must be pointed out that such an analysis looks only at relative changes in competitiveness (ULCs) in relation to the average for 2004 and does not constitute an assessment of whether or not the domestic economy is competitive on the international market.

Euro-denominated ULCs grew between 10% and 15% in the period from 2004 to 2007 (Graph T5-4) – which quantifies the decline in the competitiveness of the domestic economy in that period. From the beginning of 2007 up until Q2 2008, however, euro-denominated ULCs were more or less at the same level. With all the reservations an analysis of this kind calls for, the movement in euro-denominated ULCs over the past year and slightly longer shows that the Serbian economy has been able to cushion, by using market-based mechanisms – a rise in

7 For more details see Section 7 “Fiscal Flows and Policy” of this issue of QM.

8 The Ministry of Finance then estimated real GDP growth at 6%, while the IMF’s estimate of real GDP growth was a mere 4%. QM forecast a much higher growth of economic activity which, in all likelihood, will materialize. See QM 10, Section 5 “Economic Activity”

9 In Q1, ULCs recorded a seasonal growth, which can be seen in Graphs T5-3 and T5-4, because a seasonal decline in economic activity occurred, which was not followed by wage cuts. In Q4 the opposite thing happened.

10 Excluding general government and agriculture.

productivity and deceleration of wage growth – the adverse impact of the long-lasting trend of the dinar's appreciation on competitiveness. As of June, however, the dinar started suddenly to appreciate anew, so there may be a certain loss of competitiveness in Q3.

Industrial production

Industrial production grows at a solid pace

Industrial production in Q2 recorded a growth of 2.3% in relation to Q2 2007 (Table T5- 5). The y-o-y growth of industrial production in Q2 was by 3.7 percentage points lower than the Q1 figure, but only those areas of industrial production subject to seasonal influences recorded a deceleration.

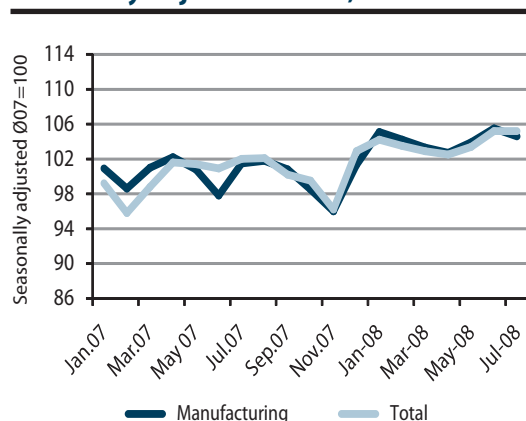
Relative to Q1, a sharp drop in the production and distribution of electricity, gas and water was observed. In QM's opinion this is not concerning. Namely, the high growth in Q1 2008 (12%) was a consequence of the comparison with the low electricity generation in early 2007 caused by an unusually warm winter. Just as we did not attach great importance to the double-digit y-o-y growth in the generation and distribution of electricity, gas and water, we are now reserved with regard to the y-o-y decline of that sector in Q2. The July data on industrial production already indicates that the y-o-y growth of that sector will exceed 5%.

Table T5-5. Serbia: Industrial Production Indices, 2005–2008

	Y-o-y indices									Share 2007
	2005	2006	2007	2007				2008		
				Q1	Q2	Q3	Q4	Q1	Q2	
Total	100.8	104.7	103.7	104.8	105.2	103.5	100.4	106.0	102.3	100.0
Mining and quarrying	102.1	104.1	99.4	102.1	101.4	99.2	95.6	106.0	101.8	6.0
Manufacturing	99.3	105.3	104.2	108.5	104.9	103.3	99.9	104.4	103.7	75.8
Electricity, gas, and water supply	106.6	102.2	102.8	94.2	108.7	106.5	104.3	112.0	96.1	18.2

Source: SBS.

Graph T5-6. Serbia: Industrial Production, Seasonally Adjusted Indices, 2007–2008



Source: SBS.

Seasonally adjusted indices confirm solid growth of industrial production in Q2

Much more relevant for analysis is the manufacturing industry, which, at the same time, has the highest share in total industrial production. In Q2, the manufacturing industry had a slightly lower y-o-y growth in relation to Q1 and it now amounts to 3.7% (deceleration relative to Q1 by 0.7 percentage points). It seems that there were no major changes in industrial production in Q2 relative to Q1.

Seasonally adjusted indices of industrial production (Graph T5-6) point to the solid and almost unchanged performance of industrial production in Q2 in relation to Q1.

Seasonally adjusted indices confirmed what QM anticipated – that fluctuations in total industrial production and its lower y-o-y growth in Q2

relative to Q1 – were primarily due to the influence of seasonal components. After two months of strong acceleration (December 2007 and January 2008 – Graph T5-6) industrial production in Q2 retained the attained level of seasonally adjusted growth relative to the average in 2007 of around 4%. A similar level of industrial production is likely to be maintained up to the end of the year.

Other indicators have been included in QM's estimate of movements in industrial production to the end of the year. In particular, due to the overhaul of a blast furnace at US Steel Serbia,

Only slight changes are possible up to the end of the year

industrial production in the second half of 2007 was lower by about 1.5 percentage points.¹¹ Therefore, the y-o-y growth of industrial production in the second semester of the year will also be influenced by comparison with a slightly lower base. A possible extraordinary increase in domestic demand can also affect industrial production in the second semester. As a rule, after quarters in which elections were held and when fiscal expansion boosted domestic demand, industrial production growth used to accelerate. Since the fiscal expansion started in Q2, and there is a chance that it might be additionally intensified up to the end of the year – this too could also affect developments in industrial production.

Industrial production growth in 2008 is expected to range between 4% and 5%

The probability of major changes in industrial production growth relative to the first semester of the year is rather low. Industrial production in 2008 will most probably grow at between 4% and 5%.

Growth of the manufacturing industry in Q2 stands at 3.7%

The manufacturing industry recorded a solid y-o-y growth of 3.7% in Q2, which was a slightly down on Q1. Table T5-7 shows the sections with the highest shares in industrial production in the manufacturing industry.

Table T5-7. Serbia: Sub-Sectors with Highest Share in Manufacturing in 2007, 2005–2008

	Y-o-y indices								Share 2007	
	2005	2006	2007	2007				2008		
				Q1	Q2	Q3	Q4	Q1		Q2
Manufacturing	99.3	105.3	104.2	108.5	104.9	103.3	99.9	104.4	103.7	100.0
Total-selected sectors	106.5	108.3	103.8	109.7	104.0	102.0	99.9	104.1	103.3	67.3
Food and beverages	104.6	105.3	105.8	112.2	107.7	104.2	100.6	101.7	98.2	30.1
Chemicals and chemical	103.8	108.3	105.0	105.6	95.3	104.1	115.0	112.6	112.2	13.0
Basic metals	121.8	122.7	98.0	115.1	108.7	92.2	78.9	108.6	105.9	10.2
Non-metal mineral products	97.7	106.6	100.3	123.4	98.0	91.9	90.6	87.8	93.6	5.2
Coke and refined petroleum	97.7	106.6	100.3	81.0	93.5	110.2	105.8	105.4	108.4	4.4
Rubber and plastic products	109.2	95.8	108.0	105.0	111.0	107.5	108.1	102.1	112.6	4.4
Other	83.9	98.9	105.1	105.9	106.8	106.2	99.8	105.0	104.5	32.7

Source: SBS.

Table T5-7 shows that that Q2 did not bring anything particularly new in the movements of industrial production of the manufacturing industry. The food industry fell slightly, while visible acceleration was recorded in the production of rubber and plastics, but it would be premature to draw conclusions with respect to the observed changes.

Table T5-8. Serbia: Components of Industrial Production, 2005–2008

	Y-o-y indices								Share 2007	
	2005	2006	2007	2007				2008		
				Q1	Q2	Q3	Q4	Q1		Q2
Total	100.6	104.7	103.7	104.8	105.2	103.5	100.4	106.0	102.3	100.0
Energy ¹⁾	103.9	102.5	101.2	93.0	104.9	105.6	103.0	110.2	98.2	26.6
Investment goods ²⁾	74.2	90.0	105.4	97.1	99.1	117.8	103.3	106.5	118.3	6.0
Intermediate goods ³⁾	104.9	106.7	104.9	113.6	108.4	102.4	95.7	106.0	106.8	30.4
Intermediate goods without basic metals	101.5	101.3	107.3	113.1	108.3	105.9	101.5	105.1	107.1	22.6
Consumer goods ⁴⁾	101.6	112.0	107.1	122.4	109.1	102.3	97.2	99.4	97.5	37.0
Consumer goods without food industry	96.3	128.3	109.2	138.7	111.4	99.3	91.8	95.8	96.5	14.2

Source: SBS.

1) Extraction of coal, crude oil, natural gas, electricity and water supply.

2) Manufacture of metal products excluding machines (sections 281, 282 and 283 Classification of Activities), manufacture of machines and equipment (excluding electric), manufacture of office machinery and computers, radio TV and communications equipment, precision and optical instruments, manufacture of motor vehicles and trailers, manufacture of other transport equipment.

3) Mining of metal and non-metallic ores, stone quarrying; manufacture of textile yarns and fabrics, wood and cork products (except furniture), cellulose, paper and paper products, rubber and plastic products, chemical products (except pharmaceuticals and home chemicals products), petrochemicals, construction materials, basic metals, sub-sector of metal goods production except machines (sectors 284, 285, 286 and 287), electric machines and appliances, and recycling sub-sector.

4) Food industry products, tobacco products, clothing, leather products and footwear, publishing products, pharmaceutical products and home chemicals products, furniture and various other products.

5) Share in total industrial production.

¹¹ For more details see Section 5 "Economic Activity" QM 10 and QM 11.

Production of investment goods takes the lead

When observed by purpose (Table T5-8), the highest y-o-y industrial production growth in Q2 of 18.3% was that of investment goods production. A high y-o-y growth in Q2 of 6.8% was also recorded by the production of intermediates. The production of consumer goods and energy generation recorded a y-o-y fall of 2.5 and 1.8% respectively.

The high growth in the production of investment goods in Q2 was a continuation of the positive trend in this specific-purpose group of products, and, at the same time, an indicator of positive breakthroughs in the overall economy. The first piece of good news is that the part of the industry which experienced the sharpest drop in production during the transition process is now recovering. Capital goods production in the first semester of 2007 accounted for less than 70% of the production realized in 2002. But a strong recovery was initiated in Q3 2007, with the trend continuing to Q2 2008. It is also good news that the high growth of investment goods production indicates the increased investment activity of the Serbian economy. This is corroborated by the fact that imports of capital goods lead the way in total imports.

Box 1. Growth Trends in the Industrial Production of Transition Countries

Industrial production is one of the key activities of a stable and strong economy and its most important export sector. The developments in industrial production in Serbia, however, followed a somewhat different pattern than in most other transition countries.

Over the 2000-2008 period,¹ industrial production in Serbia grew at a slower pace than other economic sectors. In the period, the share of industry in GDP fell from 24.5% to 20.2% in 2007. Formally, the developments in industrial production corresponded to the transition "U" curve (Graph T5-9) – the lowest value in 2003, and then steady growth – but neither the initial decline nor the subsequent growth were as abrupt as in other transition economies.

The much lower drop in industrial production than what is usual in the first years of transition can be explained by the fact that in 2000 industrial production was at a all-time low. On the other hand, the key question is whether industry in Serbia will experience a strong recovery and how, and to what extent, the experiences of other transition countries can be applied to the Serbian situation.

QM has analyzed industry development trends on the example of several transition countries. On Graph T5-9, two trends can be clearly observed – a sudden and sharp decline in industrial production, which hits bottom in the first few years, followed by a gradual recovery to the previous level, which is then exceeded.

When observed through the structure of the economy, since the beginning of the recovery of industrial production, a trend of an increase in the share of industry in GVA is noticeable,² which indicates that the industry grew faster than other economic sectors. This, however, has not yet happened in Serbia. For instance, in Slovakia and the Czech Republic, the share of industrial production in GVA today stands at about 34%, while slightly more than a decade ago it was around 26%.

The impact of FDIs on the economic and industrial recovery of transition economies is very frequently discussed. With the exception of Slovenia, this impact was generally speaking significant.³ Strong FDIs in industrial production were usually followed by high industrial production growth. For instance, in the Czech Republic, out of the total FDIs in the 1993–2006 period, some 30% went into the manufacturing industry, in Slovakia up to end of 2007, the percentage was 40%, and in Romania – as much as 50%. The Czech Republic and Slovakia have recorded a fast growth of industrial production (over the last couple of years 8%-10% on average), and in the case of Romania it was solid (4%-5% on average)⁴.

¹ That year, in this context, is considered to be the first year of transition

² Measured by the share of gross value added of industry (mining and quarrying, the manufacturing industry and production of electricity, gas and water) in GVA.

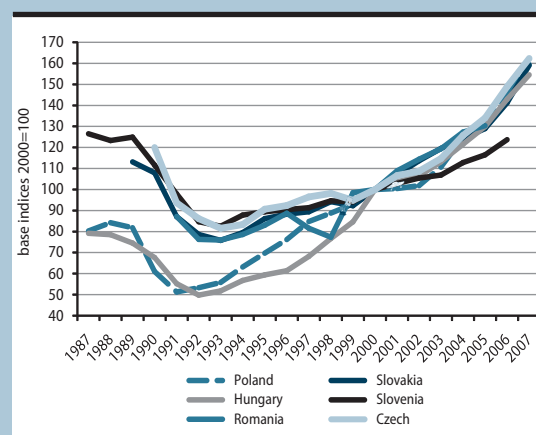
³ Bearing in mind numerous specificities of Slovenian transition, the experiences of other former socialist countries are more relevant to us.

⁴ Although it has a higher share of FDIs in the manufacturing industry than the Czech Republic and Slovakia, Romania had a much lower total amount of FDIs over the observed period (around 33% of GDP relative to about 55% of GDP in the Czech Republic and Slovakia).

In Serbia, however, over the 2004–2007 period, despite a fairly high level of FDIs, only some 18% went into the manufacturing industry. Even more worrisome is the fact that the share of manufacturing industry FDIs in total FDIs has been declining. Thus, this share in 2004 was 30%, in 2005 – 18.9%, in 2006 – 18.5%, and dropped to only 15% in 2007. An increase in the share in total FDIs over the same period was recorded in the services sector (trade, banking).

A comparative analysis of transition economies, however, cannot provide a reliable answer to the question of whether Serbia’s industrial production growth will catch up in the coming period. The most important thing is to study the specific situations of other transition economies and build on their experience. If the pattern according to which high FDIs in industry pave the way to speedy industrial production growth were to be repeated in Serbia, the forthcoming purchase of Zastava

Graph T5-9. Industrial Production in Transition Economies, 1987–2007



Source: stats.oecd.org, www.insse.ro, www.stat.si.

by FIAT could be a harbinger of accelerated industrial production growth. Not only is FIAT’s investment expected to break the ice for other big investors, but will also to contribute to more FDIs in activities associated with the automotive industry. Already now, Reum, which will open a factory in Svilajnac, plans to cooperate with FIAT.

Still, an FDI-led industrial recovery is not risk-free. In the same way in which industrial production is moving from developed countries to those with weaker environmental and labor regulations, lower wages, taxes and the like, it can move out of those countries, too, in search of even more favorable conditions.⁵ Therefore, attracting FDIs is under constant pressure of inter-state competition.

5 For instance, in late March this year, 80% out of 13,000 workers in the Renault production plant in Pitestu, Romania, went on strike demanding higher wages. At the beginning of the strike, Renault threatened to move production to Morocco, India or Russia.

Construction

Construction activity records solid growth

Construction activity was by about 5% higher in Q2 relative to Q2 2007. Among several non-coordinated indicators which describe movements in construction, *QM* usually observes the cement production index as the most reliable¹² (Table T5-10). Cement production in Q2 was up 3.7% on Q2 2007.

Table T5-10. Serbia: Cement Production, 2001–2008

	Y-o-y indices				total
	I quarter	II quarter	III quarter	IV quarter	
2001	89.5	103.5	126.9	148.1	114.2
2002	83.6	107.9	115.6	81.6	99.1
2003	51.1	94.4	92.7	94.4	86.6
2004	118.8	107.4	98.5	120.1	108.0
2005	66.1	105.0	105.8	107.4	101.6
2006	136.0	102.7	112.2	120.2	112.7
2007	193.8	108.9	93.1	85.0	104.4
2008	100.1	103.7	...	...	...

Source: SBS.

5% to 10% growth in construction expected in 2008

From among other indicators of construction published by the SBS: the value of performed construction works in Q2 was nominally higher by 16.1%, and in constant prices by 10.3%, relative to the same period last year. The number of workers on building sites was higher by 1.5%, while the y-o-y growth in actual work hours on building sites was 4%.

Construction activity in Q2 recorded a solid growth. For assessing the underlying trend in

12 The proper indicator would be the consumption of cement, but it is not available on a quarterly basis. Studies have shown that cement production is a relatively reliable approximation for consumption.

this activity the most important quarters are Q2 and Q3, since construction in Q1 and Q4 suffers strong seasonal influences (weather conditions). In view of the value of construction works in Q2, the underlying growth trend in construction activity is estimated at around 5%. Moreover, the second half of the year could bring slightly stronger construction activity, since large-scale infrastructure projects have been launched. The total growth of construction in 2008 is therefore expected to rise by between 5% and 10% relative to 2007. For a more precise estimate of the growth in the value of construction activity over the whole of 2008 it is, however, necessary to wait for the results in Q3.

6. Balance of Payments and Foreign Trade

Serbia's balance of payments worsened further in Q2. After a lengthy period (the last 15 quarters, excepting only Q1 2007) of robust foreign currency reserve growth, followed by only slight growth in Q1, the second quarter of 2008 witnessed a turn, with NBS foreign exchange reserves declining by €310 mn. This indicates a lack of foreign funding (either through FDI or borrowing) to cover the growing current account deficit. The current account deficit in Q2 was a high 19.5% of 3-m GDP. In addition to exogenous factors (rising imports and a worsening foreign trade deficit), the deterioration of Serbia's foreign position was contributed to both by marked political instability in the country and a decline in the global economy, coupled with the way international investors view risk. The current account deficit deteriorated markedly in Q2, primarily due to strong imports growth and a drop in inbound current transfers. The quarter saw imports grow at a faster pace than exports. Import growth was caused by economic growth – which involves rising domestic demand, hence more imports – as well as hikes in the price of energy in the global market. Rising energy prices contributed by some 3% of GDP to the high foreign trade and current account deficits. The current account deficit is being met from FDI (€564 mn) – generally bank recapitalizations – as well as additional borrowing by companies. The banking sector seems to have completely ceased to rely on foreign borrowing for its funding. As these inflows are not sufficient to offset the imbalance, Q2 saw the NBS expend a significant portion of its foreign currency reserves.

The balance of payments deteriorates in Q2

The balance of payments deficit continued to deteriorate in Q2 2008. According to NBS data, the deficit stands at €1,736 mn (19.5% of GDP), and is higher by as much as 68.4% than in the same period the year before, while quarterly growth in relation to Q1 stood at 33.6%. These current account trends are the consequence of the deterioration of all of its components: the balance of goods and services recorded a deficit higher by €501 mn (31.4%), more than in the same quarter the previous year. The net interest paid worsened by €106 mn (93.2% at the y-o-y level), while the net current transfer balance (usually the only current account component to see a surplus), although positive, recorded a drop of 14.4% in relation to the same period the previous year (Table T6-1).

The current account deficit continues to rise (at a y-o-y rate of 68.4%)...

These Q2 results notwithstanding, the NBS has revised the data for Q1 2008. Although changes to balance of payments methodology caused the NBS to publish lower current account deficit levels in Q1¹, the revised data changed this picture somewhat. The current account deficit was corrected upwards by €134 mn, which in fact means that the Q1 deficit was not 15.4% of GDP, as initially stated, but a very significant 17.0% of GDP.

...reaching as much as 19.5% of GDP

The balance of goods deficit amounted to €2,021 mn in Q1 (22.7% of GDP), a y-o-y deterioration of €479.6 mn (as much as 31.3%). This was a consequence of a marked acceleration in the growth of imports, which were worth €3,995 mn in Q2 (44.9% of GDP), after a y-o-y growth of 27.8% in Q2 (as against 22.4% in Q1). High y-o-y import growth, as well as its high share in GDP, was partly caused by rising energy prices worldwide. The price of imported energy products increased imports by about 3% of quarterly GDP. Had it not been for this exceptional rise in the prices of energy imports in Q2, the balance of trade and the current balance would have had lower shares in GDP (19.7% and 16.5%, respectively). Exports over this period amounted to €1,974 mn (22.2% of GDP) – €389 mn more than in Q2 2007. The y-o-y export growth of 24.5% in Q2 was higher than that recorded in Q1 (20.4%), but still below the average 28.8% export growth rate for the period 2004–2008. This imports/exports ratio, where imports grow at a faster pace than exports, inevitably leads to the further growth of the balance of goods deficit when, as is the case in Serbia, the exports/imports ratio is lower than 1. This effect is all the more apparent in Serbia as exports cover only 49.4% of imports.

Imports continue to grow (at a rate of 27.8%), y-o-y...

...while exports rise by 24.5%, not enough to reduce the trade deficit

¹ See QM 13, Section 6, Balance of Payments and Foreign Trade.

6. Balance of Payments and Foreign Trade

Table T6-1. Serbia: Balance of Payments¹⁾

	2007		2008	
	Q1	Q2	Q1	Q2
	in millions of euros			
CURRENT ACCOUNT	-1,031	-1,031	-1,299	-1,736
Goods	-1,482	-1,542	-1,841	-2,021
Export f.o.b	1,383	1,585	1,665	1,974
Import f.o.b	-2,865	-3,127	-3,507	-3,995
Services	-56	-54	20	-76
Export	500	534	663	628
Import	-556	-589	-643	-705
Income, net	-55	-114	-76	-220
Receipts	106	127	143	132
Payments	-161	-241	-218	-352
Current transfers, net	562	679	598	582
o/w grants	36	36	43	63
o/w private remittances, net	404	480	412	351
CAPITAL ACCOUNT	-322	1	5	9
FINANCIAL ACCOUNT	1,421	757	1,376	1,536
Direct investment, net	666	-191	755	564
Portfolio investment, net	269	185	-44	-38
Other investments	257	1,179	694	700
Trade credits	-5	93	119	-86
Loans	317	1,044	204	766
NBS	-33	-23	0	0
Government	50	19	1	17
Commercial banks	-177	-89	-516	-86
Long-term	43	-200	-163	-90
Short-term	-220	111	-353	4
Other (enterprises)	477	1,137	719	835
Currency and deposits	88	-3	371	20
Other assets and liabilities	-143	45	0	0
Reserves Assets (- increase)	229	-416	-29	310
ERRORS AND OMISSIONS, net	-68	273	-82	192
OVERALL BALANCE	-229	416	29	-310

Source: NBS.

1) Original US dollar monthly data is converted to euros using the monthly averages of official daily NBS mid-rates.

2) Exports f.o.b. according to NBS methodology adjusted to IMF BOP Manual, 5th edition.

Income from services amounted to €628 mn in Q2, 17.6% more than in the same quarter of the previous year. Major income-generating service categories include transportation, with an income of €160 mn (growth of 22.5%) and tourism (€148 million). Tourism stagnated in Q2, but this too is linked with Serbia's political instability during that period.

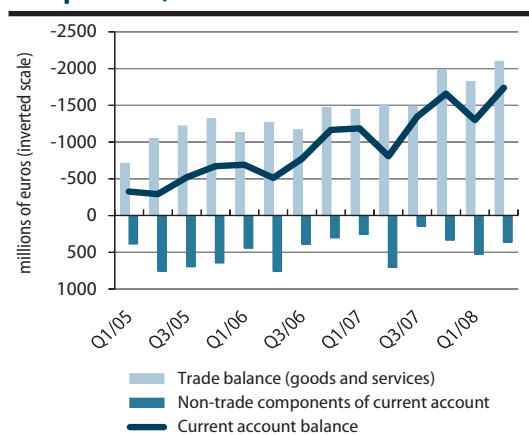
Services expenses amounted to €705 mn, 19.7% more than in the same quarter of 2007. These expenses rose primarily due to growing transportation (25.2% y-o-y) and tourism expenses (which grew by 28.8% y-o-y). These trends in services income and expenses led to a slight y-o-y increase in the balance of services by €21 mn.

The interest and dividend payment deficit doubles

The interest and dividend payment deficit (€220 mn) rose by as much as 93.2% y-o-y in Q2, both due to repatriation of foreign-owned company profits (dividend payments) and growing interest payments. Rising interest rates are a consequence of growing private borrowing abroad. Expenses due to dividend payments abroad amounted to €156 mn (y-o-y growth of 92.0%), while expenses due to interest payments stood at €194 mn (growth of 27.7%), most of which was made up of private sector interest payments (€167 mn).

The Q2 drop in current transfers, as well as rising interest payments, contribute to the high current account deficit

Q2 saw a y-o-y drop in current transfers of 14.4%, primarily due to a reduction in remittance income. Current transfers (€582 million, 6.5% of 3-m GDP), were, as usual, in surplus, and served to offset the balance of trade deficit to some extent (Graph T6-2). Net remittances in Q2 amounted to €351 mn, or €129 mn less than in Q2 2007.

Graph T6-2: Serbia: Current Account Components, 2005–2008

Source: NBS.

investments (borrowing) and central bank reserve assets. Starting with this issue, *QM* will begin monitoring the financial account according to the IMF framework. It is important to note that, according to this classification, a central bank's reserve assets are counted as part of the financial account, rather than as a separate item, which used to be the case under the previous balance of payments methodology used by the NBS.

Insufficient financial inflows in Q2 lead to a drop in foreign currency reserves

The financial account stood at €1,536 mn in Q2, of which €700 mn came in as net other investment inflows (i.e. borrowing), €563 mn were FDI investment, while the NBS sank €310 mn of its foreign currency reserves into additional funding for the financial account.

The high level of errors and omissions (€191 mn, over 10% of the current account deficit) compensates for the difference between the current and financial accounts.

FDIs - €596 mn, mainly in bank recapitalizations

The inflow of FDI into Serbia in Q2 amounted to €596 mn – a positive result, bearing in mind Serbia's serious political instability in the quarter. Unfortunately, most of these funds were not invested into export-oriented activities; going, rather, primarily into recapitalizations in the financial sector. Foreign banks, which had already discounted risks associated with doing business in Serbia at the time of entering the market, having agreed to conditions and limitations imposed by the NBS, opted for recapitalizations, both to meet regulatory requirements and to ensure ongoing funding for their own investments in Serbia. On the other hand, Serbia's FDI abroad reached a level of €33 mn, making net FDI in Q2 amount to €564 mn.

Portfolio investors leave the Serbian market

Portfolio investors continued withdrawing from the Serbian market, partly because of the global financial crisis and a more cautious approach to risk-taking, and partly due to the situation in Serbia's market. Net portfolio investment was negative in Q2, amounting to -€39 mn, mostly because foreign investors divested themselves of debtor securities (FFCD bonds, and the like).

Other investment amounted to €700 mn – 40.6% less than in Q2 2007. Inflows due to financial loans stood at €766 mn in Q2, while the same period also saw a drop in net liabilities arising from commercial loans (-€86 mn). Within the financial loan category, borrowing by enterprises represents the most significant item (€835 mn net). This long-term borrowing accounted for €1,267 mn, while a total of €497 mn was repaid over the same period.

Foreign loans mostly to companies, while banks continue repaying their liabilities

Loans to the companies accounted for almost the entire sum of foreign borrowing, since banks continued settling their liabilities as in Q1 (-€86 mn), while government borrowing remained minimal (€17 mn). Banks borrowed a mere €20.7 mn in Q2, while repaying their debts to the tune of €106.7 mn over the same period. On the one hand, such robust inflows of foreign loans to the economy are positive, but, on the other, this begs the question of the adequacy of the central bank's reserve requirement for the banking sector. As we have seen, the inflow of credit to banks has all but tapered off, and foreign loans have nearly completely switched to direct financing of enterprises, without the risk being fully transferred to foreign creditors. This is because most such

6. Balance of Payments and Foreign Trade

loans are underwritten by the Serbian daughter bank, leaving the risk squarely within Serbia's banking sector. The issue remains open of controlling and supervising the risk these guarantees pose to the Serbian financial system.

Foreign currency reserves fall by €310 mn

The gap between the high, and growing, current account deficit and the lower volume of foreign funding has led to a drop in NBS foreign currency reserves, which declined by €310 mn in Q2.

Foreign Debt

Total foreign debt amounts to €18,647 mn in Q2, or 56.9% of GDP

As of June 2008, Serbia's foreign debt amounted to €18,647 mn, or 56.9% of GDP (Table T6-3). In absolute terms, total foreign debt was higher by €690 mn relative to March 2008, but, expressed as percentage of GDP, it is now lower by one percentage point. The y-o-y increase was to €3 bn, a drop of 0.04 percentage points of GDP.

After a long period of decline, the foreign public debt now stands at slightly above the March level, amounting to €6,047 mn (18.5% of GDP). In relation to June 2007, this is significantly lower, by as much as 4.4 percentage points of GDP.

On the other hand, the foreign private debt recorded major growth, to 38.5% of GDP, or €12.6 bn in June 2008. In relation to three months earlier, this was a rise of €677 mn.

Long-term corporate debt by €926 mn higher in June than in March, reaching €9,150 mn

The growth of long-term debt remains the exclusive consequence of long-term corporate borrowing. Total long-term private debt amounts to €11.482 mn, of which as much as 79.7% is corporate debt. This trimester has again seen companies borrow extensively; relative to March, the total long-term corporate debt was by €926 mn higher, and amounted to €9,150 mn. As banks have continued repaying their liabilities, in a trend that began in Q1, the structure of the total long-term debt has been steadily changing. Thus, at the end of 2007, 73% of the total long-term debt was corporate debt; in March 2008 the figure was 75.6%, while in late June it stood at 79.7%.

After banks repaid nearly €400 mn in short-term debt over the first three months of 2008, Q2 saw a total short-term bank debt of around zero. The rise in short-term debt of €78.4 mn in Q2 is thus the consequence of rising short-term corporate borrowing, which grew by about the same amount.

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

	2005	2006	2007				2008	
			Mar	Jun	Sep	Dec	Mar	Jun
stocks, in EUR millions, end of the period								
Total foreign debt	13,064	14,884	14,858	15,689	16,361	17,789	17,957	18,647
(in % of GDP)	61.9	59.8	56.8	57.3	57.5	59.6	57.9	56.9
Public debt	7,714	6,420	6,241	6,253	6,210	6,130	6,035	6,047
(in % of GDP)	36.5	25.8	23.9	22.8	21.8	20.5	19.4	18.5
Long term	7,630	6,363	6,185	6,197	6,157	6,096	6,003	6,016
o/w: to IMF	732	185	0	0	0	0	0	0
Short term	84	57	56	56	53	34	32	32
Private debt	5,350	8,464	8,617	9,436	10,151	11,659	11,922	12,599
(in % of GDP)	25.3	34.0	33.0	34.5	35.6	39.1	38.4	38.5
Long term	4,156	7,263	7,669	8,532	9,152	10,372	10,883	11,482
o/w: Banks debt	1,260	2,929	2,906	2,704	2,628	2,801	2,660	2,333
o/w: Enterprises debt	2,895	4,334	4,763	5,828	6,524	7,571	8,223	9,149
Short term	1,194	1,201	948	904	999	1,287	1,039	1,118
o/w: Banks debt	924	942	701	808	875	1,163	770	769
o/w: Enterprises debt	271	259	247	96	123	124	269	349
Foreign debt, net ¹⁾ , (in% of GDP)	38.5	23.6	23.1	23.5	24.0	27.3	27.1	29.1

Source: NBS.

1) Total foreign debt less NBS foreign currency reserves.

Box 1. Short-term Foreign Debt and Foreign Currency Reserves

After the South Asian financial crisis, the ratio of short-term debt and foreign currency reserves of a central bank has been accorded more attention and cited as an appropriate measure of controlling the liquidity – and thus the stability – of an economy. This ratio is a good indicator of the likelihood of a financial crisis occurring, as:

- 1) It measures a country’s liquidity and hence its sensitivity to sudden capital withdrawals;
- 2) A high ratio of short-term debt to reserves indicates inadequate government regulation or a macroeconomic policy that is neither appropriate nor well thought-out;
- 3) A high ratio of short-term debt to reserves may mean that investors who agree to take high risks have already engaged in other high-risk activities (as the use of short-term loans for long-term financing increases risk);
- 4) A high ratio may discourage potential investors, which contributes to an imbalance of payments, and
- 5) This indicator points to a country’s vulnerability to capital flight.

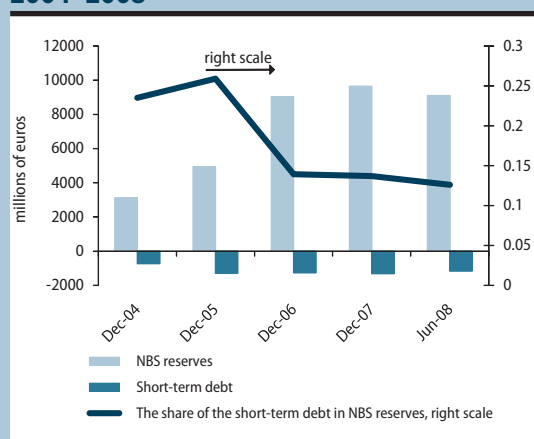
Short-term debt may be a very risky way for an economy to borrow, for a variety of reasons. Data from 33 countries covering the period from 1986 to 1998 was used in an IMF report to prove that the elasticity of short-term to GDP growth was 1.8.

Creditors may fear that profit from their investment will suddenly drop if total short-term loans

start falling – and a rise in the ratio of short-term debt to total reserves may prove them right. On the other hand, the high short-term indebtedness of a country may lead to a banking sector crisis and a general economic emergency. Therefore the risk of a financial crisis occurring is greater if the ratio of short-term loans to foreign currency reserves is high.

The ratio of short-term debt and foreign currency reserves (Graph T6-4) reached 0.25 in late 2005, and has been continually declining since, primarily due to robust foreign currency reserve growth. From March 2007 to June 2008 the ratio hovered between 0.10 and 0.13. Serbia’s level is thus significantly lower than that of neighboring countries (Croatia 0.6, Romania 0.7, Bulgaria 0.6).¹ Although this ratio is no cause for concern, it does require careful monitoring.

Graph T6-4. Serbia: Short-Term Foreign Debt and Foreign Currency Reserves, 2004–2008



Source: Ministry of Finance, NBS.

¹ See QM 10, Spotlight on: Peter Sanfrey, “Current Account Deficits in Serbia: Causes, Concerns and Consequences”.

Exports

Exports record somewhat slower growth in Q2 (28.2%, seasonally adjusted annual growth rate)

According to data released by the SBS,² exports rose at a y-o-y rate of 23.8% in Q2 2008³. In relation to the previous quarter, seasonally adjusted exports grew by 5.6% at the quarterly level, or an annual 24.4%.

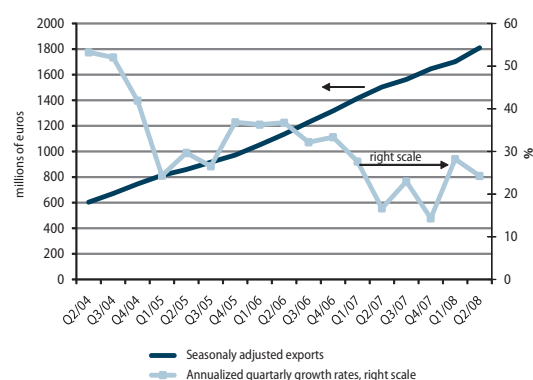
A total of €1.9 bn worth of goods were exported from Serbia in Q2, corresponding to 21.4% of estimated quarterly GDP. The share of exports in GDP was lower than in Q1, when their share in quarterly GDP stood at 23.7%. After export growth recovered in Q1 (seasonally adjusted

² QM uses SBS imports and exports values expressed in euros.

³ These results differ slightly from those given in the balance of payments section due to methodological differences in calculating imports and exports as part of the balance of payments and for purposes of foreign trade statistics.

6. Balance of Payments and Foreign Trade

Graph T6-5. Serbia: Seasonally Adjusted Exports and Annualized Quarterly Growth Rates, 2004–2008



Source: SBS, QM.

data), Q2 saw a slight deceleration. Exports have, over the past four years, grown almost by linear progression (Graph T6-5), with this linear trend involving a falling-off of the growth rate. Serbia's exports have revived since 2004, a consequence of privatization and economic development, and have seen high growth rates – albeit from a low base, which can be credited with causing the high rates. Exports continued growing at linear progression in 2008, but the base used for comparing nominal growth is more than twice as high, which leads to lower growth rates.

To be able to properly understand the structure of export growth, exports are disaggregated into three basic groupings: *bulky*, *core*, and *other exports* (Table T6-6). *Bulky exports*,⁴ considered a

separate category due to the significant share of its components in total exports, the concentration of exports with several companies, or its dependence on exogenous factors (e.g. climate or prices of raw materials on the global market), has seen worse than expected results in Q2. Bulky exports underpinned export growth from 2004 to Q3 2007, when they slowed markedly due to the refurbishment of a blast furnace at US Steel Serbia and the administrative prohibition of cereal exports.

Bulky exports grew at a y-o-y rate of 13.8% in Q2. When viewed by category of goods exported, the quarter saw a recovery in the exports of iron and steel (with a y-o-y growth of 40.6%). Exports of non-ferrous metals stagnated, while those of cereals and cereal products, as well as fruit and vegetables, shrank (-20.3% and -14.5%, respectively). Cereal exports in Q2 remained limited by the government decree banning cereal exports.⁵

Table T6-6. Serbia: Exports, 12-m Growth Rates, 2007-2008

	Exports share in 2007 (%)	2008		2007				2008	
		Q1	Q2	Q1	Q2	Q3	Q4	Q1	Q2
	%	mil.euros		y-o-y growth rate (%)					
Total	100.0	1,676	1,973	34.6	29.8	27.3	15.2	20.5	23.8
Bulky exports	29.7	463	548	36.1	29.1	19.4	-17.4	1.9	13.8
Iron and steel	12.5	220	311	61.5	29.1	9.7	-20.6	3.6	40.6
Non ferrous metals	7.9	125	128	11.9	18.6	17.6	-21.5	4.5	-0.9
Fruits and vegetables	5.3	65	64	30.3	59.2	29.7	17.1	13.9	-14.5
Cereal and cereal products	3.9	53	44	26.6	23.2	40.7	-35.3	-19.1	-20.3
Underlying exports	70.3	1,213	1,425	33.9	30.1	31.5	31.7	29.6	28.0
Core	32.7	549	585	30.9	35.2	28.6	24.0	23.5	13.7
Clothes	5.1	89	82	31.6	31.0	28.1	19.4	15.5	12.0
Miscellaneous manufactured articles, n.e.s.	4.3	77	80	6.0	17.1	34.2	39.4	50.7	25.4
Manufactures of metals, n.e.s.	4.8	76	82	76.6	60.5	33.1	24.7	26.9	1.3
Rubber products	3.3	57	57	16.2	17.9	4.8	0.0	3.3	5.5
Electrical machinery, apparatus and appliances	3.6	63	71	77.6	81.2	66.7	48.8	50.9	21.7
Organic chemicals	3.0	47	48	42.8	71.4	46.3	30.4	7.9	25.7
Plastics in primary forms	2.2	40	40	-7.4	8.2	8.3	13.6	34.4	10.1
Footwear	2.3	41	41	34.9	18.1	10.9	11.2	15.8	8.4
Paper, paperboard and articles of paper pulp	2.0	33	39	12.3	35.6	23.0	21.0	21.4	13.5
Non-metal mineral produce	2.1	28	45	55.3	32.0	28.1	22.4	10.3	19.9
Other	37.6	664	840	36.7	26.0	34.2	38.7	35.0	40.4

Source: SBS.

⁴ Bulky exports comprise iron and steel, non-ferrous metals, fruit and vegetables, and cereals and cereal products.

⁵ See QM 12, Section 6, Balance of Payments and Foreign Trade.

Iron and steel exports rally, while exports of cereals, fruit and vegetables decline

Underlying exports, which we have divided into *core* and *other* subgroups, have seen a robust growth of 28.0%. Growth of the *core* group, comprised of products that have been the mainstay of export growth over the past two years, has slowed (to a mere 13.7% y-o-y), but this has been offset by the marked growth of the *other* group (40.4% y-o-y). All product groups from the *core* category have recorded low growth rates; only three groups of products, of a total of 10 – organic chemicals, electrical machines and apparatus, and various finished goods – saw growth rates exceeding 20%. The focal point of exports seems to be shifting, from *bulky* and *core* exports to *other exports*, with the latter being the driving force behind Serbian export growth over the past four quarters. The group *other* is made up of product groups that do not individually enjoy significant shares in total exports, but whose aggregate makes up as much as 37.6% of total exports. The greatest contribution to export growth from the *other* group was made by motor vehicles (with a contribution to total y-o-y growth of 6.4%), other means of transport and associated equipment (4.9%), electric power (4.7%), and mineral ores and scrap metal (3.5%).

The next quarter is expected to see slightly higher export growth, both because of the repeal of the ban on cereal exports and an above-average agricultural crop, and due to a recovery in exports of iron and steel. The performance of the *other* group also justifies a certain degree of optimism.

Imports

Imports continued their high growth in Q2 2008 (with 27.5% at the y-o-y level). The quarter saw the import of goods worth €4.1 bn, or 46.1% of quarterly GDP. When the seasonally adjusted import series is considered – a somewhat more relevant indicator for analysis – exports can be seen to have recorded a 3-m growth of 4.6%, or 19.8% annually.

The import growth rate is stabilizing

If trends in import components, according to EU classification, are considered, as well as their shares in total imports and growth (Table T6-7), it becomes apparent that it is not only energy, but also capital goods that recorded high import growth rates in Q2. Motor vehicles accounted for about one-third of imported capital goods, but such high import growth rates for this category also indicate the renewal of equipment and fixed assets across the economy. Q2 has also seen robust growth of imports of durable consumer goods, but, bearing in mind their low share in total imports, their impact on overall import growth is negligible.

Rising energy prices contribute greatly to import growth

If energy price rises are discounted, imports are seen to parallel GDP growth

If *import growth, excluding energy imports*, is considered in the context of the growth of nominal GDP in euros, it becomes apparent that import growth excluding energy follows the y-o-y import growth.

These import growth rates, taken in the context of GDP growth, indicate a certain stability of import growth over the past five quarters: the nominal y-o-y growth of GDP expressed in euros amounted to 21.4% since the beginning of the year. Imports excluding energy recorded a nominal growth of 21.5% over the same period.

Table T6-7. Serbia: Imports, Y-o-y Growth Rates, 2007–2008

	Imports share (2007) in %	2008		2007				2008	
		Q1	Q2	Q1	Q2	Q3	Q4	Q1	Q2
		mil.euros		y-o-y growth (%)					
Total	100.0	3,613	4,105	32.9	24.4	27.8	26.7	22.8	27.5
Energy	17.4	788	764	14.3	-3.0	7.0	26.8	32.5	53.2
Intermediate products	36.4	1,201	1,440	36.3	34.0	31.0	17.0	16.2	16.0
Capital products	25.8	850	1,104	55.1	34.8	41.9	39.3	19.5	32.6
Capital products excluding road vehicles	17.6	557	723	66.0	33.1	32.6	38.9	9.3	29.3
Durable consumer goods	3.8	133	157	29.6	35.0	42.2	32.0	31.3	34.8
Non-durable consumer goods	14.2	517	542	25.0	21.3	18.8	29.6	26.6	21.1
Other	2.5	124	97	29.6	12.7	37.4	24.5	32.4	16.6
Imports excluding energy	82.6	2,825	3,340	38.6	31.2	32.6	26.7	20.3	22.8

Source: SBS.

6. Balance of Payments and Foreign Trade

Imports grew in Q2, but not dramatically. If energy imports are discounted, import growth will be seen to have paralleled that of GDP. The exogenous jump in oil and energy prices has contributed to both import growth and its perceived excessiveness. However, energy prices seem to be stabilizing on the global markets, so their impact on Serbian imports can be expected to lessen. Further economic growth will lead to a rise in overall imports, bearing in mind that the share of imports in GDP is lower than in most transitional or post-transitional economies.

Box 2. The Impact of Global Energy Prices on Serbian Imports

Import growth in Q2 has been the consequence of significant rises in energy prices across the world's markets. According to the primary energy price index published by the IMF, energy prices (in dollars) were 82.1% higher in 2008 than in the previous year. Energy imports made up 17.4% of all Serbian imports in 2007, while this figure jumped to 20.1% in the first half of 2008.

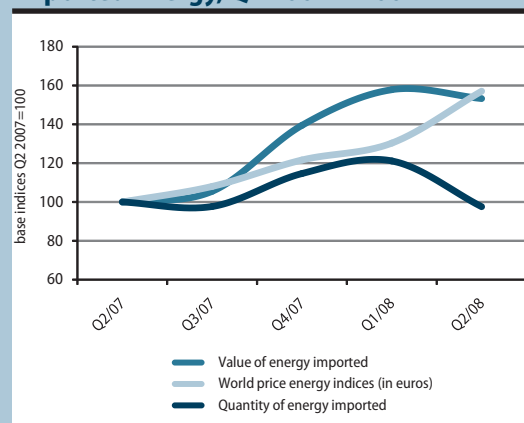
In an attempt to assess the impact of global energy prices on imports, we have used the global composite primary energy price index as utilized by the IMF. The aim is to ascertain to what extent the growth of energy imports is a consequence of greater consumption, and to what extent it is caused by rising prices of imported energy.

The energy price index is based on global energy prices expressed in dollars. As QM considers imports expressed in euros, the change in the dollar/euro exchange rate over the period observed is taken into account. The dollar depreciated against the euro by 13.7% at the y-o-y level in Q2 2008.

Taking into account the dollar's depreciation against the euro, energy prices in euros stood 57.1% higher in Q2 than in the same period the previous year. As the price of imported energy in Serbia grew at a y-o-y rate of 53.2%, it can be concluded that the quantity of energy imported in Q2 fell by 2.0% at the y-o-y level (Graph T6-8).

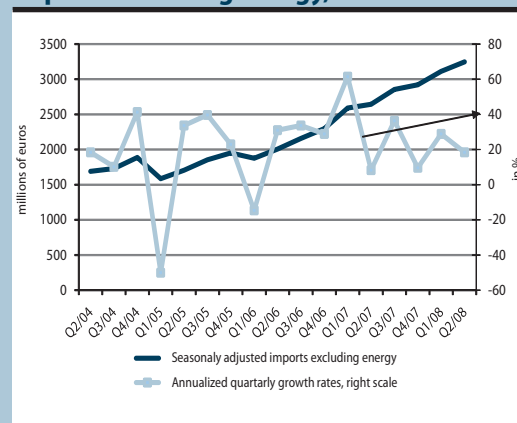
As the quantity of energy did not increase in Q2 in relation to Q2 2007, QM estimates that rising energy prices made a contribution to import growth of 3% of quarterly GDP. To discount the exogenous influence of rising energy prices, we take into account the seasonally adjusted import series excluding energy (Graph T6-9). Thus viewed, imports give a slightly more optimistic picture; imports without energy rose by 4.3% at the quarterly, or 18.4% at the annual level.

Graph T6-8. Serbia: Energy Import Indices, Global Prices and Physical Volume of Imported Energy, Q2 2007 = 100



Source: IMF, SBS, NBS.

Graph T6-9. Serbia: Seasonally Adjusted Imports Excluding Energy, 2004–2008



Source: SBS, QM.

7. Fiscal Flows and Policy

In Q2 2008, fiscal policy expansiveness was intensified. Consolidated public revenue in Q2 had a modest y-o-y real growth of a mere 1.6%, while the y-o-y real growth of consolidated expenditure accelerated strongly and amounted to 18.7%. The consolidated general government balance ran a deficit of around 22 bn dinars, which corresponds to 0.8% of the estimated 2008 GDP. Due to the generated surplus in Q1 the consolidated general government deficit in the first semester of this year was slightly lower and amounted to 0.6% of GDP, which means that approximately one-third of the fiscal deficit planned for 2008 was generated in the first half of the year. After taking into account seasonal fluctuations in the revenue and expenditure movements – it follows that with an unchanged fiscal policy the deficit in the consolidated general government balance in 2008 would be at the level of the plan (1.7% of GDP) or a slightly lower. If, however, requests for additional funds were met – public spending and the deficit would considerably exceed the planned level.

General Trends and Macroeconomic Implications

*Fiscal policy
expansiveness
intensifies*

*revenue growth
decelerates...*

In Q2, the growth in consolidated public revenue decelerated sharply. Moreover, contrary to the seasonal pattern, the real level of consolidated public revenue was in Q2 lower by 1.3% than in Q1. Several possible factors have been identified of the considerably slower growth of consolidated public revenue, including tax revenue as the most important component in relation to GDP during Q2. The first factor is the change in the structure of the final use of GDP toward a rise in exports and investment relative to domestic current spending. The rise in exports and investment contributed to a decline in net VAT revenue (due to higher refunds). Similarly, a slower wage growth resulted in the deceleration of the growth in revenue from labor taxes and contributions. The second factor affecting the slower growth in public revenue was the relaxation of financial discipline caused by reduced pressure from the tax administration on taxpayers. During election campaigns, governments shun the implementation of unpopular measures such as enforced collection of taxes, and this had a direct effect on decelerating public revenue growth. Such behavior of the authorities in election campaigns, which has become almost a tradition in Serbia, results in a lax financial discipline. An announcement that interest on tax arrears that fall due by end of 2008 will be written off, has a short-term effect in terms of delays in the payment of tax liabilities, and a medium-term effect in terms of a moral hazard. Finally, with the reform of the tax system new forms of tax evasion have been developed, for whose detection and sanctioning the relevant authorities are not sufficiently equipped. An improvement of the government's efficiency in the fight against new forms of tax evasion requires amendment of the existing regulations (tax legislation and the criminal code, etc.) as well as a more efficient work and better coordination between the tax administration, the police and the judiciary.

*... while expenditure
increases considerably*

Consolidated public expenditure in Q2 was higher by 18.7% than in the same period of the previous year, which was the highest y-o-y growth since Q4 2006. The y-o-y growth of consolidated public expenditure by 18.7% at a GDP growth of 7.6% resulted in a steep rise in the public spending-to-GDP ratio. The estimate is that the share of public spending in GDP in Q2 2008 increased by about 4 percentage points relative to the same period of 2007. Such a rise of public expenditure in Q2 relative to the same period of the previous year is an indicator of strong fiscal expansion, which is a result of both the carried forward growth and the current growth in Q2 2008.

The reasons for this high growth in public spending are manifold. One relates to the fact that in Q2 2007, to which this year's expenditure is compared, the temporary financing regimen was in place, which contributed to reducing the level of expenditure over that period. The second reason involves increases in pensions (in May) and wages (in April) 2008. Finally, the holding of the parliamentary election in mid-Q2 contributed to the rise in public expenditure, though much less than in the previous elections.

Analysis of the composition of public expenditure reveals a striking overperformance of subsidies, net lending and recapitalization. The overly high y-o-y growth of these items can be explained to a smaller extent by the temporary financing which was in place in the first semester of the previous year. The main reason for the growth of the mentioned items was a turnaround in economic policies, which was initiated in mid-2007, and which involves incentives in the forms of subsidies and budget loans as important levers for boosting economic activity and increasing employment.

From the standpoint of the long-term impact of fiscal expansion in Q2, the relevant fact is that predominantly discretionary components (subsidies, one-time payoffs to employees, loans, recapitalization, purchases of goods and services, capital expenditure) and predominantly non-discretionary components (wages, social transfers) contributed equally to increasing consolidated public expenditure.

A relatively high deficit...

...against a backdrop of announcements of additional expenditure toward the end of the year

The consolidated fiscal deficit in Q2 amounted to 0.8% of last year's GDP, which shows the strong expansiveness of fiscal policy over the period. This expansiveness will be partially carried forward into the coming periods because of the high share of non-discretionary components in the rise of public spending. According to preliminary data, a balance was achieved in the July – August 2008 period in the consolidated general government balance, which indicates that the increase in public spending in Q2 had a moderate influence in Q3. But announcements by ministries and the demands of budget beneficiaries portend that fiscal policy could be more expansive in the period ahead.

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

	2005		2006				2007				2008		
	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2
	in billions of dinars												
I TOTAL REVENUE	721.7	185.7	211.3	218.6	250.2	865.8	226.4	240.0	251.3	290.1	1007.8	268.3	273.3
II TOTAL EXPENDITURE	-695.1	-182.9	-196.8	-214.7	-277.0	-871.4	-214.9	-220.8	-254.5	-334.1	-1024.3	-252.3	-289.8
III "OLD" DEBT REPAYMENT, NET LENDING AND RECAPITALIZATIONS	-15.2	0.2	-0.8	-2.6	-6.4	-9.6	-9.8	-1.0	-5.5	-10.2	-26.5	-12.6	-5.2
o/w Net lending ²⁾	-5.3	-1.8	-0.8	-1.4	-6.6	-10.7	-0.8	-1.0	-5.5	-5.8	-13.1	-7.6	-5.2
IV TOTAL EXPENDITURE, GFS (II+III)	-710.2	-182.7	-197.7	-217.3	-283.3	-881.0	-224.6	-221.8	-260.1	-344.3	-1050.8	-264.9	-295.0
V CONSOLIDATED BALANCE (I+IV), GFS definition ³⁾	11.4	3.0	13.6	1.3	-33.1	-15.1	1.7	18.2	-8.8	-54.2	-43.0	3.4	-21.6
VI FINANCING (FREN's definition)	5.8	7.5	-13.3	98.4	7.3	100.0	20.3	-5.3	-6.8	5.2	13.4	0.0	-12.7
VII ACCOUNT BALANCE CHANGE (V+VI)	17.3	10.5	0.4	99.7	-25.8	84.8	22.0	12.9	-15.5	-49.0	-29.6	3.4	-34.3

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 2.

Analysis of Individual Taxes and Individual Expenditure Items

Most taxes had a moderate real growth in Q2 relative to the same period of the previous year. An exception to this are excises whose real level was lower by 10.4% relative to the same period in 2007.

A change in the composition of demand contributes to slower revenue growth

In Q2, the personal income tax revenue was increased in real terms by 8.1% relative to Q2 2007. Within this category, the payroll tax went up by 6.6% in real terms, while other income taxes grew by 19% in real terms. It follows that the trend of faster growth of other income taxes than of wages continued in Q2. This trend reflects primarily the more favorable tax treatment of other forms of income (e.g. royalties), as well as a faster growth of incomes from capital (dividends, interest, etc.).

The trend of high real growth rates of the corporate income tax revenue continued in Q2, though with a visible deceleration relative to the actual rates in 2007. The high rates essentially reflect the improved performance of Serbia's economy, as well as the favorable tax treatment of corporate

income (a low rate, many exemptions). The deceleration of the growth rates was an expected consequence of achieving the relatively high level of revenue relative to 2007.

Real VAT revenue growth decelerated relative to the previous quarter, but the actual growth rate remained solid. The deceleration of the VAT revenue was primarily a consequence of economic factors such as growth in exports and investment, i.e. higher tax refunds and tax crises on those grounds. Still, it is possible that the relaxation in the enforcement of tax compliance, and new schemes for VAT evasion that have been devised, also contributed to the deceleration of the VAT revenue growth.

There is circumstantial evidence of tax evasion

Excise revenue dropped considerably in real terms in Q2 relative to the same period in 2007. When observed by product groups, the sharpest fall was recorded in motor gasoline and alcoholic beverages, while in the case of diesel and cigarettes a modest growth was achieved. The fall in the gasoline excise revenue can to a large extent be explained by the switch from gasoline to gas as motor fuel, due to the significantly lower prices of gas – *inter alia*, owing to a more favorable fiscal treatment of gas. Moreover, there are strong indications of a rise in the smuggling of gasoline and diesel in the area of central Serbia that are close to Kosovo and Metohija. When it comes to alcoholic beverages, the estimate is that more widespread evasion in the case of spirits constitutes the main reason for the reduction in the real level of this revenue.

Customs revenue in Q2 was higher in real terms by 8.8% than in the same period of 2007, which was the lowest y-o-y growth rate since end-2006. The actual real level of customs revenue was almost three times lower than the y-o-y growth rates of the values of goods and services imports denominated in euros (an increase in customs duties of 8.8% in real terms, an increase in imports by 26.5% in euro terms). The most important factor of the slower growth in the real level of customs revenue compared to import growth in euro terms was the real appreciation of the dinar, i.e., a relatively high increase in domestic prices (the deflator for the customs revenue), with a slight decrease in the nominal dinar/euro rate. The growth in customs revenue decelerated further as a consequence of the higher share of imports from the CEFTA region, where Serbia implements a customs-free trading regimen, as well as a change in the composition of imports toward a higher share of components on which duties are levied at lower tariff rates (investment equipment and intermediates).

Social security contributions in Q2 relative to same quarter of the previous year grew in real terms by 4.7%, which was somewhat faster than the real wage growth over the same period. The faster growth of contribution revenue than the growth in average wages indicates a rise in employment or improved financial discipline in this segment of public revenue.

Non-tax revenue has demonstrated a high level of volatility from one period to another. The real level of non-tax revenue in Q2 relative to Q2 2007 was lower by almost 1/5 compared to last year's level. Generally speaking, non-tax revenue constitutes a heterogeneous category which includes different types of fees (court, administrative, utility, etc.), levies, penalties, as well as the revenue from bankruptcy proceedings involving state-owned economic agents. High fluctuations in the collection of revenue in bankruptcy proceedings are the main reason for the fluctuations in the total non-tax revenue. Thus, for instance, in Q2 2007 considerable amounts were collected from bankruptcies of state-owned banks, while in Q2 2008 that was not the case.

Most items comprised in consolidated public expenditure had a relatively high growth in Q2, both relative to the same period in 2007, and to the previous quarter. Furthermore, most of the public expenditure categories grew faster than GDP growth, meaning that their share in GDP went up.

Expenditure for employees in Q2 relative to the same quarter of 2007 grew in real terms by 10.2%, the highest y-o-y growth rate since Q3 2007. This expenditure in Q2 was higher than in Q1 2008 by 7.8% in real terms. The acceleration of the y-o-y rate of expenditure for employees as well as its high growth rate relative to the previous quarter were the result of the higher wages of budget beneficiaries in April, as well as of the payment of a one-off cash assistance to a portion of public sector employees in the same month. The bringing forward of wages increases

Growth in subsidies and net lending reflects increased government intervention

Expenditure for social purposes grows faster than GDP

by one month and the payment of the one-off assistance can be directly linked to the May 2008 parliamentary election.

After a year and a half of continued high real growth, the y-o-y growth rate of public expenditure for purchases of goods and services decelerated slightly in Q2 2008.

The real level of y-o-y interest expenditure in Q2 was lower by 34% than in the same period of 2007. The movements in the real level of interest expenditure reflect the schedule of maturities of the government's contractual obligations. In Q2, there were no delays in the fulfillment of the obligation of the government to pay interest.

From mid-2007, expenditure for subsidies recorded the fastest and relatively stable growth among all the items of public expenditure. The growth in subsidies reflects a change in government policies toward approval of additional incentives for very different activities. From the standpoint of the size of expenditure, the most important were subsidies for agriculture, which grew enormously in the past year. In addition, considerable subsidies were granted to companies for employment of new workers, and there were subsidies in tourism, etc.

Social transfers in Q2 had an above-average y-o-y real growth of as much as 19%. The main driver of the increase in the real level of social transfers was the rise in pensions, which constitute the biggest category within this public expenditure item. By an increase in pensions in early 2008 of 11.06% aimed at them reaching the level of 60% of the average wage, the real level of this category was increased. Pension benefits were further increased by 6.97% during the payment of the April pensions in May 2008. In addition to pensions, the level of expenditure for other types of social transfers was also increased, such as transfers for childcare, protection of the poor, etc. It is quite striking that social transfers are on the rise, while the official statistics show a reduction in poverty.

Table T7-2. Serbia: Consolidated General Government Fiscal Operations¹⁾, 2005–2008

	2006		2007			2008			12-m						Comparing to previous period															
	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	2006		2007		2008		2008															
									Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q2/Q1													
	in bn. dinars															real growth, in %														
I PUBLIC REVENUES	865.8	226.4	240.0	251.3	290.1	1,007.8	268.3	273.3	6.8	15.2	8.4	7.9	6.2	9.2	6.5	1.6	-1.3													
<i>o/w: Public revenues excluding VAT liabilities to enterprises and offsets with SDF²⁾,³⁾</i>	855.6	224.9	237.2	250.3	289.9	1,002.2	268.3	273.3	8.9	13.5	8.3	8.6	9.3	9.9	7.2	2.9	-1.3													
1. Current revenues	855.5	223.1	237.4	248.9	286.7	996.0	265.5	270.3	6.7	14.8	8.4	8.2	6.4	9.2	7.0	1.6	-1.4													
Tax revenue	756.0	195.7	209.9	216.5	248.2	870.3	234.6	245.2	5.4	15.6	8.0	6.6	3.4	8.0	7.7	4.2	1.3													
Personal income taxes	118.6	24.9	28.2	29.1	33.6	115.8	29.7	34.1	11.9	-8.9	-8.0	-6.7	-10.1	-8.4	7.1	8.1	11.4													
Corporate income taxes	18.3	11.7	5.6	4.6	7.8	29.7	15.0	8.1	58.0	39.2	82.4	25.0	79.0	52.1	15.2	30.0	-47.4													
VAT and retail sales tax	225.1	60.5	65.0	66.9	73.1	265.5	73.2	77.0	-7.3	23.4	5.7	11.9	4.6	10.6	8.7	5.7	1.9													
<i>o/w: Net VAT and retail sales tax²⁾</i>	224.5	59.1	62.3	65.8	73.1	260.3	73.2	77.0	0.3	16.5	5.1	6.9	7.8	8.8	11.3	10.3	1.9													
Excises	86.9	20.1	24.1	26.0	28.4	98.6	23.7	24.2	8.3	23.3	3.2	5.8	-0.3	6.5	5.7	-10.4	-1.2													
Custom duties	45.4	12.0	13.9	14.6	16.9	57.4	14.8	16.9	3.9	18.1	18.3	19.4	18.3	18.6	10.5	8.8	11.1													
Social contributions	231.4	58.6	64.8	67.6	79.6	270.6	69.7	75.9	12.5	14.6	14.9	7.1	4.2	9.7	7.0	4.6	1.5													
<i>o/w: contributions excluding offsets with SDF³⁾</i>	221.9	58.5	64.7	67.6	79.2	270.1	69.7	75.9	11.3	14.8	14.7	14.7	12.6	14.3	7.2	4.7	5.5													
Other taxes	30.3	7.9	8.4	7.7	8.8	32.8	8.5	8.9	11.1	13.0	9.5	-9.0	-4.0	1.7	-3.9	-5.1	5.5													
Non-tax revenue	99.6	27.4	27.4	32.4	38.5	125.7	31.0	25.1	17.4	9.7	11.6	19.7	30.0	18.4	1.7	-18.4	-21.5													
2. Capital revenues	10.3	3.2	2.6	2.4	3.4	11.7	2.8	3.1	15.2	48.2	10.6	-13.3	-4.8	7.2	-23.8	4.1	8.6													
II TOTAL EXPENDITURE	-871.4	-214.9	-220.8	-254.5	-334.1	-1,024.3	-252.3	-289.8	12.1	11.0	7.1	11.3	10.5	10.3	5.5	17.1	9.0													
1. Current expenditures	-790.0	-194.8	-203.8	-230.2	-279.0	-907.9	-238.5	-268.7	8.9	6.1	6.7	10.1	7.5	7.8	10.0	17.7	6.8													
Wages and salaries	-204.4	-53.3	-57.7	-59.6	-67.6	-238.3	-64.1	-71.3	7.0	6.2	17.3	15.5	0.6	9.4	8.0	10.2	7.8													
<i>Wages and salaries excluding severance payments⁶⁾</i>	-201.6	-53.3	-57.7	-59.6	-66.7	-237.3	-63.8	-71.3	6.2	11.6	20.4	15.5	0.8	10.4	7.4	10.2	8.4													
Expenditure on goods and services	-135.9	-30.3	-36.2	-41.0	-60.7	-168.2	-38.1	-43.1	12.9	9.2	14.1	8.5	26.6	16.1	13.1	6.1	9.5													
Interest payment	-30.2	-6.2	-3.4	-4.7	-3.5	-17.9	-6.0	-2.5	52.6	0.5	-37.3	-51.7	-67.5	-44.4	-12.2	-34.1	-59.2													
Subsidies	-55.6	-9.4	-10.5	-17.9	-25.9	-63.7	-13.4	-22.2	-10.0	-12.2	-21.6	23.1	25.0	7.6	28.0	88.2	61.8													
Social transfers	-343.4	-91.1	-91.8	-101.8	-111.3	-395.9	-112.7	-122.4	9.9	7.8	7.3	12.6	5.0	8.2	11.2	19.0	0.6													
<i>o/w: pensions⁵⁾</i>	-227.7	-62.0	-63.3	-64.9	-69.7	-259.9	-74.8	-81.5	11.1	11.0	8.5	4.1	5.0	7.1	8.5	14.9	5.5													
Other current expenditures	-20.5	-4.6	-4.1	-5.2	-10.0	-23.9	-4.2	-7.2	2.9	5.8	-27.4	2.9	45.1	9.2	-17.3	56.3	64.7													
2. Capital expenditures ⁶⁾	-81.3	-20.0	-17.0	-24.4	-55.1	-116.4	-13.8	-21.1	57.7	101.6	12.5	24.3	28.8	34.3	-38.2	10.7	48.2													
III "OLD" DEBT REPAYMENT, GOVERNMENT NET LENDING AND RECAPITALIZATIONS	-9.6	-9.8	-1.0	-5.5	-10.2	-26.5	-12.6	-5.2	-54.6	-4,678.6	12.0	99.4	47.2	159.0	15.7	338.0	-32.8													
IV TOTAL EXPENDITURE, GFS (II+III)	-881.0	-224.6	-221.8	-260.1	-344.3	-1,050.8	-264.9	-295.0	10.2	16.2	7.1	12.3	11.3	11.9	6.0	18.7	7.9													

Source: Table P-10 in Analytical Appendix.

1) See footnote 1) in Table T7-1.

2) Retail sales tax/VAT minus new tax credits to enterprises.

3) Social contributions reduced by refunds between Pension Fund, Serbian Development Fund and enterprises that are debtors of the Pension Fund.

4) QM's estimate, for details see Table P-10 in Analytical appendix.

5) Refers to the current expenditures on pensions.

6) Capital expenditures exclude projects financed from abroad (apart in 2004, see footnote 16 in Table P-10).

Note: Real growth is obtained comparing 2003 constant prices quarterly data.

Net lending, recapitalization and budget loans represent one of those public expenditure categories which have been growing very rapidly from mid-2007. The growth of this item, just like with subsidies, reflects a change in government policies, toward the strengthening of its role in economic

life. Within this category, the most significant are expenses for recapitalization of financial institutions (Poštanska štedionica – Postal Savings Bank), government agencies (NMIC), as well as concessional loans extended through the Development Fund, start-up loans, etc.

Subsidies and budget loans and similar items constitute a fast growing category, which in Q2 2008 accounted for more than 9% of total public expenditure. In view of the recent announcements of additional expenditures in this area (the example of FIAT–Zastava, etc.) as well as doubts as to the efficiency of widespread government intervention, it is necessary to thoroughly review all the items within this public expenditure category.

2008 Budget Revision

The forming of the new government, which has new priorities, together with a series of extraordinary developments in the hitherto part of the year constitutes relevant reasons for a revision of the Serbian budget. Although a budget revision has been officially announced, its main parameters are still unknown. Still, it is clear that a net result of the revision will be a higher level of expenditure, and probably a higher deficit, too, than planned by the applicable Law on the Budget of the Republic of Serbia.

Public spending should not be higher than 44% of GDP, and the fiscal deficit should not exceed 2% of GDP

The assessment that total expenditure must be increased is based on the fact that the Serbian government has undertaken several major commitments in the course of this year, which cannot be financed through reallocations within the already overstrained republican budget. Some of the more important commitments and the costs arising from them are listed below. The costs of the extraordinary pension increase by 10% (including military pensions) – amount to more than 8 bn dinars, which is less than previously estimated, due to the shift of the increase from September to November. Furthermore, the April 2008 pension indexation was higher than planned by about 3 percentage points, for which reason the payment of 12 pensions in 2008 requires additional funds amounting to 5.2 bn dinars. The final amount of the obligations toward FIAT and Zastava employees is still not known, but according to estimates, will be over 6 bn dinars this year alone. Moreover, the government's decision after Kosovo's declaration of independence to take over employees who worked in UNMIK institutions up until then – requires additional funds for the payment of their wages. Bringing forward the wage increase for budget beneficiaries by one month (April instead of May) requires additional funds to pay 12 salaries in 2008. Likewise, sticking to the announced schedule of the construction of the Corridor 10 highway, including the Belgrade bypass, will require additional budget resources. It is estimated that the total amount of additional funds for these purposes will range from 23 bn–25 bn dinars, or 0.8%–0.9% of GDP.

Demands vastly exceed the mentioned limits

Apart from the above-mentioned expenditures, which will most probably be factored into the budget during its revision, there are numerous additional demands that arise from applicable, statutorily granted rights. Thus, for example, granted rights in the fields of subsidies for agriculture, social protection and mortgage insurance are higher by about 11 bn dinars than the allocations provided for by the 2008 Budget Law. Alignment of entitlements with budget resources can in principle be achieved through a reduction of rights, an increase in budget allocations, or a combination of the two.

In addition, there are demands to secure additional funds in the revised budget for the payment of direct and indirect government debts. Thus, for example, the military pension fund has a claim on the budget worth more than 10 bn dinars related to past entitlements, while the Serbian Roads company wants its arrears, whose total amount oscillates within a band from 25 to 30 bn dinars, to be serviced out of the republican budget.

Meeting all the demands and promises is macro-economically unsustainable

Unlike previous demands, whose legal basis or economic justification is relatively sound, there are also demands for budget resources that are not so well founded. This refers primarily to the demand of military reservists for daily war allowances for the period of the NATO bombing, in addition to all the allowances they were entitled to and which have already been paid. A payout of allowances for all reservists, as was done for reservists from the Toplica District (although in the form of social assistance), would require additional funds from the budget amounting to over

50 bn dinars. Likewise, meeting of demands made by the trade unions of public sector employees for the implementation of the provisions of the collective agreement (the payment of vacation bonuses at the level of the average monthly salary, the payment of meal allowances at the level of 20% of the average wage, etc.) would be an equivalent of a rise in their wages by about 25%. Acceptance of that demand would require an additional 35 bn dinars and more in 2008 alone.

Based on the above, it follows that bringing the undertaken commitments, together with some government priorities (Corridor 10), onto the budget, would result in an increase in total expenditure by around 0.8%–0.9% of GDP, thus bringing 2008 consolidated public spending to over 44% of GDP. Owing to a somewhat higher level of public revenue than planned, the increase in the fiscal deficit would be lower (0.4%–0.5% of GDP, so that the total fiscal deficit in 2008 would exceed 2% of GDP). Keeping public spending at the level of 44% of GDP, and the fiscal deficit at around 2% of GDP means that some of these demands should be met by means of reallocations within the existing budget items, rather than by increasing total expenditure.

On the basis of the level and dynamics of the most important macroeconomic variables connected with public spending and the fiscal deficit (inflation, the external deficit, external debt), the estimate is that a deficit of around 2% of GDP constitutes the ceiling and overshooting it significantly would threaten macroeconomic stability and, consequently, other economic and social objectives as well. A higher fiscal deficit would contribute to an increase in the already high current account deficit (about 15% of GDP), the external debt (close to 60% of GDP) and inflation (around 10% annually) – which would greatly increase the probability of a balance-of-payments crisis.

It is necessary to establish priorities and review assigned rights, as well as to make savings at all levels of government

Keeping public spending and the fiscal deficit within the above limits implies strict prioritization, reexamination of current entitlements and their alignment with economic and fiscal capabilities, the implementation of austerity measures and rationalization at all levels of government.

Prioritization implies a rigorous selection of projects and programs, including reconsideration of election promises made by the political parties making up the ruling coalition. The result of the prioritization should be: accelerated implementation of certain projects (e.g. Corridor 10.), partial realization of certain proposals (e.g. one-time increase in pensions by 10%, but giving up on increasing them to 70% of the average wage), the postponement of some projects (e.g. the highway to the South Adriatic), as well as the abandonment of certain proposals (using the deal with FIAT and Zastava employees as a general model for attracting large-scale foreign investment, and forswearing the proposed payroll tax rate cut and some populist policy measures, etc.).

The second important direction for preventing the expansion of public spending is a reexamination of the existing entitlements. In the short run, the priorities seem to include reexamination of rights in the field of agricultural subsidies, social welfare and mortgage insurance.

Similarly, the application of a program of austerity measures and rationalization at all levels of government would be an important instrument for gradually reducing the share of public spending in GDP over the coming years. These measures would refer to almost all public spending items, with the best results being achieved through reexamination of government subsidizing policy, the policy of granting budget loans, etc. In the medium term, significant results could also be achieved through the streamlining of the network of government agencies, by reducing the number of public sector employees and the like.

Fiscal Policy Options for 2009

Public spending and the fiscal deficit to be higher than planned in the Memorandum

Although the new government has not yet defined the basic parameters of its fiscal policy for 2009, it is already clear that the fiscal adjustment planned in the still applicable Budget Memorandum, will not be fully implemented. Namely, the Memorandum envisaged a cut in the share of public spending in GDP in 2009 by 1.6 percentage points, and a cut in the fiscal deficit to 0.4% of GDP. The unplanned, extra pension increase of 10 %, which will be realized in November 2008, will contribute to an increase in the size of consolidated public spending in 2009 relative to the plan laid down by the Memorandum by about 1.2% of GDP.

The realization of some proposals implies an overly high growth in public spending...

The realization of other proposals and demands for increases in public spending (gradual pension increases to 70% of the average wage, high rises in public sector employees' salaries, settlement of accumulated arrears in a short period of time, the payment of additional daily war allowances to reservists, using the deal with FIAT and Zastava employees as a general model of incentives to foreign investment, and retrenchments in companies that undergo restructuring, etc.) would contribute to an additional strong growth in public spending and the fiscal deficit in relation to GDP. The impact of the majority of these proposals and demands on a rise in public expenditure in 2009 cannot be estimated at present because they have not yet been precisely quantified. A rough estimate, however, is that a gradual increase in average pensions to the level of 70% of the average wage would contribute to expenditure growth by about 1.1% of GDP.

...moreover, there are proposals to cut tax rates

In addition to increases in public spending, proposals are being floated by certain ministries to cut the payroll tax rate from 12% to 10%, as well as to increase the tax allowance from the present 5.5 thousand dinars, approximately, to 8 thousand dinars. If these two measures were cumulatively applied, the loss of fiscal revenue would amount to around 0.8% of GDP. A cut in the payroll tax rate and increase in the tax allowance, with the concurrent increase in public spending would additionally widen the fiscal deficit.

A higher public spending-to-GDP ratio and a higher deficit as share in GDP in 2009 would threaten macroeconomic stability

After taking into account the trends carried forward from 2008, as well as the current proposals of ministries and demands by budget beneficiaries, estimates are that a cut in the deficit from the estimated 2% in 2008 to 1.5% in the coming year would constitute the maximum that could be expected. Public spending would probably remain at this year's level, due to the increased share of the pension expenditure as well as higher public investment.

The containment of fiscal expansion requires the application of many restrictive measures

Achieving even these, at first glance rather modest, results in fiscal adjustment requires the application of a range of restrictive measures of fiscal policy, including:

- permanent abandonment of the plan to increase the ratio between the average pension and the average wage to 70%; instead, it is necessary to set a more realistic, economically sustainable and socially responsible objective, such as a ratio between pensions and wages of 60%,
- growth in the real level of the wage bill of up to 2% in the coming year, which implies that demands by public sector employees' trade unions for a pay rise amounting to 25% under the pretext of implementing the collective agreement, would not be accepted,
- incentives for FIAT's investment in Zastava should be treated as a unique case, rather than as a general model for attracting large-scale foreign investments,
- a firm and uniform position of the government that reservists are not entitled to additional daily war allowances,
- reduction in the amount of net lending by the government, recapitalization, etc.
- review of entitlements granted, in particular of: subsidies in agriculture, social welfare-related entitlements, and subsidies for mortgage insurance,
- resolution of accumulated direct and indirect debts in the long run,
- implementation of a general program of austerity measures and streamlining of public spending,
- postponement of the proposed cut in the payroll tax rate from 12% to 10%.

From the above, it may be concluded that fiscal policy in Serbia, just like overall economic policies, in this and the coming year, will face serious challenges, but also some significant opportunities. An overly strong fiscal expansion could seriously threaten macroeconomic stability and the overall results of the government. On the other hand, pursuing a responsible and tight fiscal policy, would lay the groundwork for long-term stable economic growth and the general advancement of the country.

A responsible fiscal policy would require at least some departures from the election promises made by the ruling coalition's parties. One way to pull this off is to launch an open debate based on arguments, in professional and political circles, about all the relevant issues in the field of economic policies and reforms.

It must be considered carefully whether delivering on the promises made in the election campaign makes economic sense

The subject of debate should also include the promises made in the election campaign by political parties, predominantly the ruling ones, as well as the contents of coalition agreements. The promises should be analyzed not only from the standpoint of feasibility, but also from the standpoint of what impact meeting them would have on economic and social development. The election promises and elements of coalition agreements are not Scripture, which must be unconditionally carried out. If there are strong arguments that some promises are impossible to fulfill or that they threaten economic and social development, their implementation must be abandoned, rather than rushing headlong into economic collapse. An in-depth analysis of the election campaign promises from the standpoint of their sustainability and the like could help to make political parties more cautious and responsible in future election campaigns.

The role of the media is important: it should promote debate based on arguments, corroborated by facts, technical analysis and relevant international experience, instead of debates based on impressions, inaccurate data, putting opponents down, and the like.

Difficulties of a Coalition Government in the Conduct of Fiscal Policy¹

The macroeconomic circumstances in which the Serbian economy operates (a high external deficit, high inflation ...) require the implementation of a tight fiscal policy in the coming several years. The conduct of such fiscal policy primarily means a slower growth in public expenditure than of GDP growth, and a shift from the fiscal deficit to a surplus. In order to realize such a fiscal policy it is necessary for the government, against the background of a slower growth of public spending relative to GDP, to select priorities for whose achievement sufficient resources would be secured (e.g. Corridor 10, regional development, employment incentives, better access to health and education services for all population segments, investment in science, modernization of the public administration, etc.), while other projects should be postponed or abandoned. Moreover, it is necessary to streamline programs in the sectors financed out of public revenue (health care, education, the public administration at all levels etc.), reduce subsidies, rigorously select investments, downsize the government sector, etc. The prerequisite for a tight fiscal policy is a unified approach of the government vis-à-vis interest groups such as pensioners, public sector employees, farmers, reservists and others who demand additional funds from the budget. A responsible fiscal policy means striking an appropriate balance between development and the social objectives of the government, and those priorities have been set in the field of development and social policies.

The described macroeconomic circumstances beg the question to what extent the structure of the incumbent Serbian government constitutes a constraint upon the implementation of a tight fiscal policy? The present government has the support of a dozen political parties, all with different programs and orientations. More specifically, the government has a tight majority of only two seats, so the withdrawal of support by any party would jeopardize the functioning and survival of the Government². In such circumstances small parties have a high “blackmailing” capacity which enables them to deliver on their election promises irrespective of whether they are priorities from the economic and social perspective. From the standpoint of an individual party such behavior is rational, because it brings it higher popularity ratings, but the costs of such policy would be shifted to another party which is responsible, based on the ministries it runs, for ensuring macroeconomic stability. Where the economic and social objectives of society (macroeconomic stability, sustainable growth etc.) are concerned, as well as the objectives of the government as a whole – such behavior has remarkably adverse consequences.

Small parties, particularly those which represent specific social groups (e.g. pensioners) – do not display responsibility for the accomplishment of general objectives of the government, such as macroeconomic stability, economic growth, reduction of unemployment, etc. There is almost a regularity – the smaller the “share” of a particular political party in the government, the lower its

¹ A more detailed analysis of the difficulties in the functioning of coalition governments composed of partners with different ideological and programmatic orientations is presented in Spotlight on 3 of this issue of QM.

² Of course, there is a possibility of an opposition party lending support to the ruling majority or even joining the coalition. In that case, the government would survive, even if parties that presently its support were to quit the coalition. This is a realistic risk for small parties that can be replaced if they engage in too much blackmailing. The risk is proportionate to the size of the party.

responsibility for the implementation of the general objectives of the government. The situation is especially complicated when the survival of the government also depends on the support of such a small party.

This is confirmed by the perseverance by certain parties in the delivering on their election promises (e.g. achieving the ratio between average pensions and average wages at the level of 70%), despite the fact that this would lead to a rise in public spending and the fiscal deficit by 2.5% to 3% of GDP and, indirectly, to a jump in inflation, the external deficit and external and public debt. Moreover, in the short run the survival of the government depends on the fulfillment of the demands of the parties in question.

If government priorities were the sum of the priorities of the member parties of the coalition, the result would be excessive fiscal expansion and a very high deficit of 5%–6% of GDP in the coming year. Furthermore, there is a real danger that the structure of public spending could be less in line with economic principles or the economic and social objectives adopted by the government, and more in line with the narrow interests of political parties and their strength within the coalition. If the economic policies of the government were realized as a simple sum of the election promises of parties making up the ruling coalition, the result would be economic instability followed by an economic crisis. Policies of this ilk are particularly risky when external aid is uncertain. Should a financial crisis break out, Serbia would be faced with the absence of an arrangement with the IMF, and tensions in relations with the EU over Kosovo and Metohija are also possible.

Prioritization at the level of the government is difficult in a situation where different parties run different sectors and when they strive to improve their own political ratings by maximizing the results in these sectors. In such circumstances, no party is willing to give up its priorities, and that results in exaggerated demands for increasing public spending. Moreover, political parties are trying to implement their priority projects as soon as possible³ so as to preempt a restrictive fiscal policy (e.g. adoption of a government stabilization program, a possible arrangement with the IMF and the like.). If their projects are already written into law, austerity measures would have to be taken in some other sectors. The speed in the realization of own projects often also imply the absence of any in-depth analysis or technical discussion about the economic rationale and sustainability of the project as a whole or its elements. Macroeconomic and fiscal implications of the implementation of the projects are, almost entirely, ignored, because the responsibility for macroeconomic stability rests on another party in the coalition. Such accelerated implementation of one's own projects also implies the entering into contracts by certain ministries without prior consultations with the government and the Ministry of Finance. Instead, the government and the Ministry of Finance are informed *post festum* about the commitments made, and the government is asked to approve them urgently. Moreover, the conspicuous intention on the part of the government or a ministry to implement certain projects very quickly, "at any cost", without transparent procedures, inspires potential partners of the government (domestic and foreign, foreign governments, etc.) to make additional requests (requests for additional subsidies and tax incentives, lower prices of domestic resources, shifting the risk to the Republic of Serbia, etc.), which reduce the profitability of such projects for the Serbian state.

It seems, then, that the structure of the incumbent Serbian government constitutes a serious constraint on the realization of the necessary tight fiscal policy. Accordingly, the assessment is that cutting public spending and the fiscal deficit as share in GDP in 2009 by 1.5–2 percentage points, as projected by the still applicable Memorandum on the Budget, Economic and Fiscal Policy, will be a difficult objective to achieve. Moreover, it will be necessary to reject a considerable number of the demands for spending in order to maintain public spending and the fiscal deficit in 2009 as ratios to GDP at the level of this year's results, i.e. public spending at around 44% of GDP, and the deficit at around 1.5–2% of GDP.

³ The second reason for the rush to implement party projects is an effort by the parties concerned to improve their approval ratings so that they could expect good results even in the case of an early election. Such party calculations partially explain their rather unusual behavior in terms of ensuring the fulfillment of their campaign promises at the very beginning of the work of the government. As a result, instead of a restrictive fiscal policy, conducted by most governments in the first years of their functioning, there is strong pressure in Serbia to pursue an expansive policy in the government's first year in office. Such behavior could also be a reflection of the mutual distrust of the parties as well as the lack of confidence in the government's longevity.

8. Monetary Flows and Policy

They-o-y growth of both nominal and real M2 slowed in Q2 2008. Monetary supply contracted relative to the preceding quarter as a result of the net reduction of foreign exchange reserves, which exceeded the growth of the monetary sector's NDAs in the same period. Owing to the appreciation of the dinar, monetary supply (M2) shrank, mainly because of the negative exchange rate differentials. Credit to the non-government sector grew strongly, with a new €510 mn going to companies and some €290 mn to households. Companies nonetheless continued borrowing heavily abroad, to the tune of €590 mn. Banks found sources for new credits in major capital increases (€710 mn) and new foreign exchange savings (€340 mn). In net terms, banks withdrew in Q2 some €140 mn invested in repo instruments. The NBS raised its reference interest rate from 14.5% in late Q1 to 15.25% and then to 15.75%. The dinar recorded major appreciation against the euro in the same period which, coupled with the higher interest rates, had the effect of tightening monetary policy. It remains to be seen whether the tightening, which can probably be ascribed to the direct effect of the dinar appreciation on some prices, will yield results in the period ahead. Since February 2008, core inflation has been running above the upper limit of the target band. The rise in primary money will not help to make the tightening of monetary policy effective since it emerged as a consequence of the withdrawal of bank funds from repo transactions and a reduction of the NBS's capital.

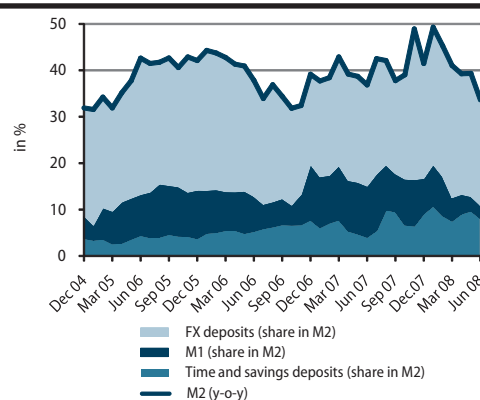
Monetary System: Structure and Flows of Monetary Supply

Nominal growth of M2 starts to slow in Q2...

... and the slower growth trend of real M2 established in early 2007 continues

The trend of accelerated y-o-y growth of total monetary supply (M2) was reversed in Q2 and its nominal growth slowed. The growth of real M2, which had been recording a slower trend for a year, continued in Q2. The quarter saw a nominal M2 y-o-y growth of 33.7% (41% in Q1), and a real growth of 19.2% (26.2% in Q1; Table T8.2). Credit to the non-government sector (viewed as

Graph T8-1. Serbia: Money and Component Aggregates¹, 2004–2008



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).

the change in the stock of dinars) also recorded slower y-o-y growth rates in Q2, although these remained at a very high level (30.3% nominally and 16.2% in real terms). But since about 70% of these credits, in QM's estimate, are foreign exchange-indexed, applying our methodology to adjust the growth rate by taking into account changes in the exchange rate¹ brings out that credit accelerated its y-o-y growth in Q2 to 40.8%, from 35.3% in Q1. The y-o-y growth of credit to households was higher by 46.1% (43.3% in Q1), and to companies by 38.1% (31% in Q1); Table T8-2. When the movement of credit by category of clients – households and companies – is observed, a fresh acceleration of the y-o-y rate for both categories is evident in Q2, after the slowdown in Q1 (flows adjusted for exchange rate changes; Table T8-2).

As for the contribution of different forms of use of monetary supply, Q2 saw the continued growth of the share of savings and time deposits in the structure of M2 growth, at the expense of the lesser contribution of dinar M1. The greatest contribution to M2 growth continued to come from the growth of foreign exchange deposits (Graph T8-1).

¹ More details on the methodology to adjust credit flows for exchange rate changes within one quarter in QM6, Section 8, Monetary Flows and Policy, Box 2.

Monetary supply decreases in Q2...

... since net NFAs declined by more than NDAs grew

A major contribution to the reduction of M2 came from the negative exchange rate differentials due to the appreciation of the dinar

Growth of credit to non-government sector accelerates again

The total negative increase of monetary supply in Q2 2008 of -0.7% of M2 at the beginning of the year (cumulative increase of 4.8% from the beginning of the year to end-Q2 less the 5.5% increase in Q1; Table T8-2) was the consequence of the fall in NFAs by -6.8% of M2 at the beginning of the year (3.6% in Q1), and the increase in NDAs by 6.1% of opening M2 (1.9% in Q1). The total decrease in NFAs came about as the result of the fall in foreign currency-denominated NFAs by 4.2% of opening M2 (an increase of 2.1% of opening M2 in Q1), and the negative exchange rate differentials due to the appreciation of the national currency in Q2 by -2.7% of opening M2 (2.5% in Q1 when the dinar depreciated against the euro). Credit to the non-government sector, whose value is adjusted for the effect of the dinar appreciation in view of the large share of indexed credits, contributed to the total increase in NDAs in Q2 by as much as 16.3% of opening M2 (4.8% of opening M2 in Q1). Net credit to government increased by 1.6% of opening M2 (-0.6% in Q1; Table T8-2) and refers to the running down of government deposits with the monetary sector. Finally, on the negative side, the increase in NDAs was impacted by the rise in the monetary sector's capital by a total -1.1% of opening M2 (-3.5% in Q1; Table T8-2).

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

	2006		2007			2008	
	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	y-o-y, in%						
M2 ¹⁾	39.2	42.9	37.4	39.4	41.5	41.0	33.7
Credit to the non-government sector ²⁾	17.5	21.6	23.9	28.0	38.3	36.4	30.3
Credit to the non-government sector ²⁾ , adjusted ³⁾	24.1	26.3	30.2	36.7	39.9	35.3	40.8
Households	62.2	58.4	54.7	60.2	52.2	43.3	46.1
Enterprises	11.1	14.2	20.2	26.2	33.7	31.0	38.0
	real y-o-y, in %						
M2 ¹⁾	30.6	35.4	30.7	29.7	27.8	26.2	19.2
Credit to the non-government sector ²⁾	10.3	15.2	17.8	19.1	24.9	22.0	16.2
Credit to the non-government sector ²⁾ , adjusted ³⁾	16.4	19.8	24.1	27.4	26.3	21.1	25.5
Households	52.2	50.2	47.4	49.2	37.5	28.2	30.1
Enterprises	4.2	8.3	14.5	17.6	20.7	17.3	23.0
	cumulative, in % of opening M2⁴⁾						
M2 ¹⁾	39.2	5.9	11.0	23.9	41.5	5.5	4.8
M2 dinar ¹⁾	19.8	-0.1	0.8	6.8	16.8	-2.5	-2.7
Foreign deposits (households and enterprises) ⁵⁾	25.7	4.0	10.1	17.3	24.5	5.6	7.7
Valuation adjustments ⁶⁾	-6.4	1.9	0.0	-0.1	0.2	2.4	-0.2
NFA, dinar increase	41.1	5.2	12.0	14.5	24.4	3.6	-3.2
NFA, fx increase	48.4	3.1	12.0	14.7	24.2	1.5	-3.0
Valuation adjustments ⁶⁾	-7.3	2.2	0.0	-0.1	0.3	2.1	-0.2
NDA	-1.9	0.6	-1.1	9.4	17.1	1.9	8.0
o/w: credit to the non-government sector ²⁾ , adjusted ³⁾	27.3	6.6	19.6	33.7	38.0	4.8	21.1
o/w: net credit to government ⁷⁾	-17.4	-4.1	-7.7	-7.0	-1.9	-0.6	1.0
o/w: NBS and com. banks capital and reserves	-13.2	-2.2	-7.4	-11.6	-17.9	-3.5	-4.6
	cumulative, in % of GDP⁸⁾						
Net credit to government ⁷⁾	-3.4	-1.3	-2.2	-1.9	-0.5	-0.3	0.4
o/w: dinar credits	0.6	-1.2	-2.4	-2.0	-1.1	-0.8	-1.4
Credit to the non-government sector ²⁾ , adjusted ³⁾	4.3	2.6	5.5	7.5	9.8	2.7	4.5

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.

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

	2006		2007			2008	
	Dec	Mar	Jun	Sep	Dec	Mar	Jun
STOCK	in millions of dinars, end of period						
NFA	407,565	441,048	484,388	500,302	563,524	596,215	534,403
o/w: NBS gross reserves	715,114	719,381	730,668	751,920	765,615	788,296	720,967
o/w: commercial bank foreign liabilities	-307,742	-318,598	-286,848	-290,860	-299,659	-264,865	-251,182
NDA	231,055	234,991	224,279	291,193	340,174	357,307	412,802
Net credit to government ¹⁾	-100,061	-128,909	-149,081	-144,385	-112,290	-120,644	-103,539
Net dinar credit	-8,776	-35,782	-62,290	-56,369	-34,251	-53,126	-67,826
Net fx credit	-91,285	-93,127	-86,791	-88,016	-78,039	-67,518	-35,713
Credit to the non-government sector ²⁾	609,171	666,007	732,402	786,873	842,512	908,598	953,977
Other items, net	-278,055	-302,107	-359,042	-351,295	-390,048	-430,647	-437,636
M2 ³⁾	638,620	676,039	708,667	791,495	903,698	953,522	947,205
M2 dinar ³⁾	283,116	282,299	288,329	326,341	390,307	367,648	365,834
Fx deposits (households and economy)	355,504	393,740	420,338	465,154	513,391	585,874	581,371
STRUCTURAL INDICATORS							
Currency outside banks/Dinar deposits (households and economy), in %	31.89	26.23	29.14	25.05	24.56	23.66	23.45
Fx deposits (households and economy) / M2 (%)	55.67	58.24	59.31	58.77	56.81	61.44	61.38
Velocity (GDP ⁴⁾ / M2)	3.33	3.23	3.17	3.01	2.64	2.59	2.61
M2 / GDP ⁴⁾	0.30	0.31	0.32	0.33	0.38	0.39	0.38
Credits to the non-government sector / GDP ⁴⁾	0.29	0.30	0.33	0.33	0.35	0.37	0.39
Non-performing loans ⁵⁾ (in % of total loans)	4.65	4.92	4.69	5.20	5.10	4.40	5.30
Money multiplier (dinar M2/H)	1.97	2.37	1.99	2.27	2.31	2.58	2.01

Source: Table P-12. 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.

Banking Sector: Placements and Sources of Financing

Banks grant new credits totaling approximately €800 mn to companies and households in Q2

In Q2 banks gave about €800 mn in new credits to companies and households (€614 mn in Q1; Table T8-4). Around €510 mn went to companies (€400 mn in Q1), and some €290 mn to households (€200 mn in Q1; Table T8-4).

Companies continue to borrow heavily abroad in Q2...

In keeping with the trend that has lasted almost two years now, companies in Q2 continued with major direct foreign borrowing. The amount of new foreign borrowing by companies in one quarter has been almost double the amount borrowed from the domestic banking system over the past several quarters. In Q2, banks took some €830 mn in credits directly from banks abroad (about €600 mn in Q1, and €900 mn in Q4 2007; Table T8-6).

... to the tune of some €830 mn

Interest rates on bank credits rose in Q2, mainly due to the rise in the EURIBOR as the result of the restrictive monetary policy in the euro zone (for more details see Section 1. International Environment). It should be recalled that interest rates on the majority of loans in Serbia are explicitly (in credit contracts with variable interest rates) or implicitly linked to EURIBOR, especially where foreign banks are concerned. Also, a minor share of dinar loans (around 10% of the total, according to bank sources), which as a rule are very short-term, were granted without an indexation clause. The interest rate on these credits may be expected to be impacted by the NBS reference interest rate (repo), which was raised several times in Q1 and Q2 2008. Hence the rates on these credits most probably increase on this basis. In the same period (Q1 and Q2 2008), however, there were no signs of a slackening of credit to companies and households, which indicates that interest rate levels still have no major effect on the amount of bank credits in Serbia. One possible explanation is that there is still a high demand for credit, which makes the market unsusceptible to the price (interest rate), especially where the demand of households and small and medium enterprises are concerned. Big companies on the whole borrow mostly abroad, from the head offices of banks that operate locally, and thus secure easier credit terms for themselves.

Table T8-4. Serbia: Funding, Credit and Investment Activity of Banks, Adjusted¹ Flows, 2006–2008

	2006		2007			2008	
	Dec	Mar	Jun	Sep	Dec	Mar	Jun
in millions of euros, cumulative from the beginning of the year							
Funding(-, increase in liabilities)	-5,237	-325	-1,061	-2,574	-4,582	258	-717
Domestic deposits	-2,245	-339	-757	-1,819	-3,254	-162	-464
Households deposits	-1,200	-329	-652	-1,059	-1,652	-192	-518
dinar deposits	-124	-35	-57	-97	-135	-18	-19
fx deposits	-1,076	-295	-595	-963	-1,518	-174	-499
Enterprise deposits	-1,045	-10	-105	-760	-1,602	29	54
dinar deposits	-739	23	112	-324	-1,138	365	394
fx deposits	-307	-33	-218	-437	-464	-336	-340
Foreign liabilities	-1,660	-10	266	207	114	564	601
Capital and reserves	-1,331	25	-569	-962	-1,441	-144	-855
Gross foreign reserves(-, decline in assets)	-77	-14	5	-17	695	-333	-386
Credits and Investment¹⁾	3,100	687	1,294	2,488	3,626	697	1,175
Credit to the non-government sector, total	1,541	575	1,508	2,315	2,945	614	1,402
Enterprises	536	313	865	1,271	1,660	406	915
short term	194	195	549	699	939	341	612
long term	341	118	315	572	722	66	303
Households	1,006	263	644	1,044	1,285	207	487
short term	194	36	101	148	221	-8	87
long term	811	226	543	896	1,064	215	400
Placements with NBS (Repo transactions and treasury bills)	1,637	200	-11	438	849	116	-126
Government, net ²⁾	-79	-89	-203	-264	-168	-33	-101
MEMORANDUM ITEMS							
Required reserves and deposits	1,813	-146	242	349	441	-369	-275
Other net claims on NBS ³⁾	0	13	-44	-104	-44	6	246
o/w: Excess reserves	-50	20	-56	-103	-92	0	207
Other items ⁴⁾	499	-110	-464	-57	-78	-202	-192
Effective required reserves (in %) ⁵⁾	36	34	37	34	31	30	29

Source: Table P-13. 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) 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 than the growth of credits. Government include: Republic level and cities and municipalities.

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

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

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

Banks withdraw dinar funding from repo operations in net terms...

... a total of €240 mn in Q2

In Q2, banks withdrew a net €240 mn invested in repo operations and 6-m NBS papers (in Q1 they placed a new €110 mn in these, and as much as €400 mn in Q4 2007 and Q3 2007 respectively). The relative reduction of the increase in the stock of repos in Q1 can be explained by the lower yields for foreign investors (combined effect of the rise in the nominal repo rate, nominal depreciation of the dinar in the period, and possible rise in the risk premiums for investment in Serbia due to political uncertainty). In Q2, however, there was an appreciable rise in repo yields for foreign investors as a result of a mild increase in the nominal repo rate and the appreciation of the dinar. In spite of the higher yields, some other factors prompted banks to withdraw in net terms the liquidity invested in repo operations. These most probably included the shortage of dinars (leading to the appreciation, which was particularly pronounced at end-Q2 as well as in July and August). Banks needed dinars to comply with the obligation to keep a portion of the reserve requirement on the foreign exchange base with the NBS in dinars, a measure that took effect on 17 May 2008. Since the dinar had recorded major appreciation against the euro by that time, instead of converting foreign exchange, banks apparently opted to acquire dinars by withdrawing them from repo transactions or failing to renew repo contracts when they matured.²

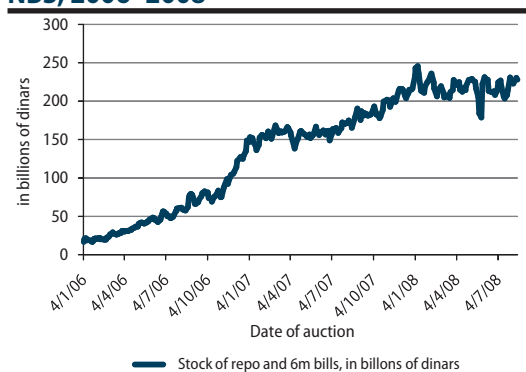
² For more details on the NBS measure, see Box 1 in this QM, and QM12, Section 8, Monetary Flows and Policy, Box 1; on repo yields see Section 9, Financial Markets, Graph T9-6.

8. Monetary Flows and Policy

Irregardless of the above and other examples of the use of repos to manage the short-term liquidity of banks, it would appear that total bank investments in 2-w repos and 6-m NBS papers stabilized at a level of some 200 bn dinars (about €2.5 bn; Graph T8-5) in late 2007 and during 2008. In the same period, the yield on repo instruments grew (both the nominal rate and the yield against the euro, see Section 9. Financial Markets; Graph T9-3). Observed in respect to the euro, the yield in Q2 2008 reached the exceptionally high level of about 30% recorded also in late 2006 and early 2007. The stabilization of the total volume of banks' investments in NBS papers may be explained by the fact that foreign banks, which are the biggest investors of excess liquidity in these short-term, low-risk transactions have a specified quota for exposure on the Serbian market, which is probably conditional on their assessment of the risk of investing in dinar-denominated papers. Thus, even though they entail a minimal risk compared to other investments, dinar-denominated instruments still carry the risk of investing in Serbia and of the dinar as a currency.

Besides withdrawal from repo contracts, banks find sources for new investment in major capital increases and new household foreign exchange savings

Graph T8-5. Stock of Bank Placements in Repo Contracts and Six Month Bills with NBS, 2006–2008



Source: NBS

Foremost among the sources for new investments in Q2 2008 were banks' capital increases and new household foreign exchange savings. In Q2, the overall banking sector recapitalized by as much as €710 mn (€144 mn in Q1; Table T8-4). New household foreign exchange savings grew by some €340 mn (€174 mn in Q1; Table T8-4). Company deposits with the banking sector stagnated in the first two quarters of the year, so bank sources through that channel, which was dominant in 2007, did not increase (€840 mn in Q4, and €400 mn in Q3 2007).

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

	2006		2007			2008	
	Dec.	Mar.	Jun	Sep	Dec	Mar	Jun
	quarterly growth of stock, in millions of euros						
Total loans to enterprises and households from domestic banking sector and direct foreign borrowing by enterprises	746	1,053	2,157	1,537	1,542	1,203	1,624
Loans to enterprises and households from domestic banking sector	222	575	933	807	630	614	789
Loans to enterprises	-21	313	552	406	389	406	509
Loans to households	243	263	381	400	241	207	280
Direct foreign liabilities of enterprises	524	478	1,224	730	912	590	835
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	503	791	1,776	1,137	1,301	996	1,344
	quarterly growth of stock, in % of quarterly GDP						
Total loans to enterprises and households from domestic banking sector and direct foreign borrowing by enterprises	10.4	16.3	30.1 ²⁾	20.0	18.0	15.9	18.3
Loans to enterprises and households from domestic banking sector	3.1	8.9	13.0	10.5	7.4	8.1	8.9
Loans to enterprises	-0.3	4.8	7.7	5.3	4.5	5.4	5.7
Loans to households	3.4	4.1	5.3	5.2	2.8	2.7	3.1
Direct foreign liabilities of enterprises	7.3	7.4	17.1 ²⁾	9.5	10.7	7.8	9.4
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	7.0	12.3	24.8	14.8	15.2	13.2	15.1

Source: FREN.

1) See footnote 1 in Table T8-4

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

Banks settled only some €35 mn of their foreign debt and liabilities to non-residents in Q2 (Item Foreign Borrowing, Table T8-4), compared to €564 mn in Q1. This continuing trend of repayment of banks' foreign debt is a logical consequence of the increasing recapitalization of banks in recent months. From the aspect of local supervision, i.e. the stability of the system, recapitalization is a more desirable way of acquiring funding from foreign banks with a local presence than from their parent companies abroad. The major recapitalization of banks was the result of an NBS measure under which credit to households may not exceed 150% of a bank's capital. Hence, if they wish to expand credit to households, most banks have to first recapitalize. Since foreign borrowing as an alternative source of new credit carries with it a required reserve of 45% (Table T8-8), foreign banks are resorting to this source less and less.

The reduction of net credit to government by around €70 mn in Q2 (€33 mn in Q1; Table T8-4), was an additional source of bank credit, and refers mainly to the inflow of funds into government deposits with the banking sector.

Table T8-7. Serbia: NBS - Foreign Exchange Purchases and Dinar Sterilization, 2005–2007¹⁾

	2005	2006	2007			2008		
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun
FLOW								
in millions of dinars, cumulative from the beginning of the year								
NBS own reserves ²⁾	63,136	145,315	15,055	46,176	60,267	97,182	4,703	19,115
NBS own reserves (in euros)	759	1,783	188	577	756	1,218	58	237
NDA	-46,040	-105,744	-46,267	-57,974	-72,100	-71,986	-39,760	-13,347
Government, dinar credits	-6,077	120	-710	-735	-735	-5,639	267	618
Government, dinar deposits	-18,576	17,540	-30,939	-56,748	-44,985	-10,107	-28,386	-41,088
o/w: municipalities	-824	-3,500	-6,768	-13,485	-11,933	-516	-8,329	-7,405
Repo transactions ³⁾	-16,829	-132,903	-16,675	-2,094	-34,961	-67,950	-11,243	8,014
Other items, net ⁴⁾	-4,558	9,499	2,057	1,603	8,581	11,710	-398	19,109
H	17,096	39,571	-31,212	-11,798	-11,833	25,196	-35,057	5,768
o/w: currency in circulation	8,485	14,811	-9,792	-3,395	-3,088	8,488	-6,613	-7,454
o/w: excess liquidity	3,518	16,516	-13,061	-3,309	-6,293	20,605	-39,840	-22,293
INCREASE								
cumulative, in % of opening H⁵⁾								
NBS own reserves ²⁾	93.4	135.1	11.2	34.5	45.0	72.6	3.5	14.3
NDA	-71.2	-93.2	-34.6	-43.3	-53.8	-53.8	-29.7	-10.0
Government, dinar deposits	-24.0	19	-23.1	-42.4	-33.6	-7.5	-21.2	-30.7
Repo transactions ³⁾	-21.8	-141	-12.5	-1.6	-26.1	-50.7	-8.4	6.0
Other items, net ⁴⁾	-25.4	29	1.5	1.2	6.4	8.7	-0.3	14.3
H	22.1	41.9	-23.3	-8.8	-8.8	18.8	-26.2	4.3
o/w: currency in circulation	11.0	16	-7.3	-2.5	-2.3	6.3	-4.9	-5.6
o/w: excess liquidity	4.6	18	-9.8	-2.5	-4.7	15.4	-29.7	-16.6
MEMORANDUM ITEMS								
Gross fx reserves (flow, cumulative from the beginning of the year, in euros)	1,860.0	4,083.1	-233.3	193.9	482.7	610.4	-85.8	-533.8
Gross fx reserves (in % of opening H in euros)	228.4	307.6	3.2	11.6	27.5	37.7	14.3	-28.1
H (growth rate, y-o-y, in %)	22.1	41.9	31.3	37.2	24.2	18.8	20.8	35.0
Currency in circulation (growth rate, y-o-y, in %)	18.8	27.6	28.0	33.0	25.5	12.4	19.9	6.8

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) This category included NBS bills, and repo transactions.

4) Other domestic assets, net, include domestic credits (net claims on banks excluding NBS bills and repo transactions; net claims on enterprises together with other assets (capital, reserves and balance items; other assets and liabilities corrected by exchange rate differentials).

5) "Opening H" refers to stock of primary money (H) at the beginning of stated year (i.e. end of previous year).

Government contributes to the increase in the NBS net own reserves by converting foreign exchange deposit...

... but increases its dinar deposit with the NBS by the same amount...

... thereby neutralizing the overall effect on primary money

Central Bank: Balance and Monetary Policy

Primary money increases in Q2 due to the withdrawal of dinars from repo transactions and reduction of NBS capital

The level of *primary money* (H) was increased in Q2 by 30.5% of the level from early 2008, which completely neutralized the reduction in Q1 (by 26.2% of the level from early 2008; Table T8-7). The Q2 increase was the result of the following net changes in the stocks of components of primary money: a) the increase in the NBS's net own reserves was 10.8% of opening H; b) the increase in the NBS's NDAs in Q2 was 19.7% of opening H (Table T8-7). With regard to NDAs, a reduction of primary money was recorded on the basis of an increase in the government's dinar deposit with the NBS, whereby 9.5% of opening H was withdrawn. Other NDA components, however, contributed to increasing primary money: reduction of the stock of repos by 14.4% of opening H and increase of other NDAs by 14.6% of opening H (Table T8-7). The increase of other assets net refers to the reduction of NBS capital on the basis of the loss recorded in the first semester of 2008. The NBS loss can be ascribed mainly to the payment of interest on repo operations and the negative exchange rate differentials.

The total increase of primary money by 40.7 bn dinars in Q2 was the result of the following absolute changes in its components: (a) in Q1 the NBS created some 14.5 bn dinars through foreign exchange transactions (sale of foreign exchange to banks, net purchases from exchange offices, and purchase of foreign exchange from government); (b) the government increased its dinar deposit with the NBS and thereby withdrew about 12.7 bn dinars; c) the stock of repos with the NBS was decreased by 19.2 bn dinars in Q2 relative to end-Q1, which created a new dinar liquidity (Table T8-7), and (d) *Other NDAs* were increased by some 19.5 bn dinars. This item refers primarily to the reduction of the NBS's capital, i.e. the loss it recorded in the first semester of 2008.

Box 1.

The NBS tightens monetary policy:

NBS measures tighten monetary policy. The effects, it appears, are transmitted exclusively through the direct impact of the dinar's appreciation on the prices of imports and their domestic substitutes

increases the repo rate by a total of 1.25 percentage points in Q2...

At a meeting of the Monetary Board in late May, the NBS hiked the interest rate by one-half of a percentage point, bringing it up to 15.75%. Up to the day this issue of *QM* went into print, the central bank did not change the nominal reference interest rate. But the dinar appreciated strongly in Q2 as well as in July and August relative to Q1. The nominal rate rose by 3.5% in Q2 and the real rate by 5.2%. The Q2 appreciation is explained by the increased supply of foreign exchange and demand for dinars due to the stabilization of the political and, hence, business climate on the one hand, and banks' need for dinars to adjust their operations with the NBS regulations of May under which they must keep a portion of the reserve requirement on the foreign exchange base in dinars, and adjust credit to households with their capital. These regulations led to a massive recapitalization of foreign banks. The hike in the nominal repo rate coupled with the relatively high nominal and real appreciation of the dinar resulted in a tighter monetary policy in Q2 and July and August 2008. It may also be assumed that the political stabilization in the same period (formation of the new Serbian government), and more stable oil and food prices on the world market calmed the inflationary expectations.

... to a level of 15.75%

The dinar's exchange rate appreciates considerably...

... in both nominal and real terms

In *QM's* view as well as according to the indicator of NBS restrictiveness (Inflation Report, May 2008), monetary policy in Q1 was virtually neutral or only mildly restrictive. Core inflation in the same period not only exceeded the target band of 3% to 6%, but at end-Q1 reached the psychological barrier of 10% y-o-y (7% at end-Q1).

Despite the tightening of monetary policy by raising of the reference rate and deceleration of the y-o-y growth of M2 and its nominal fall (Tables T8-2 and T8-3), the leading component of the growth of aggregate demand – credit to companies and households from the domestic banking system and from abroad – showed no sign of slowing down. On the contrary, its share in total aggregate demand was exceptionally high and amounted to 18.3% of quarterly GDP in Q2 (15.8% in Q1; Table T8-5). Based on the above, it may be assumed that the ultimate effect of tighter monetary policy on slowing inflation has boiled down to the effect of the appreciated dinar on the prices of imports

and their domestic substitutes, which constitute a major portion of the price index. Another possible channel for the functioning of monetary policy in Q2 was the calming of inflationary expectations. It would seem, however, that the textbook interest rate channel of transmission of monetary policy to the level of economic activity, aggregate demand and prices, over the impact of changes in reference rate on the level of investments and savings, which would be reflected in the reduction of bank credit, does not yet exist in Serbia.¹

Where the impact of the appreciation of the exchange rate on cutting inflation is concerned, it should be noted that the appreciation of the dinar takes place on the foreign exchange market as the result of a surplus of euros from capital inflows from abroad. The NBS can adopt measures to influence the inflow of this capital by raising the nominal repo rate and take some prudential steps (e.g. adjusting credit to households with banks' capital, which encourages them to recapitalize with capital from abroad). Coupled with the anticipated trend of changes in the exchange rate, raising of the nominal repo rate is a signal to foreign investors (banks) of the attractiveness of short-term investment in repo operations. If it is true that the level of total repo transactions with the NBS has stabilized at around 200 bn dinars (€2.5 bn; Graph T8-5 and caption above it), the question arises of how much room the NBS has to instigate further appreciation of the dinar by attracting capital from abroad. In the course of 2006 and 2007, when the total stock of repo operations burgeoned from virtually zero to the present level of some €2.5 bn, its maneuvering room was without doubt extensive.

In Q2, the NBS *changed the manner in which reserve requirements on the foreign exchange base are held*. As of 17 May 2008, banks must keep 10% of the calculated reserve requirement in dinars in an account with the NBS, and not in foreign exchange as up to that date, and which still pertains to remaining 90%.

Table T8-8. Banks' Reserve Requirements with NBS¹⁾, 12/ 2004-10/ 2008

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

Source: NBS.

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

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

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

Note:

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

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

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

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

1 For more details on channels of transmission of monetary policy in Serbia see: Dimitrijević J. "Monetary Policy - Transmission Channels to Prices: a Year of Inflation Targeting," QM10; and Dragutinović D. "Power and Weakness of Monetary Policy in Striking a Balance Between BoP and Inflation-Related Objectives," QM11.

Government makes the biggest contribution to the rise in NBS net own reserves...

... by converting some €150 mn from its foreign exchange deposit

The net own reserves of the NBS increased in Q2 by about €180 mn (€58 mn in Q1; Table T8-9). To a lesser extent, the increase was the result of NBS transactions on the foreign exchange market – the sale of foreign exchange to banks and purchases from exchange offices totalled €29 mn (€168 mn sold in Q1; Table T8.10). The remainder, by far the greater part, of the increase in the NBS new own reserves amounting to about €150 mn, was therefore the result of foreign exchange purchases from the government. The government's deposit with the NBS was reduced in Q2 by around €400 mn (cumulative of €557 mn at end-Q2 less €161 mn in Q1; Table T8-9). This means that, in addition to the conversion of €150 mn from the government's foreign exchange deposit, the remainder of the reduction of a net €250 mn was the result of the payment of FFCDs and foreign exchange liabilities abroad in the course of Q2.

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

	2005		2006		2007			2008	
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	
stock, in millions of euros									
NFA of Serbia	2,544	5,164	5,413	6,130	6,347	7,116	7,246	6,768	
Commercial banks, net	-1,451	-3,188	-3,213	-2,918	-2,998	-2,379	-2,147	-2,163	
Gross foreign reserves	784	707	693	712	690	1,403	1,070	1,017	
Foreign liabilities	-2,235	-3,895	-3,906	-3,630	-3,688	-3,782	-3,218	-3,180	
NBS, net	3,995	8,352	8,626	9,048	9,345	9,495	9,394	8,931	
Gross foreign reserves	4,969	9,052	8,819	9,246	9,535	9,662	9,577	9,129	
Foreign liabilities	-974	-700	-193	-198	-190	-168	-183	-198	
IMF	-748	-181	6	1	3	4	3	1	
Other liabilities	-226	-519	-200	-199	-193	-171	-186	-199	
NBS, NET RESERVES-STRUCTURE									
1. NBS, net	3,995	8,352	8,626	9,048	9,345	9,495	9,394	8,931	
1.1 Commercial banks deposits	-1,725	-3,210	-3,358	-3,478	-3,584	-3,409	-3,411	-3,166	
1.2 Government deposits	-220	-1,309	-1,247	-1,160	-1,172	-1,034	-874	-478	
1.3 NBS own reserves (1.3 = 1 - 1.1 - 1.2)	2,050	3,833	4,021	4,410	4,589	5,051	5,109	5,287	
in millions of euros, cumulative from the beginning of the year									
NFA of Serbia	535	2,620	249	967	1,183	1,952	131	-348	
Commercial banks, net	-1,223	-1,737	-24	270	190	809	232	216	
Gross foreign reserves	-29	-77	-14	5	-17	695	-333	-386	
Foreign liabilities	-1,194	-1,660	-10	266	207	114	564	601	
NBS, net	1,758	4,357	274	696	993	1,143	-101	-563	
Gross foreign reserves	1,860	4,083	-233	194	483	610	-86	-534	
Foreign liabilities	-102	274	507	502	510	532	-15	-30	
IMF	-44	567	187	182	184	185	0	-2	
Other liabilities	-58	-294	320	320	327	348	-15	-28	
NBS, NET RESERVES-STRUCTURE									
1. NBS, net	1,758	4,357	274	696	993	1,143	-101	-563	
1.1 Commercial banks deposits	-904	-1,485	-148	-269	-374	-200	-2	243	
1.2 Government deposits	-95	-1,089	63	149	137	275	161	557	
1.3 NBS own reserves (1.3 = 1 - 1.1 - 1.2)	759	1,783	188	577	756	1,218	58	237	

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).

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

	Interbank fx market (NBS-commercial banks)	Exchange offices	Total	
(-, net sale of foreign currency by NBS)				
in millions of euros				
2006				
Monthly average January-October 2006	-64	151	87	
November 2006	260	131	391	
December 2006	154	86	240	
2007				
January 2007	-412	42	-370	} -238 in Q1 2007.
February 2007	-14.8	86	72	
March 2007	-54.1	114	60	
April 2007	0	137	137	} +288 in Q2 2007.
May 2007	-75.9	160	84	
June 2007	-19	86	67	
July 2007	-22	94	72	} +195 in Q3 2007.
August 2007	-23	106	83	
September 2007	-20	60	40	
October 2007	-4	72	68	} +212 in Q4 2007.
November 2007	-20	76	56	
December 2007	-40	128	88	
2008				
January 2008	-57	63	6	} -168 u Q1 2008.
February 2008	-129	39.6	-89	
March 2008	-105	20.6	-84	
April 2008.	-64	31	-33	} +29 u Q2 2008.
May 2008.	-38	54.3	16	
June 2008.	0	45.3	45	

Source: NBS.

9. Financial Markets

In Q2 2008, the value of the turnover volume on the Belgrade Stock Exchange went up by almost 69%, but the number of transactions fell by about 9%, an indication that the values of individual transactions were significantly higher. This can be explained by the stepped up activity of large investors, particularly on the discontinuous market segment whose turnover value tripled in Q2 while that of the continuous segment declined. The Belgrade Stock Exchange indices recorded growth ranging from 2.71% to 12.84%, depending on the index, but in Q3 the value of the indices, which had recorded all-time lows up to August, started to decline again, so it is not yet possible to talk about a market upturn. Unlike the stock exchange, domestic investment funds declined in value. Owing to the combination of the NBS reference rate rises and the dinar's appreciation, particularly strong in Q3, real yields on repo transactions, calculated relative to the movements in the EUR/RSD, exchange rate, reached two-digit values and new all-time highs. On the FFCD bond market the volume and turnover doubled and returned to the levels they had in Q4 2007, while yields on all maturities continued to grow, but more evenly, so that the average yield curve flattened in Q2, but remained inverted.

Q2 sees a rise in the value of the turnover volume, as well as a decline in the number of transactions performed on the stock market

While the turnover volume went up in Q2 2008, the number of performed transactions declined relative to the previous quarter (Graph T9-1). In dinar terms, the turnover volume rose by 68.86% relative to Q1 2008, and amounted to around 28 bn dinars in Q2, while the number of performed transactions fell by 9.33% – to around 31,000 transactions.

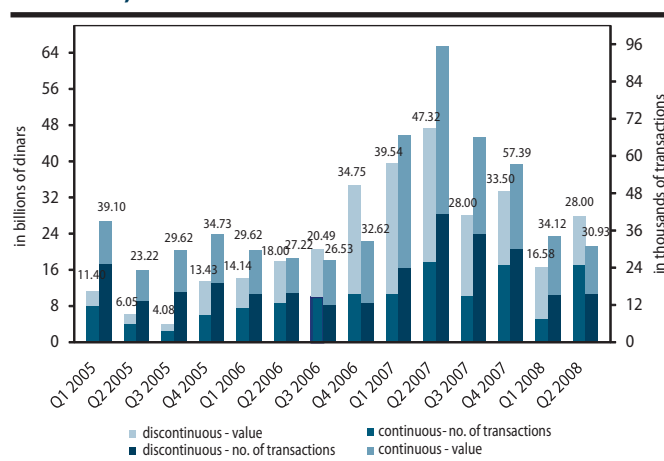
These movements in the trend indicate that individual transactions carried out in Q2 had significantly higher values than in the previous quarter. The average transaction valued around 905,000 dinars, an increase of around 86% relative to Q1 2008 and an indicator of the stepped up activity of large investors. The turnover structure in Q2 2008 corroborates this thesis. Specifically, both the turnover volume and the number of performed transactions declined on the continuous market segment, by 4.81% and 18.88% respectively. On the other hand, on the discontinuous market the value of the turnover volume was more than tripled, while the number of transactions went up by a mere 2.46% relative to the previous quarter.

The rise in the value of the turnover volume is driven by the discontinuous market segment, where the value tripled, while declining on the continuous segment

The rise in the value in Q2 of the turnover volume is still no indicator of an upturn on the Belgrade Stock Exchange. If the values are compared to those from a year ago, i.e., to Q2 2007 when the all-time high was reached both in the turnover volume and in the number of transactions performed, the activity has remained considerably reduced. The dinar-denominated value of the turnover volume declined by 40.84%, while the number of performed transactions went down by 67.54%.

In the course of the first two months of Q2, the manufacturing industry makes its way to the first place in terms of market capitalization

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



Source www.belex.co.yu.

After a long period in which financial intermediation was dominant, in April and May the manufacturing industry took the first place in terms of market capitalization, while financial intermediation came second. In June, the Belgrade Stock Exchange started to apply a new sectoral classification where, inter alia, the manufacturing industry is divided into several sectors. After the application of the new methodology, the financial intermediation sector, which remains unchanged, occupies the first place with a market capitalization of 338.19 bn dinars.

The Belgrade Stock Exchange indices record a moderate rise in value in Q2

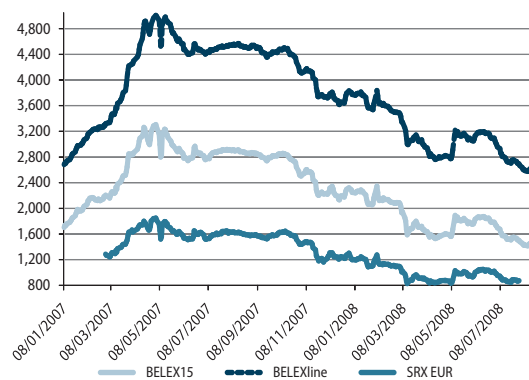
Q2 saw a slight increase in the value of the Belgrade Stock Exchange indices (Graph T9-2). The index values continued to fall from early Q2 to mid-April, when both Belgrade Stock Exchange indices hit new all-time lows since the beginning of the downward trend on the domestic capital market in May 2007. The value of the BELEX15¹ index on 17 April was 1,531.41 index points, which was the lowest recorded value of that index since December 2006, while the BELEXline² index was worth 2,764.21 index points, its lowest since mid-January 2007. The SRX³ EUR index had the lowest value in Q2 amounting to 835.85 index points on 7 May. This was followed by a slight upward adjustment of all indices, which lasted until the end of the quarter. From the first to the last trading day in Q2, the BELEX15, BELEXLine and SRX EUR indices grew by 6.14%, 2.71% and 12.84%, respectively. On 12 May, BELEX15 and BELEXLine attained their all-times highs of 1888.17 and 3215.77 index points respectively, while SRX EUR reached its all-time high of 1,048.32 index points on 16 June.

The indices of stock exchanges in the region record a loss in value in the course of Q2

The upward trend of the indices did not continue after Q2 2008. In early Q3 their value dropped again and in mid-August they fell below even the lows recorded in Q2.

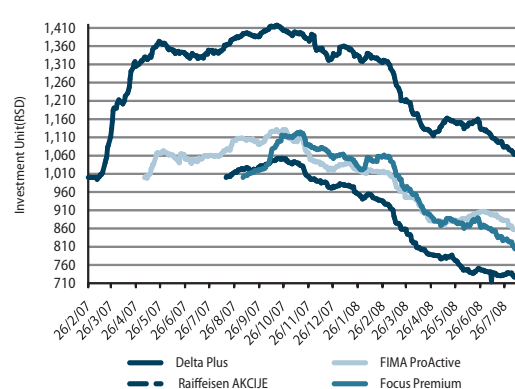
Unlike the indices which follow the Belgrade Stock Exchange and which went up in the course of Q2 2008 by between 2.71% and 12.84% – the indices of stock exchanges in the region recorded a fall ranging from 4.78% which was the loss in value of the Bulgarian SOFIX, up to 52.74% for the Montenegrin MOSTE index. A heavy loss in value was also recorded by the Montenegrin NEX20, the Macedonian MBI-10 and the Banja Luka BIRS, which fell by 27.14%, 27.55% and 16.40% respectively. The Croatian Crobex, the Sarajevo SASX-10 and the Romanian BET recorded milder declines in value of 5.40%, 5.54% and 7.18% respectively.

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



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

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



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

Although the Belgrade Stock Exchange grows in value in Q2, investment funds record a loss

Although the Belgrade Stock Exchange had a rise in value in Q2, investment funds recorded a loss in the same period, (Graph T9-3). In Q2 the FIMA ProActive fund had the best performance, with a loss of 4.06%, which was by about 1 percentage point better than the Delta Plus fund, which lost 5.38% over the same period. In this quarter, too, the Raiffeisen AKCIJE fund had the poorest performance, with a loss in the value of its investment unit of 11.22%, while the Focus Premium fund did somewhat better with a loss of 9.60%. If the movements in the value of investment units of the funds from the beginning of the year to the end of Q2 are observed, they all recorded a loss. Again, the loss was the lowest for the FIMA ProActive fund, which lost 12.10%, while Delta Plus, Raiffeisen AKCIJE and Focus Premium lost 15.56%, 23.79% and 18.08% respectively. Over the same period, the BELEX15 and BELEXLine indices lost 22.11% and 18.7%, respectively.

1 Index of the most liquid shares of the Belgrade Stock Exchange

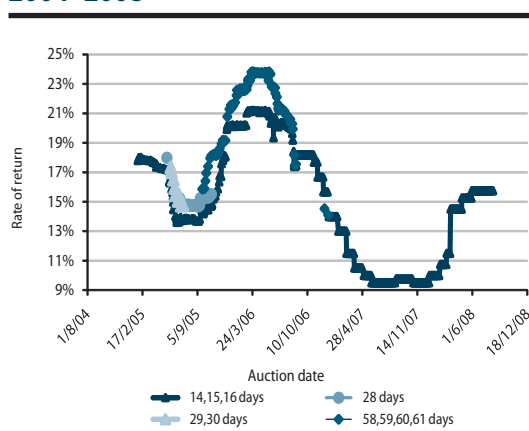
2 Overall stock index of the Belgrade Stock Exchange

3 Index of 8 most liquid shares of the Belgrade Stock Exchange calculated by the Vienna Stock Exchange (Wiener Börse)

The NBS raises the reference rate in Q2 2008 by 125 basis points to 15.75%

Real yields on repo operations go up sharply in Q2

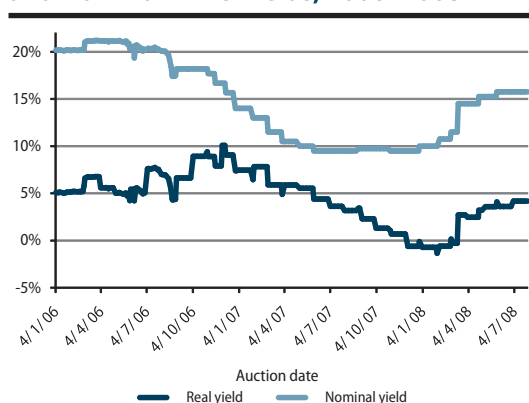
Graph T9-4. Repo Yields by Maturity, 2004–2008



Source: NBS.

yields measured in this manner. As the trend of appreciation continued in Q3 as well, real repo yields reached their all-time high of around 69% in August. As for real yields measured relative to the inflation rate, they were more moderate, as in the past, and ranged from 2.47% to 4.10% (Graph T9-6). The all-time high of 4.10% was reached after the increase in the reference rate in late May to 15.75%, but due to the rise in inflation in June, it dropped to 3.62%. Since inflation decelerated in July, and the NBS did not change the reference rate, real yields on repo operations rose to 4.17%.

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

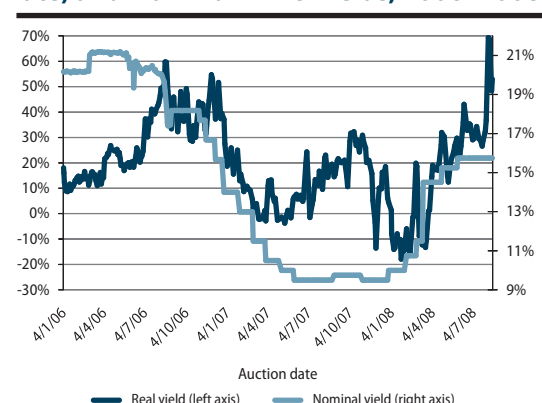


Source: NBS.

In the course of Q2 2008, the NBS raised the reference interest rate by a total of 125 basis points (Graph T9-4). At the beginning of the quarter, the rate on 2w repos was 14.50%, then in late April it was raised by 75 basis points to 15.25% and after that, in late May, by a further 50 basis points to 15.75%.

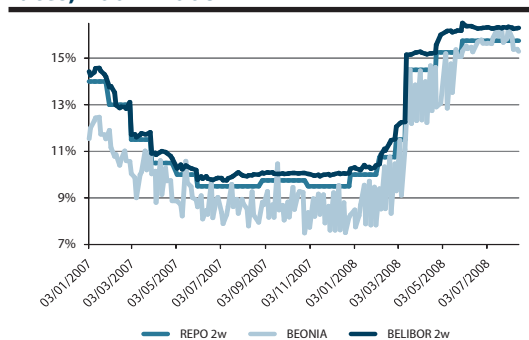
After the increase in the NBS reference rate, real yields on 2w repo operations became positive in Q2 2008. Measured in relation to the movements in the euro/dinar rate (a change in the rate from the previous three months⁴), real yields ranged from 12% to 43% during Q2 (Graph T9-5). Besides the NBS measures, the dinar's appreciation, which started in mid-May, also strongly contributed to the rise in real

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



Source: NBS.

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



Source: NBS and Reuters.

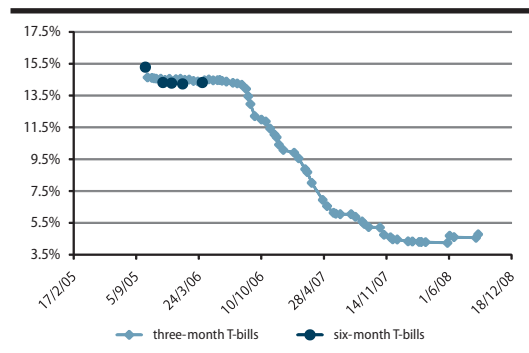
As usual, interest rates on the money market followed the nominal repo rate (Graph T9-7). In the course of Q2 the average spread between the repo rate and the BELIBOR rate with a two-week maturity (the same maturity as repo agreements), and the average spread between the repo rate and the overnight BEONIA rate leveled. Relative to Q1 the average spread between the repo rate and the BEONIA rate was reduced from 137 basis points to 74 basis points, while the spread relative to 2w BELIBOR went up from 45 basis points to 72 basis points.

⁴ A detailed rationale for such an approach to the calculation of the real return rates is provided in the text Udovički, K. i Đoković, V.: "The Exchange Rate and NBS Policy in Serbia: 2002–2006", QM5.

Yields on Treasury bills go up in Q2

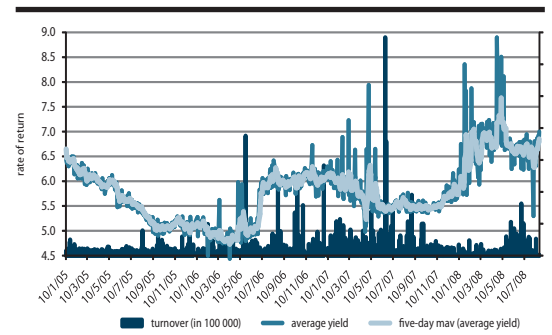
After a long downward slide, yields on Serbian T-bills went up in Q2 by between 30 and 40 basis points⁵. In the last two auctions in Q2 interest rates of 4.69% and 4.60% were achieved (Graph T9-8). Like in the previous quarters, only three-month T-bills were offered in the auctions, and the values of the issues were 400 mn, 800 mn or 1 bn dinars. Two auctions held in April and May, with nominal values of 152.27 mn and 767.1 mn dinars failed because there was no interest on the part of investors.

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



Source: MoF.

Graph T9-9. Average Yield on FFCD Bonds¹⁾, 2005–2008



Source: www.belex.co.yu

1) The graph does not depict extraordinary yield of A2006 bond of 42% on March 10, 2006.

Note: The graph was derived as the weighted average yield on securities from A2006 to A2016. The turnover values for each of securities were used as weights. Left axis refers to average yield, while the right axis refers to total FFCD trade volume.

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

The volume and turnover on the FFCD bond market went up in Q2 2008 (Graph T9-9). The traded volume amounted to around €27.3 mn, and the turnover to €20.4 mn, which was almost twice as high as in the previous quarter, meaning that both volume and turnover went back to the values recorded in Q4 2007 (in Q1 2008 the volume and turnover were halved relative to Q4 2007). If the change is observed at an annual level, the volume and turnover remained significantly lower relative to Q2 2007. The volume on the FFCD bond market dropped by 65% relative to the same period last year, while the turnover declined by 67%.

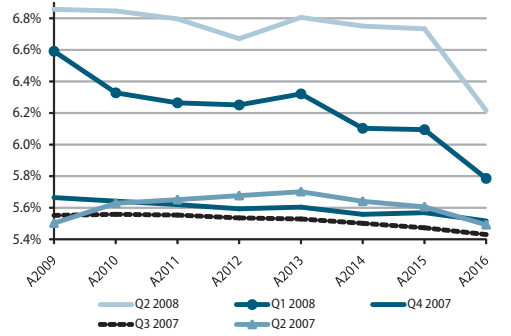
A rise in average yields for all maturities on the FFCD bond market continues in Q2 2008

The rise in yields on FFCD bonds continued in Q2 2008 as well, so the average yield curve made an upward parallel shift (Graph T9-10). The lowest growth was that of the A2009 bond, whose yield went up by an average 27 basis points relative to Q1. The highest growth was achieved on the longer end of the curve so, on average, the yields on A2014 and A2015 bonds went up by 65 basis points and 64 basis points respectively. The rise in yields was slightly lower than in the previous quarter when they increased between 27 basis points and 93 basis points. As for the shape of the average yield curve in Q2, it remained descending, but relative to the previous quarter when it was much steeper, the curve flattened. The difference in average yields between A2009 and A2015 bonds was only 12 basis points, and 64 basis points relative to A2016 (in Q1 the difference between A2009 and A2015 bonds was 50 basis points, and 81 basis points relative to A2016).

⁵ In Q3 and Q4 2007 yields on T-bills fell by 80 basis points and 75 basis points respectively, only to fall by another 4 basis points in Q1 2008.

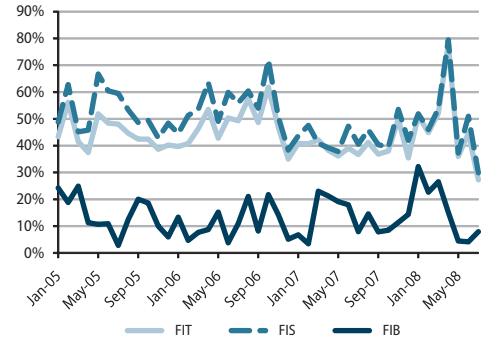
Average yield curve of FFCD bonds descends in Q2 2008

Graph T9-10. FFCD Bonds Average Yield Curves



Source: www.belex.co.yu.

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



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.

Foreign investors' participation in the turnover on the stock market and in the total turnover in April reached its all-time high, while on the bond market it fell in May and June to its lowest level since February 2007

Relative foreign investors' participation in the turnover on the bond market (the FIB curve, Graph T9-11) declined sharply in Q2 2008. In April, it fell to 15.2%, from 26.6% in March, only to further drop to 4.44% and 4.14% in May and June respectively, which actually was the lowest participation of foreign investors on this market since last February. On the stock market (the FIS curve, Graph T9-11) the average foreign investors' participation went up in Q2 by around six percentage points relative to the previous quarter. This was mainly driven by the developments in April, when a participation of 79.5% was recorded, an all-time high when it comes to foreign investors' activity on the stock market. Likewise, in April an all-time high of foreign investors' participation in the total turnover on the Belgrade Stock Exchange was achieved with 78.16%.

SPOTLIGHT ON:

Serbia's Energy Efficiency: Lagging Far Behind Developed Countries

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The energy efficiency of Serbia's economy is four times lower than the European Union average, while primary energy consumption per capita, often an indicator of a nation's level of development, is about twice as low. As energy efficiency has been gaining in importance against the backdrop of rising energy prices, high dependence of production on energy availability and prices, as well as reliance on imported energy, most countries have set clear goals to reduce energy consumption and increase overall energy efficiency. To achieve this, expert attention must be focused on the issue, and energy efficiency must be made a priority in drafting Serbia's future economic policy.

1. Current Global Economic Trends and the Need to Increase Energy Efficiency

The rising energy prices have induced the world's economies to prioritize the need for better planning and more economy in using energy. In early July 2008, the price of a barrel of crude oil reached \$145, triple to what it was in January 2007, and more than five times more than the 2002 average. Oil prices returned to levels of around \$100 in late August and early September 2008, but trends remain uncertain. Rising prices of other forms of energy have paralleled oil trends; this has been particularly true of natural gas and electric power. Over the first six months of 2008 alone, gas prices rose by 80%, and are expected to grow still further to follow prices of crude oil.

These trends in energy prices have had a major impact on economies throughout the world. While some nations have reaped the fruits of abundant sources of energy (particularly the oil- and gas-rich countries), those lacking such resources have faced inflationary pressures, with far-reaching consequences on a downturn in the economy as a whole.¹ Rising oil prices have, however, had the greatest impact on developing countries that have not yet reached the level of energy efficiency common in the developed nations, as well as on economies greatly dependent on oil and gas imports.

In addition to the focus on rising energy prices, there is an ongoing debate on how to ensure long-term stable energy sources and protect the environment. Primary energy sources, such as oil and gas, are not sustainable in the long run (with reserves running low and prices rising). On the other hand, the impact of the energy sector on the environment is dominant, with the industry being one of the worst polluters, both locally and globally.^{a)}

These three problems (*rising prices; the need to ensure long-term energy sources, and environmental concerns*) can all be addressed by increasing energy efficiency. This approach, the efficient use of energy, involves the utilization of a lower quantity of energy to provide the same level of energy services.² Energy-efficient buildings, industrial processes, and transportation could together reduce projected global energy demand by one-third by 2050.^{b)}

a) Source: Serbian Development Bureau (2008).

b) Source: International Energy Agency (2006).

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1 In the late 1970s and early 1980s, high oil prices exerted powerful inflationary pressures, to which many central banks reacted by raising interest rates. The result of this was a slowdown in economic activity, and, in some countries, recession.

2 For instance, if a house thermally insulated, it will need less energy for heating; replacing regular light bulbs with fluorescent ones will yield the same levels of lighting at a lower consumption of energy.

The experiences of the developed countries have, however, shown that increased energy efficiency is primarily the result of more efficient technologies rather than changes to corporate practices. It should come as no surprise, then, that these countries have made it a priority to reduce energy consumption, increase efficiency, and ensure greater reliance on renewable energy by 2020.³ As Serbia is highly dependent on energy imports, its degree of energy efficiency needs to be analyzed, and mechanisms devised for its improvement.

2. Serbia: Lagging Behind Other Transition Countries

Current trends in the global energy markets and the importance accorded to energy efficiency have resulted in the development of a number of indicators designed to measure it. Still, lack of available data, especially for developing countries, coupled with other methodological problems, makes it impossible to use some of these indicators, or at least denies them comparability.⁴ Therefore, this analysis of Serbia's energy efficiency will use the following indicators:

1. *Primary energy consumption per capita* (ratio of total primary energy consumption to population);⁵
2. *Primary energy consumption required to generate €1,000 of GDP* (ratio of total primary energy consumption and GDP in thousands of euros);
3. *Energy transformation efficiency* (how much primary energy is needed to produce one unit of final energy),⁶ and
4. *Industrial energy efficiency* (ratio of final energy consumption by industry to value generated by industry in thousands of euros).⁷

Serbia's primary energy consumption (PEC) per capita stood at 1.95 tons of oil equivalent (TOE) in 2005, nearly two times less than the European average. Still, this indicator cannot be taken as an entirely reliable gauge of energy efficiency for countries at a lower level of development. This is so primarily because energy consumption in the initial phases of economic development is, relatively, more the result of household consumption than of economic activity, which is still at a low level. Economic growth and development leads to significantly greater energy use by industry and transport, and to increasing energy efficiency. As Serbia is still in the initial phase of economic development, the share of energy consumption by households in the total is higher, although a downward trend can be observed lately.

Table L1-1. Serbia: Final Energy Consumption by Sector of Economy

	2005	2006	2007*
Total Consumption (mn toe)	7,367	7,360	7,622
Industry	30.1%	35.1%	35.1%
Transport	26.9%	24.1%	25.2%
Other Consumers (households)	43.0%	40.8%	39.7%

Source: Serbian Ministry of Mining and Energy.

toe – tons of oil equivalent.

* Estimate.

3 In December 2007, the US president ignored substantial pressure from the automotive industry lobby and signed the Energy Independence and Security Bill into law. This piece of legislation requires the average fuel consumption of all motor vehicles sold in the US to be brought down from the current 9.4 liters to 6.7 liters per 100 kilometer by 2020. This is the first such measure enacted in the US in the past 30 years.

4 For more information see "Energy Efficiency Measurement", EIA, www.eia.doe.gov.

5 *Primary energy*, or primary energy sources, means naturally-available energy that has not been processed. These can be 1) fossil (coal, crude oil, natural gas), 2) nuclear (uranium, thorium), and 3) renewable (sunlight, wind, water, biological or geological energy).

6 *Final energy* is energy available to the end user (heating, electrical power, various fuels, etc).

7 For the sake of comparability, consumption of all types of energy is expressed in tons of oil equivalent. This unit represents the quantity of fuel (coal, gas, uranium, etc.) providing the same heat as the burning of one ton of crude oil.

If, on the other hand, we consider the PEC required to generate €1,000 of GDP, it becomes clear that Serbia is spending 4.6 times more energy than the European average (Table L1-1). In this respect Serbia is considerably less efficient than many transition countries, though more efficient than Lithuania, Romania, and Bulgaria.

Table L1-2. Energy Efficiency Indicators

	PEC per capita (toe)	PEC required to generate €1,000* of GDP (toe)	Energy transformation efficiency** (%)	Electrical power consumption per capita (MWh)	Industrial energy efficiency (toe/€1,000 of GVA)
EU27	3.69	0.21	64.5	5.61	0.15
Bulgaria	2.56	1.58	47.8	3.31	1.15
Croatia	2.01	0.42	70.8	3.23	0.23
Czech Rep.	4.38	0.82	57.6	5.41	0.46
Estonia	4.13	0.97	50.0	4.47	0.40
Hungary	2.77	0.54	64.7	3.20	0.23
Latvia	2.05	0.64	84.8	2.47	0.45
Lithuania	2.51	0.95	51.8	2.32	0.34
Poland	2.46	0.58	60.9	2.59	0.32
Romania	1.81	1.16	62.6	1.80	0.75
Serbia	1.95	0.96	50.8	3.52	0.61
Slovakia	3.60	0.87	54.6	4.24	0.49
Slovenia	3.66	0.32	66.8	6.38	0.23

Source: Eurostat, Serbian Ministry of Mining and Energy, author's calculations.

* GDP is given at constant 1995 prices to discount inflation and exchange rate effects.

** Total final energy in relation to primary energy.

toe – tons of oil equivalent; PEC - Primary Energy Consumption. GVA - Gross Value Added.

The low level of energy efficiency in Serbia is to some extent due to significant losses during energy transformation. The efficiency of energy transformation in Serbia remains one of the lowest in Europe, which becomes even more important when compared with the situation in Slovenia and Croatia, countries that shared a common energy framework with Serbia until as recently as some 20 years ago. However, it needs to be borne in mind that energy transformation efficiency is greatly dependent on the primary source. Transformation losses are lowest for nuclear energy, slightly higher for gas, with oil and coal coming last. The difference between the most and the least efficient energy source, when it comes to transformation, can be as much as fourfold. Therefore, countries using mainly coal as their source of primary energy, Serbia included, are less energy-efficient than those basing their systems on nuclear power and gas. The key priorities of Serbia's energy sector over the next several years are thus continuing gasification and ensuring a stable gas supply.

Electric power consumption per capita in Serbia amounted to 3.52 MWh in 2005, while the European average was 5.61. However, the high per capita consumption of electrical power in developed countries is the result of its intensive utilization in the production process for the creation of value added, while in Serbia it is used predominantly by households and public and private companies for heating. Unlike gas prices, which are higher than in Bulgaria, but still lower than in other countries in the region, electric power costs some 2.5 times less in Serbia than the regional average.

Table L1-3. Average Electric Power and Natural Gas Prices for Households, 2007

	Electrical Power	Gas
	Euro cents/kWh	Euros/MJ
Czech Rep.	16,83*	9.534
Slovenia	15,38*	14.920
Slovakia	11.49	-
Hungary	11.44	11.838
Romania	9.63	9.436
Croatia	8.06	8.040
Montenegro	6.32	-
Bosnia-Herzegovina	6.27	-
Bulgaria	5.88	6.626
Albania	5.74	-
Serbia	4.50	7.298

Source: Eurostat, Serbian National Power Generation Company, Serbian National Gas Distribution Company.

* Price at year-end 2007.

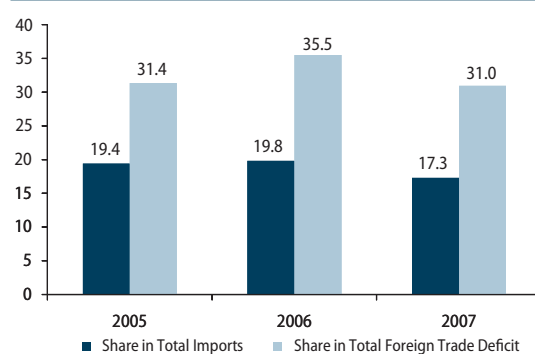
According to a report on links between energy consumption, the environment and poverty, prepared by the United Nations Development Program in Serbia and Montenegro, the average consumption of energy for heating in Serbia is higher than in North Europe.^{c)} This sounds paradoxical and should be taken as a warning especially given that North Europe's climate is much harsher. Half of all Serbian households spend 340 kWh a year to heat one square meter of space, four times as much as the West European average.^{d)}

c) Jelisavac, Sanja (2007).

d) Jelisavac, Sanja (2007).

Analyses have shown that final energy consumption by sector has been growing, with this growth still the slowest in the industry, where it has not yet reached 1990 levels (when consumption by industry stood at 3.92 million tons TOE). In addition, the industry is using about four times more final energy to generate €1,000 of gross value added (GVA) than the EU average, and some 2.5 times more than Croatia and Slovenia. One of the key reasons for this lag is the dramatic fall in industrial and economic activity during the 1990s, and the sluggish production growth since 2001, which has not been accompanied by a rise in energy efficiency.

Low energy prices make Serbia a very attractive destination for foreign investors. However, this also carries certain negative consequences. Administrative controls on prices preclude optimal allocation of energy consumption, thus reducing the efficiency of the energy sector as a whole. Serbia's energy efficiency is among the lowest in the region, and, due to lack of usage planning, energy is often in short supply (this is especially true of gas). In addition, the gas distribution network is well-developed only in Vojvodina, and, to a lesser extent, Belgrade. This is one of the reasons why most foreign companies opt to invest in one of these two regions, which has a significant impact on increasing regional differences within Serbia.

Graph L1-4. Serbia: Share of Energy Imports in Total Imports; Share of Energy Deficit in Total Foreign Trade Deficit, in %

Source: SBS.

Serbia imports some 80% of its annual crude oil consumption, and about 90% of its natural gas. This is why low energy efficiency is partly the cause of the country's high foreign trade deficit, especially with Russia.

Close to one-third of Serbia's foreign trade deficit stems from energy imports. Bearing in mind the problems arising from its high foreign trade and current account deficits, as well as its high reliance on imported energy, it is not difficult to conclude that low energy efficiency, in addition to affecting production, has a major impact on macroeconomic trends by worsening external imbalances in Serbia.

3. The Institutional Framework to Support Energy Efficiency Needs to be Strengthened

Efficient energy and energy resource utilization in Serbia came to the fore with the adoption of the Energy Act of 2004. This piece of legislation introduced energy efficiency requirements that need to be met before an energy permit and energy production license can be issued. The Act did not impose any specific requirements on energy consumers, but it did create a new legal framework and established an Energy Efficiency Agency. In addition, the Serbian government passed the National Energy Efficiency Program and set up five regional energy efficiency centers. These regional centers are to ensure the implementation of regional energy efficiency and renewable energy utilization programs. The Agency's activities, however, have so far focused mainly on implementing projects funded by an EAR Special Fund (demonstration projects, education, raising energy efficiency awareness), while a significant contribution to creating incentives aimed at increasing energy efficiency can only be expected in the future.

The experiences of countries where energy efficiency is high indicate that the following steps need to be taken to improve energy efficiency:

- Provide tax and other incentives for companies engaged in projects to improve energy efficiency;
- Ensure Guarantee Fund support for projects aiming at improving energy efficiency;
- Establish a legal framework to make possible the operation of companies implementing savings measures (at other companies or municipal offices), who would then be paid from funds achieved through the consequent energy savings, and
- Build an institutional framework to use the Clean Development Mechanism under the Kyoto Protocol to implement energy efficiency projects.

However, it needs to be stressed again that the greatest obstacles to the implementation of energy efficiency programs are the unrealistic parity and instability of energy prices, and, primarily, the relation between prices of electric power and fuel. In such a situation, energy consumers are not motivated to invest in energy efficiency projects. In addition to this financial aspect, the barriers also have a pronounced social dimension. In Serbia, energy is not a commodity. A major aspect of social policy is the control of energy prices and the general position of energy and energy resources, which is detrimental to programs aiming at boosting energy efficiency.

4. Key Measures for Promoting Energy Efficiency and Their Effects

The primary measure to promote reasonable energy use is the requirement of energy management for all consumers with a total installed capacity of more than 1 MW. This would involve monitoring energy consumption and constantly endeavoring to improve energy efficiency. This measure would be implemented gradually, would not require additional investment (i.e. could be put in place using funds planned for ongoing maintenance), and, judging by several years of experiences in the developed countries, would result in savings in industry, energy utilities, and public utility companies of at least €24 million annually.^{e)} To implement this measure it would first be necessary to adopt legislation regulating reasonable energy usage.

Energy consumption by industry can be cut by 15% by 2012. There is abundant potential for doing so by (a) improving the combustion process (energy consumption by industry can be reduced by 2-3%, which would lead to savings of some €28 million in fuel costs); (b) improving control and regulation of energy use by the industry (where, judging by experiences of countries that have implemented this, it would be possible to raise energy efficiency by 5%, which would cut energy costs by some €56 million for the industry as a whole); and (c) using waste heat generated by power plants and production processes (which would result in savings of up to 20% of overall heating production).

e) Source: Serbian Ministry of Mining and Energy.

As for the transport sector, rejuvenation of transport fleets is one of the key issues. The situation calls for measures to be taken to stimulate the purchase of new cars and other vehicles, and discourage the continuing use of those older than 15 years.

Switching from electric to other forms of heating would reduce the strain on the power generation and distribution system, with potential savings in electric power of about €60 million. In addition, exchanging just two regular 100 watt light bulbs per household to similar 20 watt fluorescent bulbs would result in electrical power savings of €28 million, while the initial investment would be repaid in eight months.

5. Concluding Remarks

Energy efficiency gains in importance in a situation of growing energy prices and the high dependence of production on energy, as well as reliance on energy imports. In such circumstances – having learned from rather unpleasant experiences – most countries are clearly opting for reducing consumption and increasing overall energy efficiency. Increasing energy efficiency is accompanied by numerous benefits for the economy as a whole: energy costs go down, as does investment into energy infrastructure; a country's competitiveness increases; consumer wealth grows, etc.

The route of improving energy efficiency is definitely one that Serbia should follow, especially if one considers the fact that the situation in Serbia is distinctly less favorable than in the world's developed nations, or even than in its immediate neighborhood. If an improvement is to be effected, the professional community needs to focus attention on the issue, and energy efficiency must be made a priority in drafting future Serbian economic policy.

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Old-age Income Replacement by Pension System in Serbia – Measurement and International Comparison

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There is some confusion in Serbia when it comes to the role of the pension system, pension system indicators, what they are designed to measure, or what one would like them to measure. This paper therefore explores the replacement rate in Serbia – the most commonly used indicator of old-age income maintenance in international analyses.

The replacement rate of persons with 40 years of service is somewhat above 70% of their last wage. This is significantly below the 2003 level when the pension benefit of the same worker could compensate for almost his entire pre-retirement income. However, the replacement rate is somewhat higher than it would have been had the Swiss formula stayed in place.

In the international context, the replacement rate is currently at the EU-10 countries' level, and is somewhat lower than in EU-15. In the final analysis, however, the replacement rate in Serbia, calculated on the basis of current legal provisions, is significantly lower than in all other European countries.

An optimum balance should be struck between the need to cut expenditure on the one hand, and the need for old-age income maintenance on the other. Over the short term, this could imply the reinstatement of the Swiss formula, which would enable the maintenance of income and pensions in payment somewhat in line with total growth while, at the same time, generating substantial savings.

Over the medium term, general point indexation should be changed so as to encompass wage growth to the greatest possible degree, while appropriate indexation of benefits in payment should also be taken into account. Some measures on the revenue side, such as the expected employment growth, could enable the funding of the system.

1. Introduction

There is some confusion in Serbia when it comes to the role of the pension system, pension system indicators, what they are designed to measure, and what one would like them to measure – old-age income replacement provided by the public pension system (relative living standard), or the absolute living standard of pensioners (poverty prevention). I will therefore review some basic concepts related to the pension system, and introduce a *hypothetical replacement rate* as a standard measure of relative old-age income maintenance.

In this paper, I focus mainly on *relative living standard prevention* in old-age. Indicators designed to measure the *absolute living standard of pensioners* and poverty in old age are another set of important pension indicators; however, they are not the subject of this paper.

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I am grateful to Gordana Matković (Center for Liberal-Democratic Studies) for reviewing the article and to Nenad Rakić (Ministry of Labour and Social Policy) for very useful comments.

In the following section, some basic concepts of old-age income security and the role of the pension system are explained; in section 3 basic pension indicators are defined; section 4 provides calculations of hypothetical replacement rates – the most commonly used pension indicator in Serbia under various scenarios. Finally, the paper presents some comparable international data.

2. Old-age Income Security and the Role of Pension System

2.1. Smoothing consumption and old-age income replacement

According to the life-cycle hypothesis, individuals prefer smooth consumption. They maximize their utility by *smoothing life time consumption*, which means that an individual should consume approximately the same amounts in old-age as when he/she was working.

That basically means maintaining the pre-retirement standard of living. The question is what income level in retirement will maintain the pre-retirement standard of living? There are a number of studies analyzing this matter. For example, Palmer (1989) as in McGill (1989) states that "... it can be demonstrated that a total retirement income of 60-75% of an individual's *gross* earnings at retirement will enable him to enjoy a standard of living that is reasonably commensurate with what he enjoyed during the latter stages of his employment".

Similarly, Munell (2005) states that replacement does not have to be 100 percent of gross income for three main reasons. First, people need less gross income since they pay much less in taxes after retirement. Second, they no longer need to save a portion of their income for retirement. A final factor often mentioned is that work-related expenses, such as clothing and transportation, are either no longer necessary or are much reduced.

On the other hand, health care expenses increase in old-age. Therefore, how the health system is financed, what the quality is of health insurance in a country, how the costs of medicines are covered, etc. influence the amount of income needed in retirement compared to working time when health-related expenses are lower.

Finally, replacing the pre-retirement income in transition and emerging economies may not be appropriate. Such economies usually start with very low wages and see unprecedented economic and wage growth. Preserving the pre-retirement income and standard of living while an economy is booming does not mean much and, as a matter of fact, may produce social tensions.

2.2. Role of the pension system

From an individual point of view, income security in old age requires a *mechanism for consumption smoothing* and *insurance for longevity* (Barr and Diamond, 2006). "A central purpose of retirement pensions is consumption smoothing – a process which enables a person to transfer consumption from her productive middle years to her retirement years, allowing her to choose her preferred time path of consumption over her working and retired life".

When saving, people face a range of uncertainties, including the longevity risk – how long they are going to live. If saving individually, a person faces the risk of outliving those savings, or of consuming very little. Therefore, we need the insurer to "pool the risk" – the life expectancy of a larger group of people is better known (Barr and Diamond, 2006).

There are two major reasons for state/public intervention when it comes to the need for a pension savings mechanism – *paternalism* and *market failure* (Diamond, 1977)^a.

Individuals may save insufficiently due to *myopia*. "Myopia may be the result of an insufficient planning horizon or a high personal discount rate. Empirically, it is difficult to distinguish between both causes, but there are strong indications for the latter. A perceived high discount rate can be the result of restricted credit markets, the existence of other, more urgent, lifetime risks (such as sickness, disability, and family dissolution) or natural and political risks" (Holzmann and Hinz, 2005).

a) Some authors (Holzmann and Hinz, for example) classify both arguments under market failure, separating it into market failure from demand (myopia/paternalism) and supply side (absence of financial products).

Even if they want to save for retirement, people need adequate financial products – long-term retirement saving products and annuity products (insuring against an uncertain date of death). The rationale for public intervention is the lack or suboptimal supply of market-based retirement products. “Even when such products exist, they often require public intervention in the form of public education and guarantee funds” (Holzmann and Hinz, 2005).

Besides consumption smoothing and insurance, a public policy might have two additional objectives for a pension scheme. The first is *poverty relief*: a society might wish its pensioners to have a minimum standard of living in retirement. The second is a *redistributional objective*: a society might wish to distribute additional resources above the poverty level to certain members of society (Barr, 2004).

Overall, the pension system has multiple objectives – the most important being poverty reduction and consumption smoothing. A pension system is therefore said to be adequate when it manages to accomplish these two major goals: to provide the absolute level of retirement income (preventing old-age poverty), and to provide the relative level of retirement income (income replacement or maintaining the relative standard of living) (Holzmann and Hinz, 2005).

2.3. Types of pension systems – Bismarck vs. Beveridge

In recent years, there has been a theoretical debate over whether the pension (system) is meant to reduce poverty in old-age or to replace income. More precisely, the dilemma is whether *the public* pension system should provide income replacement, since it seems that there is not much discussion about the need for the mandatory pension system to provide it.

The answer to this question is also quite empirical. It depends on the way a particular country initially set up its pension system, i.e. what the aim of the pension system was at its foundation. In this regard, pension systems across the world can be crudely categorized into two types – Bismarck or Beveridge – according to their goals.

The goal of the Bismarck-type of pension system is to entirely replace income in old-age with the public system, while the Beveridge type is redistributional, with the major goal of relieving poverty in old-age. However, it is almost always a rule that in countries with the Beveridge pension system, private pension arrangements play a very important role in old-age income replacement, either formally mandatory or more often through extensive collective agreements.

3. Measurement of Old-age Income Replacement Provided by the Pension System

3.1. Indicators of income replacement in old-age

There are a number of pension system indicators in use. Which one to choose depends largely on what one wants to measure. As seen in the previous section, the pension system has multiple objectives, and therefore one may want to measure its various aspects. Hence these indicators are complementary and should be looked at together for a better understanding of a national pension system (EC-ISG, 2006).

The most commonly used indicator in pension analysis is the *replacement rate*. This is a ratio used to measure the extent to which pension systems enable workers to replace income. “The number is the spiritual descendent of life-cycle theory”, as it implicitly assumes that retirement consumption should be equated to some fraction of pre-retirement consumption (Mitchell, 1998). Hence, the replacement rate is the indicator that measures maintenance of the relative standard of living.

However, despite the broad use of the term replacement rate, there is no strict definition and one can come across various ratios that are dubbed the replacement rate in literature. This was also

noticed by Mitchell (2006) - “Despite the myriad ways in which the replacement rate concept is used, there is no single commonly agreed-on definition of the term, or exactly what it is intended to capture”.

What is recently usually referred to as the *replacement rate* (henceforth RR) is the ratio of *post-retirement income to pre-retirement income*. Defined in such a way, this is a micro/individual measure of income maintenance. It can be calculated on the basis of hypothetical or actual earnings.

Hypothetical (theoretical) replacement rates are calculated for a hypothetical worker with given earnings and a career profile (base case). As such, replacement rates can be used to describe the mechanisms by which pension systems work (EC-ISG, 2004). “Theoretical RRs have been developed to measure the extent to which pension systems enable workers to preserve their previous living standard when moving from employment to retirement” (EC-ISG, 2006).

Hypothetical replacement rates can be calculated as *current* - showing the design of the pension system for those retiring nowadays, or *prospective (expected)*, explaining what the pension system is designed to provide to future retirees.

When calculated for various earning levels, hypothetical RRs can also be used to assess the level of redistribution of the system i.e. type of the pension system. If the replacement rate is the same for various earning levels, the pension system is said to be the Bismarck type or earnings-related. If a pension benefit is flat or not strongly related to earnings (contributions) then replacement rates vary over earning levels. More formally, the *coefficient of variation of RRs* for various earnings levels can be used to assess redistribution - if the coefficient of variation is closer to zero, the system is more earnings-related, i.e. of the Bismarck type; if the coefficient of variation is higher, the system is redistributive or of the Beveridge type.

Naturally, the base case for which the hypothetical RR is calculated is not representative for some workers. Assumptions about the hypothetical worker are inevitably arbitrary and are not necessarily representative of a large number of real workers. Many beneficiaries will not have full contribution records. In fact, given the diversity of real-life situations, very few actual workers may represent a profile that closely resembles the hypothetical worker to whom the calculations apply. As such, theoretical replacement rate calculations are not meant to provide a picture of the average effective replacement rate guaranteed by pension systems. However, they allow us to analyze the design of the pension system and to compare pension systems in different countries. Hypothetical replacement rates should therefore be seen as one of a wider set of statistics that are required to assess the adequacy of a pension system (EC-ISG, 2004).

A more realistic measure of old-age income replacement is the *actual RR*. One of the advantages of *actual earnings replacement rates* is that they reflect the complexities of real-life workers. Sources of data used for the calculation of the actual RR could be survey data, as well as administrative (pension fund) data. However, both sources in Serbia are quite limited for such calculations.

In Serbia, whenever the pension system i.e. the living standard of pensioners is analyzed, the only indicator used is *average pension relative to average wage*. This is an aggregate/macro measure. This indicator tells what is the average living standard of pensioners is relative to the living standard of an average worker, under the assumption that wages and pension benefits are their main source of income. This macro measure captures the pension system design, but only to a certain extent. It reflects different general trends, such as maturing of pension systems, participation and length of contributions, evolution of pensions in payment etc. In the case of Serbia, this indicator also captures developments not only of old-age pensions, but disability and survivors as well.

The average pension relative to average wage indicator has been used in some other countries as well, especially in countries in the region. However, the use of this indicator is not as common and wide as the replacement rate. EUROSTAT has developed a somewhat similar indicator dubbed the *aggregate replacement ratio*, which is followed regularly in all EU countries. This indicator is defined as the age ratio of the median individual gross pension of 65-74 relative to median individual gross earnings of 50-59, excluding other social benefits. Detailed and quality

data, which would allow for the calculation and regular use of this indicator, is still not available in Serbia.

The net relative pension level was developed by Whitehouse (2005), and is defined as net individual pension divided by net economy-wide average earnings. It is seen as an indicator of pension adequacy, since it shows the benefit level that a pensioner will receive in relation to average earnings in the respective country. Individual replacement rates may be quite high, but the pensioner may still receive only a small fraction of economy-wide average earnings. If, for example, a low-income worker – who earned only 50% of economy-wide average earnings – has a replacement rate of 100%, the benefit will only amount to 50% of economy-wide average earnings.

For an average earner, the replacement rate and the relative pension level will be the same. The relative pension level may also be used to assess redistribution of the system, but the other way round of the RR – if the system is the Beveridge type (flatter benefits), then the relative pension level is constant for various earnings levels; and if the system is earnings-related, then at higher earning levels the pension benefit will be higher compared to average earnings. Hence, if the coefficient of variation is closer to zero, the system is redistributive i.e. of the Beveridge type; if the coefficient of variation is higher, the system is of the Bismarck type.

These indicators measure the relative living standard of pensioners, i.e. income replacement. Indicators designed to measure the absolute living standard of pensioners and poverty in old-age are another set of important indicators; however, they are not the focus of this paper.

3.2. International data and sources

Recent data on hypothetical replacement rates is available from **two main sources**, which use quite different methodologies of calculation. One source is the *European Commission/Indicators Sub-Group (ISG)*, providing the current RR as well as prospective (i.e. expected) RR; the second source is *OECD/Pensions at Glance* with only prospective (expected) RR. Both sources base their calculations on legislation currently in effect.

A. European Commission/Indicators Sub-Group (EC-ISG)

The Indicators Sub-Group (ISG) of the Social Protection Committee developed indicators to be used in the ‘Open Method of Coordination’ applied to pensions.

The replacement rate is defined as a ratio of the pension benefit over the final pre-retirement income (benefit in the first year of retirement/income during the year preceding retirement).

Under the EC-ISG methodology, replacement rates are calculated for the moment of pension take-up i.e. *current replacement rates*. This means that, for example, the RR for 2005 is the replacement of income for someone who exited the labor market in 2005 and retired. Reports also provide calculations of the *prospective RR* (for those retiring in 2010, 2030 and 2050). The prospective RR indicates the pension outcome under *current legislation*.

The RR is calculated for a hypothetical worker, a *single person with 40-year career length* (i.e. he/she started to work at 25 and retired at 65) with constant average earnings. In addition to this base case, replacement rates for alternative hypothetical cases of a worker characterized by a flat low earnings profile (2/3 of average earnings)^{b)} are calculated.

Pension income included in the calculations includes pension benefits from the first pillar (EU terminology meaning statutory i.e. mandatory schemes, regardless of whether the system is PAYG or funded, private or public)¹ and the second pillar (private occupational schemes). Gross RRs for the first and second pillar are available separately, while net replacement rates are presented only for the total amount –both the first and second pillars.

b) Both reports provide two additional earnings profiles – one starting at 100% rising to 200% at the end of career, and the other with earnings rising from 80% to 120%. These profiles are not used for analysis in this paper.

¹ The first pillar according to EU terminology includes both 1st and 2nd pillar according to WB terminology.

Macroeconomic assumptions are specific for each country. This is a problem for across-country comparison. The unique common assumption regards the rate of return on privately funded pensions, which was conservatively estimated to be 2% (net of charges) in 2004 calculations, but was changed to 2.5% in the 2006 report. Hence, an increase in the anticipated real rate of return, which may affect the RR. This may be reflected in an increase in the RR from 2004 to 2006 in countries where funded schemes exist. This again complicates to a certain extent the comparison between two time points. However, the portion of mandatory funded components within the first pillar is rather small. It was only recently (during the 1990s) that some EU countries, as well as Sweden, introduced the mandatory funded component into their pension systems. That will affect the future RR (in around 20 years' time).

B. APEX methodology (OECD Pensions at Glance and WB Pension Panorama)

The second source of data is a tool recently developed by Edward Whitehouse – the **APEX model** (Analysis of Pension Entitlements Across Countries). Data on various earning levels calculated by the APEX methodology is published in the OECD publication *Pensions at Glance* (2005 and 2007), as well as in the *World Bank Pension Panorama* (2006).

The replacement rate is defined as the ratio of the pension benefit as a share of individual lifetime-average earnings. Since under the baseline assumptions workers earn the same percentage of economy-wide average earnings throughout their career, lifetime average re-valued earnings and individual final earnings are identical. Therefore, there is no difference between the OECD and EC (ISG) definition for the baseline case – flat lifetime earnings.

Only *prospective (expected)* RRs are calculated by the APEX tool that reflects future entitlements under today's parameters and rules, for current workers *just entering the labor market at the age of 20*, and retiring after a full career i.e. at the statutory retirement age. Since the statutory retirement age varies across countries, the length of the full career varies as well (40 years for retirement at 60; 45 years for retirement at 65), though in most cases it is 45 years of service.

Besides the single average earner, RRs are calculated for various earnings levels - at 0.5, 0.75, 1.5 and 2 times average (mean) earnings. These are mines of information for analyzing whether a pension system is of the Bismarck or Beveridge type.

Replacement rates include *all mandatory* pension schemes for private sector workers, regardless of whether they are public or private. This includes mandatory private personal DC pensions, recently introduced in some countries (such as Hungary, Sweden, Poland, etc.). This is equivalent to the first pillar in EC-ISG terminology.

Systems with near-universal coverage are also included, provided they cover at least 90% of employees. For example, such a degree of coverage of occupational plans is achieved through centralized collective bargaining in the Netherlands and Sweden. In Canada, Denmark, the United Kingdom and the United States, there is a broad coverage of voluntary occupational pensions and these play an important role in providing retirement incomes. However, coverage is significantly below 90%, so they have not been included in the main results (OECD, 2005)^c.

Both gross and net RRs are calculated and presented in *Pensions at a Glance*, as well as in *Pension Panorama*.

Unlike in EC-ISG, the calculation of the RR for all countries is based upon a single *set of economic assumptions*. Although it is not a realistic assumption, it ensures that the outcomes of different pension regimes are unaffected by different economic conditions (OECD, 2005). Real earnings are assumed to grow 2% in real terms (nominal 4.55%) with an inflation rate of 2.5%. The real rate of return on DC schemes (net of administrative fees) is estimated at 3.5 percent per year.

c) *The Denmark occupational scheme is included in the 2007 report; most likely the coverage increased to above 90%. That is the reason why the RR for Denmark is significantly higher in the 2007 report than in 2005.*

C. Comparability/compatibility of data

These two sources are both very informative, though each has its disadvantages. Hence the best approach is to combine them in analysis.

Macroeconomic assumptions in the APEX model are the *same* for all countries. Although this is not realistic, it is convenient for analysis of the design of a pension system since it isolates only the effect of the pension system. On the other hand, different pension system solutions, such as indexation/valorization, are very sensitive to the average macroeconomic environment – wage growth in particular – and therefore fixed assumptions for all countries can be viewed as a limitation as well.

Conversely, assumptions used in EC-ISG calculations differ significantly across member states, which reflects reality, though reducing international comparability and blurring the effects of the pension system design. Moreover, the assumptions about wage growth rates and other macroeconomics indicators, especially in the long term, are arbitrary. Finally, this makes the two sources not directly comparable.

The real rate of return is assumed to be higher in the APEX methodology (3.5% net of charges) compared to EC-ISG (2-2.5%); due to this difference, RRs in countries with funded systems could be higher in APEX reports.

APEX data provides only the *prospective RR* for the generation just entering the labor market, while EC-ISG provides both current and prospective RRs. Hence only the prospective RR from the EC-ISG source can be compared to APEX data.

Furthermore, career profiles in the two sources are different – EC-ISG replacement rates are based on a career length of 40 years, while the APEX hypothetical base case varies from country to country, but in most countries is 45 years of service. Therefore, APEX RRs could be expected to be higher than those reported by EC-ISG.

Both sources provide net and gross replacement rates. International comparability of gross replacement rates is limited for the same reason comparison of gross wages is limited – the way in which contributions are shared between employers and employees. For a given labor cost, a higher share of contributions paid by the employer implies lower gross earnings of the employee and hence a higher gross replacement rate. Another reason for using net is to take into account the different tax treatment of pension income and income from labor (EC-ISG, 2006). Therefore, net RRs are certainly more preferable indicators for comparison. However, the disadvantage of EU-ISG data is that it contains net RR data for the first and second pillars in total and not separately. On the other hand, only a few EU-15s have taken into account second pillar benefits in the replacement rate. APEX data in general is calculated for the first pillar only (except for near-universal coverage of the second pillar).

4. Old-age Income Replacement in Serbia

4.1. Current and prospective replacement rates in Serbia

The only pension system indicator used in Serbia is the *ratio of average pension to average wage*. This ratio is often referred to as the *replacement rate* in Serbia, and therefore causes much confusion when it comes to international comparison.

In order to analyze and understand a country's pension system, a single measure cannot be informative enough. Complementary measures need to be taken into account, including the theoretical replacement rate (RR).

Box 1. Pension System in Serbia

The pension system in Serbia is the *point system*, introduced in 2003. The pension benefit is defined as a product of a number of personal points and the general point value. The *personal point (PP)* is defined by the following formula:

$$PP=PC*YS$$

where *PC* is the personal coefficient and *YS* years of service

The *personal coefficient (PC)* represents the average of annual personal coefficients, whereas the *annual personal coefficient* represents the ratio of total earnings of the insured for each calendar year to the average annual earnings in the country for the same calendar year. *Years of service* can amount to 45 years at most. Each year of service equals 1, and one year of service above 40 years is calculated as 0.5. When the level of an old-age pension is calculated for a female, years of service are increased by 15%, but the increased service can add up to 40 years at most.

Under the 2003 Law, pensions in payment and the general point were indexed four times a year to CPI growth and the average wage growth in Serbia in the previous quarter, in the percentage that represented the sum of one half percent of CPI growth (fall) and one half percent of wage growth (fall) – the so-called Swiss formula.

Pursuant to the 2005 amendments to the Law on Pension and Disability Insurance, pensions in payment and the general point were indexed twice a year only to CPI growth, and a so-called interim phase was envisaged, in which the general point and pensions in payment were indexed to the modified Swiss formula in the 2006-2008 period, with wage growth taken into account in a lower percentage each year.

January 2008 saw an extraordinary indexation of 11%, pursuant to Article 75 of the amended Law (in the event the average pension in one year is lower than 60% of the net average wage, extraordinary indexation will take place in January of the next year). Another extraordinary indexation will take place in October (an additional 10% to regular indexation), in response to the demand of a member party of the present Serbian coalition government.

Calculations of the hypothetical RR in this section are based on the EC-ISG methodology – 40 years of service with flat average earnings. This career profile is *not a representative case* for Serbia – for example, the average years of service for existing pensioners is 33 years for old-age pensioners. However, this is a useful measure for assessing the system design – what is the replacement that a person may obtain if he/she works (pays contributions) the full service span? Furthermore, this will allow for comparison with international data.

Accordingly, the replacement rate is calculated as a ratio of the pension benefit for the base case (personal coefficient 1 and 40 years of service, i.e. 40 personal points) to pre-retirement wage i.e. average net pension in Serbia for the previous year. The pension benefit is deflated to the previous year's prices, to be comparable with pre-retirement wages data in real terms.

The hypothetical net RR for various scenarios is presented in *Table L2-1*. We can see that a full-career worker was able to replace almost his entire income (real terms) in 2003, when the RR started to fall. This fall became more pronounced after 2006 due to the amendments made to the 2005 Law on Pension Insurance. (For details see Box 1.) However, due to the so-called “SPS amendment” to the same Law – i.e. the January 2008 extraordinary indexation – as well as the recent political pressures for an additional 10% increase in October, the replacement rate in 2008 is higher than it would have been if the Swiss formula had stayed in place since 2003.

Box 2. Projection Assumptions

Assumptions for wage and CPI growth for the period 2009–2011 are taken from the Memorandum on Economic Policy. Afterwards, wages are estimated to grow 5% in real terms until 2020, and 3% in real terms as of 2021. The average annual inflation is estimated at 4% until 2020 and 2% afterward. Assumptions about wage and CPI growth are rather arbitrary, and serve primarily as an illustration. The underlying premise is that Serbia will undergo a period of convergence to more developed EU countries, which would imply rather high growth rates.

These assumptions are used for RR calculations in Tables L2-1 through L2-5.

	2008	2009	2010	2011-2020	2021-2050
CPI growth	8.0	6.0	6.0	4.0	2.0
Real wage growth	5.3	4.9	5.5	5.0	3.0

Source: Memorandum on Budget and Economic and Fiscal Policy for 2009 with Projections for 2010 and 2011. From 2012, estimates are based on the estimates in the EU8 and EGISG Report too.

In order to be comparable with APEX data (Table L2-6) macroeconomic assumptions, though unrealistic, were set to be in line with the APEX methodology – inflation is 2.5% and earnings growth 2%.

Table L2-1 also presents three possible scenarios for the next two years. The *first scenario* envisages continued implementation of the present Law, i.e. CPI indexation; the *second scenario* presupposes the reinstatement of the Swiss formula indexation starting from 2009; while the *third* represents the demand of one of the partners in the coalition government that the average pension to wage ratio should be 65% in 2009, and 70% in 2010^d. Under the third scenario, the hypothetical replacement rate would amount to as much as 80% in 2009, and would outstrip 90% in 2010.

d) Indexation, in the manner defined by Article 75 of the Law, practically implies extraordinary indexation in January 2009, so that the 2008 ratio of average pension to average wage is brought to the 65% level (following indexation to wages until the end of the year), and then by the same rule-indexation in January 2010, so that the 2009 ratio of average pension to wage is raised to the 70% level.

Table L2-1. Hypothetical Net Replacement Rates (male), % of Last Salary, Various Scenarios, 2003–2010

	2003	2004	2005	2006	2007	2008	2009	2010
Actual situation (until 2008)	91.6	85.3	80.5	77.0	72.4	72.3	..	..
Indexation with CPI since 2009 (current Law)	..	..	..	..	..	..	70.2	67.7
Swiss formula since 2009	..	..	..	..	..	..	71.9	71.0
Average pension is 65% of average wage in 2009 and 70% in 2010	..	..	..	..	..	..	80.3	92.5
Swiss formula since 2003	91.6	85.3	80.5	77.3	74.6	66.7	66.4	65.5

Source: Author's calculation. Details on assumptions are presented in Box 2.

Note: Hypothetical net RR is calculated according to EC-ISG methodology

Average flat earner, 40 years career length, single, male.

Hypothetical net RR= net pension during first year of retirement for average earner (personal coefficient 1) 40 years career length (personal point 40*general point)/previous year net average wage.

In Table L2-2 net RRs for different income levels are presented, as well as the net relative pension level. The pension system in Serbia is earnings-related or of the Bismarck type. This can be seen from the coefficient of variation of RRs, which is very low, i.e. zero.

The system's redistribution has only slightly increased in recent years (due to the increase in the minimal pension since the adoption of the 2005 Law). This can be concluded also by looking at the coefficient of variation of RRs, which rose in 2007, while the coefficient of variation of the net relative pension level decreased.

Table L2-2. Net Replacement Rate and Relative Pension Level, Various Earnings Levels, 2004 and 2007

	Individual earnings, multiple of economy-average							Coefficient of variation
	0.3	0.4	1	2	3	4	4.5	
2004								
Net replacement rate (% of individual pre-retirement salary) women (35- 40 years service)	98.6	85.3	85.3	85.3	85.3	85.3	75.9	0.08
Net relative pension level (% of economy-average earnings) women (35- 40 years service)	29.6	34.1	85.3	170.7	256.0	341.4	341.4	0.76
2007								
Net replacement rate (% of individual pre-retirement salary) women (35- 40 years service)	110.6	83.0	72.4	72.4	72.4	72.4	64.3	0.20
Net relative pension level (% of economy-average earnings) women (35- 40 years service)	33.2	33.2	72.4	144.8	217.2	289.6	289.6	0.73

Source: Author's calculation. Details on assumptions are presented in Box 2.

Note: Hypothetical net RR is calculated according to EC-ISG methodology.

Average flat earner, 40 years career length, single, male.

Hypothetical net RR= net pension during first year of retirement for average earner (personal coefficient 1) 40 years career length (personal point 40*general point)/previous year net average wage.

Table L2-2 illustrates hypothetical RRs by gender – male (base case: 40 years' service) and female with 35-40 years of service. Accordingly, women with 35 years of service earn the same pension as men with 40 years. This is due to the 15% increase in years of service for women in the pension formula, but only up to 40 years of service and no more. This increase is designed so that 35 years of service for women is equal to 40 years of service for men.

Table L2-3. Prospective Hypothetical Net Replacement Rates, % of Last Salary, Different Scenarios – Base Case (male)

	2008	2010	2015	2020	2030	2050
CPI indexation from 2009	72.3	67.7	53.9	42.6	31.9	17.9
Swiss indexation from 2009	72.3	71.0	63.7	56.7	49.7	37.2
Swiss formula	66.7	65.5	58.8	52.4	45.8	34.4

Source: Author's calculation. Details on assumptions are presented in Box 2

Note: Hypothetical net RR is calculated according to EC-ISG methodology.

Average flat earner, 40 years career length, single, male.

Hypothetical net RR= net pension during first year of retirement for average earner (personal coefficient 1) 40 years career length (personal point 40*general point)/previous year net average wage.

Calculations of *prospective (expected) RRs* for Serbia (Table L2-3) show low benefits in the long term according to different scenarios, though the Swiss-formula preserves income-maintenance to a certain extent, especially in the short/medium run. This projection, however, depends a great deal on initial assumptions about wage growth (this is illustrated in section 5 of this paper)

In general, replacement rates are affected by *valorization* – how past earnings are “valorized” to reflect changes in living standards between the time pension rights are accrued and the time they are claimed (Whitehouse, 2006b). In the case of Serbia, this refers to general point indexation. On the other hand, *indexation* refers to the policy for the up-rating of pensions in payment during retirement, in contrast to valorization, which covers the period before retirement (Whitehouse, 2006b).

Valorization that does not fully take into account wage growth will invariably lead to a decline in the replacement rate. The extent of the decline will depend on the valorization formula (to

what extent, and if at all, wage growth is taken into account), but it will also depend greatly on the speed of real wage growth – the higher/more rapid real wage growth is, the lower the replacement rates are, and vice versa.

It is actually very common to have different valorizations than indexation. For example, the most common practice – followed in 15 OECD countries – is to revalue earlier years' pay in line with the growth of average earnings in the economy. Conversely, pension benefits are usually indexed in line with consumer prices, or some combination of consumer prices and earnings growth (OECD, 2007). The aim is to maintain the level of old-age income at the pre-retirement level, while savings in pension costs are made possible by CPI indexation.

On the other hand, income replacement has a somewhat different meaning/importance in a transition country such as Serbia, compared to developed countries. The fact that someone has adequately replaced his/her income today does not say much about his/her income in five to 10 years' time. This is due to the fact that these are growing economies and real wage growth is very high. For instance, those who retire today will – in the event of CPI indexation and valorization, receive significantly lower income in several years' time compared to the whole population. In the case of different valorization and indexation (valorization with wage growth and CPI indexation), retirees will be receiving lower incomes not only relative to the whole population, but also relative to same-profile workers who retire later.

Therefore, in a transition economy it is more important to distinguish between the replacement rate at retirement and pensions in payment than it is in a developed country.

Table L2-4. Different Valorization of General Point (real wage growth) and Indexation of Benefits in Payment (CPI) in Serbia

	2003	2005	2010	2015	2020	2030	2050
Scenario 1. since 2003							
Replacement rate (<i>in % of last salary</i>)	95.3	92.2	88.5	89.3	89.3	91.1	91.1
Benefits in payment for those retired in 2003 (<i>in % of new pensioner benefit</i>)	..	77.9	57.4	45.2	..	..	..
Scenario 2. since 2006							
Replacement rate (<i>in % of last salary</i>)	91.6	80.5	76.6	77.4	77.4	78.9	78.9
Benefits in payment for those retired in 2003 (<i>in % of new pensioner benefit</i>)	..	..	74.3	58.5	46.2	..	..
Scenario 3. since 2009							
Replacement rate (<i>in % of last salary</i>)	91.6	80.5	73.7	75.1	75.1	76.5	76.5
Benefits in payment for those retired in 2009 (<i>in % of new pensioner benefit</i>)	..	..	95.6	75.3	59.5	..	..
3a. 5% real wage growth	..	..	94.6	71.5	54.0	..	..
3b. 6% real wage growth	..	..	97.2	84.4	73.2	..	..
3b. 3% real wage growth	..	..	..	..	..	..	..

Source: Author's calculation. Details on assumptions are presented in Box 2.

Note: Hypothetical net RR is calculated according to EC-ISG methodology.

Average flat earner, 40 years career length, single, male.

Hypothetical net RR= net pension during first year of retirement for average earner (personal coefficient 1) 40 years career length (personal point 40*general point)/previous year net average wage.

Table L2-4 shows what the effects would have been of different valorizations (i.e. indexation of general point) and indexation of pension benefits in Serbia. Two hypothetical cases are presented: (a) what would have been the effects if a different indexation of general point and pensions in payment had been in force since 2003 or 2006, and (b) what could happen in future if different indexations relative to three different wage growth scenarios was adopted as of 2009.

For example, if valorization with wage growth and CPI indexation had been in place in 2003, those retiring in that year would have been able to replace income by 95%; however, in seven years' time they would have a pension benefit only 57.4% of that of the same type of worker retiring in 2010. Differences arise over a much shorter period as well – two to three years.

For higher income-earners, this difference makes a very significant gap in absolute terms. Specifically, someone whose lifetime earnings were three times higher than the average (personal coefficient - 3), and who retired in 2003, would now receive a pension by 28,631 dinars lower than a same-profile person who retired in 2008.

4.2. Serbia in the international context

Due to the reasons explained in section 3.2, it is quite difficult to analyze Serbia in the international context, and care needs to be exercised in interpreting the data. Since both data sources are very informative, but each with its limitations, replacement rates for Serbia according to both methodologies are presented and compared.

EC-ISG data is useful for analysis since it contains both current and prospective replacement rates. However, net RR data, which is a more preferable indicator to the gross RR in this report, is given jointly with second pillar (occupational schemes) RRs. In order to enable more adequate data interpretation, the last two columns in Table L2-5 provide additional information on the nature of pension systems – what is approximately the share of the second pillar in current RRs, and which countries have a privately funded tier as part of the first pillar².

Pension systems in Europe are usually public, pay-as-you-go systems. The private component within the first pillar (second pillar in World Bank terminology) practically exists only in the EU-8 countries, and this component affects only the prospective (expected) replacement rate, because pensions from this component are still not paid. As regards the second pillar (pension plans), they are covered by the net replacement rate in six of the EU-15 countries. As we are interested primarily in the replacement rate provided by public systems, comparison is made somewhat difficult. However, when the average replacement rate in all EU-15 countries is compared with the average of nine countries that presented net replacement rates for the first pillar only, we see no significant differences.

Table L2-5 presents EC-ISG data for the EU, and RRs for Serbia calculated according to the same methodology. Replacement rates for Serbia are given for two scenarios starting from 2009 – CPI indexation, and reinstatement of the Swiss formula.

In 2005, the replacement rate in Serbia was at the level of the EU-15 countries' average, and above the EU-10 average. If the general point was indexed in line with the Law now in effect (i.e. to CPI growth), the replacement rate would already in 2010 be lower than in the EU-10 countries. If the Swiss formula were reinstated, the replacement rate would be at the EU-10 countries' level in 2010. Long-term replacement rates are comparatively low in both cases, but the Swiss formula would maintain the income level much more favorably over the medium term.

² Pillar taxonomy used in this paper is the so-called EU taxonomy, unlike WB where the privately funded tier of 1st pillar is termed as 2nd pillar.

Table L2-5. Net Replacement Rate (1st & 2nd pillar) – Average Male Earner

	2004/05	2010	2030	2050	Change 2050/05, percentage points	Share of 2 nd pillar gross RR in total (2005)	Private component in 1 st pillar (% of gross wage)
EU-15							
Austria	80.3	80.7	81.7	84.0	3.7	No	No
Belgium	67.0	72.0	76.0	74.0	7.0	9.3%	No
Denmark	71.3	73.8	77.0	76.1	4.8	7.4%	1.0
Finland	62.6	66.2	65.7	63.6	1.0	No	No
France	79.7	75.9	66.4	62.6	-17.1	No	No
Germany	63.0	67.0	65.0	67.0	4.0	No	No
Greece	115.0	117.0	121.0	106.0	-9.0	No	No
Ireland	78.0	78.0	78.0	78.0	0.0	53.7%	No
Italy	87.8	88.5	90.2	92.0	4.2	No	No
Luxembourg	98.3	98.4	98.8	98.8	0.5	No	No
Netherlands	92.0	91.3	89.6	90.1	-1.9	58.2%	No
Portugal	90.7	92.7	91.8	91.8	1.1	No	No
Spain	97.2	97.2	91.6	91.6	-5.6	No	No
Sweden	71.4	67.8	60.2	56.7	-14.7	21.7%	2.3
United Kingdom	82.0	83.0	84.0	85.0	3.0	75.8%	No
<i>EU-9 average</i>	<i>86.1</i>	<i>87.1</i>	<i>85.8</i>	<i>84.2</i>	<i>-1.9</i>		
EU-15 average	82.4	83.3	82.5	81.2	-1.3		
EU-8 + 2							
Czech Republic	79.0	75.0	70.0	70.0	-9.0	No	No
Hungary	101.9	114.0	96.0	98.1	-3.8	No	8.0
Poland	77.7	77.7	63.8	43.9	-33.8	No	7.3
Slovak Republic	63.1	62.8	62.7	63.7	0.6	No	9.0
Slovenia	82.0	75.0	65.0	60.0	-22.0	No	No
Latvia	77.6	80.1	67.1	71.8	-5.8	No	10.0
Estonia	41.1	42.6	41.6	43.1	2.0	No	6.0
Lithuania	55.0	44.0	48.0	51.0	-4.0	No	5.5
EU-8 average	72.2	71.4	64.3	62.7	-9.5		
Cyprus	52.0	53.0	66.0	70.0	18.0	No	No
Malta	87.9	88.0	61.2	34.3	-53.6	No	No
EU-10 average	71.7	71.2	64.1	60.6	-11.1		
Serbia (CPI since `09)	80.5	67.7	31.9	17.9	-62.6		
Serbia (Swiss formula since `09)	80.5	71.0	49.7	37.2	-43.2	No	No

Source: EC-ISG report 2006; Author's calculation for Serbia.

Note: Hypothetical net RR is calculated according to EC-ISG methodology.

Average flat earner, 40 years career length, single, male.

Hypothetical net RR= net pension during first year of retirement for average earner (personal coefficient 1) 40 years career length (personal point 40*general point)/previous year net average wage.

In Table L2-6, APEX data for high-income and East European countries is presented, together with data for Serbia, calculated according to the APEX methodology. As already mentioned, these are prospective RRs – for those who have just entered the labor market, and who will retire in 2047.

The first thing that can be noticed is that the prospective RR for Serbia calculated according to the APEX methodology is significantly higher compared to the previous EC-ISG methodology. This is due to two reasons: longer years of service (45 years, i.e. 42.5 in the APEX methodology instead of 40 years in EC-ISG) and more importantly, lower projected wage growth rates (2% real growth), again in line with the APEX methodology. However, again the prospective RRs for Serbia are quite low in comparison to all other countries.

Another interesting finding is that the pension system in Serbia has the closest link of contributions to benefits among all observed countries, together with Greece, and followed by Italy, Estonia, Finland and a few others.

Table L2-6. Prospective Net Replacement Rates by Earning Levels (male), International Comparison

	Individual earnings, multiple of average						Coefficient of variation
	0.5	0.75	1	1.5	2.0	2.5	
High-income OECD countries							
Australia	77.0	61.2	52.40	43.1	36.5	31.3	0.42
Canada	89.4	67.6	57.10	39.5	30.6	25.1	0.61
Japan	80.1	66.3	59.10	51.9	44.3	35.8	0.35
Korea	65.3	51.4	44.30	38.1	34.0	27.8	0.39
New Zealand	125.0	115.0	109.80	105.6	104.2	100.1	0.10
United States	61.4	54.6	51.0	44.9	39.0	35.5	0.25
EU-15							
Austria	91.2	93.4	93.2	93.5	79.3	63.2	0.18
Belgium	82.7	63.8	62.8	50.6	40.6	34.2	0.39
Denmark	95.6	68.0	54.1	42.5	35.5	30.8	0.56
Finland	90.7	78.8	78.8	79.2	78.3	79.3	0.07
France	98.0	70.8	65.0	58.7	55.3	53.4	0.30
Germany	61.7	66.6	71.8	79.2	67.0	54.2	0.15
Greece	99.9	99.9	99.9	99.9	99.9	99.9	0.00
Ireland	63.0	47.0	36.6	27.4	21.9	18.3	0.61
Italy	89.3	88.0	88.8	88.4	89.1	89.0	0.01
Luxembourg	125.0	115.0	109.8	105.6	104.2	100.1	0.10
Netherlands	82.5	88.2	84.1	85.8	83.8	82.8	0.03
Portugal	115.9	79.8	79.8	84.4	86.3	86.9	0.18
Spain	88.7	89.4	88.3	88.4	83.4	68.8	0.11
Sweden	90.2	76.4	68.2	70.1	74.3	75.0	0.12
Switzerland	71.4	68.9	67.3	53.0	41.4	34.3	0.35
United Kingdom	78.4	57.7	47.6	38.2	29.8	24.7	0.54
EU-15 average	94.9	83.4	79.7	76.3	71.3	66.3	0.25
Eastern Europe							
Czech Republic	67.1	73.8	75.2	74	61.8	52.9	0.16
Estonia	59.9	60.6	60.9	61.3	61.5	61.7	0.01
Hungary	86.6	90.9	90.5	99.1	92.6	81.8	0.08
Latvia	89.2	83.7	81.8	76.7	74.1	72.5	0.10
Lithuania	81.7	75.1	71.3	67.2	64.9	63.5	0.12
Poland	69.6	69.7	69.7	69.8	70.5	71.0	0.01
Slovak Republic	58.2	59.4	60.2	63.1	65.7	67.8	0.07
Bulgaria	67.1	73.8	75.2	74.0	61.8	52.9	0.16
Romania	66.7	63.1	61.6	59.7	59.6	58.9	0.06
Croatia	66.7	63.1	61.6	59.7	59.6	58.9	0.06
Eastern-EU average	71.3	71.3	70.8	70.5	67.2	64.2	0.08
Serbia (CPI since `09)	39.2	39.2	39.2	39.2	39.2	39.2	0.00
Serbia (Swiss form. since `09)	54.8	54.8	54.8	54.8	54.8	54.8	0.00

Source: APEX methodology (Pension Panorama, World Bank); Author's calculation for Serbia.

Note: RR calculated for those entering labor markets in 2002. That basically means retiring in 2047, according to current legislation.

5. Conclusion

The net replacement rate in Serbia – the amount of the first pension relative to the last salary – for those who contributed over full service, equals somewhat above 70% of the last salary. This is significantly below the 2003 level when the pension benefit of the same-profile worker could compensate for almost all his pre-retirement income.

In the international context, the replacement rate is currently at the EU-10 countries' level, and is somewhat lower than in the EU-15. In the long term, the replacement rate in Serbia, calculated on the basis of current legal provisions, is significantly lower than in all other European countries.

Of course, any forecasts for so far into the future are generally rather unreliable – in this case all the more so as trends in productivity (wage growth) are uncertain. In addition, forecasts for EU countries were made taking into account their current legislation; although many systems have already been reformed, future changes cannot be ruled out.

In spite of all the reservations, it may still be concluded that replacement rates are too low in Serbia in the long term, and that a change in the indexation of the general point that would reflect wage growth is indispensable in the foreseeable future.

An optimum balance should therefore be struck between the need for reducing expenditures on the one hand, and the need for old-age income maintenance on the other. The developed countries face the same problem. The customary solution is a different valorization of pensions (i.e. general point indexation in Serbia) to pension in payment indexation. In most countries, valorization is linked to wage growth, which enables the maintenance of new pensioners' income in line with their pre-retirement earnings, while savings are created by indexing pensions in payment to CPI growth only.

However, this approach cannot be replicated in a country such as Serbia where earnings (wages) grew dynamically over the preceding period, and the strong growth will possibly continue. Such a great discrepancy in indexation creates differences not only between retirees and the whole population, but also between retirees with the same working history who quit working at different times.

In general, CPI indexation in countries with such robust wage growth is unacceptable, despite substantial expenditures and an unambiguous need for saving. This is corroborated by the experiences of other transition countries that, as a rule, have an element of wages in the formula of benefits in payment indexation.

Therefore, the abandonment of the Swiss formula seems not to have been an appropriate policy decision. Its reinstatement should therefore be considered within a very short period, as this would enable the maintenance of income and pensions in payment – somewhat in line with total growth, while at the same time, substantial savings would be made possible.

Over the medium term, general point indexation should certainly be changed so that wage growth is encompassed to the greatest possible degree. Nevertheless, even though wage growth is expected to be slower than in the previous period, which could justify the different indexation of the general point and pensions in payment, the growth is likely to be so high that CPI indexation of pensions in payment will remain unacceptable. The option of indexing pensions in payment to a combination of wages and CPI growth will probably have to be considered. After all, this has been the experience of almost all countries in transition.

In light of the level of pension expenditures and funding, the problem is rendered rather difficult. However, there are possibilities that pension funding could be made easier on the revenue side. As unemployment is currently one of the main problems of pension system funding in Serbia, the expected reduction in unemployment is one possible solution.

Finally, it is worth noting that pension expenditures, albeit high (around 11% of GDP), are often overestimated in public.

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The Difficulties Faced by Economic Policy in Serbia: Institutional Constraints

Ljubomir Madžar* Any inquiry into the possibilities and effects of economic policy needs to encompass the characteristics of the underlying political system. Ethnically and culturally a very heterogeneous country, Serbia harbors many differing political values and an exceptionally large number of political parties advocating widely divergent political views. Serbia is thus compelled to rely on rather wide and incongruous coalitions and the weak and discordant governments they produce. Such weak governments have shown themselves to be incapable of successfully directing institutional development and conducting, in a satisfactory manner, economic policies that would make it possible to efficiently utilize the available resources.

1. Introductory Notes

Limitations on formulating and implementing economic policies vary widely between countries in transition and other nations, and also, to some extent, with time within each country. Universal limitations – albeit with variations in actual manifestation by country – are those that concern the socially acceptable redistribution implications of individual economic policy measures and endeavors. Whenever certain measures or a packages of measures involve a relative deterioration in the income redistribution position of certain groups, their opposition can be counted on, which directly causes well-known political limitations on economic policy. This is easily demonstrable using Serbia's latest, and very topical, experience. We know full well that the macroeconomic balance is in great jeopardy today: the external balance has been in peril almost permanently, while the internal balance has been greatly threatened over the past several years, especially in 2008. It is also well known that the greatest dangers to this balance come from the domain of fiscal policy. The government's overspending knows no bounds. Total pensions are an important liability on the budget; donations and transfers make up some 35% of total expenses of the Pension and Disability Insurance (PIO) Fund (Ministry of Finance Bulletin 2008a, p. 50), while social assistance and transfers to the public have settled at a level of about 40% of "consolidated government sector expenses" (Ministry of Finance Memorandum 2008b, p. 36). It is clear that pensions, most of all, are a significant burden on the budget, and that reining them in would significantly contribute to macroeconomic stability. Actually doing so, however, is not easy as not only are all parties required to look out for the interests of voters in this social group, but also as pensioners have organized themselves into a political party, and have managed to gain a foothold in parliament. It would appear that they have made a major contribution to formulating and officially promoting the "socially responsible state" slogan, which could wreak havoc with the macroeconomic balance. Well-informed analysts consider a socially responsible state the equivalent of a developmentally irresponsible one.

The redistribution implications of economic policy, therefore, carry with them a whole set of correspondent limitations. These limitations cannot be ignored, since doing so could endanger the continuing survival of the government. And, if the government were to fall, serious damage would be done to economic policy; this could far outweigh the unwanted consequences of politically motivated opportunism, often manifested through the setting of conditions to be met if the government is to survive at all. In his prime, N. Kaldor formulated Guyana's fiscal reform. The reform was flawless from a professional point of view, but was not in harmony with the

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political constraints. This resulted in a meltdown of the regime, street riots, and – of course – the renouncing of such reforms, with even much less radical reforms unthinkable in the foreseeable future.

This paper discusses the political limitations of conducting economic policy in Serbia, analyzing the causes of political heterogeneity and the resulting weakness of coalition governments that makes them unwilling to take strategic steps in the economy.

2. Three Determinants of Serbia's Political Heterogeneity

A fundamental political characteristic of Serbia is its truly overstated, almost drastic political heterogeneity. No other country in transition – nor, indeed, any other country – demonstrates such dramatic political and ideological differences between mainstream political parties; the wide gap between the *dominant* political parties' views is an especially striking phenomenon. An organization such as the Serbian Radical Party (SRS), with by far the greatest support in the electorate and continually gaining the largest number of seats in parliament – yet at the same time at the very extreme of the ideological and political spectrum – exists only in Serbia. Markedly extreme parties can, obviously, be found in other countries and their election systems, but are there weak and of minor importance, have slight support, and only a marginal influence on the general political balance. Only Serbia is a country where such a powerful, and indeed the largest, party as the SRS stands firmly at the literally farthest extreme of the political spectrum. On the other side of this spectrum – but by no means at its other end – are several parties, all individually (by popular support and representation in parliament) weaker than the SRS, and having to resort to coalitions to prevent the SRS from coming to power. A more detailed and, seemingly, meticulously crafted analysis of the skewed and structurally distorted political imbalance in Serbia was set out – however strange it might sound – in a newspaper article by B. Milanović (2007).

Major political differences also generate large amounts of intolerance between the main political parties; the situation is thus permanently one of potential conflict. The potential for such conflict is high in at least two senses, the likelihood of *actual* conflict, and the extent and devastating power of such conflicts once they start. The potential for conflict can also be seen in a third issue: when coalitions are finally formed, these politically very heterogeneous governments work in an atmosphere of tension and more or less overt friction between the partners, which saps government creativity and diverts energy away from anything not imposed as a social priority in any given situation. In the raft of issues that make Serbia an unfavorable destination for foreign– or even domestic – investment, this highly charged political environment is not accorded enough attention, which causes a somewhat distorted, and definitely incomplete, understanding of the wider social setting, thus impacting the pace and direction of economic growth in many ways.

The adverse impact on foreign and domestic investment is by no means the only damage to the economy caused by the political situation. The high level of pent-up strife and inability to reach consensus on at least the most important, fundamental issues makes it impossible to draft and, especially, to implement developmental or even ongoing economic policy; actually, simply put, the social discord makes it impossible to take a broad spectrum of useful and necessary actions so that the damage from this blockade is much deeper than even professional analysts are willing to admit. Most of the damage from this social discord is not directly visible, so attempts to make even an approximate assessment are almost universally destined to end in failure. Social and political discord is Serbia's nemesis; it is the reason why Serbia finds it so difficult to get to grips with itself, and an equally convincing reason why a number of now independent nations chose to end their association with Serbia, often with great effort and at considerable (generalized) cost, but resulting in mass enthusiasm on the part of the electorate – expressed through political support – once the connection was severed.

What are the roots of this excessive political differentiation and the consequent dangerous conflict potential? Although professional political analysts might infer a whole spectrum of

causes, this paper will focus on three believed to be of fundamental importance and decisive influence. *The first* is the already mentioned exceptional – one is almost tempted to say intolerable – ethnic heterogeneity. This does not remain within the relatively limited domain of the ethnic, but is, predictably, also expressed as religious, cultural, linguistic, and, finally, interest-based heterogeneity. Considerations of space do not permit an exposition or analysis of actual figures, nor does the subject really warrant such treatment. Instead, it is enough to cite a publication issued in 2004 by the Serbia-Montenegro Ministry of Human and Minority Rights, the title of which is so telling that it can almost be taken as proof of the heterogeneity hypothesis. The title is *Serbia's Ethnic Mosaic*. Nothing goes a longer way toward expressing the country's heterogeneity than the word “mosaic”. Ethnic heterogeneity, with all its accompanying attributes of heterogeneity in other aspects, cannot but create differentiation on grounds of interest, even latent or overt conflict. Ethnic communities in Serbia each have their specific needs, from linguistic and cultural to political; in an environment of a general lack of resources, such special and additional needs lead directly to conflicts. Great political skill, and, even more, rarely seen political will, needs to be demonstrated by the majority nation to defuse and resolve such conflicts. Where *politics* is a key factor in resource allocation, interethnic conflict arises often even in purely economic and financial issues – in other words, conflict arises over issues that are not even indirectly connected with ethnic differences in a politically uncontaminated allocation system. Unlike a market-based system, political arbitration in the allocation of resources has no foundation in objective criteria; each decision to commit resources, is, as a rule, perceived differently by different ethnic entities. Where disharmonious perceptions cross paths, conflict is a certainty. This is the basic reason that led Hayek to write his monumental *Road to Serfdom*, and, almost prophetically, cite Slovenia and Slovakia as examples of entities that will inevitably be involved in conflict due to political arbitration in the utilization of resources.

The *second reason* for excessive political differentiation is the rather specific socialist heritage of Serbia. In the former Yugoslavia, socialism developed as a form of government that did have a human face. Due to historical tradition and the Orthodox Christian ethos (cf. Sekulović 2004, pp. 41-54, 65-6), socialism took firmer and deeper root in the eastern part of Yugoslavia, including Serbia, than in other parts of the country. After the colossal crash of communism, an event with global historical significance, came transition as a functional and existential necessity. This caused a great deal of differentiation, and suspended Serbia between the old order – with no chance of survival, and the new – fraught with uncertainty, and not wholly in touch with the prevailing culture. Also of importance is the fact that the memory of socialism in Serbia was much more positive than in other transition countries. This was a socialism that – thanks, in part, to foreign donations and excessive borrowing – provided disproportionately high living standards (in relation to its own production) and freedoms that other socialist countries of the time could only dream of. Yugoslav socialism was good more or less as long as it lasted; its tragedy was its lack of sustainability. With most of the population having fond memories of socialism while also needing to enter a new, wholly different, market-based system, differentiation was inevitable. While the more enlightened and successful part of the population embraced the new values and successfully adapted to the new social conditions, others were left out in the cold of transition, confused and frustrated, forever longing for an irretrievably lost order of things, and thus in both values and politics *very distant* from the emancipated part of the community.

In contrast to other transition countries, where nearly all of the population saw socialism as an instrument of repression and deprivation, and where firm social consensus was therefore reached on abandoning it, things were markedly different in Serbia. Part of the population adopted the new ideology of rule of law, political pluralism and market economy based on private ownership; a fair share, however, remained in the grip of old systemic concepts and ideological notions. It was difficult for those with a steady paying job and economic security under the old order, and who could use the old red Yugoslav passport to travel freely around most of the world, to come to terms with the new realities of mass unemployment, existential jeopardy, and the quarantine that the international community imposed on a frustrated and in many respects disappointed Serbia. The country's specific socialist past, and the subsequent transition (which most of the

population saw as quite literally a traumatic process) therefore had an immeasurable impact on differentiation of all kinds, including, of course, excessive political stratification. There are, thus, quite serious reasons for the fact that Serbia is so painfully stretched along an unhealthily wide range of the political spectrum. Serbia's past and its political destiny are fundamentally different from scenarios of transformation seen in other transition countries. In its Letters to the Editor section, the Belgrade daily *Blic* ran a reader's observation that Serbia was *crucified*; a daily BBC radio broadcast (the 5 pm slot on 29 July 2008) said Serbia was *cloven in two*. Both these expressions characterize Serbia in very distinctive terms, their color not detracting at all from their accuracy.

The *third reason* for the ideological and political differentiation is the traditionalist culture tinged with the Eastern Orthodox spirituality we have already mentioned, which made it much easier to adopt socialism, and which acted – and continues to act – as a factor in its own right. With or without socialism, Serbia's population behaves differently in a world where Western values and general *Weltanschauung* have taken root. These are collective memories, a long historical tradition, long periods spent under foreign domination, ethical standards and patterns of behavior, as well as a strong collectivist trait in social relations. The collectivist spirit informing the entire community is definitely a reflection of a long-cultivated, strong solidarity without which existence under foreign rule would not have been possible. What must have been a precious characteristic of the social ethos, a trait that made the community strong and capable of surviving under harsh conditions, is today a hindering anachronism and a major obstacle to modernization.

3. Challenges of Democracy in a Politically Divided Society

In situations of major social discord and the attendant extreme political differentiations, democracy, to put it simply, does not function in a way that would satisfy all relevant elements of society. In the face of dissension and divisions, democratic mechanisms face problems in operating; they are often blocked, and the decisions made equally often turn out to be of questionable quality. It should be immediately made clear that the fact that democracy does not function equally well under all conditions, and that there are situations where it does both create and encounter significant problems, does not necessarily mean that it should be rejected in favor of a non-democratic arrangement. This is where Sartori's (1997 [1994], p. 144) defence of the need to consider alternatives as an integral component of reasoned political criticism comes across as particularly important. When it comes to democracy, the overwhelming majority of competent analysts will agree that the alternatives are (even) worse, and that identifying a weakness in a system does not necessarily imply that it should be rejected. One would do well to remember Churchill's famous words that democracy is a bad form of government, but the *least bad* of all those at the disposal of a society. Another, not entirely unimportant, observation could, however, be made here. The impressive collection of historical experiences serves to credibly prove an unusual, and, one might say, perverted correlation: where democracy functions poorly, alternative political arrangements will in all likelihood function poorly as well. There have been many countries where satisfactory results were obtained neither through democracy nor through the undemocratic alternatives that have replaced it, often involving unimaginable levels of violence.

Much that is still topical today, especially in Serbia's circumstances, on the conditions for democracy to function – or not – satisfactorily was said some seventy years ago, in a confident and authoritative style, by the sagacious and incomparable Serbian thinker Slobodan Jovanović (1990 [1920, 1936], pp. 350-70, 384-5; 1990 [1940], pp. 189-218). He first observes that there are no guarantees that a democratically elected parliamentary government will function effectively (1990 [1920, 1936], p. 294), especially stressing that it is possible to govern without (adequate) prowess, but not without authority. Not only can democratically elected governments produce decisions of dubious quality, and not only can they do so with impermissible slowness (which again presupposes inefficiency), but they may also lead to a complete blockade of decision-making, a deadlock where no decisions are made at all. The legislative branch, according to Jovanović, is

responsible for deliberating, measuring, and estimating in order to pass as good a law as possible, but it is the executive branch that should act without delay, that needs to be efficient and thus capable of generating quick agreement on decisions that have to be made.

We now arrive at the turn of events that has presented the most formidable obstacle on Serbia's road to modernization. As has been underlined in the previous section, especially its first two paragraphs, Serbia is ideologically too differentiated, and the political orientation of some of its parties covers too broad a range. It is far from achieving Jovanović's (1990 [1940], p. 189) dictum of a strong and harmonious parliamentary majority, as well as Sartori's (1997 [1992], p. 167) ideal (see below, next section, first paragraph) of two strong, dominant parties alternating in power. On the contrary, Serbia has a large number of parties, none of which is able to form a government on its own; furthermore, it is impossible in Serbia for coalitions to be formed of parties close enough to be able to govern more or less harmoniously and make decisions efficiently. Serbia is thus, for now and for the foreseeable future, at least, condemned to broad, overly heterogeneous coalition governments, with narrow action radii and quite modest operational potentials. The possibilities of such governments to implement the necessary reforms of institutions and other areas are quite slim. Coalition governments pose many problems that are difficult to overcome and that have their roots at differing levels of political organization.

First, when a nation is ideologically so diverse and the political differences between parties are so deep, political coalitions are too multifarious; for a coalition to be formed at all, it must assemble parties that are virtually incompatible. However one looks at it, these coalitions seem "unprincipled". The latest example is the coalition of parties of the "democratic bloc" with the Socialist Party of Serbia (SPS). The very fact of an unprincipled association generates damaging political consequences. These coalitions do not satisfy supporters of any of the parties involved; their voters cannot but interpret these associations as major "breaches" of political principle. SPS voters have made their displeasure abundantly clear, as have those of other parties, who could hardly have imagined that political horse-trading would lead to a coalition of those whom popular tradition perceives as irreconcilable political *opponents*. This trading is however absolutely necessary as it is the *only* way to form a government, and because a repeated election would probably produce more or less the same landscape in parliament and an unchanged constellation of interests, both of parties and of their voters. All coalition parties thus arrive in a situation where they lose the sympathies of their supporters and voters without having any actual responsibility in the matter. The entire governing political establishment loses credibility with the public, while politics as a social activity and pursuit at the general level becomes devalued. It cannot be good for society as a whole to have politics devalued so much in the eyes of those of from whom support is expected. A society whose politics is devalued is one with a low capacity for institutional progress and modernization.

4. Weaknesses and Limited Capacity of Coalition Governments

The above has served as a fitting introduction to the next round of considerations – the number of parties involved in the political process, and the manner of distribution of power among them. The first important insight in connection with this question is that it is especially favorable for democratic decision-making if only two strong parties dominate a community, alternating in power more or less regularly, and each having the capacity to form a government *alone*, leaving the other in opposition to exercise scrupulous oversight. Sartori (1997 [1992], p. 176) places special emphasis on this idea: two parties, he says, are a much better arrangement than a multi-party system, especially so for presidential systems, as a president cannot rely on differentiated coalitions as much as governments formed in parliament can, being collective executive bodies.

This leads us to a situation that is probably the greatest hindrance to formulating and implementing economic policy and creating regulatory bodies necessary to a modern market economy. Market economy is, in this context, a relevant standard, accepted as it is as the system to be aspired to in the current general endeavors to modernize the system. It is the custom first to diagnose the

shortcomings of an existing regulatory system and the numerous limitations arising from these defects, and then propose solutions, recommendations for enhancement, and, most often, wide-ranging improvements. In this, the fact is regularly overlooked that the process of creating new institutions and reconstructing old ones is complex, difficult to implement and uncertain, and that the process itself often carries serious and sometimes quite literally insuperable constraints. These limitations on institution-building activity can be viewed as “meta-constraints” in the process of modernizing society and the economy.

To recapitulate, the institutions available impose limitations on a wide range of economic activities, especially the always important and topical mobilization of resources and their allocation to priorities. In principle, and in the final analysis, the only way to remove shortcomings in asset mobilization and allocation is to (re)shape institutions and (re)draft policies. Proposals and recommendations are offered by the hatful, with no qualms or inhibitions, in an attempt to do just that – restructure institutions and redraft policies. This is the very point where economic analysis and professional efforts aimed at modernizing regulatory frameworks make strategic mistakes, which consist in overlooking meta-constraints (this is worth reiterating), limitations on institution-building activities and policy implementation. It is clear that meta-constraints are located in the realm of the political system, and that any inquiry into avenues of socially reasonable institutional development is limited and indeed defective if it does not encompass the political system. Any analysis of the political system needs to show which recommendations can reasonably be made and what *should actually not be recommended*. It is futile and useless to recommend institutional change – however desirable from a narrow economical standpoint – if *limitations to the political system make it impossible to actually implement the recommended changes*.

And so we finally arrive at the political system as the social order that defines a society’s abilities, or lack thereof, to perform the important task of institutional adjustment. It cannot but be viewed as the ultimate, final constraint on a society’s ability to increase its economic efficiency by reworking its economic system and overall regulatory apparatus. When making recommendations for institutional enhancement, one must, therefore, take into account not only the probable and desired impact of reform on the direction and efficiency of resource utilization, but also, and perhaps to a greater degree, the *capacity of the political system* to accept and properly give life to such changes. Not all political systems are the same, just like institutional arrangements in the economy, and vary widely in their capacity to produce the mass of necessary decisions (which are always strategic in nature) – with respect both to the quality and the functional implications of such decisions. The capacity of a political system to produce required institutional enhancements depends, in the final analysis, on the political homogeneity of a society – while societies with many political parties and with great differences between those parties’ agendas and ideologies can only be characterized as politically not homogeneous enough, as limited in their ability to harmonize these diverging interests and to choose economically efficient institutional change. This is why the capacity of a society to modernize its regulatory frameworks is fundamentally dependent on its political compactness – which in turn is nothing but a reflection of its greater or lesser social harmony.

Coalition governments are weak, and government weakness means a markedly reduced capacity for institutional adjustment. *First*, coalition governments rarely achieve the level of agreement necessary for quick and effective action. Disagreement means many decisions cannot even be taken, and at the same time significantly limits the set of measures available as a reflection of the government’s operational range. Discord within the government and the potential conflicts that accompany it reflect directly on the executive branch’s diminished capacity to govern. *Second*, due to the fact that government decisions call for consent from very distant, ideologically divergent members, a wide range of individual interests need to be taken into account in decision-making – and these numerous interests turn into internal obstacles. Many specific decisions can be made only by overcoming all these constraints stemming from the many individual interests. This, in turn, means a lower volume of decisions and a drop in their efficacy. *Third*, broad coalitions are rather insecure; balancing on the razor’s edge, they are as preoccupied with the risk of being

toppled as they are by substantive decision-making issues. Relying as it does on a large number of partners – some of which enjoy nearly insignificant voter support – the government may fall if any of these withholds support. This is enough for the government's hands to be tied in many issues, and for decisions that finally come to agreement to be reached with major delay and a great deal of complicated stratagems. Since the government's survival is in danger on so many counts, its overall behavior is strongly influenced by this disastrous circumstance, and the narrowing of its room for maneuver is quite obvious. This undoubtedly implies a loss of efficiency. *Fourth*, business, financial, and commercial interests are perceived to be linked with the government in various ways. When the number of parties forming a government is large, and when many of them lack political and financial power, many will prove receptive to offers coming from business circles, and will topple the government by withholding support for a financial consideration. The weakness of coalition governments in Serbia has been proven empirically by the frequent elections; a minister in the Belgrade government recently said he had taken the oath of office four times but that the entire time he spent in office was only slightly longer than one regular term. Sartori (1997 [1992], p. 165) interprets frequent early elections as a sign of serious disturbances in the governing order, and of a deep-seated crisis of the political system.

This objectively complex situation is further aggravated by the rather unfortunate arrangement of the political system. However, this aggravation can also be viewed as objectively induced, to the extent in which the lack of skills has led to systemic weaknesses in political organization is itself an objective fact of life. Obviously, when it comes to the impact of skills and the contribution made to it by the human factor, a fine and rather relative line has to be drawn between that which is objectively given and that which could have been better designed by human agency. The designers of Serbia's electoral system, rather unfortunately, one would say, opted for proportional representation (with marginal modifications to percentage thresholds), whose adequacy decreases as the ideological and voting dispersion of the electorate goes up. In his important study, Sartori (1997 [1974]) devoted many pages to a comparative analysis of majority and proportional representation systems (cf. first three chapters of the study), and – with a great deal of finely nuanced conditioning that requires very careful and repeated reading – concluded that proportional representation systems contribute to fragmentation of the electorate, and favor an increase in the already large number of political parties.

This system is obviously a poor solution for an already ideologically overstretched Serbia, as it contributes to further fragmentation and increase in the number of parties, thus making it difficult to form coalition governments – and in particular hindering their operation. On the one hand, an alternative to this fragmentizing parliamentary system of proportional representation is a presidential system that is strong enough to enable somewhat greater concentration of political power in one central point of executive power. On the other hand, a majority system should be accorded greater importance, as this will – admittedly at the cost of reflecting voter interests less faithfully, and therefore being less democratic – weed out some parties, ensure greater concentration of power between fewer political bodies, and consequently increase the disturbingly poor efficiency of the system. There exist very relevant international experiences – for instance, with the inauguration of the Fourth Republic, France successfully tackled its unhealthy political fragmentation by enshrining in the Constitution the strong office of president who had much fewer problems in ensuring political consensus than the executive did under the previous arrangement. The writers of Serbia's Constitution, it seems, possessed neither an adequate knowledge of theory, nor proper insights into international experiences. And a robust barrier to fragmentation, and a Constitution establishing an executive that is less dependent on ever uncertain efforts to create consensus, was all the more necessary in Serbia's situation – where the nation was leaving behind an authoritarian system where power was extremely concentrated (Radović 1989, pp. 108-33), and where it was obvious from the outset that a jump from one *extreme* to the other could not bring anything good.

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ANALYTICAL APPENDIX

Analytical Appendix

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

	RPI			RPI components				
	base index (avg. 2005 =100)	y-o-y growth	cumulative index ¹⁾	GOODS	Agricultural products	Industrial foodproducts	Industrial non- foodproducts	SERVICES
				annual indices²⁾				
2003	77.7	111.7	107.7	107.4	107.2	99.8	111.1	125.0
2004	85.3	110.1	113.8	110.0	103.4	112.4	109.6	110.2
2005	100.0	116.5	117.7	114.9	125.3	117.4	113.8	120.7
2006	112.7	112.7	106.6	112.4	117.6	111.2	112.3	113.3
2007	120.0	106.8	110.1	106.5	116.0	105.5	104.5	107.7
				quarterly indices²⁾				
2006								
Q1	109.2	114.8	102.2	114.6	134.4	113.2	114.4	115.4
Q2	113.1	115.6	105.7	115.7	123.6	112.2	117.1	115.4
Q3	114.0	112.5	106.1	112.3	108.8	112.4	111.9	112.8
Q4	114.3	108.2	106.6	107.6	105.8	107.4	106.5	109.8
2007								
Q1	115.5	105.8	101.2	105.1	101.1	104.8	103.2	107.5
Q2	118.5	104.8	104.2	103.4	92.9	102.7	102.5	108.2
Q3	121.5	106.6	106.9	105.8	113.8	103.8	104.5	108.5
Q4	124.7	109.1	110.1	110.0	125.0	110.5	107.9	106.9
2008								
Q1	128.5	111.3	102.8	113.6	130.6	115.2	112.0	105.3
Q2	132.6	111.9	106.1	114.8	131.7	122.0	110.8	104.4
				monthly indices				
2005								
December	107.6	117.7	117.7	115.3	136.1	115.8	114.0	124.1
2006								
March	110.0	114.4	102.2	114.1	131.4	112.1	114.3	115.3
June	113.7	115.1	105.7	115.1	119.6	112.2	116.5	115.2
September	114.1	111.6	106.1	111.3	109.6	111.5	110.4	112.3
December	114.7	106.6	106.6	106.7	106.2	106.0	105.9	106.3
2007								
January	115.1	106.5	100.4	106.8	104.6	105.2	105.6	106.0
February	115.3	105.2	100.5	104.1	100.5	105.0	101.4	108.1
March	116.1	105.6	101.2	104.5	98.4	104.2	102.7	108.4
April	117.1	104.7	102.1	103.2	99.6	103.6	101.2	108.2
May	118.8	104.5	103.6	103.0	92.5	102.7	102.1	108.2
June	119.5	105.1	104.2	104.0	86.7	101.9	104.2	108.1
July	120.2	105.8	104.8	104.6	99.2	101.1	104.9	109.1
August	121.6	106.3	106.0	105.5	117.3	103.4	103.9	108.5
September	122.6	107.4	106.9	107.3	125.0	106.9	104.7	107.9
October	123.3	108.5	107.5	108.8	127.7	108.3	106.9	107.7
November	124.7	108.8	108.7	109.7	123.6	110.1	108.0	106.4
December	126.3	110.1	110.1	111.4	123.7	113.2	108.8	106.5
2008								
January	127.5	110.7	100.9	112.1	126.7	114.1	110.4	106.7
February	128.3	111.3	101.6	113.9	129.7	115.2	112.6	104.8
March	129.8	111.8	102.8	114.7	135.5	116.3	113.0	104.2
April	131.2	112.0	103.9	114.8	133.4	120.2	111.3	104.8
May	132.6	111.6	105.0	114.6	132.0	121.8	110.2	104.0
June	134.0	112.1	106.1	115.0	129.7	124.0	111.0	104.5
July	134.2	111.6	106.3	114.7	119.3	124.5	111.1	103.5
August	134.4	110.5	106.5	112.7	98.1	122.3	110.4	104.8

Source: SBS.

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

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

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

	Retail Price Index		Consumer price index		Industrial producers' price index		Agricultural producers' price index	
	base index (avg. 2005 =100)	y-o-y growth	base index (avg. 2005 =100)	y-o-y growth	base index (avg. of previous year =100)	y-o-y growth	base index (avg. of previous year =100)	y-o-y growth
annual indices¹⁾								
2003	77.7	111.7	77.6	109.9	104.6	104.6	100.5	100.5
2004	85.3	110.1	86.1	111.4	109.1	109.1	110.0	110.0
2005	100.0	116.5	100.0	116.2	114.2	114.2	115.6	115.6
2006	112.7	112.7	111.7	111.7	113.3	113.3	109.2	109.2
2007	120.0	106.8	118.9	107.0	105.9	105.9	...	...
quarterly indices¹⁾								
2006								
Q1	109.2	114.8	108.7	114.6	108.9	114.3	105.0	105.9
Q2	113.1	115.6	112.7	114.2	113.3	116.2	107.0	107.0
Q3	114.0	112.5	112.6	111.4	115.7	114.6	110.9	110.0
Q4	114.3	108.2	113.0	107.1	115.2	108.4	111.0	107.0
2007								
Q1	115.5	105.8	113.9	104.8	101.8	105.5	101.9	105.2
Q2	118.5	104.8	116.4	103.3	104.9	104.4	101.8	103.1
Q3	121.5	106.6	120.0	106.6	106.9	105.1	117.9	116.3
Q4	124.7	109.1	125.1	110.8	109.8	108.5	132.0	129.8
2008								
Q1	128.5	111.3	129.2	113.4	108.2	111.8	...	...
Q2	132.6	111.9	134.8	115.8	112.0	113.0	129.6	146.3
monthly indices								
2005								
December	107.6	117.7	107.0	117.1	122.3	115.4	121.7	111.8
2006								
March	110.0	114.4	109.5	113.8	109.6	114.4	105.8	104.9
June	113.7	115.1	113.4	113.7	114.0	116.2	108.4	108.7
September	114.1	111.6	112.6	110.7	115.8	112.9	112.4	108.7
December	114.7	106.6	113.4	106.0	114.9	107.3	112.3	107.3
2007								
January	115.1	106.5	114.0	105.8	101.6	106.2	102.7	107.5
February	115.3	105.2	113.7	104.5	101.6	105.1	101.7	104.6
March	116.1	105.6	114.1	104.2	102.2	105.1	101.2	103.4
April	117.1	104.7	115.0	103.4	103.0	103.7	99.3	101.8
May	118.8	104.5	116.9	103.1	105.5	104.5	101.6	102.7
June	119.5	105.1	117.3	103.5	106.2	104.9	104.5	104.8
July	120.2	105.9	117.0	104.1	106.1	104.2	109.1	110.2
August	121.6	106.3	120.5	106.9	106.8	104.9	120.5	118.0
September	122.6	107.4	122.6	108.9	107.7	106.1	124.2	120.6
October	123.3	108.5	123.2	109.8	108.6	107.3	130.0	130.2
November	124.7	108.8	125.2	110.5	109.9	108.4	133.4	132.1
December	126.3	110.1	127.0	112.0	111.0	109.8	132.6	127.2
2008								
January	127.5	110.7	128.0	112.3	107.1	111.0	115.6	127.4
February	128.3	111.3	128.8	113.3	107.8	111.5	117.8	132.1
March	129.8	111.8	130.8	114.6	109.6	112.8	...	...
April	131.2	112.0	133.2	115.8	110.7	113.4	123.7	142.7
May	132.6	111.6	135.3	115.7	112.0	112.4	129.8	147.4
June	134.0	112.1	136.0	115.9	113.3	113.1	135.2	148.8
July	134.2	111.6	134.4	114.9	114.4	114.3	...	...

Source: SBS.

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

Analytical Appendix

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

	Nominal				Real				CPI in Euro area ⁴⁾
	Exchange rate (FX) ¹⁾	Base index (avg. 2005=100)	y-o-y index	cumulative index ²⁾	USD/EUR	real FX ³⁾ (avg. 2005=100)	y-o-y index	cumulative index ²⁾	
annual									
2003	64.9743	78.4	107.1	110.5	1.1241	96.7	97.7	104.6	95.8
2004	72.6215	87.6	111.8	115.6	1.2392	100.5	104.0	104.0	97.9
2005	82.9188	100.0	114.2	109.3	1.2433	100.1	99.6	94.9	100.0
2006	84.1879	101.5	101.5	91.7	1.2537	92.1	92.1	87.7	102.2
2007	79.9744	96.4	95.1	101.0	1.3705	83.9	91.1	94.6	104.4
quarterly									
2005									
Q4	85.7085	103.4	111.3	109.3	1.1898	98.8	96.6	94.9	101.0
2006									
Q1	87.0875	105.0	108.5	101.4	1.2031	97.2	96.7	99.6	101.0
Q2	86.8674	104.8	106.1	101.0	1.2552	94.9	94.1	96.9	102.4
Q3	83.2482	100.4	99.3	96.7	1.2745	90.2	90.2	92.5	102.5
Q4	79.5486	95.9	92.8	91.7	1.2893	86.2	87.3	87.7	102.8
2007									
Q1	79.9849	96.5	91.8	102.7	1.3105	86.0	88.5	101.9	102.9
Q2	81.0734	97.8	93.3	103.0	1.3482	86.1	90.8	100.3	104.4
Q3	80.0302	96.5	96.1	100.8	1.3741	83.0	91.9	95.8	104.4
Q4	78.8092	95.0	99.1	101.0	1.4493	80.6	93.5	94.6	105.7
2008									
Q1	82.6488	99.7	103.3	104.5	1.4997	82.5	96.0	102.6	106.4
monthly									
2005									
December	85.9073	139.6	109.3	109.3	1.1861	97.4	94.9	94.9	101.1
2006									
March	87.1033	141.5	107.9	101.4	1.2013	97.0	96.4	99.6	101.5
April	86.5391	140.6	106.4	100.7	1.2239	95.3	94.4	97.9	102.2
May	87.3023	141.8	106.7	101.6	1.2750	94.9	94.2	97.5	102.5
June	86.7609	140.9	105.1	101.0	1.2677	94.4	93.6	96.9	102.6
July	83.7931	136.1	101.0	97.5	1.2684	91.1	91.7	93.6	102.4
August	82.8893	134.7	98.7	96.5	1.2803	89.6	89.2	92.0	102.5
September	83.0621	134.9	98.3	96.7	1.2748	90.0	89.7	92.5	102.5
October	80.9242	131.5	95.0	94.2	1.2615	88.1	88.3	90.5	102.6
November	78.9404	128.2	91.7	91.9	1.2876	85.3	85.8	87.6	102.6
December	78.7812	128.0	91.7	91.7	1.3210	85.4	87.7	87.7	103.0
2007									
January	79.6587	96.1	91.7	101.1	1.2993	85.6	87.6	100.2	102.5
February	79.3993	95.8	91.0	100.8	1.3075	85.4	88.1	100.1	102.8
March	80.8968	97.6	92.9	102.7	1.3246	87.0	89.7	101.9	103.5
April	80.5768	97.2	93.1	102.3	1.3516	86.4	90.7	101.3	104.2
May	81.4770	98.3	93.3	103.4	1.3512	86.4	91.0	101.2	104.4
June	81.1665	97.9	93.6	103.0	1.3420	85.6	90.7	100.3	104.5
July	80.6204	97.2	96.2	102.3	1.3716	84.3	92.5	98.8	104.3
August	80.0703	96.6	96.6	101.6	1.3622	82.8	92.4	97.0	104.3
September	79.3999	95.8	95.6	100.8	1.3884	81.8	90.9	95.8	104.7
October	77.6627	93.7	96.0	98.6	1.4227	79.9	90.8	93.6	105.2
November	79.1979	95.5	100.3	100.5	1.4689	81.1	95.1	95.0	105.8
December	79.5669	96.0	101.0	101.0	1.4563	80.7	94.6	94.6	106.2
2008									
January	81.8460	98.7	102.7	102.9	1.4719	82.0	95.8	101.5	105.8
February	82.9685	100.1	104.5	104.3	1.4755	82.8	96.9	102.6	106.2
March	83.1319	100.3	102.8	104.5	1.5516	82.8	95.2	102.6	107.2
April	81.0287	97.7	100.6	101.8	1.5770	80.1	92.7	99.2	107.6
May	81.9403	98.8	100.6	103.0	1.5569	80.6	93.4	99.9	108.2
June	80.2460	96.8	98.9	100.9	1.5556	78.5	91.7	97.2	108.6
July	78.3728	94.5	97.2	98.5	1.5773	76.4	90.7	94.7	108.5
August	76.5517	92.3	95.6	96.2	1.4987	...	...	...	...

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, 2004–2008

	Total No. of employed (employees and entrepreneurs)	Employees in legal entities	Entrepreneurs		Total No. of employees	
			Total	No. of employees with entrepreneurs		
			1 (=2+3)	2		3 (=4+5)
quarterly data - in thousands						
2004	2,047	1,574	473	210	263	1,837
Q1	2,036	1,576	460	207	253	1,829
Q2	2,061	1,593	468	208	259	1,853
Q3	2,051	1,576	475	209	266	1,842
Q4	2,041	1,552	489	216	273	1,825
2005	2,056	1,535	521	228	293	1,828
Q1	2,050	1,543	507	225	283	1,825
Q2	2,062	1,544	518	228	289	1,833
Q3	2,057	1,530	527	229	298	1,828
Q4	2,055	1,521	533	230	304	1,825
2006	2,028	1,472	556	236	320	1,791
Q1	2,035	1,500	535	228	307	1,806
Q2	2,031	1,481	550	234	316	1,797
Q3	2,031	1,462	569	242	327	1,789
Q4	2,014	1,444	571	241	329	1,773
2007	1,998	1,429	569	241	328	1,756
Q1	2,002	1,432	567	240	328	1,759
Q2	1,999	1,433	566	239	327	1,760
Q3	1,997	1,425	572	244	328	1,753
Q4	1,995	1,422	573	245	328	1,750
2008						
Q1 ¹⁾	1,989	1,416	573	245	328	1,744
Q2	2,002	1,428	574	245	329	1,757
monthly data - in thousands						
2007						
January	2,005	1,432	568	240	328	1,760
February	1,997	1,425	568	240	328	1,753
March	2,004	1,438	566	239	327	1,765
April	2,003	1,436	567	240	327	1,763
May	2,001	1,433	568	241	327	1,760
June	1,998	1,429	569	242	327	1,756
July	1,998	1,427	571	243	328	1,755
August	1,993	1,421	572	244	328	1,749
September	2,001	1,428	573	245	328	1,756
October	1,998	1,425	573	245	328	1,753
November	1,995	1,422	573	245	328	1,750
December	1,991	1,418	573	245	328	1,746
2008						
January	1,989	1,416	573 ²⁾	245	328	1,744
February	1,989	1,416	573	245	328	1,744
March	2,006	1,432	574	245	329	1,761
April	2,003	1,429	574	245	329	1,758
May	2,002	1,428	574	245	329	1,757
June	2,002	1,428	574	245	329	1,757

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

Notes by column:

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

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

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

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

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

Footnotes:

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

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

Analytical Appendix

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

	2004	2005	2006	2007	2007												2008		
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Employees in enterprises, institutions and organizations, by sections of activities	in thousands																		
Agriculture, hunting and forestry	69	64	58	54	56	56	55	55	56	55	54	54	53	52	52	50	50	49	
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	24	24	23	23	23	23	23	24	24	24	24	24	24	24	24	
Manufacturing	484	460	419	389	400	396	399	395	391	388	387	384	385	382	379	376	372	372	375
Electricity, gas and water supply	46	46	45	45	46	45	45	45	45	45	45	45	45	45	45	45	45	45	46
Construction	88	88	86	83	84	83	83	82	82	82	82	82	83	83	83	82	81	81	82
Wholesale and retail trade, repair	208	205	198	195	192	191	197	197	196	196	196	195	195	195	195	194	195	195	201
Hotels and restaurants	28	27	25	24	23	23	24	24	24	24	24	23	24	23	23	23	22	22	24
Transport, storage and communications	119	116	110	109	107	109	109	109	108	108	109	108	110	109	109	108	107	107	108
Financial mediation	29	29	30	31	30	30	30	31	31	31	31	31	31	31	31	31	32	32	32
Real estate, renting activities	59	63	67	67	63	63	65	67	67	67	67	67	68	69	68	68	71	71	74
Public administration and social insurance	71	71	69	69	69	69	68	68	68	69	69	69	69	69	70	70	69	69	69
Education	131	129	127	130	130	130	130	130	130	130	129	129	129	132	133	133	133	133	134
Health and social work	165	166	158	157	155	156	156	156	157	157	156	156	158	158	158	159	159	159	160
Other communal, social and personal services	49	51	52	52	51	51	52	52	52	52	53	52	53	53	53	53	53	53	54

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

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

	Average monthly wage (SBS)			Average Monthly Wage Real Chain Index (SBS)	
	Total labour costs, in dinars	Gross, in dinars	Net, in dinars	Gross	Net
2005					
August	30,951	26,252	17,928	108.9	109.2
September	31,618	26,818	18,345	110.6	110.6
October	31,503	26,720	18,265	107.1	107.4
November	32,280	27,379	18,696	106.6	106.6
December	38,014	32,243	22,078	108.5	108.7
2006					
January	31,365	26,603	18,191	110.4	110.6
February	33,787	28,657	19,567	111.5	111.5
March	34,624	29,367	20,094	111.2	111.3
April	36,044	30,572	20,887	106.2	106.1
May	35,730	30,305	20,713	108.3	108.2
June	37,568	31,864	21,777	109.9	109.8
July	37,419	31,738	21,774	110.3	110.6
August	37,844	32,098	21,925	109.3	109.3
September	38,382	32,555	22,259	109.7	109.6
October	38,516	32,668	22,340	113.4	113.4
November	39,959	33,892	23,148	115.1	115.1
December	48,686	41,294	28,267	120.9	120.8
2007					
January	39,815	33,770	24,122	120.0	125.3
February	41,523	35,219	25,228	117.6	123.4
March	42,618	36,148	25,960	118.1	124.0
April	43,761	37,117	26,632	117.4	123.3
May	44,411	37,668	26,981	120.6	126.4
June	45,882	38,916	27,882	118.0	123.7
July	45,641	38,712	27,752	117.2	122.4
August	46,337	39,302	28,143	114.5	120.1
September	46,344	39,308	28,161	110.9	116.2
October	47,257	40,082	28,720	111.7	117.1
November	48,351	41,010	29,373	109.5	114.8
December	56,736	48,122	34,471	104.1	108.9
2008					
January	46,371	39,331	28,230	103.5	104.0
February	50,954	43,218	30,982	108.3	108.4
March	50,547	42,873	30,809	103.5	103.5
April	53,474	45,355	32,562	105.5	105.6
May	52,860	44,835	32,147	102.8	102.9
June	53,772	45,608	32,648	101.2	101.1
July	54,370	46,115	33,058	103.7	103.7

Source: Serbian Bureau of Statistics (SBS).

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

	From the budget			Public enterprises		Serbia average
	Administration - all levels	Education and culture	Health and social work	National public	Local public	
	in dinars					
2004	28,268	22,944	23,120	29,104	27,943	20,555
2005	34,783	28,261	26,984	33,987	33,353	25,565
2006	42,386	33,812	33,150	42,052	38,385	31,801
2007	49,872	41,248	43,377	51,987	42,725	38,781
2005						
Q1	31,221	25,153	22,942	31,275	31,143	22,166
Q2	34,371	28,137	26,612	32,530	32,633	25,035
Q3	34,146	29,023	27,222	35,080	33,693	26,280
Q4	39,395	30,731	31,159	37,065	35,946	28,781
2006						
Q1	39,906	32,032	26,887	39,030	34,607	28,209
Q2	40,118	32,390	31,322	40,731	38,295	30,914
Q3	41,106	33,700	31,849	42,379	38,572	32,130
Q4	48,413	37,127	42,542	46,070	42,067	35,951
2007						
Q1	46,633	37,797	35,345	53,092	41,294	35,046
Q2	49,166	39,908	42,550	50,030	41,368	37,900
Q3	58,941	49,428	51,048	59,964	50,499	46,108
Q4	63,310	53,483	61,678	63,628	53,531	50,781
<i>December</i>	66,729	57,875	78,125	66,341	55,618	56,736
2008						
Q1	52,454	46,928	42,341	56,775	46,133	41,807
Q2	56,730	48,455	48,961	56,730	48,455	45,266

Source: SBS.

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

Analytical Appendix

Table P-8. Serbia: Balance of Payments, 2003–2007¹⁾

	2003		2004		2005			2006				2007		
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
flows, cumulative from the beginning of the year, in millions of euros														
CURRENT ACCOUNT	-1,355	-2,197	-324	-615	-1,134	-1,805	-689	-1,199	-1,972	-3,137	-1,186	-1,992	-3,337	-4,994
GOODS AND SERVICES	-3,621	-5,156	-708	-1,755	-2,970	-4,284	-1,129	-2,395	-3,557	-5,023	-1,440	-2,950	-4,438	-6,425
Goods	-3,808	-5,311	-683	-1,772	-2,987	-4,279	-1,110	-2,378	-3,554	-4,983	-1,445	-2,949	-4,454	-6,413
Exports, f.o.b. ²⁾	2,447	2,991	813	1,824	2,843	4,006	1,030	2,258	3,629	5,111	1,383	2,977	4,708	6,444
Imports, f.o.b.	-6,415	-8,302	-1,496	-3,596	-5,830	-8,285	-2,140	-4,636	-7,183	-10,093	-2,829	-5,927	-9,162	-12,858
Exports/Imports (%)	38.1	36.0	54.3	50.7	48.8	48.4	48.1	48.7	50.5	50.6	48.9	50.2	51.4	50.1
Services	187	155	-25	17	17	-5	-19	-17	-3	-41	6	0	16	-11
Receipts	906	1,171	251	594	951	1,319	350	771	1,306	1,840	488	989	1,564	2,140
Expenditures	-719	-1,016	-276	-577	-934	-1,324	-369	-788	-1,309	-1,881	-482	-990	-1,547	-2,152
Balance of goods and services	-3,621	-5,156	-708	-1,755	-2,970	-4,284	-1,129	-2,395	-3,557	-5,023	-1,440	-2,950	-4,438	-6,425
Export of goods and services	3,513	4,162	1,063	2,418	3,794	5,326	1,380	3,030	4,935	6,951	1,871	3,967	6,272	8,585
Imports of goods and services	-7,134	-9,319	-1,772	-4,173	-6,764	-9,610	-2,509	-5,424	-8,492	-11,974	-3,311	-6,916	-10,710	-15,009
Income, net	-180	-172	-59	-141	-198	-260	-65	-164	-252	-330	-106	-216	-358	-498
Earnings	61	64	12	32	53	80	33	68	107	157	41	89	133	174
Payments	-241	-235	-71	-174	-250	-339	-98	-232	-359	-488	-147	-305	-491	-672
Current transfers	2,020	2,728	410	1,200	1,886	2,471	468	1,276	1,710	2,031	318	1,094	1,327	1,729
Private remittances, net	332	340	35	167	225	281	-19	104	188	202	-17	148	116	98
Inflow	690	796	184	424	683	955	97	104	232	573	276	608	953	1,336
Outflow	-358	-456	-149	-256	-457	-674	-286	-456	-724	-1,051	-292	-460	-838	-1,238
F/X accounts of non-residents	308	568	37	108	259	460	175	236	269	259	111	274	300	378
F/X purchases, net	1,106	1,592	320	884	1,329	1,631	289	882	1,166	1,447	194	606	807	1,103
Other ³⁾	274	228	17	41	73	99	23	54	87	123	30	65	104	150
Official grants	425	403	33	82	148	268	37	84	127	185	42	80	131	200
ERRORS AND OMISSIONS	44	168	-184	-75	-205	-384	-57	-76	-123	-258	-165	-186	-80	-192
CAPITAL AND FINANCIAL ACCOUNT	1,898	2,377	710	1,173	2,276	3,863	1,129	2,745	5,103	7,635	1,161	2,394	4,099	6,126
Financial account	1,898	2,377	710	1,173	2,276	3,863	1,129	2,745	5,103	7,635	1,161	2,394	4,099	6,126
Foreign direct investment (FDI)	1,198	773	262	502	998	1,248	180	788	2,566	4,348	614	608	1,147	1,942
Other investment	701	1,604	448	671	1,278	2,615	949	1,957	2,537	3,286	547	1,785	2,952	4,184
Medium/long term loans, net	628	1,221	159	602	988	1,820	456	1,695	2,473	3,156	534	1,488	2,137	3,149
Government	206	229	15	44	108	192	68	85	133	133	36	43	81	95
Commercial banks	106	417	68	209	292	729	166	1,137	1,366	1,506	41	-160	-196	-126
Other	317	574	74	348	588	886	222	474	974	1,517	458	1,606	2,252	3,180
Short-term loans, net	14	164	94	28	33	330	212	-188	25	170	-197	-98	24	337
Extraordinary debt and interest repayment	0	0	0	0	0	0	0	-188	-377	-1,060	-143	-98	-86	-56
Other assets and liabilities	18	187	120	11	186	378	136	112	441	833	347	449	843	1,476
Commercial banks F/X reserves (increase,-)	-3	33	77	30	71	100	144	146	-25	1	6	43	33	-722
NBS reserves, net⁴⁾, (increase,-)	-587	-349	-202	-483	-937	-1,675	-382	-1,469	-3,008	-4,240	191	-216	-681	-941
IMF disbursements	246	192	0	0	151	151	75	75	75	75	0	0	0	0
IMF amortization ⁶⁾	0	-188	-47	-93	-133	-166	-15	-22	-22	-32	-19	-29	-38	-64
MEMORANDUM ITEMS														
NBS reserves excl. com. banks deposits	-765	-293	-51	-270	-455	-680	-85	-433	-613	-1,666	0	276	-97	-444
in % of GDP														
Exports of goods and services	19.5	21.1	23.2	24.9	24.9	25.2	26.6	27.3	27.9	27.9	29.0	29.1	29.4	28.8
Imports of goods and services	-39.6	-47.2	-38.7	-43.0	-44.4	-45.5	-48.4	-48.8	-48.0	-48.1	-51.3	-50.8	-50.2	-50.3
Balance of goods and services	-21.1	-26.9	-14.9	-18.3	-19.6	-20.3	-21.4	-21.4	-20.1	-20.0	-22.4	-21.7	-20.9	-21.5
Current account	-7.5	-11.1	-7.1	-6.3	-7.5	-8.6	-13.3	-10.8	-11.2	-12.6	-18.4	-14.6	-15.6	-16.7
GDP in euros ⁷⁾	18,008	19,723	4,578	9,703	15,220	21,108	5,180	11,113	17,681	24,877	6,449	13,619	21,342	29,845

Source: NBS, SBS.

- 1) Original US dollars monthly data are converted to euros using monthly averages of official daily NBS mid rates.
- 2) Exports f.o.b. corrected for unregistered exports.
- 3) Includes payments settlement with Kosovo.
- 4) Excluding IMF tranches.
- 5) Includes extraordinary repayment of principal and interests on WB and IMF loans.
- 6) Principal repayments.
- 7) Cumulative from the beginning of the year. GDP 2006 and 2007 : QM estimate.

Table P-9. Serbia: Balance of Payments (New NBS Methodology)¹⁾

	2007		2008	
	Q1	Q2	Q1	Q2
	flows, cumulative from the beginning of the year, millions of euros			
CURRENT ACCOUNT	-1,031	-2,061	-1,299	-3,035
Goods and services	-1,538	-3,134	-1,821	-3,919
Export	1,883	4,003	2,329	4,931
Import	-3,421	-7,137	-4,150	-8,850
Goods	-1,482	-3,023	-1,841	-3,863
Export f.o.b	1,383	2,969	1,665	3,639
Import f.o.b	-2,865	-5,992	-3,507	-7,502
Services	-56	-110	20	-56
Export	500	1,034	663	1,291
Import	-556	-1,145	-643	-1,348
Income, net	-55	-169	-76	-296
Receipts	106	233	143	275
Payments	-161	-402	-218	-571
Current transfers, net	562	1,242	598	1,180
Government	24	50	27	76
o/w grants	36	72	43	107
Others (enterprises)	538	1,191	571	1,104
Private remittances, net	404	884	412	763
Other transfers	134	308	159	341
Payment settlements with Kosovo	30	65	34	79
Other current transfers	82	181	84	179
CAPITAL ACCOUNT	-322	-321	5	14
Receipts	0	0	1	9
Payments	-322	-321	4	4
FINANCIAL ACCOUNT	1,421	2,177	1,376	2,912
Direct investment, net	666	475	755	1,319
Abroad	11	-604	-18	-50
In reporting country (Serbia)	655	1,079	773	1,369
Portfolio investment, net	269	454	-44	-82
Assets	-2	-4	-11	-20
Liabilities	271	457	-33	-62
Other investments	257	1,436	694	1,394
Trade credit	-5	88	119	33
Loans	317	1,361	204	970
NBS	-33	-56	0	0
Government	50	69	1	19
Commercial banks	-177	-266	-516	-602
Long-term	43	-157	-163	-253
Short-term	-220	-109	-353	-349
Other (enterprises)	477	1,613	719	1,554
Long-term	455	1,604	591	1,362
Short-term	21	9	128	192
Currency and deposits	88	85	371	391
Other assets and liabilities	-143	-98	0	0
Reserves Assets (- increase)	229	-187	-29	281
ERRORS AND OMISSIONS, net	-68	205	-82	109
OVERALL BALANCE	-229	187	29	-281
MEMORANDUM ITEMS				
		in % of GDP		
Exports of goods	21.5	21.8	21.8	22.0
Imports of goods	-44.4	-44.0	-45.9	-45.4
Balance of goods	-23.0	-22.2	-24.1	-23.4
Current account	-16.0	-15.2	-17.0	-18.4
GDP in euros ²⁾	6,449	13,607	7,637	16,531

Source: NBS.

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

2) Cumulative from the beginning of the year. GDP 2008: QM estimate.

Analytical Appendix

Table P-10. Serbia: Consolidated General Government Fiscal Operations¹⁾, 2004–2008

	2004	2005	2006	2007				2008		2004	2005	2006	2007			
	Total	Total	Total	Total	Q1	Q2	Q3	Q4	Q1	Q2						
	in bill of dinars												% in GDP			
I TOTAL REVENUE	589.4	721.7	865.8	1007.8	226.4	240.0	251.3	290.1	268.3	273.3	41.2	41.2	42.4	42.1		
<i>o/w: Public revenues excluding government VAT liabilities and offsets with SDF^{2,3)}</i>	580.6	699.1	855.6	1002.2	224.9	237.2	250.2	289.9	268.3	273.3	40.6	39.9	41.9	41.9		
1. Current revenue	583.4	713.7	855.5	996.0	223.1	237.4	248.9	286.7	265.5	270.3	40.8	40.8	41.9	41.6		
Tax revenue	540.8	637.9	756.0	870.3	195.7	209.9	216.5	248.2	234.6	245.2	37.8	36.5	37.0	36.4		
Personal income tax	76.9	94.3	118.6	115.8	24.9	28.2	29.1	33.6	29.7	34.1	5.4	5.4	5.8	4.8		
Corporate income tax	6.9	10.3	18.3	29.7	11.7	5.6	4.6	7.8	15.0	8.1	0.5	0.6	0.9	1.2		
Value added tax and retail sales tax	159.1	215.9	225.1	265.5	60.5	65.0	66.9	73.1	73.2	77.0	11.1	12.3	11.0	11.1		
<i>o/w: Net VAT and retail sales tax²⁾</i>	159.1	198.8	224.5	260.3	59.1	62.3	65.8	73.1	73.2	77.0	11.1	11.4	11.0	10.9		
Excises	69.1	71.3	86.9	98.6	20.1	24.1	26.0	28.4	23.7	24.2	4.8	4.1	4.3	4.1		
Custom duties	34.3	39.0	45.4	57.4	12.0	13.9	14.6	16.9	14.8	16.9	2.4	2.2	2.2	2.4		
Social contributions	159.0	183.0	231.4	270.6	58.6	64.8	67.6	79.6	69.7	75.9	11.1	10.5	11.3	11.3		
<i>o/w: contributions excluding offsets with SDF³⁾</i>	150.2	177.5	221.9	270.1	58.5	64.7	67.6	79.2	69.7	75.9	10.5	10.1	10.9	11.3		
Other tax	35.5	24.2	30.3	32.8	7.9	8.4	7.7	8.8	8.5	8.9	2.5	1.4	1.5	1.4		
Non-tax revenue	42.6	75.8	99.6	125.7	27.4	27.4	32.4	38.5	31.0	25.1	3.0	4.3	4.9	5.3		
2. Capital revenue	6.1	7.9	10.3	11.7	3.2	2.6	2.4	3.4	2.8	3.1	0.4	0.5	0.5	0.5		
II TOTAL EXPENDITURE	-572.0	-695.1	-871.4	-1024.3	-214.9	-220.8	-254.5	-334.1	-252.3	-289.8	-40.0	-39.7	-42.7	-42.8		
1. Current expenditure	-535.0	-579.2	-790.0	-907.9	-194.8	-203.8	-230.2	-279.0	-238.5	-268.7	-37.4	-33.1	-38.7	-37.9		
Wages and salaries	-138.0	-170.0	-204.4	-238.3	-53.3	-57.7	-59.6	-67.6	-64.1	-71.3	-9.6	-9.7	-10.0	-10.0		
<i>o/w: wages and salaries excluding severance payments⁴⁾</i>	-0.3	-1.3	-3.2	-2.0	-0.3	-0.4	-0.4	-0.9	-0.3	0.0	0.0	-0.1	-0.2	-0.1		
<i>o/w: Health Insurance Bureau severance payments⁵⁾</i>	0.0	-2.2	-2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0		
Expenditure on goods and services	-78.3	-107.2	-135.9	-168.2	-30.3	-36.2	-41.0	-60.7	-38.1	-43.1	-5.5	-6.1	-6.7	-7.0		
Interest payments	-24.6	-17.7	-30.2	-17.9	-6.2	-3.4	-4.7	-3.5	-6.0	-2.5	-1.7	-1.0	-1.5	-0.7		
Subsidies	-63.8	-54.9	-55.6	-63.7	-9.4	-10.5	-17.9	-25.9	-13.4	-22.2	-4.5	-3.1	-2.7	-2.7		
Social transfers	-217.0	-281.7	-343.4	-395.9	-91.1	-91.8	-101.8	-111.3	-112.7	-122.4	-15.2	-16.1	-16.8	-16.5		
<i>o/w: pensions⁶⁾</i>	-151.1	-186.1	-227.7	-259.9	-62.0	-63.3	-64.9	-69.7	-74.8	-81.5	-10.6	-10.6	-11.2	-10.9		
Other current expenditure	-13.3	-17.8	-20.5	-23.9	-4.6	-4.1	-5.2	-10.0	-4.2	-7.2	-0.9	-1.0	-1.0	-1.0		
2. Capital expenditure ⁷⁾	-37.0	-45.9	-81.3	-116.4	-20.0	-17.0	-24.4	-55.1	-13.8	-21.1	-2.6	-2.6	-4.0	-4.9		
III "OLD" DEBT REPAYMENT, GOVERNMENT NET LENDING AND RECAPITALIZATIONS	-6.3	-15.1	-30.9	-26.5	-9.8	-1.0	-5.5	-10.2	-12.6	-5.2	-0.4	-0.9	-1.5	-1.1		
1. Pensions ⁸⁾	-4.5	-9.8	-20.3	-13.4	-8.9	0.0	0.0	-4.4	-5.0	0.0	-0.3	-0.6	-1.0	-0.6		
2. Budget credits, net ⁹⁾	-1.8	-5.3	-10.7	-13.1	-0.8	-1.0	-5.5	-5.8	-7.6	-5.2	-0.1	-0.3	-0.5	-0.5		
IV CASH BALANCE (I+II+III)	17.5	11.5	-36.5	-43.0	1.7	18.2	-8.8	-54.2	3.4	-21.6	1.2	0.7	-1.8	-1.8		
Republic budget	-0.8	4.7	-36.9	-38.8	-8.0	14.5	-9.5	-35.8	1.1	-18.6	-0.1	0.3	-1.8	-1.6		
Pension and Disability Insurance Employee Fund	-0.8	1.7	1.3	2.1	-2.2	-1.6	0.1	5.9			-0.1	0.1	0.1	0.1		
Pension and Disability Insurance Self-employed Fund	2.7	2.5	5.2	5.4	1.3	1.0	1.4	1.7	-5.3	-5.3	0.2	0.1	0.3	0.2		
Pension and Disability Insurance Farmers Fund	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	-0.1			0.0	0.0	0.0	0.0		
Health Insurance Fund	1.4	1.2	3.1	0.4	3.5	0.8	1.5	-5.4	3.8	0.5	0.1	0.1	0.2	0.0		
National Employment Service	0.8	0.4	0.2	-0.8	-0.6	0.1	0.0	-0.3	-2.6	-0.1	0.1	0.0	0.0	0.0		
Vojvodina budget	-0.6	-2.0	-2.7	-1.4	0.4	-0.3	-0.7	-0.8	2.0	3.1	0.0	-0.1	-0.1	-0.1		
Local government	..	3.3	0.5	-8.6	7.4	2.8	-2.5	-16.3	7.4	-2.1	...	0.2	0.0	-0.4		
..	..	..	-4.4	-1.4	0.0	0.6	0.1	-2.0	-0.3	-0.2	...	...	-0.2	-0.1
V FINANCING (FREN's definition)	4.8	5.9	100.0	13.5	20.3	-5.3	-6.8	5.2	21.3	-12.6	0.3	0.3	4.9	0.6		
Grants ¹²⁾	0.9	0.2	0.7	0.6	0.1	0.1	0.2	0.2	0.1	0.5	0.1	0.0	0.0	0.0		
Privatization receipts ¹³⁾	14.2	21.7	106.1	40.6	26.6	8.6	3.3	2.2	14.0	4.1	1.0	1.2	5.2	1.7		
Domestic financing ¹⁴⁾	5.9	5.0	21.0	6.7	0.5	0.5	0.0	5.6	1.0	1.0	0.4	0.3	1.0	0.3		
Foreign financing ¹⁵⁾	7.4	6.7	2.0	-1.1	-0.4	-0.3	-0.3	-0.1	0.1	0.6	0.5	0.4	0.1	0.0		
Expenditures for principal repayments to domestic and foreign creditors ¹⁶⁾	-23.6	-27.7	-29.9	-33.2	-6.4	-14.1	-10.0	-2.7	6.2	-18.8	-1.6	-1.6	-1.5	-1.4		
VI ACCOUNT BALANCE CHANGE (IVb+III.1+V)	22.3	17.4	63.5	-29.5	22.1	13.0	-15.6	-49.0	24.7	-34.2	1.6	1.0	3.1	-1.2		

Source: Public Finance Bulletin (PFB), IMF Country Report No. 06/58, FREN's estimates, Memorandum on the Budget and Economic Policy for 2006 with Projections to 2009 and for 2007 with 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 footnote 16).
- 3) Contributions revenue reduced by the item "Offsets with SDF" in the Memorandum items.
- 4) Account 414 - Social benefits for employees, including sick benefits, expenditure for training employed persons, and severance payments. This item refers only to the Republic budget.
- 5) FREN's estimate based on media reports and the MoF website, which tallies with item on receipts from borrowing (Account 91) Serbian Health Insurance Bureau from PFB.
- 6) Expenditures on current pensions, adjusted for the payment of the "old debt" and debt incurred through the delay in pension payments starting in December 2005. (See item III.2 and footnote 8).
- 7) Capital expenditure figures for 2003 and 2004 were taken from the Memorandum on the Budget and Economic Policy for 2006 with Projections to 2009. (see footnote 16).
- 8) In December 2002, payment started of the "old debt" to pensioners which was incurred in the April 1994-June 1995 period when only 83% of the due pension amounts was paid. Payment was envisaged in 43 installments (mid-2006). In addition, the delay in pension payments inherited from the 1990s was eliminated at the end of last year, with payment of the 1.5 pension arrears starting in December 2005.
- 9) The item corresponds to the item "Outlays for acquisition of financial assets" in the PFB, i.e. to the item "net lending" in the IMF presentation. This

refers exclusively to credits deemed to be for public policy purposes. It comprises loans to students, financing of the National Corporation for Housing Loan Insurance and the like. A large amount in 2003 can probably be explained by the shift in financing of government spending for the period of the temporary budget in the first months of 2004.

10) Overall fiscal balance (GFS 2001) - Cash surplus/deficit adjusted for transactions in assets and liabilities that are deemed to be for public policy purposes (i.e. lending minus repayment - GFS 1986), or what we named "budget credits". See discussion on methodology in Box 1, QM 3 for more details.

11) Under FREN's definition, the analytical balance includes on the expenditure side the payment of old (domestic) debts, specifically payments for FFCDs, the Serbia Reconstruction Loan, debt to pensioners, etc. Defined in this way, the result measures the liquidity effect government transactions have on the economy.

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

13) Estimate based on the reported republic's privatization proceeds, increased by 10% an account of the statutory allocations to the Pension Fund and the Restitution Fund. We have no explanation for the negative privatization proceeds in the PFB in Q4 2005.

14) Financing through the issuance of T-bills of the Republic of Serbia. There is a possibility that new loans to the government extended by domestic banks are included here, in which case they should be excluded from the item: "Change in Government Net Position in the Banking System on the basis of data from commercial bank's balance sheets (NBS data)" in Memorandum items.

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

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

Analytical Appendix

Table P-11. Serbia: Monetary Survey, 2005–2008

	2005		2006		2007			2008	
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	
in millions dinars, end of period ¹⁾									
Net Foreign Assets (NFA)	218,886	407,565	441,048	484,388	500,302	563,524	596,215	534,403	
Net Foreign Assets (NFA) (in euros)	2,560	5,159	5,407	6,130	6,344	7,112	7,243	6,766	
Assets	491,883	770,999	775,921	786,952	806,345	876,769	876,397	801,299	
Assets (in euros)	5,753	9,759	9,512	9,958	10,225	11,065	10,647	10,146	
NBS	424,844	715,114	719,381	730,668	751,920	765,615	788,296	720,967	
NBS (in euros)	4,969	9,052	8,819	9,246	9,535	9,662	9,577	9,129	
Commercial banks	67,039	55,885	56,540	56,284	54,425	111,154	88,101	80,332	
Commercial banks (in euros)	784	707	693	712	690	1,403	1,070	1,017	
Liabilities (-)	-272,997	-363,434	-334,873	-302,564	-306,043	-313,245	-280,182	-266,896	
Liabilities (-) (in euros)	-3,193	-4,600	-4,105	-3,829	-3,881	-3,953	-3,404	-3,379	
NBS	-81,873	-55,692	-16,275	-15,716	-15,183	-13,586	-15,317	-15,714	
NBS (in euros)	-958	-705	-200	-199	-193	-171	-186	-199	
Commercial banks	-191,124	-307,742	-318,598	-286,848	-290,860	-299,659	-264,865	-251,182	
Commercial banks (in euros)	-2,235	-3,895	-3,906	-3,630	-3,688	-3,782	-3,218	-3,180	
Net Domestic Assets (NDA)	239,985	231,055	234,991	224,279	291,193	340,174	357,307	412,802	
Domestic credits	490,467	509,110	537,098	583,321	642,488	730,222	787,954	850,438	
Net credits to government ²⁾	-27,831	-100,061	-128,909	-149,081	-144,385	-112,290	-120,644	-103,539	
Credits	40,106	34,896	29,559	25,652	24,605	19,203	21,147	20,024	
Dinar credits	21,272	18,271	16,193	16,102	16,073	10,936	12,306	12,660	
NBS	16,330	16,450	15,740	15,715	15,715	10,811	11,078	11,429	
Commercial banks	4,942	1,821	453	387	358	125	1,228	1,231	
Fx credits	18,834	16,625	13,366	9,550	8,532	8,267	8,841	7,364	
Fx credits (in euros)	220	210	164	121	108	104	107	93	
NBS	181	0	0	0	0	0	0	17	
NBS (in euros)	2	0	0	0	0	0	0	0	
Commercial banks	18,653	16,625	13,366	9,550	8,532	8,267	8,841	7,347	
Commercial banks (in euros)	218	210	164	121	108	104	107	93	
Deposits (-)	-67,937	-134,957	-158,468	-174,733	-168,990	-131,493	-141,791	-123,563	
Dinar deposits	-43,604	-27,047	-51,975	-78,392	-72,442	-45,187	-65,432	-80,486	
NBS	-40,718	-19,678	-43,849	-62,941	-52,730	-29,269	-49,326	-62,952	
Commercial banks	-2,886	-7,369	-8,126	-15,451	-19,712	-15,918	-16,106	-17,534	
Fx deposits	-24,333	-107,910	-106,493	-96,341	-96,548	-86,306	-76,359	-43,077	
Fx deposits (in euros)	-285	-1,366	-1,305	-1,219	-1,224	-1,089	-928	-545	
NBS	-18,806	-103,443	-101,705	-91,685	-92,463	-81,966	-71,923	-37,729	
NBS (in euros)	-220	-1,309	-1,247	-1,160	-1,172	-1,034	-874	-478	
Commercial banks	-5,527	-4,467	-4,788	-4,656	-4,085	-4,340	-4,436	-5,348	
Commercial banks (in euros)	-65	-57	-59	-59	-52	-55	-54	-68	
Credit to the non-government sector	518,298	609,171	666,007	732,402	786,873	842,512	908,598	953,977	
Households	132,146	203,631	230,775	254,803	286,000	306,240	333,557	343,962	
Enterprises	386,152	405,540	435,232	477,599	500,873	536,272	575,041	610,015	
Other item, net ³⁾	-250,482	-278,055	-302,107	-359,042	-351,295	-390,048	-430,647	-437,636	
o/w: Capital and Reserves (-)	-181,772	-242,254	-256,429	-289,801	-316,438	-356,592	-388,618	-398,306	
NBS	-41,450	-7,454	-15,993	-9,923	-6,189	-6,881	-13,470	17,773	
Commercial banks	-140,322	-234,800	-240,436	-279,878	-310,249	-349,711	-375,148	-416,079	
Broad money: M2⁴⁾	458,870	638,620	676,039	708,667	791,495	903,698	953,522	947,205	
Dinar denominated M2 ⁵⁾	192,180	283,116	282,299	288,329	326,341	390,307	367,648	365,834	
M1	144,949	200,090	193,187	205,564	218,393	248,839	227,209	225,480	
Currency outside banks	53,650	68,461	58,669	65,066	65,373	76,949	70,336	69,495	
Demand deposits (households and economy)	91,299	131,629	134,518	140,498	153,020	171,890	156,873	155,985	
Time and savings deposits (households and economy)	47,231	83,026	89,112	82,765	107,948	141,468	140,439	140,354	
Fx deposits (households and economy)	266,690	355,504	393,740	420,338	465,154	513,391	585,874	581,371	
Fx deposits (households and economy), in euros	3,119	4,500	4,827	5,319	5,898	6,479	7,117	7,361	
o/w: households ⁶⁾	190,136	260,661	293,195	307,783	336,109	381,687	410,836	419,824	
o/w: households ⁶⁾ (in euros)	2,224	3,300	3,594	3,895	4,262	4,817	4,991	5,316	

Source: NBS: Statistical bulletin.

1) Unless otherwise indicated.

2) Government does not include cities and municipalities, these are treated as a non-government sector.

3) As mentioned in footnote 3 in Table T-22: Enterprises also include non-profit and other non-government economic entities.

4) M2 refers to M3 in accepted methodology in Serbia, and it includes: currency outside banks; demand deposits of households and enterprises; time and savings dinar deposits of households and enterprises; and time and savings fx deposits of households and

5) M2 dinar refers to M2 in accepted methodology in Serbia, and it includes: currency outside banks; demand deposits of households and economy; and time and savings dinar deposits of households and economy.

6) Household savings.

Table P-12. Serbia: Commercial Banks Balance Sheet, 2005–2008

	2005		2006		2007			2008	
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	
	in millions dinars, end of period ¹⁾								
Net foreign reserves	-124,085	-251,857	-262,058	-230,564	-236,435	-188,505	-176,764	-170,850	
Net foreign reserves (in euros)	-1,451	-3,188	-3,213	-2,918	-2,998	-2,379	-2,147	-2,163	
Gross foreign reserves	67,039	55,885	56,540	56,284	54,425	111,154	88,101	80,332	
Gross foreign reserves (in euros)	784	707	693	712	690	1,403	1,070	1,017	
Gross reserve liabilities (-)	-191,124	-307,742	-318,598	-286,848	-290,860	-299,659	-264,865	-251,182	
Gross reserve liabilities (-) (in euros)	-2,235	-3,895	-3,906	-3,630	-3,688	-3,782	-3,218	-3,180	
Net Domestic Assets (NDA)	124,085	251,857	262,058	230,565	236,435	188,505	176,764	170,850	
Domestic credits	331,378	509,090	534,592	569,540	573,534	566,860	598,261	630,628	
Net claims on government ²⁾	5,838	-2,492	-9,261	-18,611	-23,546	-15,933	-18,523	-24,193	
Claims	25,803	23,479	19,134	15,314	15,097	15,400	17,424	15,986	
Dinar credits	7,145	6,854	5,768	5,764	6,565	7,133	8,583	8,637	
Fx credits	18,658	16,625	13,366	9,550	8,532	8,267	8,841	7,349	
Fx credits (in euros)	218	210	164	121	108	104	107	93	
Liabilities (-)	-19,965	-25,971	-28,395	-33,925	-38,643	-31,333	-35,947	-40,179	
Dinar deposits	-14,399	-21,496	-23,592	-29,212	-34,522	-26,956	-31,466	-34,813	
Fx deposits	-5,566	-4,475	-4,803	-4,713	-4,121	-4,377	-4,481	-5,366	
Fx deposits (in euros)	-65	-57	-59	-60	-52	-55	-54	-68	
Net claims on NBS	204,896	467,869	483,231	482,321	521,562	567,401	560,666	553,950	
Claims	205,631	468,312	483,620	482,561	522,696	569,468	562,160	554,305	
Cash	7,053	10,206	9,889	10,958	10,812	15,665	16,108	16,989	
Required reserves	26,046	34,290	25,931	29,196	31,838	30,393	41,789	65,908	
Excess reserves	2,621	-1,524	49	-5,973	-9,617	-8,841	-9,165	7,540	
Deposits (-)	153,016	273,808	280,284	298,088	303,240	313,546	285,163	255,180	
o/w: dinar deposits	5,274	20,189	6,651	22,804	20,741	43,226	4,871	5,053	
NBS bills/repo ³⁾	16,895	151,532	167,467	150,292	186,423	218,705	228,265	208,688	
Liabilities (-)	-735	-443	-389	-240	-1,134	-2,067	-1,494	-355	
Net claims on the rest of the economy	120,644	43,713	60,622	105,830	75,518	15,392	56,118	100,871	
Claims	507,171	589,303	645,429	711,313	764,589	820,404	894,338	939,767	
Households	131,860	203,318	230,357	254,319	285,502	305,736	333,045	343,452	
Long-term claims	107,724	163,638	187,445	206,568	234,021	248,453	275,820	279,251	
Short-term claims	24,136	39,680	42,912	47,751	51,481	57,283	57,225	64,201	
Enterprises	375,311	385,985	415,072	456,994	479,087	514,668	561,293	596,315	
Long-term claims	165,442	179,842	195,326	204,816	224,636	237,551	252,188	260,738	
Short-term claims	209,869	206,143	219,746	252,178	254,451	277,117	309,105	335,577	
Liabilities (-)	-386,527	-545,590	-584,807	-605,483	-689,071	-805,012	-838,220	-838,896	
Dinar deposits	-121,022	-191,040	-191,962	-186,591	-224,799	-292,376	-263,676	-261,715	
Households	-16,542	-26,729	-29,482	-31,264	-34,490	-37,558	-38,976	-39,127	
Enterprises	-104,480	-164,311	-162,480	-155,327	-190,309	-254,818	-224,700	-222,588	
Fx deposits	-265,505	-354,550	-392,845	-418,892	-464,272	-512,636	-574,544	-577,181	
Households ⁴⁾	-190,136	-260,661	-293,195	-307,783	-336,109	-381,687	-410,836	-419,824	
Households (in euros)	-2,224	-3,300	-3,594	-3,895	-4,262	-4,817	-4,991	-5,316	
Enterprises	-75,369	-93,889	-99,650	-111,109	-128,163	-130,949	-163,708	-157,357	
Enterprises (in euros)	-882	-1,188	-1,222	-1,406	-1,625	-1,653	-1,989	-1,992	
Other item, net⁵⁾	-207,293	-257,233	-272,534	-338,975	-337,099	-378,355	-421,497	-459,778	
o/w: capital and reserves	-140,322	-234,800	-240,436	-279,878	-310,249	-349,711	-375,148	-416,079	

Source: FREN, NBS - Statistical Bulletin.

1) Unless otherwise indicated.

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

3) Household savings.

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

Analytical Appendix

Table P-13. Serbia: National Bank of Serbia Balance Sheet, 2005–2008

	2005	2006	2007			2008		
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	in millions dinars, end of period1)							
Foreign assets , net	194,094	406,226	429,702	440,156	454,324	482,161	492,431	455,308
Foreign assets, net (in euros)	2,270	5,142	5,268	5,570	5,761	6,085	5,982	5,765
Gross foreign reserves	424,844	715,114	719,381	730,668	751,920	765,615	788,296	720,967
<i>Gross foreign reserves (in euros)</i>	<i>4,969</i>	<i>9,052</i>	<i>8,819</i>	<i>9,246</i>	<i>9,535</i>	<i>9,662</i>	<i>9,577</i>	<i>9,129</i>
Gross foreign liabilities (-)	-230,750	-308,888	-289,679	-290,512	-297,596	-283,454	-295,865	-265,659
<i>Gross foreign liabilities (-) (in euros)</i>	<i>-2,699</i>	<i>-3,910</i>	<i>-3,551</i>	<i>-3,676</i>	<i>-3,774</i>	<i>-3,577</i>	<i>-3,594</i>	<i>-3,364</i>
o/w: fx deposits of commercial banks	-147,467	-253,563	-273,927	-274,871	-282,625	-270,152	-280,814	-250,059
<i>o/w: fx deposits of commercial banks (in euros)</i>	<i>-1,725</i>	<i>-3,210</i>	<i>-3,358</i>	<i>-3,478</i>	<i>-3,584</i>	<i>-3,409</i>	<i>-3,411</i>	<i>-3,166</i>
Net Domestic Assets (NDA)	-99,741	-272,302	-326,990	-318,030	-332,233	-323,041	-368,368	-290,420
Domestic credits	-64,206	-264,055	-310,446	-311,683	-333,182	-325,783	-354,020	-314,111
Net claims on government)	-48,936	-116,094	-146,005	-161,819	-150,834	-110,363	-128,439	-106,579
Claims	16,511	16,450	15,740	15,715	15,715	10,811	11,078	11,446
o/w: other dinar credits	16,330	16,450	15,740	15,715	15,715	10,811	11,078	11,429
Deposits (-)	-65,447	-132,544	-161,745	-177,534	-166,549	-121,174	-139,517	-118,025
Dinar deposits	-46,641	-29,101	-60,040	-85,849	-74,086	-39,208	-67,594	-80,296
o/w: municipalities	-5,923	-9,423	-16,191	-22,908	-21,356	-9,939	-18,268	-17,344
Fx deposits	-18,806	-103,443	-101,705	-91,685	-92,463	-81,966	-71,923	-37,729
<i>Fx deposits (in euros)</i>	<i>-220</i>	<i>-1,309</i>	<i>-1,247</i>	<i>-1,160</i>	<i>-1,172</i>	<i>-1,034</i>	<i>-874</i>	<i>-478</i>
Net claims on banks	-15,875	-149,252	-165,948	-151,528	-184,184	-217,095	-227,308	-209,269
Claims	954	488	467	306	517	595	1,625	407
o/w: other dinar credits	946	481	453	292	511	589	1,625	407
o/w: Fx credits	8	7	14	14	6	6	0	0
<i>o/w: Fx credits (in euros)</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Liabilities (NBS bills, repo transactions) (-)	-16,829	-149,740	-166,415	-151,834	-184,701	-217,690	-228,933	-209,676
Net claim on the rest of the economy	605	1,291	1,507	1,664	1,836	1,675	1,727	1,737
Claims	670	1,353	1,509	1,666	1,838	1,680	1,735	1,738
Dinar and fx credits	670	1,353	1,509	1,666	1,838	1,680	1,735	1,738
Liabilities (-)	-65	-62	-2	-2	-2	-5	-8	-1
Dinar deposits	-65	-62	-2	-2	-2	-5	-8	-1
Other items, net3)	-35,535	-8,247	-16,544	-6,347	949	2,742	-14,348	23,691
Reserve money (H)	94,353	133,924	102,712	122,126	122,091	159,120	124,063	164,888
Currency in circulation	53,650	68,461	58,669	65,066	65,373	76,949	70,336	69,495
Commercial bank's reserves	40,703	65,463	44,043	57,060	56,718	82,171	53,727	95,393
Required reserves allocated	26,046	34,290	25,931	29,196	31,838	30,393	41,789	65,908
Excess reserves	14,657	31,173	18,112	27,864	24,880	51,778	11,938	29,485
Overnight deposits	7,604	20,967	8,223	16,907	14,069	36,113	-4,170	12,496
Giro account and cash	7,053	10,206	9,889	10,957	10,811	15,665	16,108	16,989

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.

CIP - Katalogizacija u publikaciji Narodna biblioteka Srbije, Beograd

33(497.11)

QUARTERLY monitor of economic trends and policies in Serbia /
Editor in Chief Pavle Petrović. - 2005, iss. 1 (january/july)- . - Belgrade
(Kamenička 6) : The Foundation for the Advancement of Economics,
2005- (Belgrade : Alta Nova). - 30 cm

Dostupno i na: <http://www.fren.org.yu>. - Tromesečno. - Ima izdanje
na drugom jeziku: Kvartalni monitor ekonomskih trendova i politika
u Srbiji = ISSN 1452-2624 ISSN 1452-2810 = Quarterly monitor of
economic trends and policies in Serbia

COBISS.SR-ID 126940428

Quarterly Monitor

of Economic Trends and Policies in Serbia

A publication in Serbian and English of the Foundation for the Advancement of Economics, focusing on systematic and in-depth monitoring of macroeconomic, financial and corporate trends and analysis of economic policy in Serbia.

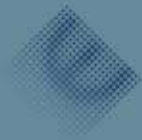


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ISSN 1452-2810



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