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The Analytical Appendix can be found at www.fren.org.rs.

Analytical and Notation Conventions

Values

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

Definitions of Aggregates and Indices

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

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

New Economy – Enterprises formed through private initiative

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

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

Notations

CPI – Consumer Price Index

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

H – Primary money (high-powered money)

IPPI – Industrial Producers Price Index

M1 – Cash in circulation and dinar sight deposits

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

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

NDA – Net Domestic Assets

NFA – Net Foreign Assets

RPI – Retail Price Index

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

Abbreviations

CEFTA – Central European Free Trade Agreement

EU – European Union

FDI – Foreign Direct Investment

FFCD – Frozen Foreign Currency Deposit

FREN – Foundation for the Advancement of Economics

GDP – Gross Domestic Product

GVA – Gross Value Added

IMF – International Monetary Fund

LRS – Loan for the Rebirth of Serbia

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

NES - National Employment Service

NIP – National Investment Plan

NBS – National Bank of Serbia

OECD – Organization for Economic Cooperation and Development

PRO – Public Revenue Office

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

QM – *Quarterly Monitor*

SBS – Serbian Bureau of Statistics

SDF – Serbian Development Fund

SEE – South East Europe

SEPC – Serbian Electric Power Company

SITC – Standard International Trade Classification

SME – Small and Medium Enterprise

VAT – Value Added Tax

From the Editor

The fundamental problems now faced by Serbia's economy are the halt in production growth and a probable recession. Inflation still remains significant, but is mainly the result of changes to administratively-controlled prices; market inflation is not high, and the looming recession will keep it in check.

GDP growth has at least halved in Q4 2008 relative to the previous quarter; indeed, there are indications it may have halted completely (see Trends, pt. 4). Industry has taken the hardest hit, recording major falls in December and, especially, January. This deceleration in economic activity was caused by a sudden halt in loans to businesses and households after the crisis broke out (see Trends, pt. 7, Table T7-5). The inability to secure additional financing abroad, as well as the withdrawal of domestic foreign currency savings, made a large dent in the sources of financing of new loans. All this has brought about a substantial reduction in domestic demand, which was the primary factor in the slowdown of economic activity. Another less important factor behind the slowdown in production was the fall in export demand: its negative impact was focused on industry (see Trends, pt. 4).

The first reaction of fiscal and monetary policy to the impact of the global crisis was uncoordinated and, partly, focused on denying even the fact that the crisis existed. Fiscal policy, under pressure by populist campaign promises, and in spite of the looming crisis, increased current spending. The National Bank of Serbia (NBS) was forced to implement a restrictive policy, endeavoring to defend the dinar in the face of major depreciation, while the main monetary constraint was imposed from outside of the NBS, by the halt in lending referred to above. Expansionary fiscal policy and restrictive monetary measures thus emerged as an unplanned response to the crisis.

Fiscal expansion seen in Q4 2008, with a quarterly deficit of an enormous 6.5% of GDP, was comparable only to substantial increases – and resulting deficits – recorded in previous quarters directly preceding elections. This policy was not a carefully thought-out response to the global crisis, but rather the result of "looking back", i.e. fulfilling campaign promises made in the run-up to the May 2008 election. So, in October 2008, at a time when the world's strongest economies were already faltering under the impact of the crisis, Serbia rebalanced the 2008 budget, substantially increasing expenditures. On the other hand, the impact of the crisis on falling spending and economic activity in Serbia has been underestimated – partly justifiably – meaning a sudden decline in public revenue was not anticipated. Public revenue has fallen, for the first time in a long while – by 0.7% in real terms in relation to the same quarter in 2007. The combination of a conscious increase in public expenditure and an unplanned drop in revenue has led to high fiscal expansion in Q4 2009. This has substantially reduced room for applying anti-recessionary policy in 2009, as built-in growth of old-age pension expenditure for 2009 amounts to some 35 billion dinars – whereas the Serbian Government has earmarked eight billion dinars in a stimulus package for the economy.

The monetary deceleration in Q4 2008 was primarily the consequence of the sudden drying up of credit, and also due to the defence of the dinar – since the selling of NBS foreign currency reserves also implies withdrawing dinars from circulation. The raising of the NBS reference interest rate to 17.75%, although justifiable as a resolute sign of readiness to prevent any possible crisis of the dinar, has not proven an efficient measure in the endeavor to defend the Serbian currency. It turned out that banks, when faced with the choice of dinars with a yield of 17.75% on the one hand, and foreign currency with minimum yields on the other, chose the latter. December was the last time this choice was made by the banks, implying that they expected the dinar to depreciate by more than 15% over the coming year. At any rate, an unsustainably high interest rate would be required to allay fears of a future fall in the dinar in these uncertain times of crisis.

The expansiveness of fiscal policy in 2009 was dictated by high built-in growth of expenses at the end of last year on the one hand, and lower-than-expected public revenue due to a sudden slowdown in consumption and production on the other. In consequence, the consolidated fiscal deficit planned for 2009 (1.75% of GDP) would probably more than double unless expenses were cut and/or revenue was increased. On the other hand, insisting on the planned deficit would mean a likely politically unacceptable reduction in spending (i.e. cuts to salaries and pensions), and would also partly be economically unjustified.

When a recession is in the offing, and when the private sector consequently refrains from spending, a legitimate solution is for the state to step in, increase its spending and generate a fiscal deficit, thus stimulating flagging production. This would be a cyclical fiscal deficit that appears when the economy is weak, and is accompanied by a fiscal surplus in times of strong economic growth, as it was in Serbia from 2005 to mid-2008. The problem is that Serbia did not, during these booming times, lead an anti-cyclical fiscal policy, which would now mean a surplus or at least a balanced budget. Had it done so, Serbia could have utilized €1.5 bn now for the necessary boost to production, rather than inventing its National Investment Plan just before elections to spirit away these funds. The effects of this would have been doubly

positive. First, the value of the dinar would not have risen dramatically, as it did due to substantial inflows of euros over the latter half of 2006; thus the dinar would not have been as overvalued and thereby would not have depreciated as much as it has done. Second, more consumption today means a greater foreign deficit – and it takes more euros to finance it. Therefore, had more euros been saved in the past, they could have been used now to finance both greater public spending and the resulting foreign deficit. Instead, the Government will have to borrow more abroad in 2009 to meet its spending needs and cover the deficit. Furthermore, certain planned public expenditures will need to be cut, a measure for which willingness is seemingly lacking, and/or taxes will have to be raised – the worst solution. If spending is reduced, the fiscal deficit could be kept at 3% of GDP, which could probably be financed from abroad. Along with the payment of frozen foreign currency deposit bonds, this would boost consumption by about 3.5% of GDP (see Highlights 1). Any such prior increase in the deficit would, however, have to be accompanied by a credible exit strategy and planned surplus in the medium term. This means that a justified anti-cyclical fiscal policy should be applied when savings are called for, and not only as an excuse for more government spending.

Monetary policy in 2009 should primarily keep the inflation and the depreciation of the dinar in check. It is not, however, unthinkable that it will have to be relaxed to avoid a sharp recession. In spite of a major depreciation of the dinar, inflation has not run out of control. The Serbian currency lost 21% of its value from September to January, while (core) inflation in the same period amounted to just 3.25% - a rough estimate shows that only 15% of the dinar's fall carried over into prices (see Trends, pt. 2). Further, price growth in January did appear high (3%), but was primarily a consequence of rising administratively-controlled prices and excises. Market (core) inflation stood at just 1%, indicating an absence of acceleration. The slowdown in market activity and consumption in 2009 will keep inflation under control.

With hindsight, the NBS was probably overly aggressive in its defence of the dinar, both as to the level it attempted to maintain and the length of time it did so. When the exchange rate jumped to 92 dinars to 1 euro in early December, it should not have been forced down to 84, as it was also probably ill-advised to spend €480 mn on keeping the exchange rate at between 90 and 95 dinars to 1 euro throughout January and the first half of February. In general, the dinar should be allowed to depreciate more quickly to a value sustainable in the medium term. First, most of this depreciation has already happened; second, foreign currency reserves have dropped to dangerously low levels, which could cause a speculative run on the dinar; finally, the Serbian currency's lower, yet stable (and sustainable) value will prove a clear foundation on which to base medium-term economic decisions.

The adverse effects of a quicker drop in the dinar on inflation remain, as we have seen, very limited: even if doubled they would still pose no great threat. On the other hand, there are substantial positive effects of a loss in value of an overvalued dinar. The depreciation of a currency acts as a stimulus of economic activity, and is thus an additional measure that could be used to counter the looming recession in Serbia. "Rightsizing" the overvalued dinar would re-align a part of demand from imported to domestic products – those that compete with exports and those that can be exported (tradable goods). Another important effect of adjusting the dinar's value would be a cut in the enormous foreign traded deficit faced by Serbia, primarily through a reduction in imports, and then by a growth of exports. Global and local empirical research shows that the positive effects of a real depreciation of the local currency do become apparent, albeit with a certain time lag.

Finally, now is the chance to attain the "right" lower value of the dinar that would be sustainable in the medium term and be compatible with a foreign current account deficit of less than 10% of GDP. The previous several years, marked by an overvalued dinar and a current account deficit of over 15% of GDP, were unsustainable even without the crisis – the global downturn just brought this fact to light more quickly. Serbia's overvalued currency was also a bad signal for the country's economy, stimulating as it did the activity of non-tradable sectors such as commerce, services, construction, real estate operations, etc, at the expense of tradable sectors, primarily manufacturing. Economically sustainable growth, with a foreign deficit of less than 10%, requires a lower value of the dinar to boost production in the advanced tradable sector. The production of tradable goods is the purview of modern sectors competing with foreign industries: it is precisely because of this why Serbia's economic growth should be based primarily on them.

Texts in the Highlights section in this issue of *QM* again deal with the effects of the crisis on Serbia, as well as with the response of economic policymakers: we analyze fiscal policy options in a time of recession (Highlights 1: Arsić, M.); the reach and limitations of anti-recessionary measures applied by the Serbian Government (Highlights 2: Arsić, M.); the effects of the global economic crisis on Serbia's labor market (Highlights 4: Arandarenko, M.); as well as the effects of NBS measures on the banking sector (Highlights 3: Kokotović, S.). Spotlight On focuses on an overview of certain aspects of the Russian experience with the current crisis, with appropriate implications for smaller nations such as Serbia and Montenegro (Spotlight On 2: Bogetić, Ž.), as well as key results of extensive research into how and to what extent Serbian joint-stock companies apply OECD corporate governance principles (Spotlight On 1: Đulić, K.).

TRENDS

1. Review

Economic activity slowed much more sharply than had been expected – the growth rate halved in Q4 relative to Q3, indicating a strong deceleration of economic activity. Although 2008 was, overall, a year of robust economic growth of some 5.4%, this rate is clearly the sum of two diverging trends: high growth over the first half, and sharp deceleration in the latter half of the year. The year ended with GDP growth of less than 3%, and, if we were to discount favorable exogenous influences on agriculture and construction, as well as the impact of the dinar's depreciation on rising financial stagnation, the conclusion would be that the economy is de facto stagnating – with y-o-y growth of a mere 0.8%. Industrial production was hit the hardest, recording the greatest fall as component of GDP. The production trend of manufacturing turned (as did the trend of overall industrial production) as early as August, when industrial production suddenly entered stagnation after recording very high y-o-y growth rates, only to see exceptionally negative growth rates in Q4 (see Section 4, Economic Activity). Unless the trend recovers – an unlikely prospect – the start of recession in 2009 becomes all the more probable.

The latest data indicate just that – powerful recessionary trends are becoming evident in early 2009: (1) January industrial production was 17.1% lower in relation to January 2008 – manufacturing recorded a fall of nearly 25%; (2) imports suffered a y-o-y fall of 37.5% in January, while exports dropped by 13.8%; and (3) retail sales were down by 5.6% at the y-o-y level. If we excluded extraordinary circumstances affecting Serbia's economy in January, the above data would undoubtedly indicate a major fall in economic activity.

A possible point of reference in estimating Serbia's growth in 2009 could be economic growth forecasts for Central and Eastern Europe, with the IMF predicting a stagnation of production (growth in 2009 forecast at -0.4%). On the other hand, the latest NBS Inflation Report assumes, as an optimistic scenario, and with substantial reservations, GDP growth of between 1.5% and 2% in 2009. This figure could thus be regarded as the upper limit of Serbian economic growth, assuming a recovery in the latter half of the year.

The fall in economic activity was caused primarily by **a drop in aggregate demand**, both domestic and foreign. The drop in export demand caused by the recession facing developed nations has affected Serbia's economy principally through the decline in the demand for basic metals, rubber and plastics, and chemicals – which was reflected in a substantial fall in production across these sectors. However, although the fall in export demand was much more pronounced than the drop in domestic demand, its share in overall demand is relatively low, so the drop in domestic demand has had the dominant effect on the decline of economic activity. The decline in domestic demand was primarily the cause of a dramatic reining-in of lending. The stagnation in loans offered by the domestic banking sector was caused by a drop in the sources used by banks to finance new lending. Nearly all sources of new bank lending have dried up: capital and reserves expressed in euros have gone down by €572 mn, new foreign currency savings have declined by €960 mn, while commercial deposits have seen a drop of €113 mn (see Section 7, Monetary Flows and Policy). On the other hand, the sudden stop in direct cross-border lending has been the direct consequence of the global financial crisis. These changes in lending have been reflected in movements of M2, the widest money supply aggregate (including foreign currency deposits). Movements of net foreign assets (NFA) and net domestic assets (NDA) indicate that changes to the money supply in Q4 were caused by several diverging trends. The overall increase in the money supply (0.8%) came about as a result of a drop in NFA (-5.8%) and a rise in NDA (6.6%). The drop in NFA, i.e. net foreign currency reserves, was caused by NBS intervention in the forex market to save the dinar from depreciating further – and had a restrictive effect. Lending to the non-government sector had a slight negative contribution to overall NDA growth – the total growth of which was caused by an expansion in net loans to the government, which actually means this growth reflects the effects of an expansive fiscal policy. The conclusion is that a halt in lending

to businesses and households was the main factor behind the monetary contraction, and thus also caused the drop in aggregate demand. In addition, a substantial monetary contraction was also caused by the withdrawal of dinars through the sale of foreign currency reserves. In parallel, the government financed the fiscal deficit in Q4 by also spending its deposits, and thereby affected the rise in the money supply and aggregate demand.

The strongest impact of the global economic crisis on Serbia was reflected in the sudden fall in foreign capital inflows. A **financial transaction deficit** was recorded for the first time; this was met, along with the current account deficit, by cutting into foreign currency reserves (see Section 5, Balance of Payments and Foreign Trade). The current account deficit was significantly lower in Q4 than over the previous quarters of 2008; this improvement was caused by reduced imports, in addition to high current transfers, as the depreciation of the dinar led to a realignment of demand towards domestic tradable goods – which, coupled with a drop in economic activity in Serbia, caused the growth rate of imports to be negative (-3%). On the other hand, exports, having seen monthly falls since Q3, remain at only 2% below late-2007 levels. Such y-o-y changes to imports and exports have led to a y-o-y **reduction in the foreign trade deficit** of 7.1%. These trends deepened in January 2009, which led to a drop in the trade deficit of nearly 50%. Such movements in imports and exports are a consequence of the reining-in of consumption and economic activity.

A somewhat deeper analysis of statistical data, with special attention paid to changes in methodology, is required for a clearer insight into the **situation in the labor market** (see Section 3, Employment and Wages). Consolidated data indicate that the number of "good" jobs is falling, while the number of "bad" jobs is on the rise. Another cause for concern is the fact that unit labor costs (ULCs) in industry were higher by 7% in Q4 than in the same period the previous year, clearly indicating that the current level of employment in industry will not be sustainable. This undesirable ULC growth was concentrated in a narrow sector of the economy – industrial production – in Q4, but Serbia runs the risk of seeing this situation spread to the rest of the economy in 2009. The y-o-y growth rate of real wages declined from 5% in Q3 to 4.1% in Q4, with nominal wages also slowing over the same period.

The dinar depreciated against the euro by 15.7% in Q4, with its overall loss in value from late September to late February standing at 22.46%. In spite of the **major depreciation** from September 2008 to January 2009, our analyses show that the exchange rate has not translated into inflation considerably – the transfer amounted to 14% for overall inflation, and 15% for core inflation – showing that the dinar's depreciation has not had dramatic effects on inflation over the period under consideration (see Section 2, Prices and the Exchange Rate).

We saw total inflation of 6.7% throughout 2008, but the underlying trend has remained high at between 8% and 10%. Inflation continued decelerating strongly in Q4, a trend begun in the previous quarter. The inflation rate at the annual level in this quarter amounted to a mere 0.2%, which was primarily the result of a drop in the prices of oil products. However, January 2009 saw high inflation, of 3% at the monthly level. Such high monthly price growth has not been recorded over the past four years, and is primarily the consequence of one-off price increases. The one-off rise in excises on oil products, tobacco and beer alone contributed by some 35% to **January inflation growth**; this period also saw major rises in prices of postal and telecommunications services, as well as in utility prices. Had these increases been made at a more favorable time, for instance in late 2008, their consequences would have been much less damaging. NBS data indicate that core inflation amounted to 1% at the monthly level in January. Retail prices in Serbia were higher by 2.3% on average in February relative to the preceding month, while the cost of living rose by 1.3%. However, our estimate is that this growth was mainly caused by changes to administratively-controlled prices, as well as that the data still do not indicate inflation has run out of control – the looming recession is currently a much greater problem than inflation.

The response of economic policy to the incipient problems was, to some extent, forced and inconsistent – the **restrictive monetary policy** imposed on the government by the spending of foreign currency reserves to defend the dinar and the fall in lending was accompanied by an expansive fiscal policy, primarily defined by pre-election campaign promises. By increasing the reference interest rate from 15.75% to 17.75% in October 2008 the NBS failed to prevent a flight from the dinar, and thus resorted to intervening in the forex market, which substantially depleted foreign currency reserves and caused

a strong monetary contraction. The overall restrictive effect of monetary policy was accompanied by fiscal expansiveness.

The **expansiveness of fiscal policy** on the expenditure side was effected through a growth in current spending (pensions and salaries), while capital outlays fell in relation to the same quarter of the previous year. At the same time, public revenue suffered a major fall in Q4 in consequence of the strong deceleration of economic activity. All this has led to a high consolidated public spending deficit, which amounted to as much as 6.5% of GDP in Q4. However, powerful recessionary trends in the economy indicate that expansive fiscal policy measures have had limited reach. We estimate that expansive fiscal policy has to some extent dampened the effects of the virtual standstill in capital inflows from abroad, as well as those of the dramatic slowdown in domestic lending, but – as the Serbian government spent nearly all available deposits in implementing these fiscal measures – any further fiscal expansion will require additional borrowing or income from privatization (for more on this issue, see Section 6, Fiscal Flows and Policy).

Exactly how difficult it is to forecast further economic trends, and just how deep the recession is proving to be, is borne out by **IMF growth rate forecasts**, systematically being revised downwards – both for developed and developing countries. For instance, the 2009 growth rate forecast for Central and Eastern European nations in November 2008 stood at 2.5% – only to be slashed to -0.4% as early as January 2009 (see Section 9, International Environment).

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

	Annual Data					Quarterly Data							
						2007				2008			
	2004	2005	2006	2007	2008	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Prices and the Exchange Rate							y-o-y[2)]						
Retail Price Index - total	10.1	16.5	12.7	6.8	10.9	5.8	4.7	6.5	9.1	11.3	12.0	10.7	8.9
Retail Price Index - core inflation[3)]	7.9	14.8	10.3	3.9	9.0	4.7	3.0	2.9	4.6	6.4	9.1	10.2	10.5
Real fx dinar/euro (avg. 2005=100)[4)]	100.5	100.0	92.1	83.9	79.7	86.2	86.3	83.2	80.8	82.5	79.7	75.0	81.7
Nominal fx dinar/euro (period average)[4)]	72.62	82.92	84.19	79.97	81.46	79.98	81.07	80.03	78.81	82.65	81.07	77.12	85.02
Economic Growth							y-o-y, real growth[2)]						
GDP (in billions of dinars)	1,388	1,692	1,988	2,329	2,759	…	…	…	…	…	…	…	
GDP	8.2	6.0	5.6	7.1	5.4	7.8	7.7	6.6	6.4	8.4	6.2	4.9	2.7
Non-agricultural GVA	6.6	7.3	7.9	8.8	5.9	8.3	9.0	8.7	9.2	8.3	7.0	5.8	2.8
Industrial production	7.1	0.8	4.7	3.7	1.1	4.8	5.2	3.5	0.4	6.0	2.3	1.0	-5.0
Manufacturing	9.7	-0.7	5.3	4.2	0.7	8.5	4.9	3.3	-0.1	4.4	3.7	0.4	-6.0
Average net wage (per month, in dinars)	14,108	17,478	21,745	27,785	32,757	25,103	27,165	28,019	30,855	30,007	32,452	33,053	35,517
Registered Employment (in millions)	2.047	2.056	2.028	1.998	1.997	2.002	1.999	1,997	1,995	1.995	2.002	1.998	1.993
Fiscal data		in % of GDP							y-o-y, real growth				
Public Revenues	41.2	42.1	42.4	42.1	41.5	15.2	8.4	7.9	6.2	7.6	5.2	2.8	-0.7
Public Expenditures	40.0	39.7	42.7	42.8	43.7	13.9	6.2	10.9	6.3	3.8	21.7	-0.4	-3.5
							in billions of dinars						
Konsolidovani bilans (def. GFS)[5)]	17.5	14.8	-33.5	-46.1	-59.9	1.7	18.2	-8.8	-54.2	11.0	-19.6	-4.4	-46.9
Balance of Payments							in millions of euros, flows						
Imports of goods	-8,302	-8,286	-10,093	-12,858	-15,052	-2,829	-3,098	-3,236	-3,695	-3,470	-3,956	-4,008	-3,617
Exports of goods	2,991	4,006	5,111	6,444	7,419	1,383	1,594	1,731	1,736	1,665	1,969	2,061	1,723
Current account[6)]	-2,197	-1,805	-3,137	-4,994	-5,876	-1,186	-806	-1,346	-1,656	-1,298	-1,764	-1,524	-1,290
in % GDP[6)]	*-11.6*	*-8.6*	*-12.9*	*-17.2*	*-17.4*	*-18.8*	*-11.5*	*-18.0*	*-20.1*	*-17.3*	*-20.4*	*-16.6*	*-15.1*
Capital account[6)]	2,377	3,863	7,635	7,635	5,990	1,161	1,233	1,705	2,027	1,412	1,672	1,430	1,476
Foreign direct investments	773	1,248	4,348	1,942	1,812	614	-5	539	795	820	650	133	210
NBS gross reserves (increase +)	349	1,675	4,240	941	-1,760	-191	407	465	260	29	-310	257	-1,736
Monetary data							in billions of dinars, e.o.p. stock[2)]						
NBS net own reserves[7)]	103,158	175,288	302,783	400,195	475,110	327,997	348,471	361,861	400,195	420,508	417,579	440,936	475,110
NBS net own reserves[7)], in mn of euros	1,291	2,050	3,833	5,051	5,362	4,021	4,410	4,589	5,051	5,109	5,287	5,757	5,362
Credit to the non-government sector	342,666	518,298	609,171	842,512	1,126,111	666,007	732,402	786,873	842,512	908,598	953,977	1,018,307	1,126,111
FX deposits of households	110,713	190,136	260,661	381,687	413,766	293,195	307,783	336,109	381,687	410,836	419,824	431,261	413,766
M2 (y-o-y, real growth, in %)	10.4	20.8	30.6	27.8	2.9	35.4	30.7	29.7	27.8	26.2	19.2	13.3	2.9
Credit to the non-government sector (y-o-y, real growth, in %)	27.3	28.6	10.3	24.9	25.2	15.2	17.8	19.1	24.9	22.0	16.2	17.8	25.2
Credit to the non-government sector, in % GDP	23.9	29.6	28.6	35.0	42.0	30.5	32.6	33.0	35.0	36.9	37.4	38.3	42.0
Financial Markets													
BELEXline (in index points)[8)]	1,161	1,954	2,658	3,831	1,198	4,220	4,456	4,431	3,831	3,068	3,092	1,942	1,198
Turnover on BSE (in mil. euros)[9)]	423.7	498.8	1,166.4	2,004.4	884.0	529.4	644.8	386.7	443.5	210.8	365.7	176.9	130.6

Source: FREN.

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

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) Overall fiscal balance (GFS 2001 methodology) - Consolidated fiscal surplus/deficit adjusted for "budgetary loans" (lending minus repayment according to old GFS methodology).

6) 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.

7) 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.

8) Index value at the last day of the given period.

9) Total turnover on Belgrade Stock Exchange, includes turnover of stocks and FFCD bonds. Dinar amounts for stocks turnover are converted into euros using the average exchange rate for the given period.

2. Prices and the Exchange Rate

Inflation stood at 0.2% at the annual level in Q4, primarily due to falling prices of oil products. Headline inflation in 2008 was 6.7%, but the underlying trend remains high at between 8% and 10%. Had prices of oil products not gone down in Q4, end-of-year inflation would have amounted to 8.4%. Core inflation slowed in Q4, but nonetheless remained above the NBS target band. January recorded high inflation, of 3%, partly the consequence of numerous one-off government interventions. If we take into account only the growth of prices not affected by administrative interventions, i.e. if we consider core inflation only, January price growth remains high at about 12.7% at the annual level. Starting in 2009, the consumer price index will be used as the official measure of inflation. As measured by this index, inflation in 2008 amounted to 8.6%. The dinar depreciated against the euro by 15.7% in Q4, with its total loss in value from late September to February 24th amounting to 23.3%. In spite of major depreciation – 21.6% – from September 2008 to January 2009, the exchange rate has failed to have a substantial pass-through to inflation. Its effect was limited to 14% on total and 15% on core inflation.

Q4 saw a major slowdown in inflation

Inflation continued decelerating substantially in Q4. The inflation rate at the annual level amounted to just 0.2% in Q4; it had been in the double digits throughout the first two quarters of the year, falling thereafter to 2.4% in Q3 (Table T2-1). Y-o-y retail price growth stood at 8.9% in Q4, as against 10.7% in the previous quarter. Overall retail price growth in 2008 amounted to 6.7%, the same as in Q3, primarily due to a drop in inflation in November and December.

Table T2-1. Serbia: Retail Price Index and Core Inflation, 2005–2009

	Retail Price Index					Core Inflation				
	base index (avg. 2005 =100)	y-o-y growth	cumulative index[1)]	monthly growth	3m moving average, annualized[2)]	base index (avg. 2005 =100)	y-o-y growth	cumulative index[1)]	monthly growth	3m moving average, annualized[2)]
2005										
Dec	107.6	17.6	17.6	2.2	22.5	106.3	14.6	14.6	0.9	18.6
2006										
Mar	110.0	14.4	2.2	0.3	9.1	108.1	11.7	1.7	0.8	7.0
Jun	113.7	15.1	5.7	0.0	14.4	110.4	11.3	3.9	0.6	8.7
Sep	114.1	11.6	6.1	-0.2	1.4	112.1	10.1	5.5	0.6	6.6
Dec	114.7	6.6	6.6	0.1	2.1	112.5	5.8	5.8	0.0	1.2
2007										
Mar	116.1	5.6	1.2	0.8	5.1	112.4	4.0	-0.1	0.1	-0.4
Jun	119.5	5.1	4.2	0.6	12.0	113.4	2.7	0.8	0.5	3.7
Sep	122.6	7.4	6.9	0.8	10.9	115.9	3.4	3.1	1.0	9.4
Dec	126.3	10.1	10.1	1.3	12.6	118.6	5.4	5.4	0.9	9.5
2008										
Jan	127.5	10.7	0.9	0.9	14.2	118.9	5.7	0.3	0.3	7.7
Feb	128.3	11.3	1.6	0.7	12.2	119.6	6.5	0.8	0.6	7.1
Mar	129.8	11.8	2.8	1.2	11.6	120.3	7.0	1.4	0.6	5.8
Apr	131.2	12.0	3.9	1.1	12.2	121.7	8.1	2.6	1.2	9.7
May	132.6	11.7	5.0	1.1	14.1	123.0	9.0	3.7	1.1	12.0
Jun	134.0	12.1	6.1	1.0	13.4	124.7	10.0	5.2	1.4	15.7
Jul	134.2	11.6	6.2	0.1	9.3	125.3	10.3	5.7	0.5	12.5
Aug	134.5	10.6	6.5	0.2	5.8	126.6	10.2	6.7	1.0	12.1
Sep	134.8	9.9	6.7	0.2	2.4	127.7	10.2	7.7	0.9	9.9
Oct	136.4	10.6	8.0	1.2	6.8	129.2	10.7	8.9	1.1	12.7
Nov	136.2	9.2	7.8	-0.1	5.2	130.1	10.7	9.7	0.7	11.4
Dec	134.8	6.8	6.7	-1.0	0.2	130.6	10.1	10.1	0.4	9.2
2009										
Jan	138.8	8.9	3.0	3.0	7.9	131.9	10.9	1.0	1.0	8.7
Feb	142.0	10.7	5.4	2.3	18.6	...	...	...	...	...

Source: SBS.

[1)] Moving averages of monthly price increases for three months, annualized (e.g., the value for March was obtained by annualizing the average of monthly price increases in January, February and March).

[2)] The SBS has not been publishing core inflation data since January 2009; core inflation data for January are thus *QM* estimates based on NBS data.

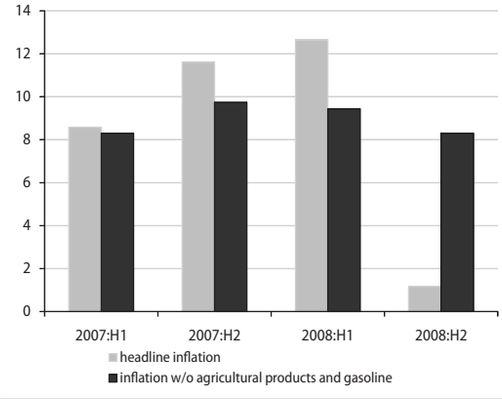
Prices of agricultural products and postal and telecommunications services saw the greatest growth, while oil products recorded the most substantial drops in prices

Inflation in Q4 was caused by a steep growth in the prices of services, and nearly identical drops in the prices of goods. After falling in Q3, prices of agricultural products recorded high growth in October and November, which led to overall growth of these prices of some 13% in Q4. The growth of prices of non-food products slowed slightly in Q4 to 1.3%. Among food products, meat prices saw the greatest rise in prices, of 6.72%. Prices of services went up by about 4% in Q4, a consequence of rising charges for utilities and postal and telecommunications services. Prices of non-food products went down by some 4.79% in Q4, primarily due to falling prices of liquid fuels and lubricants, which have continued a downward trend spurred by falling prices of oil in the global market, the financial crisis and the strengthening of the dollar – as mentioned in the previous issue of *QM*. If prices of liquid fuels and lubricants had not fallen, annualized Q4 inflation would have amounted to 6.6%, while total 2008 inflation would have stood at 8.4%.

The underlying inflation trend has remained unchanged at a relatively high level

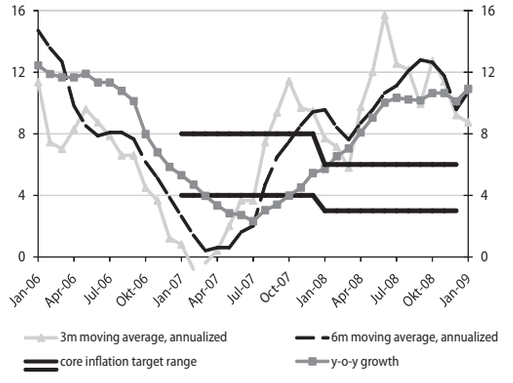
As opposed to the situation in Q3, the major slowdown of inflation in the fourth quarter was mainly caused by the substantial drop in oil prices (continuing a downward trend), and only to a much lesser degree by a slight slowdown in underlying inflation. This minor deceleration does not indicate a noticeable change in the long-term trend, which remains at between 8% and 10% (Graph T2-2).

Graph T2-2. Serbia: Headline Inflation and Inflation w/o Agricultural Products and Gasoline, Annualized Rates, 2007–2008



Source: SBS.

Graph T2-3. Serbia: Core Inflation (in %), 2006–2009



January 2009 data are *QM* estimates.

Core inflation slowed slightly in Q4

Core inflation continued rising in Q4, albeit slower than in the previous quarter. After an acceleration in October, November and December recorded slower core inflation growth, to a level of 9.2% at the annual level in Q4 (Table T2-1) – slightly lower than in Q3, but still above the NBS target band (Graph T2-3). Core inflation in 2008 stood at 10.1% (Table T2-1).

January inflation stood at 3%

After dropping in November and December (-0.1% and -1%, respectively), inflation grew in January by 3% at the monthly level (Table T2-1). Such monthly price growth had not been seen over the past four years, and was primarily caused by one-off price rises. January saw a hike in utility fees of 10.5% to offset the removal of government subsidies. Had these prices been raised at a more favorable time, such as at the end of last year, the consequences would have been less damaging. The one-off rise in excises on oil products, tobacco and beer contributed by some 35% to January inflation growth (Table T2-4). A substantial rise in the prices of postal and communications services, driven mainly by greater landline telephone costs, contributed 9.1% to January inflation. If we excluded the impact of movements in these products and services on headline inflation, we would arrive at the true indicator of price movements – core inflation.

Core inflation stood at 1% in January

Based on the consumer price index, the NBS estimates core inflation at 1%, translating into 12.7% at the annual level. The SBS has not been publishing core inflation figures since January 2009, but we have been able to estimate the contributions of various groups of products to core inflation using NBS data. The greatest contributions to core inflation in January 2009 were made

by rising prices of beverages, financial and other services, and construction materials. These three groups, making up slightly under 17% of the core inflation index, are responsible for just over 50% of the January core inflation growth (Table T2-5).

The non-food component of core inflation has not decelerated

The non-food component of core inflation has not decelerated in Q4, while slower growth of the food component of core inflation, as seen in Q3, has continued – leading to nearly equal growth in these two components of some 9% (Graph T2-7). Prices of processed and canned meat, beverages, textile products and financial and other services contributed most to core inflation in Q4 (Table T2-5).

Table T2-4. Serbia: Retail Price Index, Contribution to Growth by Selected Components, 2008–2009

	Share in RPI	Contribution to RPI growth in Q4	Contribution to RPI growth in Q3	Contribution to RPI growth in Q2	Contribution to RPI growth in 2008, through October	Contribution to RPI growth in January1)	Contribution to RPI growth in December
				in %			
Total	100.00	100.00	100.0	100.0	100.0	100.0	100.0
Goods	72.34	-1,850.96	-7.6	87.1	63.4	55.2	106.0
Agricultural products	3.63	814.35	-137.2	-1.6	0.6	1.4	-0.9
Industrial products	68.71	-2,450.53	157.5	89.5	63.4	53.3	105.8
Industrial food products	19.71	423.57	79.3	40.7	38.1	4.2	5.4
Fresh meat	1.94	26.96	20.2	10.6	8.2	1.3	5.5
Processed and canned meat	3.21	363.35	28.8	5.5	8.6	0.6	-2.2
Beverages	4.42	267.24	24.1	3.6	8.5	3.8	-4.4
Tobacco products	4.15	0.00	75.6	0.0	5.8	21.1	0.0
Industrial non food products	40.43	-3,264.39	-21.8	44.2	9.9	23.3	109.6
Electricity	7.62	0.00	129.7	0.2	14.4	0.0	0.0
Liquid fuels and lubricants	8.74	-3,282.59	-173.7	24.2	-21.9	10.2	108.5
Construction materials	2.46	83.71	52.0	6.4	10.1	2.3	-1.0
Services	27.66	1,950.96	107.6	12.9	36.6	44.8	-6.0
Public services	9.14	699.05	28.3	2.0	9.9	30.2	-3.5
Transportation services	5.60	34.89	46.8	6.9	10.5	3.6	-0.6
PTT services	4.27	1093.81	0.0	0.0	9.6	9.1	0.0

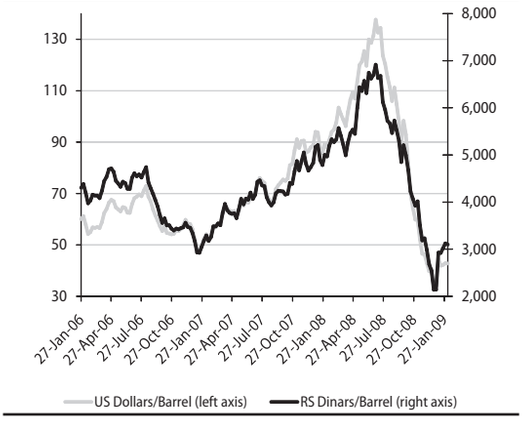
Source: SBS.
1) January 2009 data are *QM* estimates.

Table T2-5. Serbia: Core Inflation, Contribution to Growth by Selected Components, 2008–2009

	Share in Core Inflation	Contribution to Core Inflation growth in Q4	Contribution to Core Inflation growth in Q3	Contribution to Core Inflation growth in Q2	Contribution to Core Inflation growth in 2008	Contribution to Core Inflation growth in January[1)]	Contribution to Core Inflation growth in December
				in %			
Core inflation	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Goods	85.6	74.8	88.7	92.7	87.7	76.6	38.5
Industrial food products	34.4	29.3	40.7	58.6	45.8	31.3	3.2
Fresh meat	4.1	1.4	9.1	20.4	11.3	6.9	-14.0
Processed and canned meat	6.8	18.3	13.0	10.7	11.8	3.0	5.6
Beverages	9.3	13.5	10.8	7.0	11.7	20.5	11.3
Industrial non food products	41.8	32.0	37.1	27.1	30.2	24.8	24.0
Textile products	9.5	14.2	-0.6	9.4	7.5	1.4	6.9
Construction materials	5.2	4.2	23.4	12.3	14.0	12.6	2.6
Services	14.4	25.2	11.3	7.3	12.3	23.4	61.5
Financial services	2.1	19.9	6.8	0.2	6.9	17.4	56.4

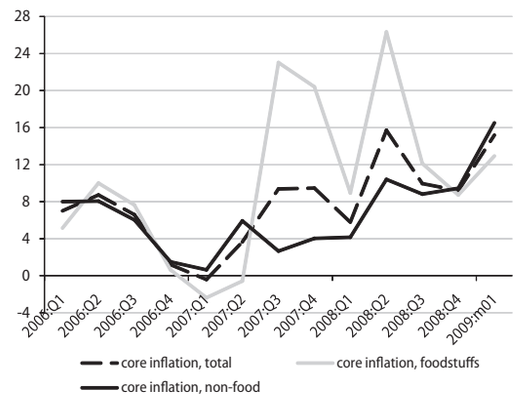
Source: SBS.
1) January 2009 data are *QM* estimates.

Graph T2-6. World: Weekly Ural Crude Prices in Dollars and Dinars, 2006–2009



Source: Energy Information Administration, US Department of Energy.

Graph T2-7. Serbia: Components of Core Inflation (annualized rates, in %), 2006–2009



Source: SBS, *QM*.
January 2009 data are *QM* estimates.

Box 1. Consumer Price Index Methodology

The Serbian Bureau of Statistics (SBS) has started using the consumer price index (CPI) as the official measure of inflation. This index is calculated using methodology identical across European Union countries (Harmonized Index of Consumer Prices) and defined as the measure of average change in retail prices of goods and services used for personal consumption. The SBS began preparing for the switch to this index in 2005. That year saw a substantial expansion of the list of products used to calculate the retail price index in preparation for measuring the cost of living using the COICOP (Classification of Individual Consumption by Purpose) method, also involving changes to the calculation of electricity and telephone service indexes. The fundamental difference in reach between the CPI and the retail price index (RPI) is in that the new index includes rental costs (renting a flat, for instance), as well as financial, education, and catering services. However, the CPI as published by the SBS does not include all COICOP items, omitting the purchase of second-hand goods, receipts in kind, life insurance, gifts, imputed rent, and outlays for investment and games of chance.

Another difference between the RPI and the CPI is in the different weights used in calculation, as well as in the actual method of calculating the index at the lowest level of aggregation. A weighted geometric mean of average prices in urban centers is used to calculate the CPI at the lowest level of aggregation, whereas the RPI uses a weighted arithmetic mean of average prices in urban centers.

The CPI is weighted according to the structure of consumption by households based on the Household Consumption Survey and the structure of final household production from GDP, while the RPI is weighted using the structure of retail sales of goods and services used in household production, taking retail sales data as its starting point. Weights of the RPI represent the structure of "quantities" of products sold in each urban center. Classifications used in calculating these indices and showing their structures also differ: the CPI follows the COICOP HICP[1] classification, comprised of 12 categories (Table T2-8), more similar to the classification of the cost of living index than to that of the RPI.

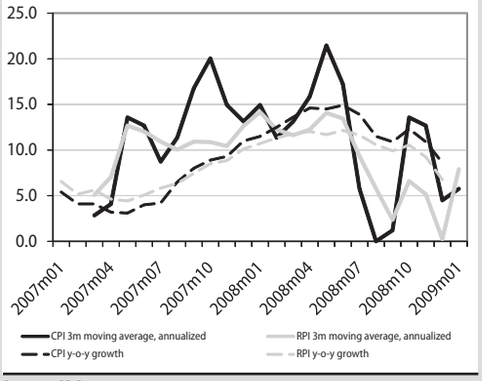
1 Harmonized Index of Consumer Prices.

Table T2-8. Share of Selected Product Categories in the Consumer Price Index and the Retail Price Index (in %), 2008

	Comsumer price index	Retail price index
Food and non – alcoholic beverages	35.2	24.9
Alcoholic beverages and tobacco	5.6	7.0
Clothing and footwear	6.9	5.9
Housing, water, electricity, gas and other fuels	16.3	18.9
Furniture, household equipment, routine maintenance	5.3	7.5
Health	4.2	2.4
Transport	11.5	16.2
Communication	3.2	4.3
Recreation and culture	5.4	2.0
Education	1.2	1.2
Restaurants and hotels[1)]	1.5	...
Miscellanous goods and services	3.8	7.1
Total[2)]	100.0	97.3

[1)] The retail price index does not include restaurant and hotel prices.
[2)] The total sum of weights of the retail price index does not equal 100% as the consumer price index includes neither means of production and reproductive material in agriculture, nor construction materials.

Graph T2-9. Serbia: Movements in the Consumer Price Index (in %), 2007–2009



Source: SBS.

As we already mentioned in the previous issue of *QM*[2], one of the crucial differences between the CPI and the RPI is the greater share of food and agricultural products in the former (Table T2-8), meaning that this index exhibited lower annual growth in Q3, which saw a drop in the prices of agricultural products, and greater annual growth in Q4 – which recorded a rise in these prices (Graph T2-9).

2 See Highlights 2, *QM* 14.

Table T2-10. Serbia: Retail Price Index and Consumer Price Index, 2007–2009

	Consumer Price Index				Retail Price Index			
	y-o-y growth	cumulative index	monthly growth	3m moving average, annualized[1)]	y-o-y growth	cumulative index	monthly growth	3m moving average, annualized[1)]
2007								
Jan	5.4	0.4	0.4	...	6.6	0.4	0.4	...
Feb	4.1	0.1	-0.3	...	5.2	0.5	0.1	...
Mar	4.1	0.7	0.6	2.8	5.6	1.2	0.7	5.1
Apr	3.2	1.4	0.7	4.1	4.6	2.1	0.9	7.0
May	3.1	3.3	1.9	13.6	4.4	3.5	1.4	12.7
Jun	4.0	3.7	0.4	12.7	5.1	4.2	0.6	12.0
Jul	4.2	3.4	-0.2	8.7	5.8	4.8	0.6	10.9
Aug	6.5	6.0	2.5	11.4	6.3	6.0	1.2	10.0
Sep	8.0	7.6	1.6	16.8	7.4	6.9	0.8	10.9
Oct	8.9	8.2	0.5	20.0	8.5	7.5	0.6	10.9
Nov	9.3	9.7	1.4	14.9	8.8	8.7	1.1	10.4
Dec	11.0	11.0	1.2	13.1	10.1	10.1	1.3	12.6
2008								
Jan	11.5	0.9	0.9	14.9	10.7	0.9	0.9	14.2
Feb	12.5	1.4	0.6	11.4	11.3	1.6	0.7	12.2
Mar	13.6	3.0	1.6	13.1	11.8	2.8	1.2	11.6
Apr	14.6	4.6	1.5	15.8	12.0	3.9	1.1	12.2
May	14.5	6.5	1.8	21.5	11.7	5.0	1.1	14.1
Jun	14.9	7.2	0.7	17.2	12.1	6.1	1.0	13.4
Jul	13.9	6.1	-1.1	5.7	11.6	6.2	0.1	9.3
Aug	11.5	6.4	0.4	0.0	10.6	6.5	0.2	5.8
Sep	10.9	7.5	1.0	1.2	9.9	6.7	0.2	2.4
Oct	12.3	9.4	1.8	13.6	10.5	7.9	1.2	6.6
Nov	10.9	9.6	0.2	12.7	9.2	7.8	-0.1	5.2
Dec	0.9	8.6	-0.9	4.5	6.7	6.7	-1.0	0.2
2009								
Jan	10.0	2.1	2.1	5.7	8.9	3.0	3.0	7.9

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

Total consumer price growth in Q4 amounted to 1.1%

Total consumer price growth in Q4 amounted to 1.1%, a rise in relation to the 0.3% seen in Q3. If we consider headline inflation as measured by the CPI in 2008, we would arrive at the figure of 8.6% (Table T2-10); headline inflation as measured by the RPI was lower, standing at 6.7% (Table T2-1). The main reason behind this difference is the variance in weights accorded to individual components: agricultural products, the prices of which grew substantially in 2008, receive greater weights when the RPI is calculated, while oil products, which saw their prices fall considerably over the same period, receive lower weights (Table T2-8). In addition, seasonal products are treated differently by the two indexes.

January inflation as calculated using the CPI amounted to 2.1%, or 28% at the annual level, while the NBS forecast predicts inflation at year-end 2009 will stand at 9.3%. The assumption is that such high January inflation growth was mainly caused by one-off hikes in government-controlled prices of a large number of products and services, as has already been mentioned above.

Exchange Rate

The dinar nominally weakened against the euro by 9.7%, or 4.4% in real terms

If we look at the movements in the exchange rate throughout 2008, we will see ample signs of volatility and depreciation at the start of the year – developments linked to a substantial extent to political instability and elections. From late May to late September the dinar gained significantly in value, by some 7%.[1] Exceptionally strong and rapid depreciation was then recorded starting in October, as a consequence of the financial crisis. Had the gain in value been dampened by NBS intervention in mid-2008, we would perhaps now have greater foreign currency reserves. In addition, the dinar's depreciation in Q4 would probably have been milder, as the currency would not have plunged from a level of 76 dinars to 1 euro, but would rather have gone down only from about 81-83 dinars to 1 euro.

The dinar nominally depreciated against the euro by 15.7% in Q4;[2] its loss in value amounted to 23.3% from late September to 24th February. The Serbian currency kept weakening in October, November and early December, reaching a 2008 record low of 91.63 to 1 euro on 4 December. The dinar then gained in value for a week, to reach a level of 84 to 1 euro on 10 December, only for the downward trend to continue into 2009, where the dinar reached an all-time low of 96.33 to 1 euro on 28 January. The major depreciation of over 21% (Table T2-11) seen from September 2008 to January 2009 has not had a significant pass-through to inflation: this amounted to 14% to headline inflation calculated using the retail price index, or 15% to core and consumer price inflation (Table T2-11).

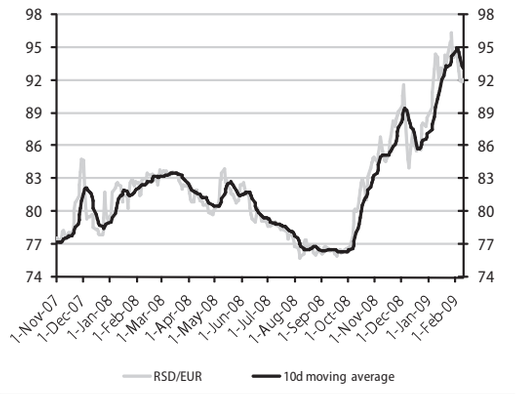
Table T2-11. Serbia: Pass-Through from Exchange Rate to Inflation (in %), 2008–2009

	Inflation of retail prices	Core inflation[1)]	Inflation of consumer prices	Depreciation of nominal exchange rate	Pass-through from exchange rate to inflation of retail prices[2)]	Pass-through from exchange rate to core inflation[2)]	Pass-through from inflation to inflation of consumer prices[2)]
				September=100			
January	3.05	3.25	3.20	21.62	14	15	15

Source: SBS, NBS, QM.
1) January 2009 data are QM estimates based on NBS data.
2) Pass-through is calculated as the ratio of percentile inflation growth and percentile depreciation of the nominal exchange rate, multiplied by 100.

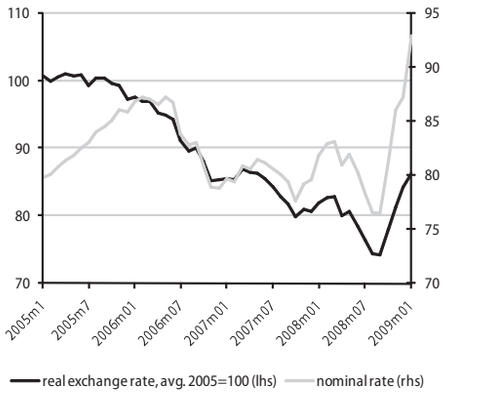
1 Appreciation from late May to end of September.
2 Depreciation from end of September to end of December.

Graph T2-12. Serbia: Dinar/Euro Daily Exchange Rate, 2007–2009



Source: NBS.

Graph T2-13. Serbia: Nominal and Real Dinar/Euro Exchange Rate, Monthly Average, 2005–2009



Source: NBS, Eurostat.

Table T2-14. Serbia: Dinar/Euro Exchange Rate, 2005–2009

	Nominal				Real			USD/EUR Rate[6]
	exchange rate (FX)[1]	base index[2] (avg.2005 = 100)	y-o-y index[3]	cumulative index[4]	real FX[5] (avg.2005 = 100)	y-o-y index[3]	cumulative index[4]	
	monthly exchange rate							
2005								
December	85.9073	103.6	109.3	109.3	97.4	94.9	94.9	1.1861
2006								
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
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	76.4	90.7	94.7	1.5773
August	76.5517	92.3	95.6	96.2	74.4	89.8	92.2	1.4987
September	76.4226	92.2	96.3	96.0	74.2	90.8	92.0	1.4387
October	81.2956	98.0	104.7	102.2	78.1	97.7	96.7	1.3309
November	86.4508	104.3	109.2	108.7	82.7	102.0	102.5	1.2726
December	87.3002	105.3	109.7	109.7	84.3	104.4	104.4	1.3482
2009								
January	92.9458	112.1	113.6	116.8	86.4	105.4	107.0	1.3327
February	93.6865	113.0	112.9	117.7	…	…	…	1.2797

Source: NBS, Eurostat.
1) Month average, official daily NBS mid rate.
2) Ratio of fx in Column 1 and average fx in December 2002.
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 Eurozone 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.
Note: 12-m averages are used for annual data; 3-month averages are used for quarterly data.

3. Employment and Wages

The employment rate rose from 51.5% to 53.3% while the unemployment rate fell from 18.8% to 14.7% between 2007 and 2008, according to the Labor Force Survey. Most of this rise in employment and reduction in unemployment was registered because of methodological changes in the Labor Force Survey questionnaire – persons classified as unemployed or inactive have now been reclassified as unpaid family workers and self-employed workers. In the same period, according to the RAD[1] survey, there was a slight decrease in the number of formally employed persons. The RAD survey registers only employed persons with formal employment contracts and for whom social security contributions are paid, while the overall number of employed persons according to the Labor Force Survey covers also the informally employed, agricultural workers and unpaid family workers. Consequently, the labor market data taken as a whole indicate that the number of "higher quality" jobs is in decrease, while the "lower quality" jobs are increasing. Y-o-y growth rate of real wages fell from 5% in Q3 2008 to 4.1% in Q4. Nominal wage growth in the same period slowed down as well. However, the depreciation of the dinar has not yet entirely "eaten" the 2008 growth of wages calculated in euros. The biggest y-o-y growth of real wages in Q4 2008 is seen in the mining and quarrying sector and in wholesale and retail trade, while electric power production, financial intermediation and real-estate have undergone y-o-y drop of real wages during 2008. Finally, public sector wage growth was below the average wage growth rate in Q4.

Employment

The number of employed persons (15-64) in October amounted to 2.65 million, in 2008 the employment rate rose and the unemployment rate decreased

As indicated by the Labor Force Survey, the number of employed persons among the working-age population (15-64) in October 2008 amounted to 2.65 million. Their number increased by around 120,000 between 2007 and 2008, which led to an increase in employment rate from 51.5% to 53.3% (columns 1 and 3, Table T3-1). On the other hand, the number of unemployed by LFS dropped by more than 100,000, to under half a million for the first time after 2003 (columns 4 and 5, Table T3-1), which contributed to the drop in unemployment rate among the working-age population from 18.8% in October 2007 to 14.7% in October 2008.

Table T3-1. Serbia: Employment and Unemployment in Labor Force Survey, 2004–2008

		Total number of employed 15-64 [2]	Number of employed in agriculture and unpaid family workers 15+	Employment rate 15-64	Total number of unemployed 15-64	Unemployment rate 15-64
		1	2	3	4	5
2004	October	2,735,977	641,720	53.4	664,002	19.5
2005	October	2,574,139	586,708	51.0	718,773	21.8
2006	October	2,516,794	501,937	49.8	691,877	21.6
2007	October	2,525,570	521,420	51.5	585,472	18.8
2008	April	2,652,429	670,141	54.0	432,730	14.0
	October	2,646,215	589,240[3]	53.3	457,204	14.7

Source: Labor Force Survey (LFS), SBS.

Notes:

1) Labor Force Survey was, until 2008, conducted once per year - in October. Since a pilot LFS was conducted in April 2008, we have semi-annual data for 2008 - those for April and October.

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

3) The October 2008 LFS also publishes data on those employed in agriculture and unpaid family workers for the 15-64 age contingent of the population, and this figure amounts to 443,243. For the next issue of QM, we plan to publish data for this age contingent for the previous surveys as well.

Most of the rise in employment and drop in unemployment is owed to methodological changes in LFS

However, it should be pointed out that most of the apparently enormous drop in unemployment between 2007 and 2008 is owed to methodological changes in the Labor Force Survey questionnaire. That is to say, employment growth between 2007 and 2008 can primarily

1 RAD is not an abbreviation, and means labor in Serbian. We do not translate it.

be ascribed to the growth of so called "lower quality" jobs, because of the methodological enhancements of the questionnaire by which persons formerly classified as unemployed or inactive – are now reclassified as unpaid family workers or self-employed workers. Column 2 of the Table T3-1 shows that almost a fifth of the overall number of employed is composed of agricultural workers or unpaid family workers in agriculture. We can also see that the employment growth in that particular contingent most significantly contributes to the overall employment growth. Had the questionnaire remained unchanged, the unemployment rate would have been around 17.5% - therefore its decrease in relation to 2007 would have amounted to only one percentage point. Since the necessary methodological enhancements of the Labor Force Survey have been completed, we finally have a quite objective picture of the labor market statistics.

The number of employees in legal entities, as a proxy for "higher quality" employment, is in constant decrease, although the decrease has considerably slowed down

Stagnation or a slight drop of "higher quality" employment, approximated by the category of paid employment, is confirmed by the data from the RAD survey conducted by the Serbian Bureau of Statistics, which serves as the main source of information on formal employment fluctuations. The number of employees in legal entities, a proxy for "higher quality" employment, is in constant decrease, although the decrease has considerably slowed down in 2007 and 2008, so that their number amounted to 1,425,000 employed persons in September 2008 (Table T3-2). 482,000 persons of these were public sector employees and 943,000 were employed in the economy (Table T3-3).

Table T3-2. Serbia: Number of Registered Employed and Unemployed[1], 2004–2008

		Total no. of employed	Employees in legal entities[2]	Entrepreneurs			Total no. of employees	Number of unemployed (NES)
				Total	No. of entrepreneurs	No. of employees with entrepreneurs		
		1 (=2+3)	2	3 (=4+5)	4	5	6 (=2+5)	7
		in thousands						
2004	March	2,065	1,601	464	208	255	1,856	..
	September	2,037	1,560	477	210	267	1,827	843
2005	March	2,070	1,557	513	228	285	1,842	884
	September	2,067	1,536	531	230	300	1,836	898
2006	March	2,032	1,496	536	228	308	1,804	920
	September	2,019	1,447	572	242	330	1,777	915
2007	March	2,004	1,438	566	239	327	1,765	913
	September	2,001	1,428	573	245	328	1,756	808
2008	March	2,006	1,432	574	245	329	1,761	795
	September	1,998	1,424	574	245	329	1,753	726

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; National Employment Service (NES).
Notes:
1) By the registered number of employed, we refer to the formal economy, i.e. those employees with employment contracts and for whom social security contributions are being paid. By the registered number of unemployed, we refer to those persons that have registered with the National Employment Service (NES). NES moved from monitoring the number of job seekers to the number of unemployed persons in September 2004. This is why we do not have these data for the previous period (column 7).
2) Data on employees in legal entities are uncorrected data for July 2008 and data on entrepreneurs and their employees are from March 2008. These are the most recent data available.

The biggest decrease in the number of employees in legal entities was seen in manufacturing industry and then in wholesale and retail trade.

The biggest decrease in the number of employees in legal entities was seen in manufacturing industry, where 9,000 jobs disappeared, i.e. 2.5% of the employed in that sector. Employment in wholesale and retail trade also dropped by around 3,000 employees, i.e. 1.5% in that sector. The only sectors that saw employment growth between March and September 2008 are financial intermediation with a net increase of 2,000 jobs or about 6% of the employed in that sector, as well as real estate industry, with the same increase of 2,000 work places, i.e. about 3% of the employed in that sector (Table P-5 in the Analytical appendix).

The number of persons employed by entrepreneurs also decreased by about 6,000.

Finally, between March and September 2008, for the first time since we monitor the series, the number of persons employed by entrepreneurs decreased by approximately 6,000 (column 5, Table T3-2).

Table T3-3. Serbia: Employees in the Public Sector, 2004–2008

		Employees in legal entities						
		Public sector						
		From the budget			Public enterprises		Public sector - total	Other [1]
		Administration - all levels	Education and culture	Health and social work	National public	Local public		
		1	2	3	4	5	6	7
		in thousands						
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
	September	61	122	141	100	58	482	943

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 od the employed persons presented in this table. Their numbers are estimated at around 80,000, and they add another 4% to the total number of employeed in Serbia.The data on their exact numbers and wages are not published by the SBS because of national security concerns.

Footnotes:

1) Private, socially-owned and mixed ownership enterprises (without entrepreneurs). This column is not disaggregated further due to data availability limitations. The number presented in column 7 is calculated by subtracting the total number of employees in public enterprises and those financed from the budget from the total number of employees in legal entities from Table T3-2.

Box 1. Labor Force Survey and RAD Survey as Sources of Labor Market Statistics

Labor Force Survey (LFS) is the only source of economically relevant and internationally comparable data on employment, unemployment and participation and their relative measures. Since the Serbian Bureau of Statistics enhanced the Labor Force Survey in 2008 and started to implement it twice a year (up until now only one survey was conducted per year), it is possible to make the LFS data a primary focus of the section "Employment and Wages" as of this issue of *QM* (Table T3-1). At the same time, the RAD survey data (Table T3-2) will be used as control data for monitoring formal employment as well as the main source of information on the average wage in Serbia. The diversity of data statistics on the labor market is necessary if we want to monitor, as thoroughly as possible, the effects of the global financial crisis on the labor market. We expect that in the period ahead of us we will witness significant job churning between sectors, as well as changes in the employment structure. Therefore, by monitoring only one dimension of labor market statistics, we would miss a part of the overall changes.

The main differences between the Labor Force Survey and the RAD survey were already analysed in issue 12 of the *QM*. As a reminder, the RAD survey monitors the number of employed persons with formal employment contracts and for whom social security contributions and taxes are paid. Therefore, employees in legal entities in the RAD survey are estimated on the basis of a national sample of companies, while the number of entrepreneurs and their employees derives from estimates of health insurance registrations. This way, *only* registered employees are comprised and this number does not include agricultural workers, unpaid family workers, or army or police employees (which are traditionally excluded for security reasons). On the other hand, LFS is based on interviews with individuals from a national sample of households. Since the work status of the respondent is allotted on the basis of his personal declaration on his engagement in the labor market, the overall number of employees by LFS comprises also informally employed persons, agricultural workers and unpaid family workers, as well as army and police employees. Because of the larger scope based on the economic definition of employment (paid work for at least one hour during the reference week) – it is logical that the number of employees in the Labor Force Survey is higher by about 600,000 than the number of registered employees in RAD survey.

A more detailed analysis of the data from the two surveys will show that the RAD survey also contains about 100,000 more formally employed persons than the LFS. Hence, if we compare the overall number of employees in the RAD survey and the number of formally employed persons in the Labor Force Survey (formally employed persons are the ones possessing a contract of employment and/or social security contributions paid by the employer), bearing in mind that the LFS methodology from 2008 is completely in line with Eurostat standards and that it is used as a reference survey, it can be concluded that the RAD survey overestimates formal employment by about 100,000 work places. In order to illustrate this difference, the parallel review of formal employment by these two surveys for 2008 is given in Table T3-4.

Table T3-4. Serbia: Comparative Overview of Formal Employment in RAD and LFS, 2008[1)]

	Employees in legal entities	No. of employees with entrepreneurs	Employees in military and police (estimate)	Total number of wage employees	Formal entrepreneurs (self-employed)	Total number of formally employed
	1	2	3	4(=1+2+3)	5	6(=4+5)
			in thousands			
RAD Survey	1,425	323	80	1,828	245	2,073
Labor Force Survey (LFS)[2)]	1,451	222	80	1,753	220	1,973

Source: SBS.
Footnotes:
1) Row 1, which refers to RAD survey, presents us with data for September 2008, while the LFS (row 2) presents us with data for October 2008. Taking into consideration the different dynamics of these two surveys, this is the narrowest time gap possible between the two sets of data.
2) LFS data refer to the 15+ population, in order to be comparable with the RAD survey, which does not capture data on workers´ age. This is really not an issue, since we suppose that the majority of workers with formal working contracts are not aged over 65 anyway.

As mentioned previously, employees of the Ministry of Interior and the Serbian Army are traditionally excluded from the RAD survey for security reasons, while they are included in the overall number of employees in LFS. Since their number is estimated at about 80,000, we add that number to the overall number of employees in the RAD survey (column 3, Table T3-4), while we deduct the same number from the number of employees in legal entities in LFS (column 1, Table T3-4) in order to have comparable sets of employees in all the columns of the Table T3-4. Therefore, in column 1 for both surveys, employees in legal entities are given without army and police employees.

We can see that the main difference in the number of employees in the two surveys is derived from the number of persons employed by entrepreneurs, where their number is about 101,000 higher in the RAD survey than in the LFS (column 2, Table T3-4). We can also see a difference between the number of self-employed, which is by about 25,000 higher in the RAD survey (column 5, Table T3-4) and the number of employees in legal entities, where their number is by about 26,000 lower in the RAD survey (column 1, Table T3-4).

This analysis shows that the entrepreneurial sector causes the difference in the number of employees between the RAD and LFS surveys, because the number of private entrepreneurs and their employees is overestimated in RAD survey. This argument is further confirmed by the data from the Tax Administration, where a considerably smaller number of self-employed persons are registered (about 90,000 less, which is consistent with LFS data). Different explanations for this "employment surplus" in the RAD survey are possible: from the fact that inactive and unemployed persons are registered as entrepreneurs because of pension and health insurance, to hiding the real owner and doing double calculations in RAD, since a certain number of employees holding formal paid jobs appear at the same time as owners of private companies. However, more precise reasons for the probable overestimate of the number of employees in RAD will not be known before the revision of the methodology used in this survey is completed.

Wages

Y-o-y growth of real wages fell from 5% in Q3 to 4.1% in Q4. Nominal wages also saw a growth slowdown

Y-o-y growth rate of real wages fell from 5% in 2008 Q3 to 4.1% in Q4. With the exception of December, we can see that the real wage growth rate is even lower than in Q4 and amounts to 3.1%. It is significant that nominal wages also underwent a growth slowdown, so the nominal y-o-y growth in Q4 2008 was 15.1% compared to 17.9% in Q3. In December, nominal growth was lower and amounted to 12% (Table T3-5). In former *QM* analyses on wage fluctuations it seemed that the real wage growth had, slowed down for the most part because of the inflation rate increase and that it would regain the high growth rate if the inflation would decrease. Nevertheless, we can now clearly see that that is not the case and that the nominal wage growth slowdown considerably contributes to the real wage growth slowdown.

The overall gross wage real growth in 2008 was 5.5%.

On an annual level, the overall y-o-y gross wage real growth in 2008 amounted to 5.5%. With regard to 14.6% in 2007, this represents a big slowdown in wage growth. In the same period, nominal wage growth fell from 21.9% y-o-y to 17,8% (Table T3-5).

Table T3-5. Serbia: Average Monthly Wage and Real Y-o-y Wage Indices, 2004–2008

	Average Monthly Wage				Average Gross Monthly Wage Index[2)]	
	Total labour costs[1)], in dinars	Net wage, in dinars	Total labour costs, in euros	Net wage, in euros	nominal	real
	1	2	3	4	5	6
2004	24,234	14,108	334	194	123.7	111.4
2005	30,142	17,478	364	211	124.4	107.1
2006	37,493	21,745	445	258	124.4	111.3
2007	45,723	27,785	572	347	121.9	114.6
2008	53,868	32,757	660	402	117.8	105.5
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
Q3	54,372	33,053	705	429	117.9	105.0
Q4	58,440	35,517	678	412	115.1	104.1
Dec	63,520	38,626	717	436	112.0	103.1

Source: Serbian Bureau of Statistics (SBS). Footnotes:
1) Total labour costs include empoloyer'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 labour cost indices, because the average TLC is larger than the average gross wage by a fixed 17.9%.

The depreciation of the dinar has not yet entirely "eaten" the 2008 growth of wages calculated in euros

Q4 has seen a significant depreciation of the dinar leading to a drop in wages calculated in euros. That is to say, net wages fell from 429 euros in Q3 to 412 euros in Q4, in spite of the fact that the highest wages were paid in Q4, given the year-end bonuses and the so called thirteenth pay (Table T3-5). However, it is interesting that, calculated in euros, in Q4 2008 wages still grew with regard to Q4 of the preceding year; moreover, they remained higher than in Q1 and Q2 2008 nominally, but smaller compared to Q3 of 2008[2]. It can thus be concluded that, even if the depreciation of the dinar was considerable in Q4, it has not yet entirely "eaten" the growth of wages expressed in euros formed during 2008.

Unit labor costs in dinars have been showing a decreasing trend for several years now, with inevitable seasonal oscillations (columns 2 and 3, Table P-7 in Analytical appendix).[3]

2 High wages expressed in euros in Q3 2008 can partly be explained by the significant appreciation of the dinar in that period.
3 Except for agriculture and fishing, which are subject to big seasonal oscillations.

Table T3-6. Serbia: Average Gross Wages by Activities, Y-o-y Real Indices, 2006–2008

	2006	2007	2008	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Total	111.3	114.6	105.5	114.2	108.2	105.2	103.1	105.0	104.1
Agriculture, forestry and water works supply	114.7	107.6	111.2	108.2	106.3	113.0	113.0	110.3	108.3
Fishing	92.6	86.7	127.5	101.5	103.0	118.0	179.7	87.8	124.6
Mining and quarrying	113.5	118.5	101.2	111.3	106.4	91.9	98.9	105.7	108.2
Manufacturing	113.7	111.6	105.8	109.7	106.8	108.3	103.2	105.6	105.9
Electricity, gas and water supply	106.3	118.7	97.1	110.1	103.8	82.4	98.8	102.7	104.3
Construction	112.9	117.2	107.2	112.9	106.1	108.7	105.0	107.5	107.6
Wholesale and retail trade, repair	114.5	113.1	108.2	113.5	105.1	109.4	107.4	108.0	108.1
Hotels and restaurants	109.5	112.9	103.9	115.6	109.2	110.0	104.1	102.9	98.8
Transport, storage and communications	108.5	108.9	104.0	108.4	106.9	105.8	102.6	104.6	102.8
Financial intermediation	112.4	109.1	98.3	105.2	106.7	93.4	95.6	103.9	100.3
Real estate, renting activities	103.4	119.6	98.5	116.6	119.0	105.2	95.3	97.6	96.0
Public administration and social insurance	109.2	111.3	100.7	113.2	102.2	98.3	100.6	101.3	102.7
Education	108.9	114.3	106.5	116.3	110.5	110.2	106.1	104.9	104.7
Health and social work	108.5	123.9	101.5	127.2	112.0	105.6	99.4	100.9	100.2
Other community, social and personal service	105.0	107.4	101.6	110.6	101.0	102.1	100.5	101.2	102.5

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

The biggest y-o-y growth of real wages in Q4 2008 was seen in the mining and quarrying sector and in wholesale and retail trade

The biggest y-o-y growth of real wages in Q4 2008 was seen in the mining and quarrying sector (8.2%) and in wholesale and retail trade (8.1%). The y-o-y growth rate, higher than the average wage growth rate, was also observed in construction (7.6%) and the manufacturing industry (5.9%). The hotel and restaurant sector as well as the real-estate industry underwent y-o-y decrease in real wages: the former by 1.2% and the latter by 4% (Table T4-6).

Electric power production, financial intermediation and the real estate industry underwent y-o-y decreases in real wages

On an annual level, the biggest real wage growth in 2008 was seen in wholesale and retail trade (8.2%) and than in construction (7.2%). The sectors of electric power production, financial intermediation and real estate experienced y-o-y decrease in real wages in 2008 (Table T4-6).

Y-o-y wage growth in the public sector was below the Serbian average in Q4

The public sector did not see significant y-o-y real wage growth in Q4 – except in local public companies, the growth was below the national average (4.1%) and below the economy average (5.1%). In the health and social work sector it was even negative (-0.8%). On an annual level, 2008 saw y-o-y real wage growth only in education and culture, which was a little over the Serbian average (Table T4-7).

Table T3-7. Serbia: Gross Wages in Public Sector 2004-2008, Y-o-y Real Indices

	From the budget			Public enterprises		Other[1)]	Serbia average
	Administration - all levels	Education and culture	Health and social work	National public	Local public		
	1	2	3	4	5	6	7
2004	107.4	107.7	110.9	107.9	113.4	113.7	111.4
2005	105.9	106.0	100.8	100.5	103.0	106.9	107.1
2006	109.1	107.2	109.4	110.8	102.9	113.7	111.3
2007	111.1	114.7	123.8	116.7	105.0	114.1	114.6
2008	100.7	105.7	101.3	101.2	95.9	105.7	105.5
2007							
Q1	111.5	112.6	125.4	129.8	113.8	117.3	118.5
Q2	118.6	119.2	131.5	118.9	104.5	117.4	118.6
Q3	114.1	116.7	127.5	112.5	104.1	112.5	114.1
Q4	100.1	110.3	111.0	105.8	97.4	109.0	108.2
2008							
Q1	99.2	109.5	105.6	94.3	98.5	107.3	105.2
Q2	99.6	104.8	99.4	103.0	89.0	104.2	103.1
Q3	100.8	104.7	101.1	103.6	91.7	106.3	105.0
Q4	103.3	103.7	99.2	103.9	104.4	105.1	104.1

Source: SBS.
Footnotes:
1) Column 6 includes private, socially-owned and mixed ownership entreprises (without entrepreneurs).
2) Coumn 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 6, Table T3-2).

Box 2. New Methodology to Calculate the Average Wage

As of January 2009, the Serbian Bureau of Statistics changed the methodology for calculating average Serbian wage, which was *revised downwards*. That is to say, up until and including 2008 included, the average wage was calculated exclusively on the basis of the wages of employees in legal entities, in accordance with the RAD-1 survey data. The average wage calculated in this way did not include the wages of persons employed by entrepreneurs. Given the fact that wages paid by entrepreneurs are lower, on average, than the average wage paid by legal entities (which includes wages in the public sector), calculating the average wage only on the basis of the wages paid by legal entities overestimated the average wage. Finally, since 2009, the data on wages paid by entrepreneurs are calculated from the records of paid taxes and contributions kept by the Ministry of Finance, i.e. Tax Administration. As a result, the national average wage was reduced.

According to the new methodology, the gross wage amounted to 28,877 dinars in January 2009, which is nominally almost the same as the average gross wage in January 2007 calculated using the old methodology. This is certainly a significant decrease in the average wage and we can expect it to have considerable implications for the future public policy making.

SBS has also recalculated the average wage for 2008 using the new methodology in order to calculate the y-o-y average wage growth index between 2008 and 2009. According to the new methodology, the average wage is nominally higher by 14.1% in January 2009 than it was in January 2008.

We would especially like to point out that *QM* has on several occasions recommended to widen the scope of wages on the basis of which the average wage is calculated, starting from Katarina Stanic's analysis in her text "Registered Employment and Wages – Statistical Data and Trends 2000-2005" published under the section called "Spotlight on" in issue 3 of the *QM*. We will therefore dedicate more attention to this important enhancement of SBS methodology in our next issue and conduct a more detailed analysis of its implications.

4. Economic Activity

The growth of economic activity has decelerated much more sharply than expected in Q4. We estimate the y-o-y GDP growth in Q4 at around 2.7% and non-agricultural GVA at 2.8%. Although 2008, when observed in total, was a year of substantial economic growth (approximately 5.4%), it is evident that this growth is a sum of two separate trends: high growth in the first and sharp deceleration in the second half of the year. We finish the year with a GDP growth standing at less than 3%, and the speed of the reduction in economic activity is worrisome. If we excluded favorable exogenous influences on agriculture and construction as well as the influence of a depreciation of the dinar on the financial sector growth from economic activity, the achieved GDP growth would stand at merely 0.8%. Excluding the highly unlikely reversal of trends the possibility of entering a recession in 2009 becomes increasingly certain. The growth of both export and domestic demand has also significantly decelerated in Q4, but domestic demand has remained disproportionately high when compared to production. Faced with q combination of a sharp deceleration of economic activity and a misbalance between total consumption and production, economic policy is now oriented towards an increase of state investment activities and selective stimuli to the economy. The goal of such economic policy is to stimulate economic activity without increasing the existing misbalances. Still, the principle course and measures of fiscal policy measures and principle course will have to undergo the hardest test during the implementation phase. In the long-run, the substantial increase of domestic economy competitiveness that was brought about by the depreciation of the dinar can have a positive influence on the alleviation of structural misbalances. The full effects of the competitiveness increase will be felt only after the end of the global crisis and the recovery of export demand, since export demand has decreased even more than domestic demand under the influence of the crisis. Industrial production has recorded a y-o-y decline of 5%, while construction activity continues to record fairly high growth rates.

Gross Domestic Product

We estimate GDP growth in Q3 at around 2.7% and non-agricultural GVA growth at around 2.8%

According to *QM*'s preliminary estimate, based on the available data on the results of economic activity[1], the y-o-y real GDP growth in Q4 stood at around 2.7 % (Table T4-1). The achieved GDP growth in Q4 represents a deceleration of over two percentage points in relation to Q3. Non-agricultural GVA, which we consider as a more reliable measure of economic activity achieved a y-o-y growth of 2.8% in Q4, which is nearly equal to the total GDP growth.

When observed according to the production principle, agriculture, transport, storage and communication are in the lead in the total growth of economic activity in Q4. In relation to Q3, we registered a significant growth deceleration in the processing industry and financial mediation, and a slighter, but still evident, deceleration in the wholesale and retail trade. (Table T4-1).

1 The methodology used for estimating GDP is based on the estimates of real growth of gross value added in individual sectors of the economy according to the production principle, which were than summed up and the tax component was added. The modifications in relation to the methodology of the Statistical Office of the Republic of Serbia (SORS) are partly related to the indicators on basis of which we estimate sectoral growth, and which we consider as more reliable indicators of actual sectoral growth in certain cases (e.g. cement production in construction). Also, since we have fewer indicators at our disposal than SORS, we include indirect indicators which are not an integral part of official statistical methodology in the estimate, and we also carry out deeper analyses of trends in individual sectors, as well as a demand analysis.

Table T4-1. Serbia: Gross Domestic Product, 2005–2008[1)]

	Y-o-y indices												Base index	GDP share
	2005	2006	2007	2008	2007				2008				2008/ 2002	2007
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4[2)]		
Total	106.0	105.6	107.1	105.4	107.8	107.7	106.6	106.4	108.5	106.3	104.9	102.7	140.6	100.0
Taxes minus subsidies	110.2	99.8	109.5	101.2	110.6	107.8	112.5	107.5	109.1	103.1	98.7	96.0	145.9	15.5
Value Added at basic prices	105.4	106.8	106.7	106.2	107.4	107.8	105.6	106.2	108.4	106.8	106.1	104.0	139.9	84.5
Non agricultural Value Added	107.3	107.9	108.8	105.9	108.3	109.0	108.7	109.2	108.3	106.9	105.8	102.8	146.0	89,2[3)]
Agriculture	95.1	99.8	92.2	109.0	99.5	98.2	88.3	87.6	109.0	105.9	107.7	112.8	105.6	10,8[3)]
Manufacturing	99.9	105.6	104.8	100.8	109.4	104.9	104.6	101.6	103.9	104.4	100.6	95.0	113.9	15,7[3)]
Construction	102.0	107.7	108.3	105.6	117.7	110.3	105.1	102.0	103.8	107.5	100.9	110.0	144.0	3,5[3)]
Transport, storage and communications	123.4	129.3	119.4	115.4	113.7	117.2	120.1	125.7	120.1	117.3	113.6	112.0	278.8	15,1[3)]
Wholesale and retail trade	122.0	110.3	119.5	107.1	122.6	120.0	117.7	118.5	111.4	105.8	107.6	104.5	225.0	12,7[3)]
Financial intermediation	117.1	117.0	117.9	112.7	117.1	117.5	117.4	119.6	116.9	116.0	113.9	105.0	217.5	8,4[3)]
Other	102.1	100.6	101.5	102.1	99.9	102.3	101.8	102.0	103.3	102.1	102.7	102.1	110.1	33,7[3)]

Source: SBS.
1) In constant prices in 2002.
2) *QM* estimate.
3) Share in VA.

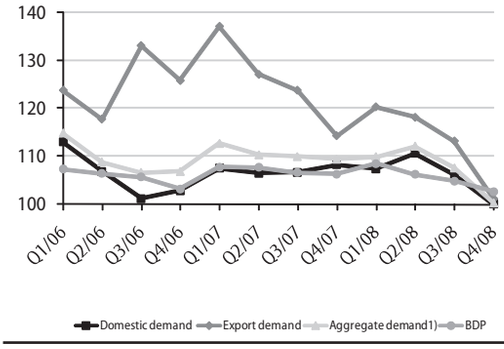
In the unusually low total growth of economic activity in Q4 we can notice a high, double-digit growth of several sectors which stands out from the rest of the economy. We consider the double-digit growth of transport, storage and telecommunications sustainable in 2009. as well, primarily because of the long-term high telecommunications growth which should not be affected by the financial crisis. However, the high growth of construction and agriculture is very unlikely to continue in 2009. These two sectors have achieved high growth in Q4 under the influence of exogenous factors. The previous year, observed in total, has been favorable to agriculture and, hence, the growth of agriculture in Q4 was also very high. When considering construction, the actual growth trend of this sector is presented in Q2 and Q3, and the achieved y-o-y growth of construction activity in Q4 is primarily the reflection of somewhat better meteorological conditions when compared to the same period of the previous year, i.e. the higher number of working days caused by a warmer autumn.[2]

The growth of financial mediation that we estimated at about 5%, although lower than the usual one, will also be hard to maintain in 2009. A separate problem is the fact that the indicator we use for the estimate of this sector's trend is the y-o-y growth of deposits and credits measured in dinars, although this sector's business transactions are mainly indexed in euros. The real depreciation has, therefore, influenced the estimated y-o-y growth of financial mediation in Q4, which appears as much higher than it would be if it were observed in the currency used for the majority of business transactions.

When we exempt exogenous influences on agriculture and construction from economic activity in Q4, as well as the effect of depreciation on the growth of financial mediation, we get a GDP growth rate of about 0.8% which we consider as the underlying economic activity trend with which we enter 2009.

Growth of aggregate demand slowed down in Q4

Graph T4-2, Serbia: Real y-o-y Growth of GDP and Aggregate, Domestic and Export Demand, 2006–2008



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

On Graph T4-2 we have presented the real y-o-y growth of domestic, export and aggregate demand, as well as the real GDP growth. The graph demonstrates that the deceleration of aggregate demand growth was sharper than the deceleration of the growth of economic activity, which we can interpret in the context of cause and effect links. Namely, the sudden deceleration of aggregate demand was, all things considering, the "trigger" which led to the sudden deceleration of the economic activity.

In the aggregate demand, export and domestic demand can be analyzed individually. Export demand has obviously slowed down more than the domestic (Graph T4-2), putting the export oriented part of the economy in a more unfavorable

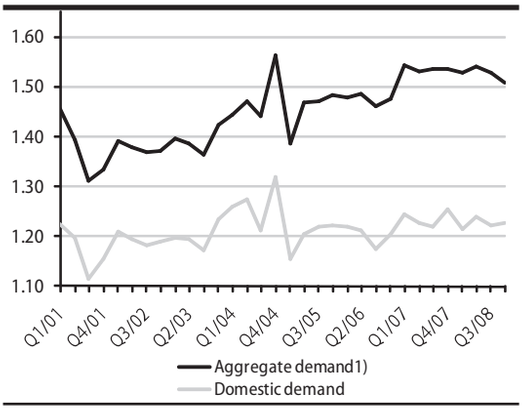
2 We suppose that the official SORS data will report a much lower construction growth in Q4 than the one present in our estimate. For more details on construction acitivity in Q4, as well as the measuring of the same, see the section concerning construction.

position than the rest of the economy. Slowdown of the domestic demand is transmitted primarily to the decrease in the production in the manufacturing industry, where most of the export goods are produced (Table T4-1).

Domestic demand is much more important for economic activity because of its share in the total demand – around 80%. Domestic demand also suddenly decelerated in Q4. The low real wage growth and primarily a sharp deceleration of credit activity have influenced the deceleration of domestic demand growth in Q4[3]. Expansionary fiscal policy has pushed in the opposite direction - the rise of domestic demand[4].

It is worrisome that, in spite of the deceleration, domestic demand is still disproportionately high when compared to production (Graph T4-3). This maintains the structural imbalance of the domestic economy, characterized by much higher consumption than production, which exerts unchanged pressure on inflation and the depreciation of the dinar.

Graph T4-3. Serbia: Aggregate and Domestic Demand Ratio to GDP, 2001–2008



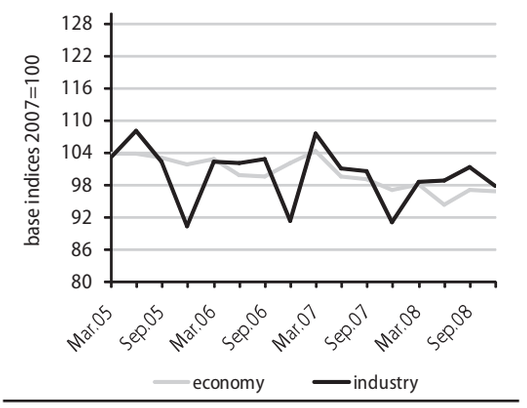
Source: *QM* based on SBS data.
1) Aggregate demand = domestic demand + export

Reactions of economic policy to the sharp deceleration in demand, and hence economic activity, in the circumstances of existing misbalances, can be divided into two groups. The first group is characterized by the well known "recipe" of stimulating production by the means of heightened state investment. In our case the emphasis is on the construction of Corridor 10. The second group of economic policy measures is far more creative and relates to the subsidizing of the credit interest rate for the companies that produce tradables and the subsidizing of consumer credits related to the purchase of lasting products of domestic origin. For now it is difficult to estimate the amount of influence that the fiscal policy measures will have on economic activity, especially because there are certain problems connected to their realization.[5]

Unit labor costs in the industry demonstrate a significant y-o-y growth

Although unit labor costs (ULC) measured in dinars have been mildly declining in Q4 when compared to Q3, they should be experiencing a much sharper decline in the industry under seasonal influences (Graph T4-4). If we observe the y-o-y indices, a high y-o-y ULC growth of about 7% is noticeable in the industrial sector. The sharp decline of industrial production, which was not followed by an equal deceleration of wages or the reduction of number of employees, influenced the high y-o-y ULC growth in the industry. Simply put, companies have yet to react to the sharp decline in the industrial production by a large dismissal of employees. Examples from practice confirm these figures, since a large number of companies have sent workers on paid leaves in the existing circumstances of reduced production but have not dismissed them. Barring the case of sudden trend reversal and industrial production recovery the current level of employment will not be sustainable.

Graph T4-4. Serbia: Real Unit Labor Cost in Economy and Industry, 2005–2008



Source: QM based on SBS and NBS data.

The ULC growth is for now concentrated only in industrial production. In the total economy (out of which we excluded the state and agriculture) we still record a slight ULC decline. This decline of dinar ULCs in the economy is the result of the productivity growth continuing to be slightly higher than real growth of wages.

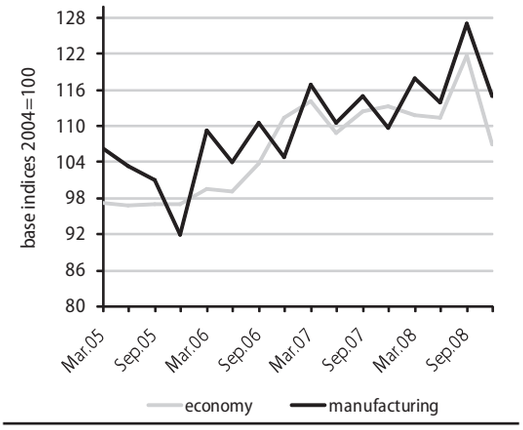
Unit labor costs measured in euros (euro-ULCs) indicate the international competitiveness of

3 For more detail see Section 3 „Employement and wages" and Section 7 „Monetary flows and policy" of this issue of *QM*.
4 For more detail see Section 6 "Fiscal Flows and Policy" of this issue of QM.
5 For more detail see Highlights 1 of this issue of *QM*.

Competitiveness has increased

domestic economy because they define the biggest domestic cost component (labor costs) in relation to value added. Euro-ULCs are calculated for the processing industry which produces by far the biggest portion of tradables, as well as for the total economy[6]. We emphasize that such an analysis monitors only the relative change of competitiveness (ULC) in relation to the average in 2004, and that we are not giving an assessment of whether the domestic economy is, or is not, competitive in the international market.

Graph T4-5. Serbia: Real Unit Labor Cost in Euro, Economy and Manufacturing, 2005-2008



Source: *QM* based on SBS and NBS data.

There is a sudden decline of over 10 percentage points of euro-ULCs in Q4 when compared to Q3. The large depreciation of the dinar, which was not followed by a similar increase in wages, had the strongest influence on the increase of competitiveness. Euro-ULCs have previously, from 2004 to Q3 of 2008, grown by about 25% (Graph T4-5) – which at the same time quantifies the decline of domestic economy competitiveness in the cited period. Now the trend in Euro-ULCs movement has suddenly reversed and the continuation of real dinar depreciation in Q1 of 2009 is probably leading to a more permanent rise of the domestic economy's international competitiveness.

However, we probably cannot expect positive effects because of the rise in competitiveness in the form of substantial increases in exports before the end of the global crisis and the recovery of export demand. We should especially keep in mind that a depreciation of domestic currencies has also occurred in a large number of important export markets, along with an increase of protective measures that negate the positive influence of the depreciation of the dinar on the prices of Serbian products.

Industrial Production

Industrial production is in decline

Industrial production has recorded a decline of 5% in Q4 in relation to the same period last year (Table T4-6). In relation to the previous quarter industrial production has achieved almost six percentage points lower y-o-y growth, which is the biggest deceleration of the trend of industrial production since we started following it. In 2008 industrial production achieved a growth of 1.1% compared to last year, which is significantly lower than expected because of the bad results in Q4.

Table T4-6. Serbia: Industrial Production Indices, 2005–2008

	Y-o-y indices												Share
	2005	2006	2007	2008	2007				2008				2007
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Total	100.8	104.7	103.7	101.1	104.8	105.2	103.5	100.4	106.0	102.3	101.0	95.0	100.0
Mining and quarrying	102.1	104.1	99.4	103.6	102.1	101.4	99.2	95.6	106.0	101.8	103.0	102.7	6.0
Manufacturing	99.3	105.3	104.2	100.7	108.5	104.9	103.3	99.9	104.4	103.7	100.4	94.0	75.8
Electricity, gas, and water supply	106.6	102.2	102.8	101.8	94.2	108.7	106.5	104.3	112.0	96.1	103.2	96.9	18.2

Source: SBS.

Deceleration of processing industry

The production and distribution of electric energy, gas and water experienced a y-o-y decline of 3.1% in Q4. The decline of production in this sector is, on one hand, the consequence of a somewhat warmer autumn compared last year, and on the other hand, also a consequence of the deceleration of the economic activity. The delay in production of companies such as US Steel Serbia will undoubtedly influence the deceleration of electric energy production. We will be able to make a more precise assessment of that influence only after the end of the heating season.

6 Excluding state and agriculture sectors.

Ore and stone mining maintained a stable y-o-y growth of 2.7% in Q4. All things considered, the growth of this sector of the economy was not influenced by the global financial crisis, so similar growth rates are expected in 2009 as well.

The processing industry sector, which has the biggest share in total industry production, is of much more importance for the analysis. Processing industry has experienced a y-o-y decline of 6% in Q4, and a deceleration in relation to Q3 that stood at 6.4 percentage points.

The reversal of the trend in processing industry production (and therefore in the total industrial production) already occurred in august (Graph T4-7). That is when industrial production, after experiencing historically highest production values since the beginning of the transition and very high y-o-y growth rates, has suddenly entered stagnation, followed by extremely negative y-o-y growth rates in Q4. The deceleration of industrial production from the middle of the year coincides with the trend in the aggregate demand movement (Graph T4-2).

The reversal in industrial production can best be seen in the seasonally adjusted industrial production indexes. The already recorded deceleration of both export and domestic demand, but also the difficulties that the companies are facing in their attempts to ensure solvency, have contributed to this reversal.

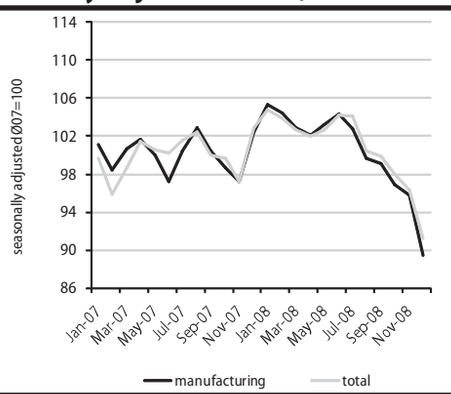
Y-o-y growth of specific sectors with a significant share in the processing industry is presented in Graph T4-8. Observing the Graph we can notice that the decline of industrial production in Q4 is common for all of the observed sectors, but is sharpest in the export oriented sectors. Such an analysis also helps us to identify the main channel through which the global crisis is transferred to the domestic industry.

The level of industrial production in the food processing industry, which has the biggest share in industrial production, maintained roughly the same trend in Q4 as in the first three quarters of 2007. Still, we expected a much higher growth of industrial production in the food processing industry in Q4 than the achieved one, having in mind that 2008 was a successful agricultural season and that the demand for agricultural products is relatively stable. We presume that the decline of production in the food processing industry was crucially influenced by the non-solvency of companies caused by their difficulties in obtaining credits.

The reduction of demand had the strongest influence on the decline of other observed sectors of the processing industry and this decline is much bigger than the one caused by solvency issues. Some companies from these sectors, such as US Steel Serbia or Tigar Michelin Holding, have decided to temporarily halt their production in Serbia in the framework of the consolidation of their parent multinational companies.

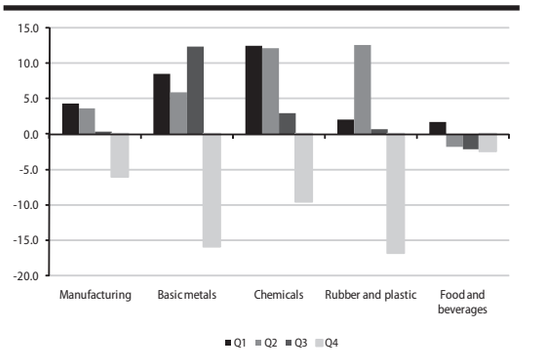
This analysis, on the other hand, also indicates that the possible positive influence of the reduction in the interest rate on the credits to the economy is very limited, since the decrease of demand has more influence on the decline of economic activity (Graph T4-8). It is probable that the measures oriented towards the increase of demand for domestic products, such as subsidizing of interest rates on credits for the purchase of domestic products, will have a greater influence on the economic activity.

Graph T4-7. Serbia: Industrial Production, Seasonally Adjusted Indices, 2007–2008



Source: SBS.

Graph T4-8. Serbia: Y-o-y Growth of Selected Sub-sectors, 2008



Source: SBS.

Bad results of all specified-purpose product groups

When observed in relation to purpose (table T4-9) – we can notice a decline in the majority of purpose-specific product groups. The highest, and sole positive y-o-y industrial production growth of 1.1% in Q4 was achieved in the production of consumer goods. The biggest decline (13,8%) was recorded in the production of intermediary products. When we exclude the production of basic metals from the intermediary products group this decline is somewhat smaller but is still sharp (table T4-9).The production of investment goods has also experienced a y-o-y decline of about eight percent in Q4 after very high growth rates in the previous three quarters, and the energy generation experienced a y-o-y decline of 3.6% influenced by a somewhat warmer autumn.

Table T4-9. Serbia: Components of Industrial Production, 2005–2008

	Y-o-y indices												Share[5]
	2005	2006	2007	2008	2007				2008				2007
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Total	100.6	104.7	103.7	101.1	104.8	105.2	103.5	100.4	106.0	102.3	101.0	95.0	100.0
Energy[1]	103.9	102.5	101.2	101.5	93.0	104.9	105.6	103.0	110.2	98.2	102.4	96.4	26.6
Investment goods[2]	74.2	90.0	105.4	105.5	97.1	99.1	117.8	103.3	106.5	118.3	105.0	92.1	6.0
Intermediate goods[3]	104.9	106.7	104.9	100.0	113.6	108.4	102.4	95.7	106.0	106.8	99.7	87.2	30.4
Intermediate goods without basic metals	101.5	101.3	107.3	98.8	113.1	108.3	105.9	101.5	105.1	107.1	95.3	89.1	22.6
Consumer goods[4]	101.6	112.0	107.1	97.9	122.4	109.1	102.3	97.2	99.4	97.5	100.0	101.8	37.0
Consumer goods without food industry	96.3	128.3	109.2	96.3	138.7	111.4	99.3	91.8	95.8	96.5	103.4	108.5	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.

Construction

Construction activity in Q4 is higher by about 10 percent in relation to the same period last year. Among several inconsistent indicators describing the movements in construction, we consider the cement production index as the most reliable one7 (Table T4-10). Cement production in Q3 is about 10.1% higher than the production from the same period last year.

Out of the other construction indicators published by SORS the value of construction works performed in Q3 is nominally higher by 5.9%, and in permanent prices 2% lower compared to the same period last year. The number of workers on construction sites is lower by 0.6%, while the y-o-y decline of actual working hours on construction sites is 0.1%.

Box 1: Measurement of the Growth of Construction Activity

When assessing the trend of construction activity, we can notice a significant discrepancy where (a) on the basis of data on *cement production* from industry production statistics the trend is growing, and (b) on the basis of data on *construction activity* from construction statistics the trend is declining. How can we explain such a discrepancy?

Small enterprises dealing primarily with the construction of apartments constitute a considerable portion of the construction sector. We suppose that it is difficult for official statistics to monitor their activity, i.e. that in most part they are not even registered. On the other hand, it is much easier to monitor the activities of large enterprises, and we consider that because of this the official statistics gives them greater importance than it should and overestimates their share in total construction.

Another indicator that demonstrates the systematic undervaluation of the activity of small enterprises, as opposed to the activity of large companies, in the official construction statistics is the un-

usually low share of apartment construction in the total construction activity – only 10%. The share of transport infrastructure construction, which is mostly done by large construction companies, is on the other hand unusually high – around 50%.

When the growth trends of small and large construction enterprises are similar, the growth measured on the basis of cement construction growth is similar to the construction sector growth published by the construction statistics. However, when there is a discrepancy between the growth of small and large enterprises, the construction statistics will give a greater importance to the large enterprises trend. In this situation the cement production provides a better picture of the movement of the whole sector since both small and large enterprises use cement.

Such a scenario most probably occurred in Q4, i.e. the decline in the activity of large construction enterprises and the rise in the activity of small ones. There is an explanation for such movements. Namely, the state suddenly decreased its investment activities[1] in Q4 which directly caused a reduction in the activity of large enterprises whose most important employer was the state. The activity of small enterprises was not especially affected by this.

If we observe the share of specific types of construction in the total construction activity, we can notice that the share of transport infrastructure in the total construction in Q4 was considerably reduced – from 50.1% in Q4 2007 to only 43.1% in Q4 2008. So, according to the construction statistics data as well, the decline in activity was concentrated solely in the road infrastructure construction, and the rest of the construction sector recorded high growth.

Taking into consideration the probable overvaluation of standards for road infrastructure construction in construction statistics, we consider that the decline in this segment had far less influence on the total trend, and that the data on cement production give a more valid picture of the construction growth trend.

1 For more detail see Section 6 „Fiscal Flows and Policy" of this issue of *QM*.

...but the data from different sources are completely inconsistent

Table T4-10. Serbia: Cement Production, 2001–2008

	Y-o-y indices				
	I quarter	II quarter	III quarter	IV quarter	total
2001	89.5	103.5	126.9	148.1	114.2
2002	83.6	107.9	115.6	81.6	99.1
2003	51.1	94.4	92.7	94.4	86.6
2004	118.8	107.4	98.5	120.1	108.0
2005	66.1	105.0	105.8	107.4	101.6
2006	136.0	102.7	112.2	120.2	112.7
2007	193.8	108.9	93.1	85.0	104.4
2008	100.1	103.7	108.1	110.1	105.9

Source: SBS.

More favorable meteorological conditions and a greater number of working days in comparison to 2007 was the most important factor influencing the high growth of construction activity in Q4, which we estimate at 10%. The unquestionable influence of the crisis and delays in credit and investment activity are still not noticeable on the total level of construction activity. We presume that these will be transferred to the construction sector as well, with a delay of several quarters, because the majority of construction activity currently consists of structures whose construction had begun before the culmination of the economic crisis. We will not be able to estimate the new trend in construction activity until Q2 in 2009 and the start of the new construction season, and therefore it is advisable to take the results from Q4 and Q1 with necessary caution.

5. Balance of Payments and Foreign Trade

The global financial crisis has had an impact on Serbia's foreign trade and financial transactions. Q4 2008 saw a deep depreciation of the dinar, a significant slowdown in exports and financial inflows (which saw negligible growth), a drop in the value of imports to below Q4 2007 levels, low foreign direct investment, fleeing portfolio investments, short-term bank borrowing, and a sudden run on foreign currency deposits by a frightened public. All this was accompanied by large-scale spending of NBS foreign currency reserves in Q4, which drove them down by €1.76 bn.

The current account deficit was lower in relation to the first three quarters of 2008…

…standing at €1,290 mn (or 15.1% of GDP)

Serbia's current account deficit amounted to €1,290 mn, and was nominally lower than that seen in the first three quarters of 2008. The deficit stood at 15.1% of GDP, substantially lower than previous quarterly values in 2008 (17.3% in Q1, 20.4% in Q2, and 16.6% in Q3).[1] Data for 2007 and 2008 indicate that the current account deficit as a percentage of GDP was lower than its current level only in Q3 2007 (13.9%). Such a quarterly improvement was caused by falling imports and high current transfers, mainly remittances (Table T5-1).

The goods deficit amounted to €1,894 mn (22.2% of GDP)

The goods deficit stood at 22.2% of estimated quarterly GDP in Q4 2008 (as against 24.1% in Q1, 23.0% in Q2, and 21.3% in Q3). Exports stood at €1,723 mn in Q4 (20.2% of GDP), while imports, worth €3,617 mn, amounted to 42.5% of GDP.[2] Markedly lower exports and imports over the last three months of 2008 drove the goods deficit down – to €1,894 mn – in relation to that seen in the previous two quarters.

Year-on-year export growth was 2%...

…while imports fell by 3% at the y-o-y level

The global financial crisis has affected Serbia's foreign trade. Exports, which have seen drops each month ever since Q3, stand only 2% above the 2007 level. Falling economic activity in Serbia, coupled with the depreciation of the dinar, has resulted in a negative import growth rate (-3%). Such y-o-y changes in exports and imports have led to a reduction in the y-o-y foreign trade deficit of 7.1%. In relation to the previous quarter, exports were lower by 16%, while imports fell by 10%. These changes, along with a low service deficit, growing interest expenses and major current transfers, have together driven the current account deficit to a level 7.4% below that seen in Q4 2007 (Table T5-1). If we take into account the structure and trends behind the growth of the current account deficit in 2008 (20.8% in Q1, 61% in Q2, and 46.3% in Q3), it becomes clear that the y-o-y reduction in the deficit of 7.4% was caused solely by slowing economic activity and recession in the Serbian and international markets, as well as the depreciation of the dinar.

For the first time on record, this quarter has seen a financial account deficit – met, along with the current account deficit, by a decrease of foreign currency reserves

In Q4, foreign currency reserves served not only to cover the negative current account balance, but – for the first time – to meet the financial account deficit (including Errors and Omissions). This means that the positive value of €1,476 on the financial account (Table T5-1), parses as a shortfall of €260 mn and a reduction in foreign currency reserves of €1,736 mn. The negative value of the financial account was caused by modest FDIs (€210 mn), net withdrawal of portfolio investments, as well as significantly negative trends of other investments. The Other investments has seen a negative value for the first time since 2007, recording a shortfall of €439 mn (Table T5-1); this was caused by a run on deposits by the public, who took out nearly €1.4 bn (especially in October, which saw €922.2 mn taken out of banks).[3] These withdrawals could not be offset by high commercial loans, short-term bank borrowing, and foreign borrowing that has remained positive (although substantially lower than in previous quarters).

1 Balance of payments data have been prepared in accordance with new NBS methodology (for a detailed explanation see Section 6, Balance of Payments and Foreign Trade, in *QM* 12, as well as http://www.imf.org/external/np/sta/bop/BOPman.pdf).

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

3 These data differ from those published in Section 7, Monetary Flows and Policy. This difference is the result of different data sources: for Balance of Payments we consider data provided by the NBS Balance of Payments Division, while for Monetary Flows and Policy the data is supplied by the banking sector balance. There are differences in recording deposit withdrawals by the public, businesses and non-residents. Changes to methodology have also had an impact – the issue will be presented in greater detail in the following issue of QM.

The current account deficit amounted to €5,876 mn, or 17.4% of GDP, in 2008

According to NBS data, the current account deficit recorded in 2008 was higher by 27.6% in relation to 2007, standing at €5,876 mn. This amount equalled 17.4% of GDP, 1.5 percentage points greater than the deficit seen in 2007. What is interesting to note is that exports grew more than imports in 2008 (exports grew by 16.4%, imports by 15.8%). However, the same period also saw a high foreign trade deficit, standing at €7,663 mn (22.6% of GDP). Foreign direct investment remained almost unchanged in 2008 in relation to 2007, amounting to €1,812 mn. The trend of long-term borrowing by businesses seen in 2007 (€3.2 bn) continued in 2008, albeit to a lesser extent (€2.5 bn), while short-term borrowing rose from almost zero to about €500 mn. Deposit withdrawals were a hallmark of 2008 – the last quarter alone saw €1.4 bn in foreign currency deposits taken out of banks. As deposit trends were positive throughout most of the year, deposit withdrawals at the annual level amounted to €667 mn. NBS foreign currency reserves declined by €1,760 mn over the course of 2008.

Table T5-1. Serbia: Balance of Payments[1)]

	2007	2008	2007				2008			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
			in millions of euros							
CURRENT ACCOUNT	-4,605	-5,876	-1,075	-1,095	-1,042	-1,393	-1,298	-1,764	-1,524	-1,290
Goods	-6,629	-7,633	-1,482	-1,542	-1,566	-2,039	-1,805	-1,987	-1,947	-1,894
Export f.o.b	6,373	7,419	1,383	1,585	1,714	1,690	1,665	1,969	2,061	1,723
Import f.o.b	-13,001	-15,052	-2,865	-3,127	-3,280	-3,729	-3,470	-3,956	-4,008	-3,617
Services	-254	-171	-56	-54	-82	-61	31	-72	-107	-23
Export	2,304	2,739	500	534	645	625	676	637	733	692
Import	-2,558	-2,910	-556	-589	-727	-686	-645	-710	-840	-715
Income, net	-600	-929	-110	-195	-70	-225	-139	-308	-125	-357
Receipts	517	561	108	131	144	134	145	137	158	121
Payments	-1,116	-1,490	-218	-326	-214	-359	-284	-445	-283	-479
Current transfers, net	2,877	2,859	573	696	676	932	615	604	655	985
o/w grants	166	210	36	36	50	45	43	64	52	50
o/w private remittances, net	2,065	2,206	404	480	487	694	412	614	430	750
CAPITAL ACCOUNT	-314	0	-322	1	6	1	4	-1	-3	-1
FINANCIAL ACCOUNT	4,742	5,990	1,520	773	1,022	1,427	1,412	1,672	1,430	1,476
Direct investment, net	1,821	1,812	721	-111	429	781	820	650	133	210
Portfolio investment, net	678	-92	269	185	119	106	-48	-38	26	-31
Other investments	2,977	2,509	301	1,115	856	705	669	750	1,528	-439
Trade credits	328	71	-5	93	89	151	99	-77	-167	216
Loans	3,403	3,134	313	1,042	738	1,311	232	812	1,362	728
NBS	-92	0	-33	-23	-9	-27	0	0	0	0
Government	121	52	50	19	39	13	1	14	11	26
Commercial banks	167	95	-181	-92	41	399	-538	-88	334	387
Long-term	-130	-340	43	-200	-42	69	-163	-90	27	-114
Short-term	297	435	-224	109	83	330	-375	2	307	501
Other (enterprises)	3,206	2,987	477	1,137	667	925	769	886	1,017	316
Currency and deposits	-652	-666	147	-49	18	-768	352	32	333	-1,383
Other assets and liabilities	-102	-30	-154	29	12	10	-13	-17	0	0
Reserves Assets (- increase)	-734	1,760	229	-416	-382	-165	-29	310	-257	1,736
ERRORS AND OMISSIONS, net	178	-114	-123	322	14	-35	-118	92	97	-185
OVERALL BALANCE	734	-1,760	-229	416	382	165	29	-310	257	-1,736
PRO MEMORIA										
			in % of GDP							
Current account	-15.9	-17.4	-17.1	-15.6	-13.9	-16.9	-17.3	-20.4	-16.6	-15.1
Balance of goods	-22.8	-22.6	-23.5	-22.0	-20.9	-24.8	-24.1	-23.0	-21.3	-22.2
Exports of goods	21.9	22.0	22.0	22.6	22.9	20.5	22.3	22.8	22.5	20.2
Imports of goods	-44.8	-44.5	-45.5	-44.6	-43.8	-45.3	-46.4	-45.8	-43.8	-42.5
Balance of goods and services	-23.7	-23.1	-24.4	-22.8	-22.0	-25.5	-23.7	-23.9	-22.4	-22.5
Current transfers, net	9.9	8.5	9.1	9.9	9.0	11.3	8.2	7.0	7.2	11.6
GDP in euros[2)]	29,037.4	33,795.0	6,302.2	7,013.5	7,490.4	8,231.3	7,484.0	8,633.0	9,157.0	8,521.0

Source: NBS.

1) Original data in US dollars converted into euros at the monthly level using monthly averages of official daily NBS mid rates.

2) Exports f.o.b. using NBS methodology adjusted to IMF BOPM-5.

3) Quarterly values. Annual GDP converted into euros using the average annual exchange rate (average of official NBS daily mid rates).

Foreign Debt

Table T5-2. Serbia: Foreign Debt, 2005–2008

	2005	2006	2007				2008			
			Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	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	20,530	21,800
(in % of GDP)	*61.9*	*59.8*	*58.3*	*58.8*	*59.0*	61	*59.4*	*58.6*	*61.1*	*64.5*
Public debt	7,714	6,420	6,241	6,253	6,210	6,130	6,035	6,047	6,282	6,386
(in % of GDP)	*36.5*	*25.8*	*24.5*	*23.4*	*22.4*	21	*20.0*	*19.0*	*18.7*	*18.9*
Long term	7,630	6,363	6,185	6,197	6,157	6,096	6,003	6,016	6,247	6,369
o/w: to IMF	732	185	0	0	0	0	0	0	0	0
Short term	84	57	56	56	53	34	32	32	35	18
Private debt	5,350	8,464	8,617	9,436	10,151	11,659	11,922	12,599	14,248	15,414
(in % of GDP)	*25.3*	*34.0*	*33.8*	*35.4*	*36.6*	40	*39.5*	*39.6*	*42.4*	*45.6*
Long term	4,156	7,263	7,669	8,532	9,152	10,372	10,883	11,482	12,366	13,006
o/w: Banks debt	1,260	2,929	2,906	2,704	2,628	2,801	2,660	2,333	2,357	2,301
o/w: Enterprises debt	2,895	4,334	4,763	5,828	6,524	7,571	8,223	9,149	10,009	10,705
Short term	1,194	1,201	948	904	999	1,287	1,039	1,118	1,882	2,408
o/w: Banks debt	924	942	701	808	875	1,163	770	769	1,118	1,605
o/w: Enterprises debt	271	259	247	96	123	124	269	349	764	803
Foren debt, net [1], (in% of GDP)	*38.5*	*23.6*	23.7	24.1	24.6	28	27.8	30.0	32.2	40.4

Source: NBS
1) Total foreign debt less NBS foreign currency reserves.

Foreign debt stood at €21.8 bn (64.5% of GDP)

Serbia's foreign debt stood at €21.8 bn at year-end 2008, four billion euros, or 22.5%, more than at year-end 2007 (Table T5-2). Foreign debt amounted to 64.5% of GDP, having grown by 3.2 percentage points over one year, partly due to nominal foreign debt growth, and partly since euro-GDP has declined due to the depreciation of the dinar.

Public foreign debt amounted to €6.4 bn at year-end 2008…

After a downward trend throughout 2007 and Q1 2008, public foreign debt grew over the remainder of last year. Public foreign debt amounted to €6,386 mn in December 2008, which was €256 mn more in relation to year-end 2007, a rise of 4.2%. Its share in GDP of 18.9% fell over the same period by 1.2 percentage points.

…while private sector debt reached €15.4 bn

Private sector debt saw major growth throughout 2008, especially in the latter half of the year. At year-end 2008 it amounted to €15,414 mn, or 70.7% of total foreign debt. Its growth of €3,755 mn (32%) in relation to year-end 2007 contributed 95% to y-o-y growth of total foreign debt. This growth was a consequence of increases in both long-term and short-term borrowing by the private sector.

The economy showed little restraint in borrowing throughout the year

At the end of December 2008 private foreign long-term debt amounted to €13 bn, of which 17.7% was long-term bank debts, with the rest, or 82.3%, long-term debts owed by businesses. Y-o-y and quarterly growth of long-term borrowing can be ascribed to borrowing by businesses, with banks, conversely, repaying their liabilities. Bank long-term liabilities were down by €500 mn as against December 2007, while the private sector's foreign debt rose by 41.4%, or €3,134 mn. Compared to September 2008 banks also reduced their liabilities, while the long-term debt of businesses rose by €700 mn.

Short-term borrowing by both banks and businesses increased, especially in the latter half of the year

A hallmark of the second half of 2008 was substantial short-term borrowing by both banks and businesses. Banks endeavored to shield themselves from financial issues (such as large-scale foreign currency deposit withdrawals by the general public, as seen in October), and thus took out €501 mn net in short-term loans over Q4. At the same time, businesses saw total short-term borrowing rise by €453.5 mn over the last six months, or €679 mn over the last year. Taken together, the trend of rising private sector borrowing and falling NBS foreign currency reserves has contributed to a sudden increase in the ratio of short-term debt to foreign currency reserves – with the result that this indicator of Serbia's vulnerability[4] has now reached new heights (Graph T5-3). The ratio of short-term debt to foreign currency reserves of 29.8%, as recorded in December 2008, indicates Serbia's current poor liquidity, or, rather, its reduced capacity to meet foreign liabilities that need to be settled in the short term.

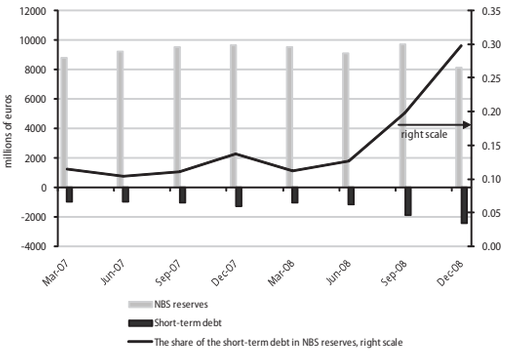
4 For more on this issue see Section 6, Balance of Payments and Foreign Trade, in *QM* 13.

Exports

Falling demand has affected all components of exports

A consequence of the global financial crisis has been a drop in demand across foreign markets, resulting in a dramatic slowdown in overall export growth in Q4. According to data released by the Serbian Bureau of Statistics, exports grew at a y-o-y rate of 1.7%, substantially lower than the rate seen in previous quarters. This slowdown has led to virtual stagnation of *bulky* (with a growth of -0.2%) and *underlying exports* (growth of 2.3%) in relation to Q4 2007. This stagnation was caused by the fact that just a few groups of products saw significant growth rates, while others either stagnated or recorded substantial falls.

Graph T5-3. Serbia: Ratio of Short-Term Debt to Foreign Currency Reserves, 2007–2008



Source: Serbian Ministry of Finance, NBS.

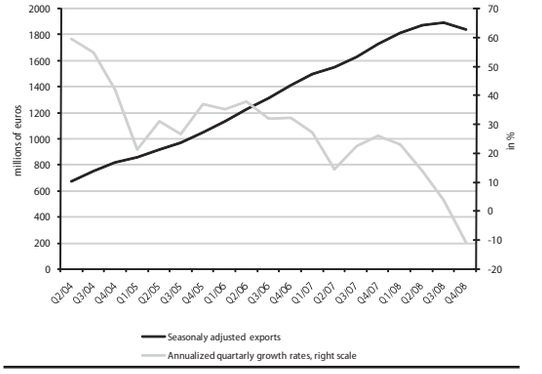
The slowdown in overall exports is all the more apparent if we consider seasonally-adjusted and quarterly growth rates (Graph T5-4). The decline in exports in Q4 in relation to Q3 2008 amounts to 2.8%. At the annual level, the quarterly drop referred to above amounts to 10.9%. Despite the fact that seasonally-adjusted exports have been slowing down significantly ever since early 2008 (annualized quarterly growth rates of seasonally-adjusted exports stood at 22.9%, 13.8% and 3.8% in Q1, Q2 and Q3 2008 respectively), this is the first time in the period observed (i.e. since mid-2004; see Graph T5-4) that the annualized quarterly growth rate was negative. This trend is an indicator of the real state of Serbia's exports – with growth starting to slow in the first trimester of 2008 and further decelerating in the latter half of the year.

Most components of bulky exports have dropped

In relation to Q4 2007, the only component of *bulky exports* seeing high y-o-y growth (93.4%) is cereals. Despite the fact that agricultural yields were relatively high in 2008, the growth is primarily a consequence of last year's low base due to an export ban on these products.

Other components recorded negative growth, especially evident for *iron* and *steel* exports, seeing a fall of 10% despite the low Q4 2007 base, when both production and exports were low as a result of the refurbishment of No. 2 Blast Furnace at US Steel Serbia. Since US Steel has yet to restart production, we expect to see a very substantial fall in the exports of these two groups of products in Q1 2009 (taking into account the high base stemming from US Steel producing at full capacity).

Graph T5-4. Serbia: Seasonally-Adjusted Exports and Annualized Quarterly Growth Rates, 2004–2008



Source: SBS, QM.

The y-o-y drop in the exports of *fruit and vegetables* of 1% was lower than over the past two quarters: y-o-y exports fell by 14.5% and 8% in Q2 and Q3, respectively.

Underlying exports have seen slight growth…

Exports of non-ferrous metals fell y-o-y by 25.7%. The volume of exports remained virtually the same, while prices quoted in euros fell by 25.0%. In relation to Q3 2008, Q4 saw a drop in the volume by 12.3%, while prices in euros were lower by 24.0%.

…albeit driven only by a few groups of products

The growth of underlying exports slowed in every quarter of 2008, but its y-o-y growth rate reached an unusually low 2.3% in Q4. Even this slight growth was driven only by a few product groups.

Exports of products from the core category have been falling…

The *core* group also experienced a slowing trend, especially over the first three quarters of 2008, and recorded a y-o-y fall of 9.8% in Q4. Within this category the only positive example was clothing exports, which rose by 22.1%, while all other groups either exhibited very modest growth (such as *electrical machinery, apparatus and appliances* and *footwear*) or saw major drops. Extreme falls were recorded by *organic chemicals* (-50.3%) and *plastics in primary forms* (-42%).

…while growth of the other group has failed to offset this fall

The *other* group recorded positive y-o-y growth of 12.2% (Table T5-5). Taking the overall slowdown into account, with a substantial decrease in many export components apparent in Q4, a 12.2% growth is relatively good and represents a significant contribution to the modest growth of overall exports. This component is less sensitive to external influences (i.e. less susceptible to price fluctuations in the global market). Exceptionally high y-o-y export growth was recorded by the following products: *tobacco and tobacco products* (242.4%), *oil seeds and oleaginous fruits* (103%), *telecommunications apparatus and appliances* (137.3%), *non-monetary gold* (427.5%), as well as *miscellaneous goods*.

Table T5-5. Serbia: Exports, Y-o-y Growth Rates, 2007–2008

	Exports share in 2008 (%)	2008				2007				2008			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	%	mil.euros				y-o-y growth rate (%)							
Total	100.0	1,676	1,973	2,066	1,727	34.6	29.8	27.3	15.2	20.5	23.8	19.6	1.7
Bulky exports	27.1	463	548	601	408	36.1	29.1	19.4	-17.4	1.9	13.8	8.0	-0.2
Iron and steel	13.0	220	311	300	133	61.5	29.1	9.7	-20.6	3.6	40.6	36.0	-10.7
Non ferrous metals	6.4	125	128	135	90	11.9	18.6	17.6	-21.5	4.5	-0.9	-1.2	-25.7
Fruits and vegetables	4.4	65	64	109	88	30.3	59.2	29.7	17.1	13.9	-14.5	-8.0	-0.9
Cereal and cereal products	3.4	53	44	57	97	26.6	23.2	40.7	-35.3	-19.1	-20.3	-29.6	93.4
Underlying exports	72.9	1,213	1,425	1,465	1,319	33.9	30.1	31.5	31.7	29.6	28.0	25.0	2.3
Core	30.5	549	585	611	524	30.9	35.2	28.6	24.0	23.5	13.7	9.3	-9.8
Clothes	4.9	89	82	88	107	31.6	31.0	28.1	19.4	15.5	12.0	2.4	22.1
Miscellaneous manufactured articles, n.e.s.	4.2	77	80	86	72	6.0	17.1	34.2	39.4	50.7	25.4	9.1	-13.5
Manufactures of metals, n.e.s.	4.3	76	82	82	78	76.6	60.5	33.1	24.7	26.9	1.3	-0.5	-10.3
Rubber products	2.9	57	57	64	41	16.2	17.9	4.8	0.0	3.3	5.5	27.8	-19.2
Electrical machinery, apparatus and appliances	3.9	63	71	82	73	77.6	81.2	66.7	48.8	50.9	21.7	30.3	2.8
Organic chemicals	2.3	47	48	47	29	42.8	71.4	46.3	30.4	7.9	25.7	-5.3	-50.3
Plastics in primary forms	1.9	40	40	38	22	-7.4	8.2	8.3	13.6	34.4	10.1	6.7	-41.9
Footwear	2.2	41	41	45	37	34.9	18.1	10.9	11.2	15.8	8.4	9.0	3.8
Paper, paperboard and articles of paper pulp	1.9	33	39	35	32	12.3	35.6	23.0	21.0	21.4	13.5	1.9	-7.2
Non-metal mineral produce	2.0	28	45	45	32	55.3	32.0	28.1	22.4	10.3	19.9	16.7	-4.9
Other	42.3	664	840	854	795	36.7	26.0	34.2	38.7	35.0	40.4	39.4	12.2

Source: SBS.

Imports

Imports recorded negative y-o-y growth of -2.8% in Q4 2008...

Imports recorded a y-o-y drop 2.8% in Q4 2008 (Table T5-6). As imports have slowed to a greater degree than exports (which saw growth of 1.7% – see previous section and Table T5-5), the ratio of exports to imports has risen in relation to Q4 2007 by two percentage points, and now stands at 46.6%.

…with substantial drops seen by two components: intermediate and capital goods

Import trends by component indicate that the main reasons behind the fall in imports are a drop in domestic production and investment as well as the depreciation of the dinar, while consumer demand remains relatively high. Data displayed in Table T5-6 make apparent a substantial drop in two components, *intermediate products* (-5.9%) and *capital products* (-11.9%). In addition, the capital products component – if motor vehicles are excluded – recorded a y-o-y drop of 6.0%. *Energy, durable and non-durable consumer goods*, as well as the *other* component grew compared to the same period in the previous year.

Table T5-6. Serbia: Imports, Y-o-y Growth Rates, 2007–2008

	Imports share (2008)	2008				2007				2008			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	in %	mil.euros				y-o-y growth (%)							
Total	100.0	3,613	4,105	4,009	3,706	32.9	24.4	27.8	26.7	22.8	27.5	19.1	-2.8
Energy	20.0	788	764	796	736	14.3	-3.0	7.0	26.8	32.5	53.2	51.2	5.7
Intermediate products	34.4	1,201	1,440	1,464	1,211	36.3	34.0	31.0	17.0	16.2	16.0	12.8	-5.9
Capital products	24.8	850	1,104	985	881	55.1	34.8	41.9	39.3	19.5	32.6	10.4	-11.9
Capital products excluding road vehicles	16.8	557	723	664	653	66.0	33.1	32.6	38.9	9.3	29.3	13.1	-6.0
Durable consumer goods	3.9	133	157	144	161	29.6	35.0	42.2	32.0	31.3	34.8	13.5	2.6
Non-durable consumer goods	14.3	517	542	545	603	25.0	21.3	18.8	29.6	26.6	21.1	19.5	4.2
Other	2.7	124	97	74	115	29.6	12.7	37.4	24.5	32.4	16.6	12.3	21.2
Imports excluding energy	80.0	2,825	3,340	3,213	2,970	38.6	31.2	32.6	26.7	20.3	22.8	13.1	-4.7

Source: SBS.

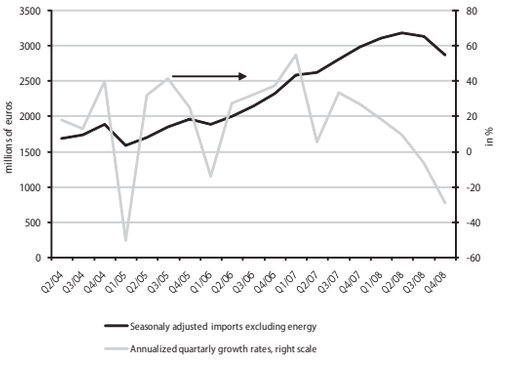
The growth of energy imports is much lower than in previous quarters. The reason behind this is the substantial fall in energy prices globally; however, as most of Serbia's foreign currency inflows are euro-denominated, the effects of this fall have been partly offset by the euro's depreciation against the dollar.

The *other* component saw a very high growth rate, of 21.2%, while several groups of products recorded extremely high y-o-y growth: *live animals* (124.5%), *oil seeds and oleaginous fruits* (310.6%) and *miscellaneous goods* (191.3%).

The slowdown in imports and exports has not led to a substantial reduction in the foreign trade deficit

Compared to Q3 2008, seasonally-adjusted imports excluding energy recorded a sharp decline of -8.3% which represents an annualized rate of -29.2%. That imlplies a significant decrease in domestic demand for import goods (annualized quarterly growth rates of seasonally-adjusted imports excluding energy stood at – 18.5% in Q1, 9.4% in Q2 and -6.5% in Q3 2008, Graph T5-7).

Graph T5-7. Serbia: Seasonally-Adjusted Imports Excluding Energy, 2004–2008



Source: SBS, QM.

The simultaneous slowdown in the growth of exports and the slight decline in imports have not led to a substantial reduction in the foreign trade deficit, as the ratio of exports to imports is still low (46.6%). We expect a further slowdown in imports due to lower capital inflows, the depreciation of the dinar, reduced borrowing, and a significant drop in economic activity. On the other hand, exports will certainly remain influenced by the global recession and the caution prevailing among consumers in global markets, which is one of the reasons of the already apparent fall in Serbia's industrial production.[5] The effects of the global financial crisis are yet to be felt in Serbia, and will bring about a further drop in imports and exports, as well as in all of their components.

5 See Section 4, Economic Activity, in this issue of *QM*.

6. Fiscal Flows and Policy

The expansionary nature of fiscal policy in Serbia was significantly increased in Q4 of 2008. The consolidated fiscal deficit was 47 bn dinars, which amounts to arround 6.5% of estimated GDP in that particular quarter. The fiscal deficit in Q4 is almost four fifths of the total deficit from the last year. The increase of the fiscal deficit in Q4 exceeds the usual seasonal increase and it can be compared with the leaps that are typical for election campaign periods in Serbia. For the first time after many years, the real level of public revenue has decreased in comparison with the same quarter of the previous year. The decrease of the real level of consolidated public revenue of 0.7% is a strong indicator of recession tendencies in the Serbian economy. The real decrease of consolidated public expenditures of 3.5% can be viewed as a positive signal only with reserve, since it was compared with the rather high level of expenditures from Q4 of 2007 when the elections took place. In the entire 2008, there was a strong deceleration of the real growth of the consolidated public expenditures and revenues in comparison with the previous year, with a moderate increase of the fiscal deficit relative to GDP. The consolidated public revenues had a real increase for 3.4%, while the consolidated public expenditures were increased by 4.7% in comparison with the previous year. The consolidated fiscal deficit in 2008 was 2.2% of GDP, which is slightly above the 2007 deficit.

General Tendencies and Macroeconomic Implications

Revenues and expenditures are experiencing a real decrease, while the deficit is increasing

After three quarters in a row in which the real growth of consolidated public revenues was decelerated, in Q4 of 2008, for the first time in several years, the real level of public revenues was decreased compared to same period in the previous year. While there were reservations about the causes of the deceleration in the growth of public revenues in the first three quarters of 2008, the cause of the decrease of the real level of public revenues in Q4 is quite certain – it is the economic recession. The moderate deceleration of economic activity in Q3 turned into an intensive deceleration in Q4. Moreover, the data industrial production and foreign trade prove that the recession tendencies are getting stronger within the quarter itself.

Indirect taxes are experiencing a real decrease, while direct taxes are still growing in real terms

Analyzing tax groups, some highly divergent tendencies can be noted in Q4. The real level of revenues from indirect taxes (VAT, customs and excise taxes) has significantly dropped, while the real level of revenues from the most important direct taxes (income tax and contributions) keeps significantly growing. The drop in real revenues from indirect taxes indicates tthat domestic demand has dropped in Q4, although the assessments in Chapter 4 "Economic Activity" do not confirm this.[1] This difference might be partially explained by the growth of financial indiscipline in payment of tax duties, caused by a deterioration of taxpayers' solvency. Namely, in the conditions of deteriorated solvency, the enterprises make a priority when it comes to payment of duties, including their tax duties as well. When paying their tax duties, enterprises give priority to payment of income taxes and contributions, and not to payment of duties on the basis of indirect taxes, since without paying these they would not be able to give salaries.

Consolidated expenditures are experiencing a real decrease, while the expenditures for pensions and salaries are growing

In Q4, consolidated public expenditures dropped in real terms by as much as 3.5% in comparison with the same quarter of the previous year. The real drop was noted in the majority of significant components of public expenditures, except for the expenditures for pensions and salaries of employees in the public sector. The real growth of expenditures for employees in Q4 is, on one hand, a result of the previously agreed upon increases of income and, on the other, it is caused by one-term payments for employees shortly before Christmas and New Year holidays. The increase of expenditures for pensions in Q4 comes as a consequence of the cumulative effects of the one-term increase of pensions of 10% and the regular indexation of pensions.

1 It is possible that, after receiving some additional data, it will turn out that GDP and domestic demand in Q4 have achieved a much lower growth than it seemed based on the previously available data. In that case, the data on economic activities and demand on one side, and the data on tax collection on the other side, would be more harmonized.

Table T6-1. Serbia: Consolidated Balance of the State Sector[1], 2005–2008

	2005	2006	2007					2008				
	Q1-Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4
						in billions of dinars						
I TOTAL REVENUE	721.7	865.8	224.9	238.6	248.9	288.4	1,000.7	269.4	281.4	283.3	311.8	1,145.9
II TOTAL EXPENDITURE	-695.1	-888.4	-222.9	-219.7	-254.2	-334.7	-1,031.5	-254.0	-295.8	-286.6	-359.3	-1,195.7
III "OLD" DEBT REPAYMENT, NET LENDING AND RECAPITALIZATIONS	-15.2	-10.9	-0.9	-1.1	-6.7	-6.7	-15.3	-4.4	-5.2	-1.2	0.6	-10.1
o/w Net lending [2]	*-5.3*	*-10.9*	-0.9	-1.1	-6.7	-6.7	-15.3	-4.4	-5.2	-1.2	0.6	-10.1
IV TOTAL EXPENDITURE, GFS (II+III)	-710.2	-899.3	-223.7	-220.8	-260.9	-341.4	-1,046.8	-258.4	-301.0	-287.8	-358.7	-1,205.8
V CONSOLIDATED BALANCE (I+IV), GFS definition[3]	11.4	-33.5	1.2	17.8	-12.1	-53.0	-46.1	11.0	-19.6	-4.4	-46.9	-59.9
VI FINANCING (FREN's definition)	5.8	119.6	24.2	-0.2	1.0	-0.9	24.2	5.0	-12.2	-1.3	11.4	2.9
VII ACCOUNT BALANCE CHANGE (V+VI)	17.3	86.2	25.4	17.6	-11.1	-53.9	-21.9	16.0	-31.8	-5.7	-35.4	-57.0

Source: Table P-10 in the Analytical Appendix.

[1] State sector (general government) – all levels of government (central, provincial, municipal) and their budget beneficiaries and mandatory social insurance organizations (pension and disability insurance funds, National Office for Health Insurance, National Employment Service). It does not include public enterprises and the National Bank of Serbia.

[2] This item corresponds to the item "Net acquisition of financial assets for policy purposes" in the PFB, or "net lending" in the presentation of the International Monetary Fund. These are credits to students and farmers, credits given through the Development Fund, debt payoffs to pensioners, and recapitalization.

[3] Consolidated balance (cash surplus/deficit according to Government Financial Statistics) is the difference between the current income and revenues from the sales of non-financial property (i.e. capital revenues) and current expenditures and expenses for the purchase of non-financial property (i.e. capital expenditures). In addition to this, the expenditures include the item that incorporates the domestic debts payoff – pensions, budgetary loans and recapitalization. Defined in such a way, the resultant measures the solvent effect that the state transactions have on the economy. For details, see the methodological discussion in Box 1 in *Quarterly Monitor* no. 3.

[4] Given the one-term nature of the revenue from the sale of the mobile phone operator's license, we have treated this revenue as a form of funding, unlike Ministry of Finance that previously treated it as an item of current non-fiscal revenue in the accounts.

Expansionary fiscal policy in Q4 has alleviated recession tendencies

Expansionary fiscal policy in Q4 of 2008 had the objective to alleviate recession tendencies in the Serbian economy. The anti-recessionary nature of fiscal policy in the stated period was not, for the most part, a result of the Government's policy, but a consequence of a significantly lower collection of public revenues in comparison with the planned amount. The expansive nature of fiscal policy on the expenditures side was realized through the growth of current consumption (pensions and salaries), while capital expenditures have decreased in comparison with the same quarter of the previous year.

...recession was not stopped ...

Despite the fiscal impulse, the strong recession trends in the economy show the limited reach of the expansive fiscal policy. However, the limited reach of expansive fiscal policy is not reason enough to abandon this idea, since without such fiscal policy the recession would be even stronger. It is estimated that the expansionary fiscal policy has alleviated the effects of practical stop in the inflow of foreign capital, as well as of dramatic deceleration of credit activities within the country. However, by implementing the above stated fiscal policy, the Government has spent almost all of its available deposits. Therefore, a necessary condition for additional fiscal expansion would be the realization of additional revenues, either by loans or by privatization.

The continuation of current tendencies implicates lower revenues and higher deficit than it was planned

According to unofficial data, in January[2] 2009 the revenue level of the budget of the Republic of Serbia has decreased not only in real, but in nominal terms as well. According to preliminary estimates, it is expected that the recession tendencies, and with them the growth deceleration, or even a real drop in public revenues, will continue in 2009. This means that, if fiscal policy remains unchanged (planned level of public expenditures and current tax rates) the consolidated deficit of the state in 2009 will be higher than planned.

Box 1. Emission of Treasury Bills

Trying to provide the funds to cover a part of the budget deficit, the Treasury of the Republic of Serbia organized, in the beginning of February, an auction for three-month treasury bills. The treasury bills will be available to all the interested investors: financial institutions, enterprises and citizens. The value of the offered treasury bills in the first emission was two billion dinars, while the interest rate was fixed and it was 15% per year, i.e. 3.56 per three months. Eventually,

2 The drop in revenues in January can partially be explained by the unfavorable impact of irregular factors such as lack of gas in industry. In addition to this, the calendar itself had a negative effect on the level of revenue, since the last day of the month, when a great amount of revenue is collected (by payment the excise taxes and income taxes), happened to be on weekend.

42.2% of the total emission was sold. These relatively modest results of the first emission can be explained by the existence of more favorable alternatives for some investors (e.g. banks can buy the two-weeks bills of the National Bank of Serbia (NBS) with the annual interest rate of 16.5%), but also by the relatively high risk of changes of the exchange rate.

The second auction of the Treasury Bills took place in mid-February, and it was far more successful. The Treasury of the Republic of Serbia sold as much as 73.24% of the total number of emitted three-month bills whose value was three billion dinars, with the annual interest rate of 16.5%. It is considered that the increase of the interest rate, to the level of the NBS's repo rate, was the key contribution to the greater success of the second emission of the state bills.

Analysis of Individual Tax Forms and Individual Public Expenditures

Revenues from VAT, customs and excise taxes were significantly decreased

The real level of revenue from indirect taxes in Q4 was significantly decreased compared to the same period in the previous year. The real level of revenue from VAT was 2.3% lower compared the same period in the previous year, which is actually the biggest drop since 2006.[3] In the entire 2008, there was a real increase of revenue from VAT of 2.7%, which is a significant deceleration in comparison with the achieved growth of over 10% in the previous year. The drop in revenues in real terms from the excise taxes in Q4 in comparison with the same quarter of the previous year was 1.7%, while the revenue from excise taxes in the entire 2008 increased by only 0.9% in real terms. Incidentally, there are significant variations in the course of quarterly inter-annual rates of revenue growth from excise taxes. It is possible to note a certain consistency in these variations, according to which the growth in one quarter will be followed by a decrease in the next. The revenues from customs in Q4 are as much as 8.7% lower compared to the same period in the previous year. The depreciation of the dinar, which started in the beginning of Q4, was not enough to compensate for the decrease in the foreign currency value of imports. Revenues from customs in the entire 2008 were 2% higher in comparison with the previous year.

Revenues from the income tax and contributions are still growing in real terms

Income taxes and contributions for social insurance are the only taxes which contribute significantly to the state budget that grew in real terms in Q4, compared to the same period in the previous year. The real level of revenue from the income tax in Q4 is as much as 6.5% higher, while the contributions for social insurance have increased 2.5% compared to the same period in the previous year. The growth of the real level of revenue from contributions follows the dynamics of real wages relatively firmly, while the real revenue from income taxes grows slightly faster than the growth of wages. The real level of revenue from the income tax increased by 6.5% in 2008, while the real level of contributions is 4.5% higher.

In Q4, the profit tax, which had a double-digit rate of real growth in the past couple of years, dropped (albeit minimally) in real terms, for the first time. The drop of revenue from the income tax, given the way it is calculated and collected,[4] reflects, for the most part, the deterioration of the economy's solvency. In spite of the drop in the last quarter, the growth of the real level of income from the profit tax in 2008, compared to the previous year, was still very significant, standing at 18.7%.

In real terms, expenditures for pensions and salaries grew, while other expenditures decreased

Among all the expenditres, those for pensions had the most significant real growth. Expenditures for pensions in Q4 are 20% higher compared to the same period in the previous year, while the real growth of expenditures for pensions during the entire 2008 was 15%. The high rate of real growth of pensions is caused by successive significant increases of pensions in 2008. In addition to the regular increases of pensions (by applying the indexation formula on April and October pensions), there were two irregular increases of pensions in the previous year. The first was

3 The drop of income from VAT in 2006 was caused by increased reimbursements of taxes and credits in comparison with 2005, which was the first year of VAT application in Serbia.

4 Duties on the basis of profit tax within a certain year are paid in advance, based on the profit achieved in the previous year. The final duty for a certain year is assessed after determining the taxable profit by the end of the first quarter within the tax balance of the enterprise.

carried out in early 2008 in order to keep the ratio between the average salarie and the average pension at 60%, while the second irregular increase of 10% was carried out in October 2008. The cumulative nominal increase of the average pension in 2008 was around 35%.

According to corrected data from the Ministry of Finance, the real growth of work expenses for employees in Q4, compared to the same quarter of the previous year, is 8.5%. According to the corrected data, the real growth of work expenses in the state sector in 2008 was 11.1%, compared to the previous year. These corrected data on work expenses differ a great deal from the data of the Statistical Bureau of Serbia on the average wages in public agencies with the largest number of employees. Thus, for example, according to the data of the SBS, the average real wages in healthcare, state administration and social insurance in 2008 have remained at approximately the same level as in the previous year, while the average wage in education grew 5.6%in real terms in 2008. The SBS data approximately correspond to wage dynamics that were arranged between the Government and the relevant trade unions. Therefore, it is concluded that the corrected data of the Ministry of Finance overestimate the growth of work expenses in the state sector, both in Q4 and the entire 2008.[5]

According to the corrected data, the expenditures for the procurement of goods and services in Q4 are 11.4%lower, compared to the same quarter of the previous year, while at the level of the entire year these revenues decreased by 2.6% in real terms. Just like with salaries, the revised data show completely opposite tendencies in the flow of this type of expenditures in 2008 in comparison with the previously published data.

The decreasing tendency in the flow of capital expenditures, which is also typical for the entire 2008, was additionally quickened in the last quarter of 2008. The inter-annual drop of the real level of capital expenditures in Q4 was as much as 21%, while the drop at the level of the entire 2008 is 14.5%. The decrease of the real level of public expenditures might partially be explained by an increased restrictiveness on the expenditures side, in order to keep the overall general government balance within the planned range. The second reason for the decrease in capital expenditures may lie in the fact that the initiation of bigger infrastructure projects has still not compensated for the canceling of quite a few dispersed smalelr projects within the National Investment Plan.

Based on the consolidated fiscal data for the last quarter of 2008 and data on the Serbian budget for January 2009, as well as judging by the tendencies in the economy – it can be assessed that the real level of public revenue in 2009 will be significantly lower than expected. A more reliable assessment about the exact level of public revenue that would be achieved with the given fiscal policy will be possible only after receiving the available macroeconomic and fiscal data for Q1 of 2009. Lower revenues than planned, while keeping consumption at the planned level, would lead to a deficit higher than the planned one of 1.75% of GDP. Preliminary assessments indicate that with the unchanged real level of expenditures[6] and unchanged fiscal policy, the fiscal deficit in 2009 would be between 3.5% to 4.5% of GDP.

5 The probable reason for the differences between the real growth rate of work expenses in the data provided by the Ministry of Finance and the Statistical Office is that the Ministry has corrected only the data for 2008, while the data for previous years have remained unchanged. Therefore it can be said that the Ministry's data for 2008 reflect quite well the expenditures level for that year, but that the growth rates are inadequate, since the data for 2008 cannot be compared to the data for previous years.

6 If inflation remained higher than planned, this would cause a lower real level of expenditures, which would also make the deficit lower relative to GDP. A lower real level of expenditures could also be achieved through delaying state payments. Therefore, if the Government does not actively put the fiscal balance into a sustainable framework, this would happen spontaneously, through a higher inflation or through delays in state payments.

Table T6-2. Serbia: Consolidated Balance of the State Sector[1], 2005–2008

	2006	2007	2008					12-m							Comparing to previous period
	Q1-Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4	2006 Q1-Q4	2007 Q1-Q4	2008 Q1	Q2	Q3	Q4	Q1-Q4	2008 Q4 / Q3
	in bn. dinars							real growth, in %							
I PUBLIC REVENUES	**865.8**	**1,000.7**	**269.4**	**281.4**	**283.3**	**311.8**	**1,145.9**	**6.8**	**8.4**	**7.6**	**5.2**	**2.8**	**-0.7**	**3.4**	**9.0**
o/w: Public revenues excluding VAT liabilities to enterprises and offsets	*855.6*	*995.2*	*269.4*	*281.4*	*283.3*	*311.8*	*1,145.9*	*8.9*	*9.1*	*8.3*	*6.5*	3.3	-0.6	4.0	*9.0*
							0.0								
1. Current revenues	855.5	995.4	268.9	280.3	282.6	311.3	1,143.1	6.7	7.9	7.7	5.0	3.7	0.1	3.7	9.0
Tax revenue	756.0	870.0	234.4	247.4	248.3	270.2	1,000.4	5.4	8.0	7.6	5.2	3.6	0.1	3.9	7.7
Personal income taxes	118.6	115.8	29.7	34.1	33.6	39.0	136.5	11.9	-8.4	7.1	8.1	4.5	6.5	6.5	14.8
Corporate income taxes	18.3	29.7	15.0	8.1	7.4	8.5	39.0	58.0	52.1	15.2	30.0	45.3	-0.2	18.7	13.3
VAT and retail sales tax	225.1	265.5	73.2	77.0	73.8	77.7	301.7	-7.3	10.6	8.7	5.7	-0.3	-2.3	2.7	4.2
o/w: Net VAT and retail sales tax [2]	*224.5*	*260.3*	*73.2*	*77.0*	73.8	77.7	301.7	*0.3*	8.8	*11.3*	*10.3*	*1.3*	*-2.3*	*4.7*	4.2
Excises	86.9	98.6	23.7	26.6	29.5	30.3	110.1	8.3	6.5	5.7	-1.5	2.4	-1.7	0.9	1.7
Custom duties	45.4	57.4	14.8	16.9	16.3	16.8	64.8	3.9	18.6	10.5	8.8	0.9	-8.7	2.0	1.8
Social contributions	231.4	270.3	*69.7*	*75.9*	78.7	88.5	312.7	12.5	9.6	6.9	4.4	5.2	*2.5*	4.5	11.2
o/w: contributions excluding offsets with SDF [3]	*221.9*	*269.8*	*69.7*	*75.9*	78.7	88.5	312.7	*11.3*	*14.1*	*7.0*	*4.6*	*5.2*	*2.8*	*4.7*	11.2
Other taxes	30.3	32.8	8.4	8.8	8.8	9.5	*35.6*	11.1	1.7	-4.5	-5.8	4.0	*-1.6*	-2.1	5.8
Non-tax revenue	109.6	125.4	34.4	32.9	34.3	41.1	142.7	17.1	7.4	8.5	3.3	4.5	-2.7	2.8	18.5
2. Capital revenues	0.3	5.3	0.3	0.5	0.3	0.2	1.4	56.3	1,703.2	-55.6	81.3	-89.6	*-87.7*	-76.8	-27.0
II TOTAL EXPENDITURE	**-888.4**	**-1,031.5**	**-254.0**	**-295.8**	**-286.6**	**-359.3**	**-1,195.7**	**13.7**	**8.9**	**2.4**	**20.1**	**1.8**	**-1.4**	**4.7**	**24.1**
1. Current expenditures	-807.0	-919.5	-242.0	-272.7	-260.5	-314.4	-1,089.6	10.6	6.9	6.9	19.5	2.3	2.3	7.1	19.5
Wages and salaries	-204.4	-238.3	-66.5	-74.0	-71.3	-81.4	-293.2	7.0	9.4	12.7	15.0	9.2	8.5	11.1	13.1
Expenditure on goods and services	-135.9	-168.1	-34.0	-44.2	-45.2	-57.9	-181.2	12.9	16.1	0.8	8.1	-1.3	-11.4	-2.6	27.0
Interest payment	-30.2	-17.9	-6.0	-2.6	-5.1	-3.4	-17.2	52.6	-44.4	-12.2	-31.4	-3.1	-10.6	-13.2	-32.6
Subsidies	-55.6	-63.7	-13.3	-22.2	-13.9	-28.3	-77.8	-10.0	7.6	27.5	88.2	-29.7	0.5	10.3	101.0
Social transfers	-360.4	-409.3	-117.9	-122.4	-120.4	-136.0	-496.8	13.7	6.5	6.0	19.0	6.8	8.1	9.7	11.8
o/w: pensions [5]	*-227.7*	*-259.9*	*-74.8*	*-81.5*	*-83.6*	*-91.1*	*-331.0*	*11.1*	*7.1*	*8.5*	*14.9*	*16.4*	*20.1*	*15.1*	7.9
Other current expenditures	-20.5	-22.1	-4.2	-7.3	-4.6	-7.3	-23.5	2.9	1.1	-15.7	62.5	-18.9	-20.6	-4.1	55.6
2. Capital expenditures[6]	-81.3	-112.1	-12.0	-23.1	-26.1	-44.9	-106.0	57.7	29.3	-44.5	28.1	-3.2	-21.0	-14.5	70.6
III "OLD" DEBT REPAYMENT, GOVERNMENT NET LENDING AND RECAPITALIZATIONS	**-10.9**	**-15.3**	**-4.4**	**-5.2**	**-1.2**	**0.6**	**-10.1**	**47.6**	**-53.9**	**346.5**	**338.0**	**-83.8**	**-108.6**	**-40.3**	**-151.8**
IV TOTAL EXPENDITURE, GFS (II+III)	**-899.3**	**-1,046.8**	**-258.4**	**-301.0**	**-287.8**	**-358.7**	**-1,205.8**	**13.0**	**9.2**	**3.8**	**21.7**	**-0.4**	**-3.5**	**4.1**	**23.4**

Source: Table P-10 in the Analytical Appendix.

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

2) Turnover tax/VAT decreased for new tax credits of economy.

3) Contributions decreased for compensations between the Fund for Pension and Disability Insurance, Fund for Development and enterprises with debt towards the Fund for Pension and Disability Insurance.

4) Estimation of FREN. For explanations, see Table P-10 in the Analytical Appendix.

5) Only expenses for current pensions.

6) Capital expenditures do not contain the projects financed from foreign sources (except in 2004, see footnote in Table P-10).

7) This item corresponds to the item "Net acquisition of financial assets for policy purposes" in the PFB, or "net lending" in the presentation of the International Monetary Fund. These are credits to students and farmers, credits given through the Development Fund, debt payoffs to pensioners, and recapitalization.

Note:

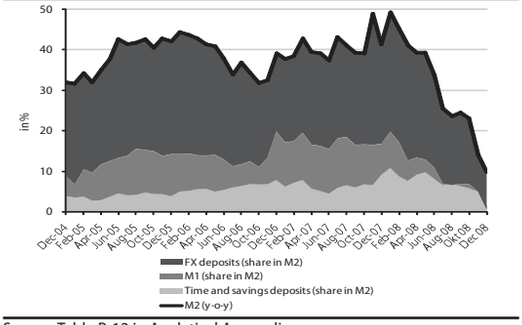
The real growth was calculated by applying the overage base index of retail prices (base of December 2003) on the quarterly data.

7. Monetary Flows and Policy

The halting of credit activity in Q4 strongly influenced the decline of economic activity. Total credits to the non-governmental sector declined by €29 mn in Q4 – with the placements to companies dropping €163 mn and credits to households growing by 135 million euros. In Q4, when compared with other quarters, companies almost completely ceased with the foreign borrowing (€316 mn). Nearly all the sources of new bank placements have "run dry", capital and reserves calculated in euros have dropped by €572 mn, new foreign currency saving dropped €960 mn and company deposits dropped €113 mn. Only short-term foreign borrowing recorded a growth of €387 mn. Sharp deceleration of the growth of M2 in Q4 (0.8% of the initial M2) is an indicator of the monetary contraction that lead to the decline of demand and economic activity. Deceleration of M2 was primarily influenced by a sudden stop of credits to the economy and population in Q4, and also in smaller measure by the decline of net foreign currency reserves (NFA) caused by NBS interventions on the foreign currency market, while state spending of deposits has mildly compensated for this deceleration. The depreciation of the dinar against the euro mitigated the restrictive nature of monetary policy. Reserve money has substantially increased in Q4, but only nominally, because the majority of assets withdrawn from repo placements were transferred to the gyro account in order to meet the demands related to reserve requirements, so one form of reserves transformed into another. As a consequence, the growth of reserve money did not have an expansive effect. The National Bank of Serbia (NBS) increased the reference interest rate on biweekly repo operations to 17.75%, attempting to maintain the repo placement stock and prevent the depreciation of the dinar. In February, after inflation exhibited signs of sudden deceleration, NBS reduced the repo rate to 16.5%.

Nominal growth of M2 decelerates further in Q4...

Graph. T7-1. Serbia: Money and Component Aggregates[1], 2004–2008



Source: Table P-12 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).

... and the trend lasting since the beginning of 2007 continues

The trend of deceleration of nominal y-o-y growth of the total money supply (M2), in comparison to the trend from the previous quarter, is even more pronounced in Q4. The growth of real M2, which has been exhibiting a deceleration trend for a year now, continues to decelerate in Q4. Thus, a nominal y-o-y M2 growth of 9.8% (24.46% in Q3) and real growth of 2.9% (12.2% in Q3) were recorded in Q4 (Table T7-2). Credits to the non-governmental sector recorded – in both nominal (observed in the form of the change of the dinar balance) and real terms – an acceleration of y-o-y growth rate of 33.7% and 25.2% in Q4 (29.4% in nominal terms and 17.8% in real terms in Q3), but this is exclusively the result of the depreciation of the dinar and the revaluation of credits on that basis. Since a large portion (according to our assumption at least 70%) of these credits have a foreign currency clause, by applying our methodology for growth rate correction which takes the changes in the exchange rate into consideration1, we can see that credits in Q4 have substantially decelerated their y-o-y nominal growth to 23.6% (from 32.3% in Q3) – household credits have decelerated by 15.7% y-o-y (19.5% in Q3) while credits to companies have slowly grown by 28.1% (39.5% in Q3). (Table T7-2) If we observe the movement of credits to the households and credits to companies, we can notice that there is a deceleration of the y-o-y growth of the credits to companies in Q4, after their acceleration in Q3 (corrected flows for the change in the exchange rate, Table T7-2), while the credits to households continue to exhibit the previous deceleration trend.

1 For more details on the methodology employed to correct credit flows for the changes in the exchange rate during a single quarter see Section 8 „Monetary Trends and Policy", Box 2, QM 6

When observing the contribution of individual forms of use (maintenance) of money supply, we can notice that in Q4, M1 had a negative contribution to the growth of M2 and the contribution of savings dinar deposits and term dinar deposits to the M2 growth structure has dropped to 1.4%. The greatest contribution to M2 still comes from the growth of foreign currency deposits (Graph T7-1) which grew in absolute terms, measured in euros, until the end of Q3, while they afterwards dropped to almost the same level as the one from the beginning of the year, but, because of the depreciation of the dinar standing at 16%, growth measured in dinars continued to be recorded in Q4.

Money supply records a minimal nominal accretion...

...and although NFA sharply declined NDA grew

... owing to the reduction of state dinar deposits and to the nominal growth of credits to the non-governmental sector because of dinar depreciation

The total accretion of the money supply in Q4 2008 of 0.8% of M2 from the beginning of the year (cumulative accretion of 9.8% from the beginning of the year to the end of Q4 minus the accretion of 9.0% during Q3, Table T7-2) developed as the result of the decline of net foreign assets (NFA) of 5.8% of M2 from the beginning of the year in Q4 (growth of 0.2% in Q3) and the increase of net domestic assets (NDA) of 6.7% of the initial M2 (4.0% in Q3). The total decline of NFA was also caused by the decline of foreign currency denominated NFA of 13.5% of M2 from the beginning of the year (increase of 2.0% of the initial M2 in Q3), regardless of the positive revaluation of foreign currencz indexed loans caused by domestic currency depreciation of 7.7% of the initial M2 during Q4 (-1.8% in Q3). Credits to the non-governmental sector (whose value was corrected for the effect of the depreciation of the dinar keeping in mind the substantial share of indexed credits) have had a mildly negative contribution in the total increase of NDA in Q4 with -0.2% of the initial M2 (9.4% of the initial M2 in Q3). The net value of state crediting has increased by 5.1% of the initial M2 (0.9% in Q3, Table T7-2) and relates to the spending of dinar state deposits in the monetary sector. The final growth of NDA was also influenced, from the negative side, by the growth of monetary sector capital of, in total, 10.1% of the initial M2 (-1.7% in Q1).(Table T7-2)

Growth of credits to the non-governmental sector sharply decelerates

Table T7-2. Serbia: Monetary Survey, Selected Indicators, 2006-2008

	2006	2007				2008			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
					y-o-y, in%				
M2[1]	39.2	42.9	37.4	39.4	41.5	41.0	33.7	24.5	9.8
Credit to the non-government sector[2]	17.5	21.6	23.9	28.0	38.3	36.4	30.3	29.4	33.7
Credit to the non-government sector[2], adjusted [3]	24.1	26.3	30.2	31.2	38.4	35.3	30.7	32.2	23.6
Households	62.2	58.4	54.7	53.6	50.6	43.3	35.5	19.5	15.7
Enterprises	11.1	14.2	20.2	21.1	32.2	31.0	28.1	39.5	28.1
					real y-o-y, in %				
M2[1]	30.5	35.3	30.7	29.7	28.6	26.2	19.2	12.2	2.9
Credit to the non-government sector[2]	10.2	15.2	17.8	19.1	25.6	22.0	16.2	16.6	25.2
Credit to the non-government sector[2], adjusted[3]	16.4	19.8	24.1	22.2	25.6	21.1	16.4	19.0	15.7
Households	52.1	50.1	47.4	43.1	36.7	28.2	20.7	7.6	8.3
Enterprises	4.2	8.3	14.5	12.8	20.1	17.3	14.1	25.6	19.9
					cumulative, in % of opening M2[4]				
M2[1]	39.2	5.9	11.0	23.9	41.5	5.5	4.8	9.0	9.8
M2 dinar[1]	19.8	-0.1	0.8	6.8	16.8	-2.5	-2.7	-1.1	0.5
Foreign deposits (households and enterprises)[5]	25.7	4.0	10.1	17.3	24.5	5.6	7.7	12.5	2.3
Valuation adjustments[6]	-6.4	1.9	0.0	-0.1	0.2	2.4	-0.2	-2.3	7.0
NFA, dinar increase	41.1	5.2	12.0	14.5	24.4	3.6	-3.2	-3.0	-8.8
NFA, fx increase	48.4	3.1	12.0	14.7	24.2	1.2	-3.0	-1.0	-14.5
Valuation adjustments[6]	-7.3	2.2	0.0	-0.1	0.3	2.5	-0.2	-2.0	5.7
NDA	-1.9	0.6	-1.1	9.4	17.1	1.9	8.0	12.0	18.7
o/w: credit to the non-government sector[2], adjusted[3]	27.3	6.6	19.6	28.3	36.6	4.8	12.8	22.2	22.0
o/w: net credit to government[7]	-17.4	-4.1	-7.7	-7.0	-1.9	-0.6	1.0	1.9	7.0
o/w: NBS and com. banks capital and reserves	-13.2	-2.2	-7.4	-11.6	-17.9	-3.5	-4.6	-6.3	-16.4
					cumulative, in % of GDP[8]				
Net credit to government[7]	-3.4	-1.3	-2.1	-1.9	-0.5	-0.3	0.3	0.7	2.2
o/w: dinar credits	0.6	-1.2	-2.3	-2.1	-1.1	-0.8	-1.3	-1.0	0.8
Credit to the non-government sector[2], adjusted[3]	4.3	2.6	5.4	7.7	9.8	2.7	4.4	6.6	10.7

Source: Table P-12 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 T7-3. Serbia: Monetary Survey, 2006–2008

	2006	2007				2008			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
STOCK	in millions of dinars, end of period								
NFA	407,565	441,048	484,388	500,302	563,524	596,215	534,403	536,102	483,707
o/w: NBS gross reserves	715,114	719,381	730,668	751,920	765,615	788,296	720,967	745,070	724,755
o/w: commercial bank foreign liabilities	-307,742	-318,598	-286,848	-290,860	-299,659	-264,865	-251,182	-279,131	-349,703
NDA	231,055	234,991	224,279	291,193	340,174	357,307	412,802	448,498	508,826
Net credit to government [1]	-100,061	-128,909	-149,081	-144,385	-112,290	-120,644	-103,539	-94,156	-53,042
Net dinar credit	-8,776	-35,782	-62,290	-56,369	-34,251	-53,126	-67,826	-60,934	-14,199
Net fx credit	-91,285	-93,127	-86,791	-88,016	-78,039	-67,518	-35,713	-33,222	-38,843
Credit to the non-government sector [2]	609,171	666,007	732,402	786,873	842,512	908,598	953,977	1,018,307	1,126,111
Other items, net	-278,055	-302,107	-359,042	-351,295	-390,048	-430,647	-437,636	-475,653	-564,243
M2[3]	638,620	676,039	708,667	791495	903,698	953,522	947,205	985,134	992,533
M2 dinar[3]	283,116	282,299	288,329	326,341	390,307	367,648	365,834	380,015	395,088
Fx deposits (households and economy)	355,504	393,740	420,338	465,154	513,391	585,874	581,371	605,119	597,445
STRUCTURAL INDICATORS									
Currency outside banks/Dinar deposits (households and economy), in %	31.9	26.2	29.1	25.1	24.6	23.7	23.5	23.2	29.5
Fx deposits (households and economy) / M2 (%)	55.7	58.2	59.3	58.8	56.8	61.4	61.4	61.4	60.2
Velocity (GDP[4] / M2)	3.3	3.3	3.2	2.9	2.6	2.6	2.7	2.7	2.7
M2 / GDP[4]	0.30	0.31	0.3	0.3	0.38	0.39	0.37	0.37	0.38
Credits to the non-government sector / GDP[4]	0.29	0.30	0.32	0.34	0.35	0.37	0.37	0.38	0.43
Non-perofrming loans[5] (in % of total loans)	4.7	4.9	4.69	5.20	5.1	4.4	5.3	6.0	5.8
Money multiplier (dinar M2/H)	2.0	2.4	2.0	2.3	2.3	2.6	2.0	2.3	1.2

Source: Table P-12 in Analytical Appendix.
1) See footnote 7) in Table T7-2.
2) See footnote 1) in Table T7-2.
3) Definitions of M2, M2 dinar, NFA and NDA - see Analytical and Notation Conventions.
4) See footnote 8) in Table T7-2.
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.

The Banking Sector: Placements and Sources of Financing

In Q4 banks reduced the total volume of credits to companies and household by €29 mn

In Q4, banks have reduced their placements in credits to companies and households by about €29 mn, when recalculated in euros (increase of €1.2 bn in Q3, Table T7-4). The nominal drop of credits to companies and households in euros is much larger, but the greatest portion of that drop is actually the effect of the recalculation of dinar credits without the currency clause in euros in line with the selling exchange rate. However, taking into consideration that about 30% of the credits to companies and households are not denominated in foreign currency, we estimate the real drop at about €29 mn. The real credit drop estimated in such a manner is caused by the drop of credits to the economy in the amount of about €163 mn and the growth of credits to the population in the amount of €135 mn.

Companies are decelerating their foreign borrowing in Q4

...by another €316 mn

Companies have substantially decelerated direct foreign borrowing, as opposed to the previous two-year trend. The reason for this is the financial crisis which forced international creditor banks to strongly decelerate total crediting, so Serbian companies were affected in the same way as many others in South-East Europe. In Q4, companies have borrowed about €316 mn directly from foreign banks (approximately €1.017 mn in Q3, €835 mn in Q2, €719 mn in Q1 of 2008 – Table T7-5).

Interest rates on banking credits dropped in Q4. This drop was mainly influenced by the drop of EURIBOR, which is in return the consequence of the expansive monetary policy of the European Central Bank (ECB). We would like to remind the reader that the interest rates of a large portion of credits in Serbia are explicitly (in credit contracts for credits with variable interest rate) or implicitly linked to EURIBOR, especially in the case of banks. Interest rates on indexed credits are influenced, besides the monetary policy of the domicile central bank (European Central Bank, Swiss Central Bank), by the country's risk premiums and the rate of reserve requirements. A small portion of credits, which are as a rule extremely short-term ones, is planned without a currency clause. In the case of these credits we can expect that the height of the interest rate will be influenced, among other things, by the height of the NBS' reference interest rate (repo). This interest rate was increased to 17.75% in Q4 (15.75% in the course of Q3), so this kept the rates on these credits high. In spite of the NBS measures which resulted in lower interest rates on foreign currency indexed credits, at least for those who would finance themselves

through new borrowing from foreign banks, total credit activity has ceased. The reason for this is the impossibility of use of foreign credit lines because of the weak solvency of European banks, but also the reduction of population's savings which was a substantial source of funding in the previous period.

Table T7-4. Serbia: Funding, Credit and Investment Activity, Adjusted[1] Flows, 2006-2008

	2006	2007				2008			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	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	-2,140	-833
Domestic deposits	-2,245	-339	-757	-1,819	-3,254	-162	-464	-1,134	-95
Households deposits	-1,200	-329	-652	-1,059	-1,652	-192	-518	-842	84
dinar deposits	-124	-35	-57	-97	-135	-18	-19	-28	-63
fx deposits	-1,076	-295	-595	-963	-1,518	-174	-499	-813	147
Enterprise deposits	-1,045	-10	-105	-760	-1,602	29	54	-292	-180
dinar deposits	-739	23	112	-324	-1,138	365	394	261	198
fx deposits	-307	-33	-218	-437	-464	-336	-340	-554	-378
Foreign liabilities	-1,660	-10	266	207	114	564	601	138	-165
Capital and reserves	-1,331	25	-569	-962	-1,441	-144	-855	-1,144	-572
Gross foreign reserves(-,decline in assets)	-77	-14	5	-17	695	-333	-386	-316	-18
Credits and Investment[1]	3,100	687	1,294	2,488	3,626	697	1,175	2,888	700
Credit to the non-government sector, total	1,541	575	1,508	2,315	2,945	614	1,402	2,595	2,022
Enterprises	536	313	865	1,271	1,660	406	915	2,099	1,574
Households	1,006	263	644	1,044	1,285	207	487	496	448
Placements with NBS (Repo transactions and treasury	1,637	200	-11	438	849	116	-126	361	-1,419
Government, net[2]	-79	-89	-203	-264	-168	-33	-101	-68	98
MEMORANDUM ITEMS									
Required reserves and deposits	1,813	-146	242	349	441	-369	-275	-97	-225
Other net claims on NBS[3]	0	13	-44	-104	-44	6	246	28	422
o/w: Excess reserves	-50	20	-56	-103	-92	0	207	-13	443
Other items[4]	499	-110	-464	-57	-78	-202	-192	-490	-330
Effective required reserves (in %)[5]	36	34	37	34	31	30	29	28	30

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 The increases in the original dinar values of deposits were calculated at the average exchange rate in the period, and in fx deposits as the difference in balances calculated at the exchange rates at ends of periods. Capital and reserves were calculated at the exchange rates at the ends of periods and do not include the effects of exchange rate differentials from revaluation of all previous items.

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

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

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

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

The banks drastically reduced the amount of dinar assets in repo placements in Q4...

... by approximately €1.78 bn

During Q4 banks used previously placed assets in repo placements and six monthly securities of NBS to amortize the strong blow to their liquidity caused by the withdrawal of citizens' savings, to fill the share of foreign currency reserve requirements which are held in dinars but also to transform a part of those assets in liquid foreign currency assets. Although NBS increased the repo rate in late October from 15.75% to 17.75%, in an attempt to maintain the stock of repo placement, expectations of substantial dinar depreciation outweighed the difference between the domestic and foreign interest rates, so the repo stock was drastically reduced, by 152 bn dinars, i.e. about €1.78 bn were withdrawn from repo placement and permanent six-month placing (in Q3 the banks increased these placements by €487 mn). From a historical maximum of repo operations stock, which was reached on September 26th when the nominal balance of sold securities was 248 bn dinars (€3,250 mn) – this stock dropped to 95 bn dinars (€1,077 mn), i.e. to the level of Q3 2006. Since the banks strongly pressured the exchange rate on the basis of the conversion of their surplus of dinar solvency into euros, the NBS changed the regulations and forced the banks to maintain foreign currency reserve requirements on the level from late September (which discouraged premature debt discharge of foreign banks). After that, the banks stopped discharging their debts, while the change related to the exchange risk (the maximum foreign currency open position was reduced from 20% to 10% of capital) prevented the banks from keeping a high level of liquid assets in foreign currency and forced them to keep those assets in dinars. Repo placements continue to represent the only alternative for the banks to place dinar assets which caused them to start growing again from mid-January, although the repo rate was reduced to 16.5%, which, alongside the strong depreciation of the dinar, practically lead to loses in these placements. The banks were unable to lend this amount of dinars to companies under

mutually acceptable terms, and on the other hand, provisions on exchange risk and open foreign currency position prevented them from increasing the volume of indexed placements.

The banks have lost almost all sources for new placements oreign currency savings of households are decreasing, as well as company deposits and large share capital increases are absent

A substantial drop in the liquidity of the banking sector on the basis of a reduction of total citizen deposits in the amount of €926 mn occurred in Q4. Beside this, company deposits also declined by a total of €113 mn. Share capital increases, which were a leading source of funding in previous quarters, now came to an almost complete stop, while the balance of foreign liabilities increased by €303 mn, this time mostly on the basis of short-term credits. Foreign currency savings of households dropped by €960 mn in Q4, as a reaction to the news on the possible bankruptcy of several European banks with business operations in Serbia. The total capital of the banking sector dropped by €572 mn in Q4 (growth of €289 mn in Q3, Table T7-4), but this drop was a consequence of the conversion to euros, because the capital was booked in dinars. Banks have substantially increased their foreign currency reserves (by about €300 mn) in reaction to their endangered liquidity in Q4.

The banks have increased their amount of foreign debt in Q4, mostly on the basis of short-term borrowing, by about €387 mn (increase of €334 mn in Q3) (item Foreign Borrowing, Table T7-4). The majority of banks, because of the financial crisis, have lost credit lines from their head offices, but some were forced or able to settle the premature withdrawal of deposits of domestic depositors through taking up short term liquidity credits. Capital share increases, on the other hand, remained sluggish in Q4, as in Q3, in relation to previous quarters.

Table T7-5. Serbia: Credit to Enterprises and to Households - Impact on Aggregate Demand, 2006–2008

	2006	2007				2008			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	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	1,333	1,624	2,253	287
Loans to enterprises and households from domestic banking sector	222	575	933	807	630	614	789	1,193	-29
Loans to enterprises	-21	313	552	406	389	406	509	1,184	-163
Loans to households	243	263	381	400	241	207	280	9	135
Direct foreign liabilities of enterprises	524	478	1,224	730	912	719	835	1,061	316
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	503	791	1,776	1,137	1,301	1,125	1,344	2,244	153
	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	20.0	18.0	17.4	18.3	24.0	3.4
Loans to enterprises and households from domestic banking sector	3.1	8.9	13.0	10.5	7.4	8.0	8.9	12.7	-0.3
Loans to enterprises	-0.3	4.8	7.7	5.3	4.5	5.3	5.7	12.6	-1.9
Loans to households	3.4	4.1	5.3	5.2	2.8	2.7	3.1	0.1	1.6
Direct foreign liabilities of enterprises	7.3	7.4	17.0[2)]	9.5	10.7	9.4	9.4	11.3	3.8
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	7.0	12.3	24.8	14.8	15.2	14.7	15.1	23.9	1.8

Source: FREN.
1) See footnote 1 in Table T7-4.
2) 9,1% of GDP relates to one loan to Telekom for the purpose of acquisition of Telekom Republika Srpska.

The high depreciation of the dinar in Q4 lead to an equally high growth of credit share in GDP (in dinar amounts), although, if we look at the original currencies, crediting practically came to a halt. At the end of Q4, the balance of credits to companies from the domestic banking system and of direct foreign credits reached 66.2% of GDP, which is close to the EU average. This points to a fundamental limitation of the capacity of domestic companies for further large borrowing, because the banks will probably negatively evaluate the credit capacity of an average company. Hence, it is more probable that further direct foreign borrowing will have to go through the public sector.

Table T7-6. Serbia: Stock Loans to Enterprises and Households in % of GDP[1)]

	2006	2007				2008			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
Total loans to enterprises and households from domestic banking sector and direct foreign borrowing by enterprises	44.8	48.2	52.5	55.5	60.0	65.3	66.3	68.8	80.6
Loans to enterprises and households from domestic banking	27.7	29.5	31.7	33.0	34.4	36.7	36.9	37.7	42.0
Loans to enterprises	18.1	19.0	20.3	20.6	21.6	23.0	23.4	25.2	27.6
Loans to households	9.6	10.5	11.3	12.3	12.8	13.7	13.5	12.6	14.5
Direct foreign liabilities of enterprises	17.1	18.7	20.8	22.6	25.6	28.7	29.4	31.1	38.6
Direct foreign liabilities of enterprises and banks' credits to enterprises from domestic banking sector	35.2	37.7	41.2	43.2	47.1	51.7	52.8	56.2	66.2

Source: FREN, NBS - Statistical Bulletin.
1) GDP (Gross Domestic Product) used in calculations centered on annual level.

The Central Bank: Balance and Monetary Policy

Reserve money grew strongly in Q4 as a consequence of the decline of NBS net foreign assets and the drop of placement in repo operations

The *reserve money* level (H) increased substantially in Q4 (by 119.5%) of the level from the beginning of 2008, Table T7-7. The increase of reserve money in Q4 is a result of the following net changes to the stock of some of its components: (a) the drop of net own foreign currency reserves of NBS stood at 20% of the initial H; (b) the growth of net domestic assets (NDA) of NBS in Q4 stood at 139.4% of the initial H, Table T7-7. A growth of reserve money on the basis of the repo placement stock reduction of 116.6% of the initial H, as well as the reduction of remaining net domestic assets by -11% of the initial H were recorded within NDA, Table T7-7.

Net own reserves of NBS recorded a substantial decline in Q4 as a consequence of the reduction of NBS foreign currency reserves

Table T7-7. Serbia: NBS - Foreign Exchange Purchases and Dinar Sterilization, 2006-2008[1)]

	2006	2007				2008			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
FLOW	**in millions of dinars, cumulative from the beginning of the year**								
NBS own resreves[2)]	145,315	15,066	46,140	60,267	97,636	4,695	19,115	56,373	27,211
NBS own reserves (in euros)	1,783	*188*	*577*	*756*	*1,218*	*58*	*237*	*706*	*312*
NDA	-105,744	-46,278	-57,938	-72,100	-72,440	-39,752	-13,347	-66,941	122,232
Government, dinar credits	120	-710	-735	-735	-5,639	267	618	0	81
Government, dinar deposits	17,540	-30,939	-56,748	-44,985	-10,107	-28,386	-41,088	-36,706	8,638
o/w: municipalities	-3,500	*-6,768*	*-13,485*	*-11,933*	*-516*	*-8,329*	*-7,405*	*-5,073*	*-909*
Repo transactions[3)]	-132,903	-16,675	-2,094	-34,961	-67,950	-11,243	8,014	-28,597	127,517
Other items , net[4)]	9,499	2,046	1,639	8,581	11,256	-390	19,109	-1,638	-14,004
H	39,571	-31,212	-11,798	-11,833	25,196	-35,057	5,768	-10,568	149,443
o/w: currency in circulation	14,811	-9,792	-3,395	-3,088	8,488	-6,613	-7,454	-5,388	13,007
o/w: excess liquidity	16,516	-13,061	-3,309	-6,293	20,605	-39,840	-22,293	-39,483	1,602
INCREASE	**cumulative, in % of opening H[5)]**								
NBS own resreves[2)]	154.0	11.2	34.5	45.0	72.9	3.5	14.3	42.1	20.3
NDA	-112.1	-34.6	-43.3	-53.8	-54.1	-29.7	-10.0	-50.0	91.3
Government, dinar deposits	18.6	-23.1	-42.4	-33.6	-7.5	-21.2	-30.7	-27.4	6.4
Repo transactions[3)]	-140.9	-12.5	-1.6	-26.1	-50.7	-8.4	6.0	-21.4	95.2
Other items , net[4)]	10.1	1.5	1.2	6.4	8.4	-0.3	14.3	-1.2	-10.5
H	41.9	-23.3	-8.8	-8.8	18.8	-26.2	4.3	-7.9	111.6
o/w: currency in circulation	15.7	-7.3	-2.5	-2.3	6.3	-4.9	-5.6	-4.0	9.7
o/w: excess liquidity	17.5	-9.8	-2.5	-4.7	15.4	-29.7	-16.6	-29.5	1.2

Source: Table P-14 in Analytical Appendix.
1) Government includes: 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).

Through the tightening of monetary policy he NBS is attempting to mitigate the influence of the financial crisis on the dinar exchange rate...

The *total increase of reserve money* in the amount of 160 bn dinars in Q4, is the result of the following absolute changes of its components: (a) NBS reduced the net value of its reserve by around 26 bn dinars as a result of foreign currency transactions (interventions on the interbank foreign currency market and sale of foreign currency to banks, net repurchase from exchange offices, currency differentials etc); (b) the state has reduced the balance on its dinar deposit with NBS by about 41.2 bndinars; (c) the repo placement balance with NBS has been reduced

...by freezing the level of earmarked resources and required reserves on the level from the end of September...

...and elevating the repo rate in Q4 to the level of 17.75%

by 156 bndinars[2] in Q4 in relation to the end of Q3 and this also reduced dinar solvency, Table T7-7, and (d) the *remaining domestic net assets* have been reduced by about 14.8 bndinars.

In early February banks started to prematurely discharge their foreign debts. The possibility for this appeared after NBS allowed for the additional 10% and afterwards 20% more of allocated foreign currency assets on the basis of calculated foreign currency reserve to be replaced by dinar assets. The banks withdrew a part of their foreign currency assets from their NBS accounts and prematurely discharged their foreign debts, and substituted the missing assets in the required reserve accounts from the repo placement. Since in this manner the dinar exchange rate suffered strong pressure, in early December NBS changed the regulations and frozen the basis for the calculation of foreign currency reserve on the level from the end of September. Although this did not represent a direct ban of premature debt discharge, banks were strongly discouraged from further debt discharge. Apart from this, NBS has attempted to attract additional foreign deposits in repo placements by increasing the repo rate to 17.75% which was additionally "enriched" with the canceling of reserve requirements on new borrowings. Still, because of the general non-liquidity on European markets, but also the fear of a strong depreciation of the dinar, the repo stock has not been enlarged on the basis of new inflows from abroad.

Table T7-8. Banks' Reserve Requirements with NBS[1], 12/2004–5/2008

	12/2004	05/2005	07/2005	10/2005	11/2005	03/2006	04/2006	05/2006	11/2006	12/2006	10/2007	10/2008	12/2008
Rate on:													
DINAR DENOMINATED BASE	21	20	20	18	18	18	18	18	15	10	10	10	10
more then 1 month dinar time deposits											5	5	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	45	45
thereof: new external bank borrowings novo zaduženje banaka after septmeber 2008[4]												0	
NEW FX SAVINGS DEPOSITS[3]	47	47	45	41	38	40	40	40	40	40	40	40	
SUBORDINATED CAPITAL						20	20	20	20	20	20	20	
thereof: new external bank borrowings novo zaduženje banaka after septmeber 2008[4]												0	

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.

[4] Since October 2008. new foreign borrowing of banks is not subject of obligatory reserve requirements, while old borrowing are still subject to obligatory reserve requriments.

[5] Since 17th of December, the base for calculation of obligatory reserve is set at the level equal to the level on 30th of September, this measure is aplicable starting from 17th of December 2008 until 17th of June 2009.

[6] From 17th of May 2008, 10% of calculated fx based reserve is required to be held in dinars countervalue. From 17th of November 2008, 20% of calculated fx based reserve is required to be held in dinars countervalue. From 17th of December 2008, 40% of calculated fx based reserve is required to be held in dinars countervalue

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.

The dinar exchange rate is still significantly depreciating...

Net own reserves of the NBS have decreased in Q4 by about €394 mn (increased by €470 mn in Q3, Table T7-9). This decrease has mainly resulted from the NBS' transactions on the foreign currency market. NBS sold foreign currency in the amount of €914 mn to banks through interventions on the interbank foreign currency market (IFCM) while trying to slow down the depreciation of the dinar, but also returned a part of the assets from the reserve requirements on

2 A difference of 5 bn dinars between the balance of commercial banks and NBS balance in NBS remaining securities stock appeared in the data for December of 2008

...which forces the NBS to relax monetary policy and intervene on daily basis on the IFCM

the basis of the withdrawal of citizens' savings, as well as of the change of regulations on foreign currency reserve requirements in the amount of €1,112 mn. On the other hand, net repurchases from exchange offices in the amount of €168.2 mn were conducted (€88 mn repurchased in Q3. Table T7-10).

Table T7-9.Serbia: Foreign Exchange Reserves, Stock and Flow, 2006-2008

	2006	2007				2008			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
					stock, in millions of euros				
NFA of Serbia	5,164	5,413	6,130	6,347	7,116	7,246	6,768	7,000	5,451
Commercial banks, net	-3,188	-3,213	-2,918	-2,998	-2,379	-2,147	-2,163	-2,557	-2,562
Gross foreign reserves	707	693	712	690	1,403	1,070	1,017	1,087	1,385
Foreign liabilities	-3,895	-3,906	-3,630	-3,688	-3,782	-3,218	-3,180	-3,644	-3,947
NBS, net	8,352	8,626	9,048	9,345	9,495	9,394	8,931	9,557	8,013
Gross foreign reserves	9,052	8,819	9,246	9,535	9,662	9,577	9,129	9,727	8,180
Foreign liabilities	-700	-193	-198	-190	-168	-183	-198	-170	-167
IMF	-181	6	1	3	4	3	1	1	-9
Other liabilities	-519	-200	-199	-193	-171	-186	-199	-171	-159
NBS, NET RESERVES-STRUCTURE									
1. NBS, net	8,352	8,626	9,048	9,345	9,495	9,394	8,931	9,557	8,013
1.1 Commercial banks deposits	-3,210	-3,358	-3,478	-3,584	-3,409	-3,411	-3,166	-3,343	-2,191
1.2 Government deposits	-1,309	-1,247	-1,160	-1,172	-1,034	-874	-478	-457	-459
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	3,833	4,021	4,410	4,589	5,051	5,109	5,287	5,757	5,362
					in millions of euros, cumulative from the beginning of the year				
NFA of Serbia	2,620	249	967	1,183	1,952	131	-348	-116	-1,665
Commercial banks, net	-1,737	-24	270	190	809	232	216	-178	-183
Gross foreign reserves	-77	-14	5	-17	695	-333	-386	-316	-18
Foreign liabilities	-1,660	-10	266	207	114	564	601	138	-165
NBS, net	4,357	274	696	993	1,143	-101	-563	62	-1,482
Gross foreign reserves	4,083	-233	194	483	610	-86	-534	65	-1,482
Foreign liabilities	274	507	502	510	532	-15	-30	-2	1
IMF	567	187	182	184	185	0	-2	-3	-12
Other liabilities	-294	320	320	327	348	-15	-28	1	13
NBS, NET RESERVES-STRUCTURE									
1. NBS, net	4,357	274	696	993	1,143	-101	-563	62	-1,482
1.1 Commercial banks deposits	-1,485	-148	-269	-374	-200	-2	243	66	1,219
1.2 Government deposits	-1,089	63	149	137	275	161	557	578	575
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	1,783	188	577	756	1,218	58	237	706	312

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).

As in Q1, during the political crisis, the NBS has executed net sales of foreign currency in Q4. However, the volume of sales on the IFCM in Q4 was substantially larger than in Q1, or any other period. Because of the drastic reduction of turnover in IFCM, the NBS has again been organizing the meeting of IFCM since December.

Table T7-10. Net Monthly Transactions on Foreign Exchange Market, NBS, Banks and Exchange Offices, Nov 2006–Sept 2008

	Interbank fx market (NBS-commercial banks)	Exchange offices	Total	
(-, net sale of foreign currency by NBS)				
		in millions of euros		
Monthly average January-October 2006	-64	151	87	
November 2006	260	131	391	
December 2006	154	86	240	
January 2007	-412	42	-370	
February 2007	-14.8	86	72	-238 in Q1 2007
March 2007	-54.1	114	60	
April 2007	0	137	137	
May 2007	-75.9	160.1	84	+288 in Q2 2007
June 2007	-19	85.7	67	
July 2007	-22	93.9	72	
August 2007	-23	106	83	+195 in Q3 2007
September 2007	-20	60	40	
October 2007	-4	72	68	
November 2007	-20	76	56	+212 in Q4 2007
December 2007	-40	128	88	
January 2008	-57	63	6	
February 2008	-129	39.6	-89	-168 in Q1 2008
March 2008	-105	20.6	-84	
April 2008	-64	31.2	-33	
May 2008	-38	54.3	16	+29 in Q2 2008
June 2008	0	45.3	45	
July 2008	0	26.8	27	
August 2008	3	33	36	+88 in Q3 2008
September 2008	0	24.7	25	
October 2008	-269	55	-214	
November 2008	-357	16.9	-340	-746 u Q4 2008.
December 2008	-288	96.3	-192	

Source: NBS.

8. Financial Markets

The fourth quarter of 2008 saw a fall in the value of reported trading on the Belgrade Stock Exchange (BSE) by 21.26% in relation to the previous quarter; conversely, the number of transactions performed rose by 14%. Activity in Q4 switched to the continuous part of the market, which saw growth both in the value of trading (by 5.15%) and in the number of transactions (by 58.25%). Overall annual activity on the BSE, measured by the value of trading, fell in 2008 for the first time since 2005. BSE indices continued to fall throughout the last quarter of 2008. Indices fell by about the same percentage as in Q3 2008: BELEX15 fell by 43.69%, one percentage point more than in Q3 2008; BELEXline lost 38.29%, some 2 percentage points more than in Q3, while SRX EUR shed 53%, 10 percentage points more than over the previous quarter. In early November, the 2w repo rate was raised by 100 bp, to 17.75%. This reference interest rate was retained until the end of 2008 and into early 2009, only to be reduced in late January by 125 bp to 16.5%. In spite of the rise in the reference interest rate, real yields on 2w repo operations measured relative to the euro/dinar exchange rate fell and even became negative due to the depreciation of the national currency, while real yields measured relative to the rate of inflation over the last quarter of 2008 rose. In late 2008 yields on Republic of Serbia's treasury bills grew to 8.92% and 9.91% respectively, twice as much as at the beginning of the quarter. The volume and turnover of trading in frozen foreign currency deposit (FFCD) bonds continued falling throughout Q4 2008. If the overall annual volume and turnover of trading in this market are taken into account, activity has more than halved in 2008 after several years of stable growth. Average yields of FFCD bonds continued growing over Q4, while the average yield curve exhibits a downward trend, flattening somewhat in the 2 to 7 year range.

Q4 saw a drop in the value of trading on the BSE, but also a rise in the number of transactions performed

The last quarter of 2008 saw a drop in activity on the BSE (Graph T8-1). The value of trading reported continued its downward trend, falling by 21.26%, but the number of transactions performed rose by 14% in relation to Q3. Such activity was the consequence of two factors: firstly, the falling value of trading – in spite of a rise in the number of transactions – was caused by a major drop in prices. Secondly, as opposed to the previous quarter, activity was focused on the continuous part of the market, where individual transactions are, on average, smaller than those in the discontinuous segment.

Activity in Q4 switched to the continuous part of the market, which saw an increase in both the value of trading and the number of transactions performed

Both the value of trading and the number of transactions rose in the continuous market in Q4 relative to the previous quarter, by 5.15% and 58.25% respectively. On the other hand, activity in the discontinuous segment of the BSE fell, both as indicated by the value of trading (-49.44%) and the number of transactions performed (-29.92%). The transfer of activity to the continuous market, coupled with falling share prices, led to an overall fall in the value of trading regardless of the rise in the number of transactions.

In relation to the same period one year previously, the BSE has seen a further drop in activity, both measured by the value of trading and the number of transactions

This structure of trading on the BSE could indicate greater activity by small investors, who – probably for fear of the global financial crisis, becoming most apparent in Q4 – began withdrawing their assets. This assumption is further borne out by the drop in the value of the average transaction by 31% relative to Q3 2008.

When viewed at the annual level, the BSE's downward trend remains unchanged. The value of trading fell by 71.15% in relation to Q4 2007, as did the number of transactions performed, by 57.54%. The drop was felt both in the continuous and the discontinuous part of the market.

After a period of constant growth starting in 2005, the annual value of trading on the BSE declined in 2008

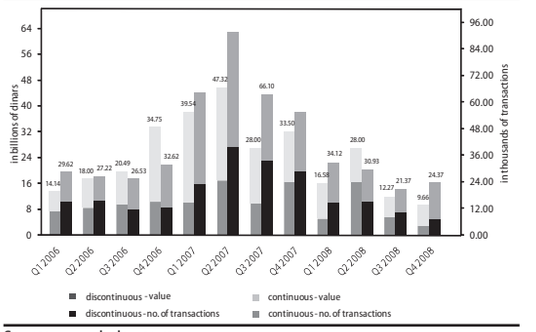
Total annual value of trading on the BSE, measured relative to the volume of trading reported, fell in relation to the previous period for the first time since 2005.[1] With about 66.5 bn dinars, the value of trading fell by 55% relative to 2007, or by about 24% in relation to 2006.

1 The value of trading grew constantly from 2005 to 2007, when the total value of trading amounted to some 148.3 bn dinars.

In Q4, BSE indices continued falling at a pace similar to that seen in Q3

The fall in the value of BSE indices continued throughout the last quarter of 2008 (Graph T8-2). The percentile loss was about the same as in Q3 2008: BELEX15[2] lost 43.68%, 1 percentage point more than in Q3, while BELEXline[3] shed 38.29%, some 2 percentage points more than in Q3 2008. The SRX EUR index[4] lost 53% of its value during Q4, 10 percentage points more than over the previous quarter. All indices reached their all-time lows during this quarter: 474.56 index points, 1078.47 index points, and 236.87 index points for BELEX15, BELEXline and SRX EUR, respectively.

Graph T8-1. Stock Trading Volume, Value and Structure, 2006–2008



Source: www.belex.co.rs

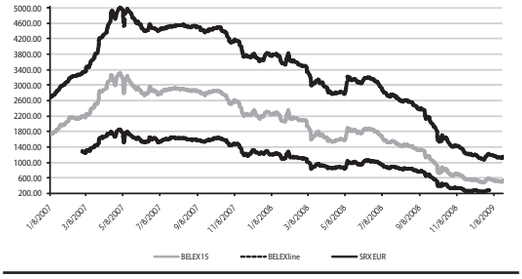
Late 2008 saw indices record a short-lived upward correction

The last week of 2008 saw an upward correction of indices, with BELEX15 recording growth of some 21%, and BELEXline rising by about 12%. Early 2009 then saw a new drop, resulting in overall growth from the last week of 2008, when historic lows were reached, to early February 2009 reaching 12.7% for BELEX15 and 2.8% for BELEXline.

Regional stock market indices also fell in Q4

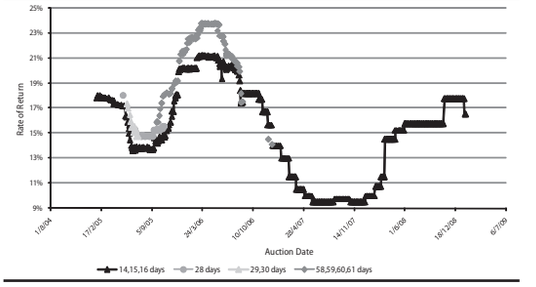
Like the BSE, other regional markets also saw value wiped from their stocks over the last quarter of 2008. The Sarajevo SASX-10, the Montenegrin MOSTE, Banja Luka's BIRS, the Romanian BET and the Montenegrin NEX20 all saw drops lower than that recorded by the Serbian market, of 19.19%, 24.91%, 26.22%, 32.96% and 34.75%, respectively. Croatia's Crobex, with a fall of 43.40%, saw similar results to those of BELEX15, while the Macedonian MBI-10 and the Bulgarian SOFIX lost more than the Belgrade Stock Exchange – 54.21% and 55.33%, respectively. The greater drop in value of the Serbian index can be ascribed to the generally low liquidity of the market and the increased volatility of the Serbian currency in the last quarter of 2008, which only served to increase general insecurity.

Graph T8-2. BELEXline, BELEX15 and SRX EUR Indices, 2007–2008



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

Graph T8-3. Repo Yields by Maturity, 2004–2009



Source: NBS.

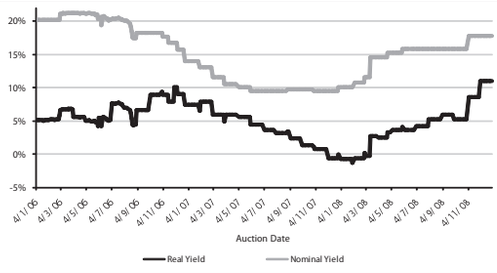
The NBS raised its reference interest rate by 200 bp to 17.75%, only to cut it in the second half of January by 125 bp, to 16.50%

Over the course of Q4 the NBS continued its policy of raising the reference interest rate (Graph T8-3). At a meeting of its Monetary Board, the Bank raised its 2w repo rate by 100 bp, to 17.75%. This level was retained until the end of the year and into early 2009, only to be cut by 125 bp, to 16.5%, in late January.

In spite of an increase in the NBS reference interest rate in Q4 2008, real yields on 2w repo operations measured relative to movements in the euro/dinar exchange rate (changes in the rate over the previous three months)[5] fell or even became negative due to the depreciation of the Serbian currency (Graph T8-5). In early Q4 real yields calculated using this approach amounted to some

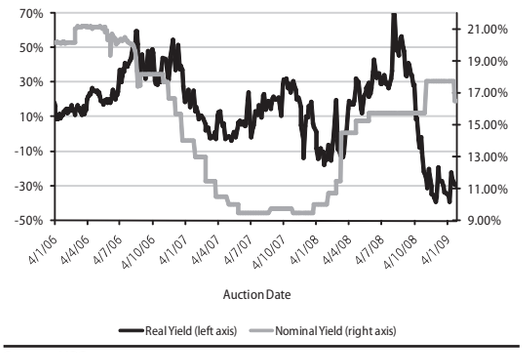
2 Index of the most liquid shares on the BSE.
3 Overall stock index of the BSE.
4 Index of the 8 most liquid shares on the BSE calculated by the Vienna Stock Exchange (Wiener Börse).
5 A detailed rationale for such an approach to the calculation of the real return rates is given in "The Exchange Rate and NBS Policy in Serbia: 2002–2006", Spotlight on: 1, QM 5.

Graph T8-4. Real (with regard to inflation) and Nominal Repo Yields, 2006–2008



Source: NBS.

Graph T8-5. Real (with regard to EUR/RSD exchange rate) and Nominal Repo Yields, 2006–2009



Source: NBS.

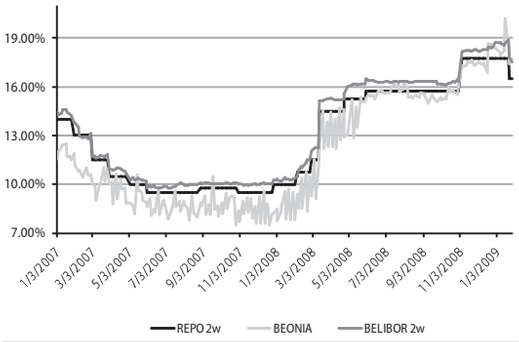
Real repo yields measured relative to movements in the euro/dinar exchange rate fell in Q4

28%, but then fell over the course of the quarter to 39%, and fluctuated between 39% and 22% in January 2009.

As for real yields measured relative to the inflation rate,[6] these grew over the last quarter of 2008 (Graph T8-4). This was a consequence of, on the one hand, the rising NBS reference interest rate, and, on the other, a fall in the inflation rate recorded in November and December. Real yields measured relative to inflation thus rose to 8.5% in November, and to almost 11% in December.

Real repo yields (adjusted for inflation) rose over the course of Q4

Graph T8-6. Repo, BEONIA and BELIBOR 2w Rates, 2007–2008



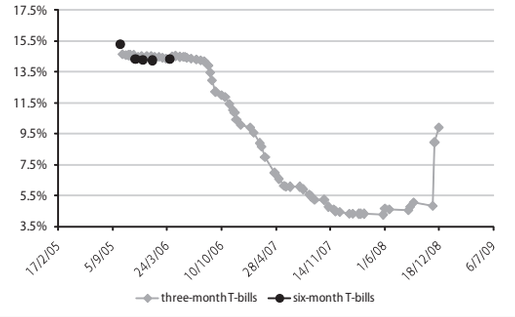
Source: NBS, Reuters.

As usual, interest rates in the money market followed the nominal repo rate (Graph T8-6). In Q4 the average spreads between the repo rate and the BELIBOR 2w rate (same maturity as repo agreements) and the repo rate and the overnight BEONIA rate remained the same as in Q3 2008. The average spread between the repo rate and the BEONIA rate amounted to 16 bp, while the spread in relation to BELIBOR 2w stood at 51 bp.

Late 2008 saw major growth in yields of Republic of Serbia treasury bills

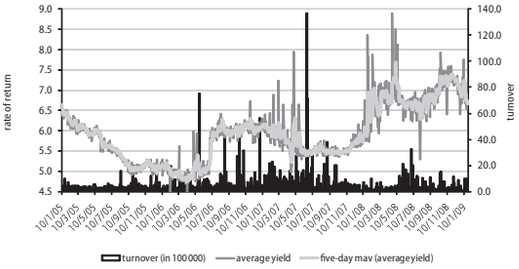
After a slight recovery in yields of Serbian treasury bills (T-bills) beginning in Q2 2008, the end of the year saw yields rise markedly. The last two auctions in 2008 resulted in interest rates of

Graph T8-7. Yields in T-bill Market, 2005–2008



Source: MoF.

Graph T8-8. Average Yield on FFCD Bonds[1], 2005–2009



Source: www.belex.co.rs

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 the securities were used as weights.

6 Real repo yields (adjusted for inflation) have been calculated by subtracting the inflation rate, measured as the change in the RPI at the annual level, from minimum yields.

8.92% and 9.91% respectively, twice as much as at the beginning of the quarter (Graph T8-7). All T-bills have three-month maturity; the two issues amounted to 400 mn dinars and one bn dinars respectively.

The volume and turnover of trading in the FFCD bond market continued the downward trend started in Q3

The volume and turnover of trading in the FFCD bond market continued falling in Q4 2008 (Graph T8-8). The volume of trading amounted to some €22.24 mn, while turnover stood at €16.96 mn, respectively 13.54% and 4.34% less than in the previous quarter. Volume was down by 13.98% at the annual level,[7] while turnover declined by 8.26%; activity in the FFCD bond market thus again fell in relation to the same period last year. This reduction in activity indicates that investors in FFCD bonds are reluctant to sell at this time, which is only logical given rising yields and falling prices over the past year. On the other hand, rising yields have failed to attract new investors, in all likelihood because of the global financial crisis.

Following several years of growth, the FFCD bond market shrank in 2008

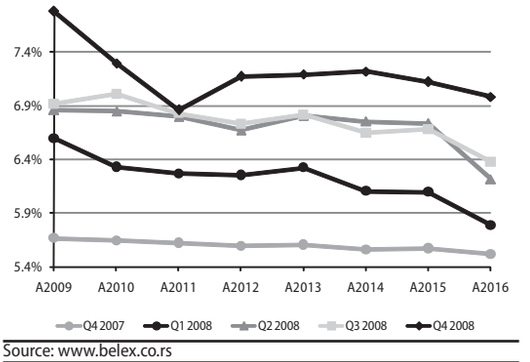
If one were to consider the overall annual volume and turnover in the FFCD bond market, one would see that activity has more than halved after several years of stable growth.[8] Total volume of trading in the FFCD bond market amounted to €88.49 mn in 2008, which is 57.28% lower than in 2007. Total turnover declined in relation to 2007 by 57.35%, and stood at €65.24 mn in 2008.

In Q4 2008 average yields continued rising in the FFCD bond market for bonds of all maturity periods

Average yields for bonds of all maturity periods, except 2 years, rose in Q4 2008 (Graph T8-9). The highest growth, of 86 bp, was recorded – as expected – by A2009 bond, with the shortest maturity. A2011 bond saw growth of a mere 3 bp on average, a negligible change for the Serbian market. The remaining bonds saw average yields grow from 29 bp to 57 bp. The yield curve remained descending in Q4, i.e. bonds with shorter maturity periods had greater average yields than those with longer ones: yield on A2009 amounted to some 7.78% on average, while yield on A2016 stood at 6.98%. Besides the initial section of the curve, with a steep downward gradient, the 2 to 7 year section is ascending and almost flat. The descending gradient in this part of the curve amounts to just 12 bp.

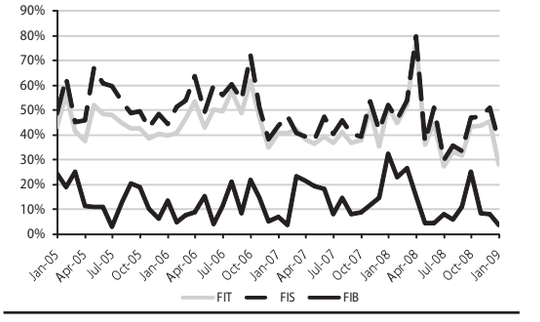
Average yield curves for FFCD bonds remained descending in Q4 2008, evening out somewhat in the 2 to 7 year segment

Graph T8-9. Average FFCD Bond Yield Curves



Source: www.belex.co.rs

Graph T8-10. Foreign Investor Share in BSE Turnover, 2005–2009



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

The share of foreign investor involvement in BSE turnover rose in the last quarter of 2008, only to fall almost to its all-time low in early 2009.

The relative share of foreign investor involvement in the bond market (FIB curve, Graph T8-10) rose in Q4 2008, mainly as a consequence of a spike recorded in October 2008, when it amounted to 25.14%, followed by constant decline over the course of Q4 2008, only to come close, with 3.7% seen in early 2009, to its all-time low recorded in July 2005. In the stock market (FIS curve, Graph T8-10), the average Q4 foreign investor share rose by some 15 pp in relation to the previous quarter, but still remained lower than over the first two quarters of 2008 and was closer to average 2007 values. Finally, the share of foreign investor involvement in total turnover (FIT curve, Graph T8-10) rose throughout Q4 2008 by some 14 pp, but, as with the stock market, came close to its all-time low in January 2009.

7 Relative to Q4 2007.
8 Volume grew by 43.39% in 2006 and by 30.55% in 2007; turnover rose by 46.88% and 34.41% in 2006 and 2007, respectively.

9. International Environment

Projected growth rates were lowered both for developing and developed countries. The collapse of industrial output indicates a deepening recession. Contrary to expectations, the crisis also intensively hit developing countries, which are undergoing the greatest recession since WWII. Inflation fell considerably across the world – lower inflation and economic activity increased risks of deflation. The US Administration adopted a large fiscal stimulus package and is preparing new measures to stabilize financial markets. The price of oil appears to have bottomed out while the dollar strengthened.

Table T9-1. World: GDP Growth and Inflation, 2006–2008[1)]

	Real GDP							Inflation		
	Real growth (%)			Real growth, seasonally adjusted (%)				y-o-y (%)		
	2006	2007	2008	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q2 2008	Q3 2008	Q4 2008
USA	3.0	2.2	1.3	0.9	3.3	-0.5	-3.8	4.3	5.3	1.5
Canada	2.8	2.5	0.6	-0.8	0.3	1.0	-3.5	2.4	3.4	1.9
Japan	2.2	2.1	-0.4	3.2	-2.4	-0.7	-9.0	1.4	2.2	1.0
China	11.1	11.4	9.0	11.7	11.5	6.4	1.5	7.8	5.3	2.5
India	9.4	8.7	6.2	8.8	5.9	6.0	0.3	7.8	9.0	9.1
Euro area	2.9	2.7	0.7	2.9	-0.8	-0.8	-5.9	3.6	3.8	2.3
Germany	3.1	2.6	1.0	5.2	-2.0	-2.1	-8.2	3.0	3.3	1.7
France	2.2	1.9	0.7	1.6	-1.2	0.6	-4.6	3.7	3.6	2.0
UK	2.8	3.1	0.7	1.1	0.8	-2.0	-5.9	3.4	4.8	3.9
Italy	1.9	1.7	-0.9	2.0	-1.1	-2.0	-7.1	3.8	4.1	2.9
Russia	6.7	8.1	5.6	0.9	9.0	5.1	-13.5	14.0	14.9	13.8
Bulgaria	6.0	6.1	5.2	7.0	7.1	6.8	3.6	15.0	13.7	9.3
Romania	6.9	6.0	…	8.2	9.3	9.1	…	8.6	8.1	6.8
Hungary	3.8	1.3	0.6	1.3	2.0	-0.4	-3.9	6.8	6.3	4.3
Croatia	5.0	5.6	…	4.3	3.4	1.6	…	6.5	7.4	4.5
FYR Macedonia	4.0	5.0	…	5.3	6.2	5.5	…	9.9	8.4	5.5
BIH	6.7	6.8	…	…	…	…	…	8.4	8.5	5.5
Serbia	*5.6*	*7.1*	*5.4*	8.5	6.3	4.9	2.7	*12.0*	*10.7*	*8.9*

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 rates.

World

Recession is deepening

The IMF corrected its November forecast: global growth in 2009 will stand at only 0.5%[1], the lowest since WWII (Table T9-2). This forecast is 1.75 percentage points lower than the one made in November. Notwithstanding all state measures across the world, the financial markets have in the meantime remained non-functional, whilst production nosedived. Alongside efforts to ease the credit crunch, the monetary and fiscal measures ought to lead to a gradual recovery of the global economy, which is predicted to grow by 3% in 2010. There is, however, still the risk that the applied instruments aiming to ensure economic growth may prove inefficient.

Many Western countries are in recession. Annual growth in developed countries will probably stand at -2%. If the hitherto economic measures prove efficient, their growth may stand at around 1% in 2010.[2]

According to the IMF, developing countries will record much lower growth, 3.3% in 2009 compared with 6.3% in 2008.[3] Similar growth levels were recorded during the previous recessions.

Table T9-2. Chronological Correction of IMF Growth Rate Forecasts

	Forcasts for 2008				Forcasts for 2009			
	World	Advanced countries	Emerging countries	Central and Eastern Europe	World	Advanced countries	Emerging countries	Central and Eastern Europe
January 2008	4.1	1.8	6.9	4.6	4.4	2.1	7.0	5.1
April 2008	3.7	1.3	6.7	4.4	3.8	1.3	6.6	4.3
July 2008	4.1	1.7	6.9	4.6	3.9	1.4	6.7	4.2
October 2008	3.9	1.5	6.9	4.5	3.0	0.5	6.1	3.4
November 2008	3.7	1.4	6.6	4.2	2.2	-0.3	5.1	2.5
January 2009	3.4	1.0	6.3	3.2	0.5	-2.0	3.3	-0.4

Source: IMF.

1 *World Economic Outlook - Update*, January 2009
2 *Ibidem.*
3 *Ibidem.*

Financial markets remain unstable

The situation in the financial markets has not normalized notwithstanding the hitherto urgent economic measures. Credit margins are still wide despite the mild improvement of conditions and increased activity in the corporate bond market. The *status quo* will remain until the problems related to the transparency of bank assets and bad debts are resolved. Companies in developing countries will continue to face the risk of illiquidity given that they are now no longer able to roll over credits.

The fatal combination of the credit crunch and economic deceleration produced extremely negative effects in late 2008. The fall in the value of shares across the world led to reduced personal wealth, increasing pressures for a cut in personal spending. The uncertainty has simultaneously led individuals and companies to put off their planned expenditures, which has resulted in lower demand for consumer and capital goods. Individuals and companies interested in spending cannot do so because of the rigorous credit approval conditions. All of these factors together caused a serious slowdown of global industrial production and trade at the end of 2008.

The situation in developed countries has probably never been this grave since WWII. The current economic mechanisms will have to prove efficient and the US real estate market will have to stabilize if their economies are to turn around and recover by the end of the year. According to the "optimistic" scenario, the annual growth of developed countries will be 1% in 2010.

Developing countries increasingly feeling the impact of the crisis

Developing countries have unfortunately not been in the least immune to the crisis that began in the West. The thesis - that they "decoupled" from developed countries due to their intra-trade - proved to be incorrect. As opposed to 6.3% growth in 2008, the IMF forecasts that annual growth in developing countries will stand at 3.3% in 2009. The slowdown is the consequence of lower imports, lower prices of raw materials and lower external funding (especially in countries with high foreign debts). Given that their economic systems are more stable and disciplined than they used to be, macroeconomic instruments will ease the situation and the growth level will be similar to the level recorded during the global recessions in the past. The situation is especially woeful in poverty-stricken Africa, whose economies rely on revenues from raw material exports.

Lower oil prices and economic slowdown cut inflation

The plunge in world demand has led to the collapse in the prices of energy commodities. The IMF corrected its oil price forecast for the following two years, from $68 t o $50/barrel in 2009 and from $78 to $60/barrel in 2010, given that slower economic recovery also entails lesser demand in the following two years. Apart from oil, the IMF for similar reasons corrected the prices of metal and food, the major export products of developing countries.

The drop in raw material prices and the economic slowdown have slashed inflation and periods of low, even negative inflation are expected. The developed countries' total annual inflation, which stood at 3.5% in 2008, is expected to fall to 0.25% in 2009. Developing countries are also forecast to witness a significant decline in inflation, from 9.5% in 2008 to 5.75% in 2009.

Reference interest rates in developed countries are falling

The monetary authorities of developed countries, especially the US and UK, slashed their reference interest rates after inflation fell, to extremely low levels. Fiscal deficits have grown because monetary measures have not stabilized the economies yet. The fiscal economic stimulus packages, primarily, and the reduction of fiscal incomes will lead to higher fiscal deficits. Automatic stabilizers and financial sector recovery costs will increase expenditure, while capital gains tax will not generate revenue due to the fall in share prices. The average fiscal deficit of developed countries stood at 3.25% GDP in 2008 and is expected to rise to as much as 7% in 2009.

Eurozone

The Eurozone had lower GDP growth than expected in Q4 (-5.9% q/q[4]). The greatest surprise came from Germany (-8.2 q/q), whose exports were prominently slowed down by the fall in external demand and world trade volume. Another factor contributing to low GDP growth in

4 Unless specified otherwise, all quarterly GDP rates are hereinafter seasonally adjusted annual rates.

Q4 was the lack of capital investments given the declining capacity utilization in the Eurozone. Surveys show a drop in consumer confidence and weaker retail turnover, indicating that personal consumption, too, contributed to such low quarterly results. All these factors resulted in negative growth (-1.2%) in the Eurozone in Q4 over Q4 2007. This is the first time negative quarterly GDP growth was recorded at the annual level since the European Monetary Union was founded.

Annual inflation stood at 2.3% in Q4. It kept falling further every month in the quarter, down to a mere 1.6% in December, i.e. half the October rate. The fall in energy prices was crucial for the drop in inflation. Surveys demonstrate a sharp decline in capacity utilization, which, together with inflation, increases deflation risk.

Reference interest rate near historical minimum

After a sharp 0.75 percentage point cut in December, the European Central Bank reduced the reference interest rate by another 0.5 percentage points in January. The reference interest rate, now standing at 2%, is the lowest since 2003. The cut ensued in response to the disastrous economic survey results and industrial production data for the last two months of 2008. This is why this rate level has not been defined as the minimum level and is expected to be further lowered if necessary to boost the economy. Prices are stable; a further drop in activities may trigger deflation. ECB President Trichet hence warned of the "liquidity trap" for the first time and the need to avoid it[5].

Unemployment is growing

Unemployment in the Eurozone grew from 7.7% in October to 7.8% in November. In Spain, it rose from 12.8% in October to as much as 13.4% in November. In Germany, unemployment increased in Q4 2008 for the first time, after previously declining for 34 months. There is a divergence between the situation in the labor market and the results of surveys of other economic indicators. Unemployment rose by 0.6% in the Eurozone and by 2.4% in the US in 2008, although both economies witnessed a relatively similar fall in economic activity. The survey results mostly mirrored those during the recession in the early 1990s, but the level of unemployment did not correspond to the one in that period. Unemployment is expected to soar in the following months, as there is probably still a historical correlation between unemployment and economic activity surveys.

Eurozone exports have fallen due to lower demand across the world. Germany has suffered the most because it is the biggest exporter. Its monthly exports in November fell by 10% and its trade surplus Was $8 USD lower than in November 2007.

Germany adopts second fiscal package to counter recession

Like in the US, financial sector support measures were succeeded by fiscal measures. Germany also prepared a second package after the first one. Together with this second package, total fiscal aid in the Eurozone went up to *circa* 1% of it's GDP . Sectors struck hardest by the crisis are aided: the car industry and construction. This aid will slow down the fall in domestic demand and the growth of unemployment. Apart from Germany, Italy, France and Spain have also prepared similar fiscal stimulus packages. Expenditures on these fiscal packages, combined with increased expenses caused by automatic stabilizers, will double the fiscal deficit in the Eurozone.

Around 6.5% of the employed are in the car manufacturing sector, generating around 7% GDP. With the aim of containing the decline in employment and domestic demand, France and Spain included in their fiscal packages measures targeting new car buyers. For instance, owners of old cars who want to buy new ones are subsidized to trade in their old cars for new ones with ecological engines.

Measures in the construction sector entail cutting down the red-tape to begin construction, tax relief and fast-tracking public works procedures. Germany's second fiscal package envisages €18 bn for the construction of schools, colleges, roads, railways and the Internet network. Spain has earmarked €8 bn for building schools and hospitals and France €10.5 for the construction of railways, the power grid and services.

The Eurozone budget deficit will rise from 2% to 4% in 2009. Given that 3% is the upper

5 The *"liquidity trap"* is a situation in which a central bank lowers the reference interest rate close to zero, but high liquidity fails to boost the economy.

limit in the Eurozone, this situation will be tolerated only in the short term as it is treated as extraordinary.

Economic survey results show serious deceleration, which may indicate that the recession will last longer than expected. Industrial production surveys had the lowest results - at the 1985 level. They are very close to their historical minimum. The results obtained in surveys of services and consumer confidence are somewhat better, but these surveys, too, are sending extremely pessimistic signals.

The European Commission survey showed that capacity utilization in the processing industry stood at 81.6% in Q4 2008 and is projected at 75.2% in Q1 2009. This is the greatest quarterly decline in capacity utilization since the monitoring of the series has begun. The greatest fall in the series was recorded during the recession in the mid-seventies, when it stood at 3%. The decline is omnipresent and widespread both in terms of country and industry. The fall in the manufacturing industry, lower consumption of capital goods and possibly deflation may thus be expected.

United States of America

GDP growth in Q4 2008 was higher than expected. Instead of the 5.5% q/q contraction, preliminary measurements show that the decline stood at 3.8%. The final product sale component was higher than forecasted, although the decline remained considerable (5.1% q/q). Also, supplies increased unexpectedly. This is bad news for Q1 2009, however, because the unexpected supplies will be corrected by lesser production. This correction will not, however, affect the 2009 growth forecasts because the supplies effect will be offset by the latest fiscal package that will boost the sale of final products.

Low personal consumption is the chief reason for the GDP fall. Its decline in Q3, the greatest since 1980, was caused by increased unemployment, the decline in real estate and share prices as well as by increased savings. Savings grew 0.6% in August and 2.4% in October y-o-y. Fears of job loss have prompted citizens to save.

FED lowers reference interest rates to historical record low

Inflation pressures nosedived and the Federal Reserve decided to use the reference interest rate to avert deflation and boost the economy. The reference interest rate is now at its record low of 0.25%. Such low rates are ordinarily seen only in Japan.

Nearly 3 million people lost their jobs in 2008

The unemployment rate stood at 7.2% in December, the maximum in the past 15 years. The labor market has been weakening and 100,000 jobs were cut on average every month until last July; in November, 533,000 people lost their jobs. A total of 2,589,000 people lost their jobs in 2008. Unlike the previous quarters when most of the lay-offs occurred in the construction and processing industries, the services sector was hit the hardest by job loss in Q4, which indicates that unemployment is spreading across the economy. As expected, only people employed in the health, state administration and education sectors are immune to the process.

The analysis of foreign trade demonstrates weak import and export indicators both for the US and its trade partners. Exports have been falling due to lower external demand. Imports recorded an even greater decline notwithstanding the rise of the dollar because US consumers have been refraining from buying. The balance of payments deficit fell by $16 bn in November, while in October it remained more or less the same as in September.

"Colossal" fiscal package adopted at President Obama's initiative

President Barack Obama initiated the process of designing a fiscal package to help economic recovery. A $787 bn fiscal package was adopted after only a month. Some of its main features include[6]:

– $288 bn tax cuts for individuals and businesses;

– $61 bn for infrastructure investments (roads, modern railways, ports, airports and public residential buildings);

6 „Getting to $787 Billion", February 2009, *Wall Street Journal*.

– $90 bn for the "Medicaid" program;

– $71 bn for education, social security, health care system improvements;

– $50 bn for the energy system and environmental protection:

– The implementation of the package is to result in the creation of 3.5 million jobs

The package had to be approved by both the House and the Senate before President Obama could sign it. The first version of the package won the majority in House. The Senate then voted in an $838 bn plan differing from the House package. Many of the items were identical but differed in the amounts of allocated funds. The House package included items absent from the Senate package and *vice versa*. After both the House and the Senate voted the packages in, they established contact and reached an agreement on the final package, which was then submitted to the President to sign.

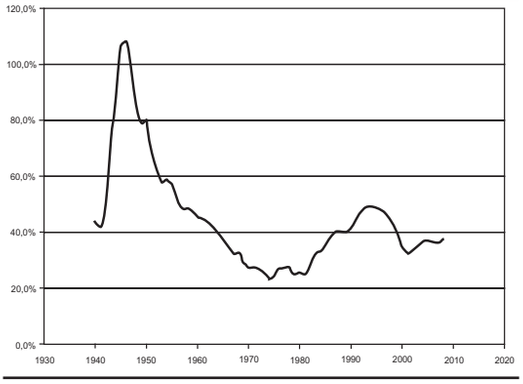
President Obama tried to muster a broader, national support, and not merely his party's backing, for the package. The US has not had such a large fiscal package for a long time. It may have some negative effects but is probably inevitable at this moment. Given the circumstances, it should preferably enjoy the broadest political support to ensure political stability, like President Bush had for his financial package last year. However, not one Republican member of the House voted for Obama's plan. The Senate majority was obtained thanks to the three Republican Senators who voted for the package.

To alleviate the Republicans' fears of corruption and irrational spending, Obama pledged full transparency and launched a website (www.recovery.org) that will publish how every single dollar is spent. Republicans, traditionally unsupportive of expansive fiscal policies, fear that the deficit will be excessive.

Experts divided over package effects

Supporters of the economic recovery package stress that not only the deficit, but also the debt-to-GDP ratio should be taken into account. From the historical perspective, the debt-to-GDP ratio (Graph T9-3) was not too high at the moment the fiscal package was reviewed[7]. The argument is that the economy is able to bear the burden of the increased deficit. The situation is, however, alarming if one bears in mind the budget deficit, which stood at 1.2% of GDP in 2007. The maximum deficit in the 1990s was recorded during Clinton's administration in 1992, when it stood at 4.7%. Obama's fiscal package will probably lead to a hike in the deficit that will exceed 10%, amounting to as many as $1.5 trillion! Moreover, if the estimated package and TARP expenses turn out to be higher than planned, the debt-to-GDP ratio may exceed 50%. The uncertainty lies in the pace of economic recovery. If the economy really recovers relatively rapidly, it will be able to bear the costs of the package without suffering graver consequences.

Graph T9-3. US: Debt-to-GDP Ratio, 1940–2008



Source: Economic Policy Institute.

More conservative economists question the effects of the fiscal package on employment. President Obama has frequently mentioned that the fiscal package would create over three million new jobs. However, unemployment grew instead of falling during the Great Depression period after President Roosevelt launched the second New Deal package; it dropped to below 20% only on the eve of WWII.[8] Heritage Foundation economists state that Japan tried a similar strategy and voted in eight financial packages after the 1990s recession, but that they failed to prevent "stagnation".[9] This package can fund half of the current high-schoolers,

7 „False fiscal dilemma", John Irons, Economic Policy Institute, October 2008.
8 "More federal spending: New deal or raw deal?", Heritage Foundation, January 2009.
9 "Why Spending Does Not Equal Stimulus", Heritage Foundation, January 2009.

law studies, and $150 bn would be left over. To underline how colossal the package is, experts highlight that it equals Australia's annual GDP.

A kind of so-called bad bank will most probably be established in the near future

US experts are increasingly supporting the idea advocated by the IMF as a final solution to the financial crisis. A new approach is recommended given that TARP failed to resolve the problem of transparency and restore the functioning of interbank markets. It envisages the establishing of a so-called *bad bank* that would collect bad mortgage loans in one place and unburden private banks. US society would find this more acceptable than the nationalization of banks, the shares of which would be sold after the economy recovered. Nationalization would harm the shareholders the most and such state interference would be perceived as too "leftist" given the US libertarian tradition. The Nordic countries resolved their banking crisis in the early 1990s by nationalization, but the bank shareholders paid the greatest price. To avoid nationalization, the banks will have to sell their bad mortgages, swapping them for state bonds and partly bear the costs of the bad assets. The remaining costs would be evenly shared by the tax payers. Like with the TARP, the prices at which the bad credits will be bought from banks is the critical part of the plan. The price should be set low enough for banks not to find auctioning off the real estate themselves more profitable. A too high a price would, on the other hand, reward, at the expense of the tax payers, those who performed badly in the market.

The situation in the real estate market remained woeful. Many economists claim that the recession cannot be overcome unless this market recovers. Interest rates on mortgage credits dropped since November but several months will have to go by before real estate sales go up. Some hoped that this would happen sooner, but December data proved them wrong. New home sales in December reached a record low since this series began to be monitored back in 1963. In Q4, the sale of new houses fell by 23.7% over Q3. The housing stock to sales ratio stood at 12.9, which indicates that, at the present level of market activity, over one year will be needed to clear the stock of unsold houses. This is why the new fiscal package is targeting new real estate buyers and offering them tax cuts to boost house sales and construction. As soon as housing prices fall, the numerous buyers waiting for them to reach rock bottom will opt for buying. The real estate market activity will thus witness a hike during recovery.

Asia

Japan

Industrial production collapses in Q4, while GDP records 12.7% fall

The fall of the GDP in Q4 stood at 9% q/q. This was the greatest contraction since 1974, when the oil shock in Q1 resulted in a 13.1% decline in Japan's GDP. The main reason for the Q4 decline lies in the fall of real exports, an incredible -45% q/q. This was the greatest quarterly contraction of exports since 1955, when the monitoring of the series began.

Lesser external demand for Japanese cars was the main cause of the decline in industrial production

The Japanese industrial production also recorded a sharp monthly decline in November (8.5%); the projection for December was - 9%. The collapse of the Japanese industrial production was caused by a fall in motor vehicle production, with very low demand for cars leading to a y-o-y decline which exceeded 60% in Q4. Japan mostly sells its cars abroad, above all in the US and Europe, where the consumers tightened their belts because of the recession. The impact of a 1% fall in car production in Japan on GDP growth is four times greater than when the US car industry reduces its production by 1%.

Total annual inflation in Q4 2008 stood at 1%. The fall was above all caused by the decrease in the prices of energy-generating products, because base inflation was stable, at zero. Total inflation fell from 1.7% in October to only 0.2% in December. Negative inflation is forecasted for April. There is again a risk of deflation, wherefore the reference interest rate is nearly zero, standing at 0.1%.

The monthly current account surplus fell by 41% in December and was as much as 61% lower than the average surplus in the first seven months of 2008. This slump above all can be attributed

to the drop in exports. The surplus is expected to continue falling given the decrease in the revenues Japanese companies earn abroad and in external demand.

Unemployment stood at around 4% in December and is expected to grow considerably in the coming months due to lower demand and the collapse of industrial production.

Declining consumer demand has led to a fall in company production in the USA and the Eurozone. The situation in Japan is different. The lower external demand and uncertainty prompted its companies to sharply cut down capital investments, which will lead to a drop in wages and lay-offs. In result, spending will decline. The recession spiral in Western economies moves from households to corporates , while, in Japan, it moves from corporates to households.

China

The Chinese economy has been hit by the effects of the financial crisis more than expected. Growth in Q4 stood at 1.5% q/q, much below the potential level. The following factors led to the slowdown: a drop in exports due to global recession and lesser construction activity. They have, in turn, led to an increase in unemployment.

Annual growth in 2009 revised down to 7%

The pessimistic scenario projected annual growth at nearly 7% in 2009. When comparing this percentage to growth in developed countries, one may have the impression that China will pass through this crisis relatively painlessly. Western economists have, however, for quite some time now been highlighting the hidden risk China may face during the recession. They believe that there is a lower growth limit, below which unemployment may trigger large-scale strikes and unrest given the social tensions in China.

The restructuring of state companies began in the late 1990s. A number of workers, well-organized in trade unions, were dismissed at the time. There was a lot of pressure on the Government and numerous strikes and demonstrations were staged. The Government drew courageous moves notwithstanding the risks and pressures. The unrest did not escalate to the proportions that would have seriously disrupted internal relations in China. From the present perspective, this policy yielded manifold benefits although it was unpopular at the time. Can greater unemployment caused by economic slowdown today destabilize the Chinese political system?

Unemployment is growing in China but does not risk triggering strikes and political tensions

The following two groups will be hit the most by the economic slowdown at the end of the year: East Coast factory workers and college graduates looking for a job in their profession. East Coast factories mostly export to the West and are directly hit by the drop in demand in those countries. These factories mostly employ migrants from farming areas. Under Chinese law, most residents in such areas are allocated land by the state. Therefore, if and when they are laid off, these factory workers will have the option of returning home and making a living by working the land. Six million students graduate from Chinese colleges every year. They will have great trouble finding a job now, but will be able to stay at home for a while and be supported by their parents. In other words, there are shock absorbers to cushion the effects of unemployment growth on both vulnerable groups. Moreover, neither group is well-organized in trade unions or politically, which also reduces the chance of strikes or protests. Finally, China's social policy is much more efficient than it used to be and there is fiscal room to help out the vulnerable groups if need be or stimulate the economy. In conclusion, there are no real grounds for the scenario of large-scale strikes or unrests due to the growth of unemployment.

East Europe and Neighboring Countries

Romania

Romania likely to sign arrangement with IMF to avoid financial crisis

Romania is facing similar problems like other East European countries but also a high risk stemming from the financial crisis. This is why Romania is expected to sign an arrangement with the IMF soon. The leu unexpectedly depreciated in the foreign currency market. The predominant public opinion was that the Romanian Central Bank would react and intervene by injecting foreign currency reserves in the market to prevent the further weakening of the leu. Four lei to a euro was considered the psychological barrier beyond which it would not allow depreciation. One euro is now worth more than 4 leis (1 euro : 4.2 lei), which will hit those whose debts are denominated in euros. Credit activity will slow down, not only because of the financial crisis effects in the West, but because depreciation increases risk and loan costs as well. Romania may face a currency crisis, inflation and a serious degradation of the financial system unless it amends its economic policy.

The depreciation of the leu in a recession may have proved auspicious if the share of debts denominated in euros was lower. However, over half (56%) of the total private debt is in euros. The weakening of the currency increases debt servicing costs. Moreover, depreciation very rapidly spilled over into inflation, wherefore the positive effects of the depreciation on Romanian export competitiveness are low. An additional problem related to exports lies in the fact that wages grew by 20% in 2008, but the unit labor costs in euros were not slashed as production fell. Spending the thin foreign currency reserves to counter depreciation would not yield satisfactory results. The interest rates charged to businesses and the population are much higher than the current reference interest rate. The use of the foreign currency reserves would increase uncertainty and thus lead to even higher interest rates. The solution may lie in an arrangement with the IMF, lower state consumption, increases in taxes and the reference interest rate. Even if the scenario is successfully implemented, Romania will definitely enter recession and have to correct the 3% GDP growth forecasted for 2009.

Domestic demand grew two times faster than the GDP in 2008 due to credits and wage increases. The balance of payments deficit thus reached nearly 14% of GDP. Half of the deficit was last year covered by FDIs. The stop in such investments would slash domestic demand, which would, in turn, result in the correction of the balance of payments. The risk of halting foreign investments was partly eliminated by the issue of additional shares by European banks in Romania. The deterioration of the financial crisis may, however, lead to a sudden halt of capital inflows If depreciation continues, companies may start going bankrupt and the population may find itself unable to pay its credits.

The crisis prompted the Romanian Government to abandon its planned populist budget spending. The EU will probably be interested in helping out, although Romania does not use the euro, because a crisis in Romania would undermine trust in the whole region. Credits drawn by branch offices of Western companies in Romania account for most of the external debt. The crisis will therefore probably be averted by an arrangement with the IMF with the active involvement of the EU.

As opposed to 2008, when growth stood at 8%, this year's growth will stand at -3% if the arrangement with the IMF is reached. The end of the credit boom, the drop in real estate prices and exports due to recession are the main factors of contraction. Negative growth can also be partly ascribed to the high base effects, because Romania had an extremely good agricultural yield last year. All this will lead to a falloff in domestic demand and trade deficit. This is why the Government will probably opt for slowing down the economy, but without further depreciation and destabilization of the financial system. Rapid depreciation would result in very high inflation.

Romania's fiscal policy is also in a specific position. Now that most countries have opted for fiscal expansion, Romania will probably have to pursue a restrictive fiscal policy. The fiscal deficit stood at 5% GDP in 2008, compared to the 3% average in the 2002-2007 period. Taxes will probably be increased because the increase in deficit would also lead to the weakening of the leu.

As in the case of fiscal policy, the monetary authorities are unable to apply instruments characteristic of recession. Lowering the reference interest rate to stimulate the economy is not a particularly realistic option. Cutting the reference interest rate would lead to the depreciation of the leu, which would immediately result in an increase in short-term interest rates. The effect of boosting the economy would thus be immediately reversed, because manufacturers would be unable to refinance the existing credits and continue their production, which would ultimately lead to a destimulation of production.

Currencies and Commodities

The dollar strengthens

The dollar strengthened vis-à-vis the basket of the main world currencies in Q4, achieving its maximum in October. As the effects of recession spread to developing countries, the investors withdrew their capital from their financial markets, which are considered more risky, and invested it in US state bonds. The discrepancy between the FED reference interest rate and those of the other central banks has been reduced wherefore the volume of "carry trade" has fallen, which resulted in the greater buying of USD. BNP Paribas projects that the dollar will continue to strengthen in the months to come and average 1.14 to the euro in 2009.[10]

The price of oil has probably bottomed out

The price of oil has probably bottomed out and is unlikely to continue to extend declines from the Q4 due to global slowdown. For it to decline further, risks arising from political tensions in the Middle East need to be alleviated and the US' relations with Iran, Venezuela and Russia need to improve. This definitely will not happen for some time and the political risk premium will remain. Moreover, OPEC has reduced production and will continue to take such decisions. Extracting oil when the price of a barrel stands at $40 is not profitable in many oil fields. As the economic crisis fades, China's and India's appetites for energy will again grow and the price of oil is expected to return to the $100/barrel level in 2011.[11]

10 *Economic Market Monitor*, December 2008, BNP Paribas
11 *IBIS World Recession Briefing,* "Economic crisis: When it will end?"January 2009.

HIGHLIGHTS: Global Financial Crisis and Serbia

Highlights 1. Options of Fiscal Policy in Recession: Serbia 2009[1]

Milojko Arsić *

Recession tendencies from the last quarter of 2008 show that the growth of the economy in 2009 will be much slower than it was forecast when the state budget was drafted. The inter-annual GDP growth rate was 2.7% in the last quarter, which is the lowest growth rate in the past few years. December data about the flow of economic activities show that the recession tendencies are increasing. Data on the world economy, including our neighboring economies, also show that the recession tendencies are deeper and that they will probably last longer than it was estimated several months ago.

A deceleration or even a drop of economic activitiy and domestic demand will lead to significantly lower revenues than planned. Therefore, it is inevitable not only to rebalance the budget of the Republic of Serbia, but also to rebalance the budget of the Autonomous Province of Vojvodina and the local communities' budgets. In relation to this, there are questions about when the rebalance should be implemented, as well as which are its basic possible frameworks and directions. It is assessed that the budget rebalance will not be implemented before data for the first quarter of 2009 on macroeconomic and fiscal flows become avaliable, both for the Serbian and the world economy. Based on this data, it will be possible to give a more reliable assessment of the economic flows, including public revenue, in the year 2009 as a whole. Among the reasons for the delaying of the rebalance, there is a need to reach an agreement with the IMF, but also the need to more precisely determine how much funds the Government of the Republic of Serbia can provide for the funding of the budgetary deficit. In that sense, it will be necessary to know, at the time of the implementation of the budget rebalance, how much support can be received from the European Union and when.

The increase of the fiscal deficit would alleviate the recession tendencies. The global framework in which the budget rebalance should be placed still cannot be set in a more precise way. However, based on the macroeconomic and fiscal tendencies, it is already clear that during the rebalance implementation it will be necessary to carry out a fiscal adjustment in the amount of[2] 1.5%–2.5% of GDP. The fiscal adjustment can, in principle, be achieved by increasing the fiscal deficit, by decreasing public expenditures and by increasing the public revenues.

The not so improbable drop of economic activity, instead of the projected growth, indicates that a more intense application of anti-recession measures by the state is justified. In that sense, it is assessed that it would be good to increase the consolidated fiscal deficit by around one percentage point of GDP[3] in comparison with the planned deficit of 1.75% of GDP. After the said increase, [4] the fiscal deficit in Serbia would be around 2.5%–3% of GDP, which is at the level of expected deficits in the region (see Box 1). The increase of the fiscal deficit would partially compensate for the significant drop of domestic and world demand for domestic products, which started in the second half of 2008 and has kept increasing ever

Box 1. Fiscal Deficit in Neighboring Countries

The fiscal deficit in the Republic of Serbia can also be assessed through comparison with the deficits in the neighboring countries. According to the analysts' assessments, it is expected that the neighboring countries will achieve the following ratios of fiscal deficits relative to GDP in 2009:

Slovakia around 3% of GDP,

Romania around 5% of GDP,

Hungary around 3.5%-3.6% of GDP,

Czech Republic around 3% of GDP,

Ukraine over 3% of GDP,

Croatia 2.5%–3% of GDP.

Source: www.economy.rs

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1 I would like to thank Professor Pavle Petrović for his useful suggestions he gave me and the comments he made on the draft version of this text.

2 Only after the data for the first quarter of 2009 becomes available it would be possible to make a more precise assessment of the amount of necessary fiscal adjustments.

3 Assuming that the natural growth rate of the Serbian economy is around 5% per year, this would mean that the real fiscal deficit of around 2% of GDP corresponds to the cyclically adjusted deficit of 0% of GDP. A cyclically adjusted deficit is the deficit which would be achieved if: the growth rate of GDP were equal to the natural growth rate, public revenues and GDP are growing at approximately the same rate, and if the real level of public expenditures remained unchanged.

4 Some economists and politicians propose to reduce the fiscal deficit of Serbia, due to the high deficit in foreign trade. These proposals are assessed as inadequate, since their implementation would mean that the state of Serbia is systematically running a pro-cyclic policy, e.g. that in the periods of expansion it additionally increases the demand, and in the periods of recession it decreases the demand. The flawed, expansive pro-cyclic policy in the period between 2006 and 2008 cannot be compensated by a pro-cyclic restrictive fiscal policy in the period of recession.

since. The drop of domestic economic demand is caused by the decrease of foreign capital inflow, which used to finance a significant part of the domestic demand in the previous years, especially that part of demand that relates to private investments. In addition to this, the recession tendencies worldwide have influenced the decrease of demand for products made in Serbia.

The fiscal impulse of around 3.5% of GDP would partially compensate for the expected strong drop of private demand. By increasing the fiscal deficit to, for example, 3% of GDP in 2009, the total fiscal impulse, which includes one part of payments on the basis of foreign currency savings alongside with the fiscal deficit[5], would reach about 3.5% of GDP. The stated fiscal impulse will achieve a macroeconomically relevant positive impact on the growth of domestic demand. In relation to this, the question is whether it is necessary to, through fiscal policy, increase domestic demand given that the demand was 20%-25% higher than GDP in the past several years? The answer to this question is positive, due to the fact that in the past several years the largest part of the demand surplus (over 90%) was generated by the private sector. The said demand surplus was funded from foreign credits, direct and portfolio investments and remittances, including foreign currency pensions. It is expected that in 2009 the scope of foreign investments and credits will be halved in comparison with the previous years, and that the scope of remittances will decrease due to the financial crises in the countries of origin of these remittances[6]. Therefore it is expected that private sector demand will significantly drop due to funding difficulties, which will cause a significant decrease of imports, production and employment. The impossibility of funding private demand from the inflow of foreign funds will generate pressure on the existing domestic resources, including the foreign currency reserves of the NBS. The role of the fiscal impulse is to alleviate the said drop of domestic demand, which would also alleviate the drop of production and employment.

The fiscal impulse will have a positive effect on the position of the country in the balance of payments. Alongside this, two additional questions are raised: first, how exactly will the said fiscal impulse influence Serbia's balance of payments position, and second, how will it influence the long-term sustainability of Serbia's public finance system? It is assessed that the fiscal impulse will have a positive effect on Serbia's balance of payments[7] because the fiscal deficit will almost entirely be funded from foreign assets (credits, revenue from privatization and macrofinancial assistance from the EU), so therefore it will generate an additional inflow of foreign currency on the financial part of the balance of payments in the amount of 3%-3.5% of GDP. On the other hand, the part of the increase in domestic demand that will be generated by the fiscal impulse will also reflect on the increase of imports, which means an increase of the deficit in the trade and current account of the balance of payments. During the previous years, around 40% of domestic demand in Serbia was covered by imports. It is expected that a slightly lower percentage of the growth of state demand will be covered by imports, due to the generally higher inclination of the state demand towards domestic products, but also due to the real depreciation of dinar. If ⅓ of the fiscal impulse is covered by imports, that would generate an increase of imports of around 1 percentage point of GDP. Therefore, the net foreign currency (balance of payments) effect of the fiscal impulse would be positive and it would be around 2.5% of GDP (3.5% of GDP because of the inflow of foreign credits and privatization revenues, minus 1% of GDP because of the increase in imports).

Moderate borrowing by the state, in order to finance the deficit, would not endanger the sustainability of the public debt. It is a different question if borrowing with the purpose of covering the planned fiscal deficit[8], will make Serbia's public debt unsustainable. It is assessed that borrowing by the state, in order to finance the deficit, will not endanger the sustainability of the public debt, mostly because the ratio of public debt and GDP is low in Q1 2009 as well[9] (after a relatively significant depreciation of the dinar) standing at around 30%. The second reason lies in the fact that an important part of the fiscal deficit will be covered from privatization revenues. It is assessed that the privatization revenues from NIS and other privatizations will cover around 40%-50% of the consolidated fiscal deficit in Serbia. Therefore, the net increase of public debt on the basis of the funding

5 Payments on the basis of foreign currency savings will amount to 0.9% of GDP, but one part of the payments will be re-invested in the form of financial savings. Approximately, it is assessed that the payment of foreign currency savings will generate additional demand in the amount of around 0.5% of GDP.

6 Unlike remittances, the inflow of foreign currency pensions will remain stable.

7 The effect of the fiscal impulse on Serbia's balance of payments position is different than the standard situation described in the macroeconomics schoolbooks. In a standard situation, the fiscal impulse has a negative effect on the position of the country in the balance of payments, since the state borrows in the domestic financial market, while the growth of domestic demand increases imports.

8 If the state borrows money in order to pay off the foreign currency savings of citizens, that does not change the total level of public debt, since one state debt is simply replaced by another. Similarly, if the state borrows money in order to pay off the due debts to foreign countries, it will not affect the total level of public debt.

9 One of the good moves of the Government in the previous years was to prematurely pay off the debts to the World Bank and the IMF in 2006. By paying off these debts prematurely in the period of expansion, the Government had created room for the state and the NBS to borrow more money in the period of recession.

of the fiscal deficit will be around 1.5%-2% of GDP. All this leads to the conclusion that net borrowing by the state in the amount of around 2% of GDP in the next few years would not endanger the sustainability of the public debt of Serbia[10].

By investing in infrastructure, future generations will not only inherit debts, but property as well. Regardless of the sustainability of Serbia's borrowing in order to finance the fiscal deficit, there is the question of the justifiability of borrowing from the point of view of transferring the burden of financing of this generation's consumption to the future generations that will have to return the money and the pertaining interest. Even though this problem cannot be entirely removed, it can be significantly alleviated if the state borrows in order to finance the construction of infrastructure (roads, railways, irrigation channels, communal infrastructure and other). In this way, the state will leave the property to future generations, and not only the credits that the future generations will have to repay. Of course, it is of crucial importance to finance those projects which are useful for society, and to make the implementation of said investments as efficient as possible.

The priority of the Government of Serbia is to provide funds for the financing of the fiscal deficit. Of course, the increase of the fiscal deficit demands provision of additional funds for its financing. Therefore, one of the priority tasks of the Government would be to provide financial assets for the funding of the existing fiscal deficit and an additional deficit, as well as assets for an orderly servicing of the public debt. The first step that should be taken in that direction is removing the obstacles for retrieval of previously arranged credits. The provision of additional funds for the financing of the fiscal deficit is a huge challenge for the Government, bearing in mind the rather unfavorable conditions for borrowing both in the domestic and in the international financial market. It is assessed that the best opportunities to provide additional funds are to borrow from international financial organizations, governments of certain countries and the EU. Given that a large number of countries is counting on the afore mentioned sources of funds, as well as that these funds are limited, it is assessed that the Government of Serbia should be much more agile than it used to be in the past few months.

A possible increase of the fiscal deficit, without providing additional funds to finance it, would lead to a delay in state payments. This delay would be unfavorable both from the perspective of anti-recession policy and form the perspective of financial discipline. Such irregular payments would also decrease liquidity and domestic demand, which would reflect on the decrease of economic activity. Furthermore, such a delay would additionally worsen the already decreased level of financial discipline caused by the recession, including the decreased discipline in the payment of tax duties.

Alongside with the increase of the deficit, it would probably be necessary to decrease expenditures. Based on newer macroeconomic and fiscal data, it is estimated that the drop of public revenues in 2009 will be so drastic that the fiscal adjustments through the increase of the fiscal deficit by 1 percentage point of GDP would not be enough, but that it would be necessary to undertake additional fiscal adjustments through the decrease of public consumption, and perhaps even through an increase in taxes. Due to the uncertainty surrounding the economy and domestic demand, the estimated scope of additional fiscal adjustments (in addition to the increase of the fiscal deficit) stands, for now, in the relatively wide range of 0.5-1.5 percentage points of GDP. A more precise assessment will be possible only when the data for the first quarter of 2009 becomes available.

Bearing in mind that the existing budgets of the Republic of Serbia and other state levels from 2009 do contain a strong real, and sometimes even nominal reduction of public expenditures, the space for additional reduction is pretty much limited. When examining the possibility of additional reductions, it is necessary to pay heed not only to the macroeconomic consequences, but also to the social implications of the proposed measures. In order to prevent possible social discontent caused by the reduction of public consumption, it is necessary to present the gravity of the situation to the public in the most thorough manner, but also to explain the measures that are being implemented in other countries. In addition, within the budget rebalance, it is necessary to provide additional funds for the vulnerable categories of population which are endangered the most by the economic crisis (the unemployed, the elderly without pensions, etc.).

It is assessed that, when implementing the budget rebalance, it would be necessary to preserve the policy that existed when the budget was adopted, according to which the reductions of public expenditures should mostly be accomplished through a reduction of current consumption. A reduction of public investments

10 It is interesting to compare the growth of the ratio of the public debt and GDP on the basis of net borrowing by the state with the increase of the debt/GDP ratio on the basis of the real depreciation of dinar. Due to the fact that around 97% of the public debt of Serbia is expressed in foreign currency, the real depreciation of the dinar by 20% increases the ratio of public debts and GDP by around five percentage points. Thus, the intense real depreciation of the dinar is more dangerous for the sustainability of the public debt than, for example, the increase of public debt by two percentage points of GDP in order to finance the fiscal deficit.

in current circumstances is justified only if their implementation is not possible due to organizational and technical difficulties. In a similar manner, it would be wise to transfer the funds allocated for investments in the joint project with FIAT into something else (for example, into additional social programs or into additional incentives for the economy), but only if this does not endanger the implementation of the entire project.

When it comes to the reduction of current public consumption, it is assessed that a non-standard situation demands the implementation of non-standard measures,[11] such as:

- to set the maximal pension level till the end of 2009 at the level of the average wage in the country or at the level of e.g. 30% higher than the average wage,

- to apply the agreed increase of salaries of public sector employees only to the salaries of those employees whose wages are bellow the national average, while freezing the salaries of other employees till the end of the year.

In addition to this, it is necessary to strengthen the measures of internal control in order to reduce the unnecessary waste of funds.

11 If some of the above stated measures are implemented, it is necessary to do it in a legally appropriate manner, in order to avoid the possibility that today's savings might turn into tomorrow's public debt, because of possible disputes of the legality of these measures.

Finally, one of the possibilities for reducing the budgetary deficit is also to increase the rates. The circumstances to apply such a measure are unfavorable[12], but it should not be rejected as a possibility, if the state balances are not stabilized through the increase of the deficit and he decrease of public consumption. If tax increases are necessary, the most suitable option is to increase the general rate of VAT. From the perspective of the functioning of the economy, it is more favorable to increase the VAT rate than to increase the tax rate on production factors (income tax, profit tax). Moreover, if the VAT rate is increased by two percentage points, that would probably create enough space for a increase of the non-taxable part of wages to, for example, 8000 RSD. The increase of the non-taxable part of wages would create space for a decrease of labor expenses and/or for an increase of net wages, which is especially important for poorly paid workers who are engaged in activities that require a lot of hard work, such as, for example, the textile industry. However, the increase of the VAT rate would cause a one-off jump in prices, which would make an increase of official inflation forecasts necessary.

12 In the theory of economics, it is often recommended to decrease taxes in periods of recession, in order to increase private revenues and encourage private demand. However, this proposal is not appropriate when the private sector is restraining itself from consumption because of high risks – in such circumstances, the growth of private consumption caused by a decrease in taxes will be relatively modest.

Highlights 2. Reach and Limitations of Anti-Recession Measures of the Government of the Republic of Serbia

Milojko Arsić *

During January and in early February 2009, three packages of economic policy measures were adopted in Serbia. The first package consists of a set of laws that reduce the risks and expenses of operations in the financial sector. The most important measures within this particular package are the following:

– the amount of insured bank deposit of citizens was increased from 3000 to 50000 €,

– the application of the interest revenue tax and tax on capital gain in securities trade will be suspended in 2009.

In the end of January, the Government adopted a second package of economic policy measures whose immediate objective was to encourage the credit activities of banks, while the final objective was to soften the recession tendencies in the Serbian economy, by encouraging of the domestic demand. The most important measures within this particular package are the following:

– subsidized interest rates on commercial banks' credits to companies (amount of credit 40 bn dinars, interest rate 5.5%, payment deadline up to one year),

– subsidized interest rates on commercial banks' consumer credits approved to citizens for the purchase of domestic products (amount of credit 20 bn dinars, interest rate 4.5%-6%, payment deadline depending on the product value – seven years at most.)

– participation of the Development Fund in investment credits and approval of state guarantees for ¾ of banks' participation in approved credits (amount of credit 17 bn dinars, participation of the Development Fund 5 bn, participation of banks 12 bn, state guarantee covers 9 bn dinars of bank credits, deadline 3-5 years, interest rate around 6%).

In addition to this, credits from abroad were presented as a part of this package (EIB, KFW, EBRD and

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I would like to thank Professor Pavle Petrović for his useful suggestions and the comments he made on the draft version of this text.

the Government of Italy) in the amount of €480 mn (around 45 bn dinars) which will focus on crediting small and medium enterprises. The credits are approved through domestic banks, under conditions which are more favorable than the market ones. In addition, the Government redefined the existing incentive measures (subsidies for apartment construction, crediting of export, encouraging of foreign direct investments) by putting them in function of anti-recession policy and preservation of employment.

In early February, the Government also adopted the Action Plan for the construction of the road and railway Corridor 10 for 2009, in order to generate a positive impulse for economic activities within its anti-recession policy through an increase of public investments. In addition to its anti-recession function, this package of measures has a long-term objective, which is to build a modern traffic infrastructure as a necessary precondition for the overall development of economy.

The scope of planned works on the highway in Corridor 10 is set within a wide range from 10 to 112 km of highway, depending on the dynamics of project documentation development, expropriation of land and securing of financial assets. This is why the value of works on the highway construction varies within the interval of around €120 mn in the most modest option (construction of 40 km of highway and a part of the Belgrade bypass) to as much as €550 mn in the most ambitious option. The value of planned railway works in Corridor 10 (construction of railroads and the railway station Prokop, project documentation development) in 2009 stands at around €190 mn, out of which the funds in the amount of around €80 mn are already provided (credits of the European Investment Bank). To summarize, it seems that the value of works on the road and railway infrastructure in Corridor 10 is set somewhere between a minimum of €200 mn (0.6% of GDP) to over €700 mn (2.1% of GDP).

In addition to the three above stated packages of measures adopted either by the Government of the Republic or by the National Assembly, in early February the Minister of Economy and Regional Development proposed state investments in industrial capacities (Copper Mining and Smelting Complex in Bor, Methanol – Acetic Acid Complex in Kikinda, Fertilizer complex in Pančevo and others). The program mostly includes large industrial enterprises that are significant exporters, but which have not been privatized in the previous period of time, or their privatization has failed. The stated program has gained a strong support from the cities in which the said investments would be implemented, but at the same time there have been a lot of additional requests to expand the program to other large state enterprises that have not been privatized or whose privatization had failed. The expert public mostly reacted negatively towards the stated proposals.

Assessment of the Macroeconomic Reach of the Measures Foreseen by the Government of the Republic of Serbia

The adopted packages of measures, as well as the initiative of the Minister of the Economy, can be assessed from the perspective of their macroeconomic implications, as well as from the perspective of their market orientation.

The first package of measures is mostly inarguable, albeit its reach is somewhat limited. The announcement of this package has stopped the withdrawal of bank deposits, but the significant amount of deposits which were previously withdrawn, have, as of yet, not been redeposited. A moderate growth of foreign currency savings in 2009 can be expected only if the trust in the economic policy of the Government and the NBS is restored. A possible implication of serious disturbances on the foreign currency market might lead to panic and mass withdrawal of citizen's foreign currency savings from the banks – in spite of the state guarantees.

The second package of measures of the Government of the Republic of Serbia is focused on trying to soften and partially compensate for the drop of credit activities of domestic banks, as well as for the drastic decrease of foreign capital inflow (credits and foreign direct investments). In this sense, it is assessed that this packaged is aimed at blocking, as far as possible, the key channels through which the global economic crisis has been causing a decline of economic activity and the growth of unemployment in Serbia. One part of these measures (subsidies for consumer credits) is focused on increasing domestic demand for domestic products, which acts as an incitement for the domestic economy and simultaneously contributes to the alleviation of the highly pronounced misbalance in foreign trade.

The overall value of the stimulative domestic and foreign credits stands at around 122 bn dinars (around €1.3 bn), which is around 4% of the expected GDP of Serbia in 2009. Domestic credits planned in the Government's package of measures are around 77 bn dinars (77=40+20+17) which would generate an increase of domestic credits by about 11% relative to the end of 2008. Foreign credits in the stated package of measures stand at slightly below €500 mn.

The macroeconomic significance of the stimulative credits can be assessed by comparing them with the

growth of domestic credits and inflow of foreign capital in the previous years. In the period from 2005 to 2007, Serbia has achieved a GDP growth of around 6% annualy, including:

– the growth of domestic credits at an average rate of over 30% per year,

– an average inflow of foreign credits in the same period of €3.4 bn per year,

– direct foreign investments at an average of €2.4 bn per year,

– the total inflow of foreign capital (credits + foreign investments) at around €6 bn per year – an average of around 22% of GDP.

The macroeconomic (in today's circumstances anti-recession) importance of investments related to Corridor 10 essentially depends on the scope and timing of investments that will be implemented. Based on the time needed for the development of project documentation, the time and the funds needed for land expropriation, the time needed for organizing the tenders, the possibility of providing additional funds, the condition of construction equipment etc., it is estimated that the value of implemented works in 2009 will be between €200 mn and €300 mn at best, which is 0.6% to 0.9% of expected GDP.

When assessing the macroeconomic effects of the measures contained in the second and the third package, it is necessary to take into consideration the possibility that the level of their implementation in 2009 could be much lower than it was foreseen in the Government's plans. In the case of stimulative credits, the Government only plays the role of the catalyst in the transactions between mostly private banks and mostly private enterprises. The decision whether to approve the credits planned in the second package of measures, and if so, how many, more often than not depends on the banks, i.e. their credit potential, business opportunities, perception of risks etc. Therefore, the possibility that the real amount of approved credits would be much lower than planned should not be excluded. As a result, it is suggested that the Government should monitor the approval of stimulative credits on a monthly basis, and if it perceives a significant deceleration of credit approval, it should undertake additional or alternative incentive measures.

In the case of the implementation of infrastructure investment projects, there is a possibility that the total implementation in 2009 will remain at the lower boundary of the assessed interval (around €200 mn), with the largest part of the investments implemented in the second half of the year. The main reasons for a slower implementation of investment programs are related to land expropriation (delay in passing of the new law on expropriation, lack of funds for expropriation, possible disputes with the land owners, etc.), to lack of project documentation, and to the time needed to select a contractor who will carry out the work.

In case the measures from the second and the third package are implemented to a significantly smaller extent than the Government has planned, their positive anti-recession impact will be proportionally lower than assessed. Bearing in mind that the speed of the state's reaction is of crucial importance for the success of anti-recession measures, in the case of a significantly slower implementation of infrastructure projects, it is necessary to undertake alternative measures which will increase domestic demand in a short period of time. Among these measures are one-time transfers to poor categories of population which are highly prone to consumption (e.g. transfers to social assistance beneficiaries, the unemployed, persons older than 65 who receive not pension, etc.). If it comes to this, in order to preserve the long-term sustainability of the social protection system, it is of crucial importance to approve this as one-term assistance, and not to permanently increase the rights in the social protection sphere.

The macroeconomic importance of the possible implementation of state investments in the industrial sector cannot be assessed in a more precise manner, because it is not known, even approximately, what the total cost would be. However, it is assessed that they would most probably have a positive short-term and long-term impact on employment and export. On the other hand, their long-term impact on the economy would probably be negative, since the preservation of inefficient production would demand perpetual state subsidies for the enterprises concerned.

This all means that the stimulative measures in the Government's package are relevant from a macroeconomic aspect, but that it is not certain whether they are sufficient to more significantly compensate for the expected drop in the inflow of foreign capital and the decrease of the banks' approval of domestic credits without subsidies. If the net inflow of foreign capital, including state borrowing from abroad, should prove to be low in 2009 (e.g. at €2 bn or less), this will cause dramatic problems in the balance of payments and in the foreign currency market (decrease of foreign currency reserves, depreciation of the dinar). A possible more severe depreciation of the dinar in 2009 would complicate not only the servicing of foreign credits, but also of domestic credits which are mostly (around 70%) denominated in euros. Such a turn of events would, in turn, have an impact on capital flight from Serbia,

quicken inflation, exasperate the crisis in the banking sector, lead to a decline of economic activity, etc.

Therefore, it was assessed that it would be necessary to expand the existing Government's program in such a way that would provide additional inflows of foreign currency from abroad through borrowing (credits for infrastructure construction, macrofinancial support to the Serbian budget by the EU etc.) and attract foreign direct investments. The credits that the state would draw from the IMF would have multiple positive consequences: they would provide the funding of the budgetary deficit, the economy would get a positive impulse through public investments, and the increase of foreign currency supply would have an impact on the stabilization of the foreign currency market. For that reason, it was assessed that it would be necessary to provide additional funds from the IMF in order to prevent possible problems in the balance of payments.

All in all, it is assessed that it is necessary to thoroughly reexamine the Government's economic policies, which would include a possible rebalance of the budget upon the end of the first quarter (see Chapter 6 *Fiscal Flows and Policy* for its section on the rebalance of the budget), but also a definite (instead of a temporary) abandonment of the implementation of certain promises from the election campaign (growth of pensions to 70% of the average salary, growth of salaries of around 20% due to the application of the General Collective Agreement, etc.).

Anti-Recession Economic Policy and Economic Reforms

The anti-recession policy of the Government should not push aside the continuation and quickening of economic reforms, and it certainly should not contain any anti-reform measures. Therefore, it is necessary, alongside with the implementation of the anti-recession policy, to quicken the adoption of reform legislation and to improve the implementation both of previously adopted laws and laws that are yet to be adopted. During the previous three years, the long-term breaks in the work of the National Assembly have significantly slowed down the adoption of the reform legislation – for some of these laws, it takes between one and two years until they are put up for discussion and adoption. Among these, the following laws are of particular importance: the laws establishing a competitive environment (essential amendments to the Law on Protection of Competition, the Law on State Assistance), the laws regulating ownership and property (Law on Public Property), the laws improving the functioning of the financial system (the new Law on Securities, Law on the National Bank of Serbia, etc.), the laws improving the public finance system (the new laws on the budgetary system and public debts) and others.

In addition, the lack of progress in the functioning of state institutions, with an occasional worsening of the situation, caused an inconsistent implementation of the adopted reform-oriented legislation (Law on the State Audit Institution, provisions of the Law on Tax procedure and Tax Administration that are related to the cross-assessment of the tax base, and others). The increase in the efficiency of the courts is of crucial importance for a more consistent application of the laws regulating economic life. The widespread presence of incompetent, sometimes even corrupted, political party activists in important positions in state bodies has additionally slowed down the progress in the functioning of state institutions. This implies a pretty inadequate human resource policy in the political parties, which appoint incompetent people to important positions in state institutions, who, on top of that, often do not highly value the public interest, including the citizens' interest in establishing a modern market economy in Serbia.

Bearing all this in mind, alongside with the implementation of the active anti-recession policy, it is necessary to speed up economic reforms, including both the faster adoption of new legislation and a more consistent implementation of the existing one. A quickening of reforms is in line with the needs of the Serbian economy, in order for it to be able to attract a significant amount of capital from the world market, both during the global recession and especially after it is gone.

Of course, the reforms that lead to the development of a modern market economy cannot replace the implementation of anti-recession economic policy measures. Even in countries which had exemplary market economies for decades, governments apply strong measures of state intervention in times of recession, in order to soften recession tendencies and encourage a positive impulse in the economy. In Serbia, which is half-way in its development of a market economy, it is even more necessary to undertake strong anti-recession measures. The lack of such measures might result in a drastic drop in production and employment and in growth of poverty, which could provoke social discontent. Social discontent is more likely to turn against the implementation of market reforms than against the strengthening of requests to speed up those same reforms. Therefore, when it comes to packages of measures, it is important both for the proposed ones and for future ones to remain consistent with the development of a wholesome market economy, but also to be accepted by wide sections of the population.

The final version of the Government's measures in the second package is much more market-oriented

than the measures that were previously announced by representative of the Government. For the largest part of the stimulative credits, the state has chosen to approve subsidies on interest rates, instead of the previously announced loan guarantees, which removed the possibility of moral hazard. The only exceptions to this are the investment credits, since when it comes to this matter, the state gives guarantees to banks for three quarters of their participation. In the final version of the measures the Government has chosen to leave it up to the banks to choose their clients for all types of credits, which is a significant advancement compared to the previously announced important role of the state in the allocation of credits. The only duty of enterprises that use the subsidized credits is not to reduce the number of employees while they are receiving these credits.

The compatibility of the Government's investments projects with a market economy can be assessed both from the point of view of the activities that receive investments, and from the point of view of respecting competitive procedures when implementing the investments. Generally speaking, it can be assessed that the Government's activities in the sphere of infrastructure (where we mostly deal with natural monopolies) are completely in line with the role of the state in a modern market economy. On the other hand, the Government's investment projects in the industrial sector, where there is an environment suitable for market competition, are in contrast with the practice of modern market economies from the past few decades. The question that arises from this line of thinking is whether it is profitable for the state to invest in the projects which are not profitable for the private sector. Given that the state is generally less efficient than the private sector, such state investments can be justified only if the profitability of the project is not crucial for the state – what is crucial, for example, is whether these enterprises are large exporters or if they employ a lot of workers, which conflicts with the logic of market economies. Therefore it is assessed that there are no economically justified reasons for the state to independently implement large investment projects in the industrial sector.

An additional problem with the implementation of state investments in industrial projects is the fact that the announcement and the beginning of implementation of several projects will lead to an avalanche of new requests to expand state investment programs to other non-privatized large public enterprises. By refusing such requests, the state faces the problem of arbitrary discrimination against enterprises. On the other hand, mass approval of such projects is not feasible since the state does not have the funds for their implementation, nor would it be able to receive concession credits for such purposes. However, it would not be good even if the state could implement such projects, since it would implicate the restoration of an inefficient state economy. The argument of "making the state run some enterprises only temporarily" is also inacceptable, since it would be difficult for the state to exit non-profitable business, even if it wanted to, because it would neither be able to find a new private owner, nor would it want to shut down these projects after investing so much money into them. Also, based on the practice to date, it is assessed that it is not very probable that the state, as the owner of the enterprise, would undertake the necessary unpopular measures in order to restructure the enterprise, such as dismissal of redundant workers, firming of the work discipline, etc.

Instead of having state investments in the industrial sector, it is much more appropriate for a market economy to give certain incentives and thus encourage the private sector to implement the said investments. Great export potential of a particular enterprise or a large number of employees working in it might be a justification for state intervention limited by time and resources, with the purpose to make the private owners overtake the said enterprises and then implement all the necessary investments.

Although state investments in the construction of modern transport routes are inarguably justified, it is necessary to make the implementation of these investments efficient, i.e. to make sure that the projects are implemented with the shortest deadlines, with the lowest costs and with a satisfactory quality. In order to achieve this, the necessary (albeit not the only) condition is to strictly respect the competitive procedures when selecting the contractor who will carry out the works, as well as to hire the appropriate independent monitoring bodies which would supervise the implementation. The idea to speed up the implementation and therefore make up for the time that was lost due to delays in project development and land expropriation cannot be a valid reason for skipping competitive procedures. If the competitive procedures and the appropriate supervision are neglected, that is the almost sure way to get involved in expensive, slow and inefficient projects, with a high risk of corruption.

Highlights 3. Effects of the Measures of the National Bank of Serbia on the Banking System

*QM**

In early October, soon after the bankruptcy of *Lehman Brothers Bank*, the Serbian banking sector was strongly hit by the financial crisis. The amount of withdrawn foreign currency savings in the panic wave that gripped the depositors and lasted form early October to mid-November, reached €960 mn. Aside from this, the fact that foreign owned domicile banks have prematurely repayed their credits to their parent banks has additionally decreased the supply of foreign currency on the interbank foreign currency market (IFCM), and as a consequence, pushed the value of the dinar further down. The NBS, in order to increase the supply of foreign currency, has undertaken the following measures:

– It facilitated new foreign borrowing, through a change of regulations relating to reserve requirement, and made it possible for new borrowing to be free from assigning reserve requirements;

– It doubled the amount of foreign currency reserve requirements that the banks calculate on foreign currency basis (but hold in dinars on gyro accounts) – first from 10% to 20% and then from 20% to 40% of assigned assets;

– It "froze" the absolute amount of assigned reserve requirements at the level from the end of September of 2008, in order to prevent premature repayment of credits to foreign banks. In that manner, the banks were discouraged from prematurely returning the credits to their parent banks, because the assets assigned on the basis of reserve requirements were not returned to them. It is important to note that this measure does not explicitly forbid banks from repaying credits to their parent banks, but dissuades them from that indirectly; the measure has a time limitation and will last until June 17th when it will be reconsidered.

– It reduced the maximum amount of the open foreign currency position to 10% of the capital in order for the banks not to hold the so-called *long foreign currency position* in the maximum amount of 20% of the capital (the positive difference between foreign currency assets and foreign currency liabilities) owing to which they deepened the insolvency of the interbank foreign currency market in October and November.

The banks – in order to replenish the part of foreign currency reserves issued in dinars, as well as to cover the payment of prematurely withdrawn savings deposits and the premature repayment of foreign liabilities – have reduced the repo placement stock by 151 bn dinars from the end of the September to the end of December. This stock was subsequently mildly increased after the demands related to foreign currency reserve requirements were met, and after the introduction of measures which have *de facto* prevented the premature repayment of foreign liabilities.

All these measures, along with the daily interventions of the NBS on the IFCM and the increased reference interest rate of 17.75% on biweekly repo operations, have still failed in stopping the depreciation of the dinar. In the context of Serbia's high current account deficit, the sudden stop in cross-border credits and of the increases of the banks' share capital has caused a strong disruption in the supply of foreign currency, which in turn lead to strong depreciation pressure. In the conditions of an expected depreciation of the dinar and of the global insolvency on the money markets, the high repo rate was unable to attract new deposits from abroad (so called *currency trade*, i.e. the borrowing of foreign investors in domestic currencies that carry smaller interest rates and the placing in non-risky repo placements of NBS that carry drastically higher interest rates), or to at least ensure the maintaining of the existing stock of repo placement, because of the expectation and fear that the dinar depreciation could bring higher losses than the interest incomes from those placements.

Attempting to reduce the high rates of "eurization" of the domestic economy and improve the position of debtors with currency-indexed credits, NBS has made an agreement with the four largest banks to make possible for their clients, starting from November 24th, the following:

– Premature repayment of credits without additional costs (except in the case of refinancing),

– Prolongation of the repayment period of credits in use for up to a year, on client demand,

– Conversion of foreign currency indexed credits into the dinar ones, on client demand,

– Conversion of credits indexed in Swiss francs into the ones indexed in euros, also by client demand.

All in all, it seems most likely that this measure has not brought about any substantial changes, but there is a possibility that the clients, with the passing of time and paying of elevated liabilities linked to indexed credits, will subsequently realize the benefits of transferring to dinar credits. In early February the NBS has amended and passed several decisions complement with the Government's package of measures for the mitigation of the negative effects of the global economic crisis, which enabled the approval of cheap credits for solvency and

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investments in the economy, as well as consumer credits for the population. Provisions which will especially stimulate consumers to use the options for premature repayment and conversion of credits into dinars were provided in the framework of these decisions.

Practically discontinued *cross-border* credits, deposit withdrawals, but also high interest rates on indexed credits which are a consequence of high reserve requirements and the growth of risk premiums on investment in Serbia – these have all caused a complete disappearance of credits in Serbia in Q4. As we predicted in the previous issue of *QM*, in such an environment, additionally burdened by the strong depreciation of the dinar, the debtors and producers of goods sold on credit (apartments, motor vehicles, technical goods) suffered the most serious consequences, especially those whose income is in dinars. Unofficial information indicates that the most affected ones are retailers and builders. Simultaneously, there is a sharp drop in foreign demand for export products, so exporters are not in a much better position, apart from being protected from foreign currency risk.

The banking sector has suffered strong pressure because of all of the abovementioned, so uncollectible credits are increasing. Owing to the very high capital of the banking sector (about 24% of total banking sector liabilities), its solvency has not been put into question for now, but this could also happen if business operations of their debtors deteriorate further. The main factor that can cause this deterioration of economic activities, beside the decline of sales, is a further strong depreciation of the dinar. Considering that about 70% of all credits (both enterprise and consumer) from the local banks and 100% of *cross-border* credits are linked to the dinar-euro exchange rate, and partially to dinar-Swiss franc exchange rate, the depreciation of the dinar from September until the end of January caused a growth of liabilities related to indexed credits.

Still, companies are those that are mostly affected by the depreciation of the dinar. In the following example, based on the real practice of determining interest rates, we review the influence of the decline of the variable part of the interest rate (in majority of cases this is the three-monthly Euribor) and the dinar depreciation in Q4 on typical residential credits and investment credits for companies.

As it is obvious from this example, companies suffer a much greater burden, i.e. the increase of monthly rate in dinars, which is a consequence of a much shorter deadline for a typical investment credit given to a company as opposed to residential credits, but also of the difference created by the credit repayment method.

Table 1. Assessment of the Influence of the Reduction of the Reference Interest Rates and the Depreciation of the Dinar on the Monthly Installment for Euro Denominated Loans

Type of loans	Housing loan [1)]	Investment loan to a company[1)]
Maturity in years	20	5
Repayment method	equal annuities	equal principal repayments, interest on the remaining principal
Principal amount, in euro	100,000	1,000,000
Variable part of interest rate, september 2008 (3M euribor)	5.0%	5.0%
Fixed part of interest rate	2.0%	5.7%
Interest rate p.a.	7.0%	10.7%
Installment in euro	775.3	25,616.7
Dinar exchange rate against euro	76.0	76.0
Installment in dinars	**58,922.7**	**1,946,866.7**
Variable part of interest rate, september 2008 (3M euribor)	3.0%	3.0%
Fixed part of interest rate	2.0%	4.1%
Interest rate p.a.	5.0%	7.1%
Installment in euro	660.0	22,583.3
Dinar exchange rate against euro	94.0	94.0
Installment in dinars	**62,035.8**	**2,122,833.3**
Change of installment in dinars	**5.3%**	**9.0%**

1) In both cases we consider the case of initial installment, while consideration of a loan already being repaid for some time could change the outcome but not the final conclusion.

Highlights 4: Effects of the Global Financial Crisis on Serbian Labor Market

Mihail Arandarenko *

Global Effects

In January 2009, the International Labor Organization (ILO) and the European Commission have published their official forecasts of fluctuations on the international labor market, and the European Union labor market. Both organisations envisage a significant worsening of key indicators of the labor market (KILM) in the next few years.

In the EU, the financial crisis affected the labor market already in 2008. Nevertheless, it is estimated that in 2008 employment will rise by 0.9%, which is 0.8 percentage points less than the rise in 2007. For 2009, on the contrary, it is estimated that employment will fall by no less than 1.6%, which means that about 3.5 million jobs will disappear. Employment will continue to decrease

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in 2010, but the fall is expected to be slower (0.5%), i.e. more than a million workplaces. Cumulatively, in the next two years employment in the EU-27 will fall by almost five million. The general unemployment rate in the EU will consequently rise by almost a quarter, from today's 7.5% to 9.5% in 2010. In the Eurozone, this figure will be 10.2%. The last time the EU had a double-digit unemployment rate was in 1998.

Table 1. Countries with the Highest Expected Decrease of Employment and Rise of Unemployment

Country	Number of employed, % change relative to previous year		Unemployment rate		
	2009	2010	2008	2009	2010
Spain	-3.9	-2	11.3	16.1	18.7
Ireland	-4	-1.5	6.5	9.7	10.7
Latvia	-5.8	-2.8	6.5	10.4	11.4
Lithuania	-3.9	-1.6	5.4	8.8	10.2
Estonia	-4	-1.1	5.1	8.8	9.7

The ILO estimates regarding the labor market fluctuations in world regions are given in three possible scenarios (optimistic, medium and pessimistic). According to the optimistic one, based on the already abandoned IMF projections from November 2008, unemployment in the world will grow by eight million in 2009, from 190 to 198 million. According to the most pessimistic scenario, unemployment will rise by as much as 40 million, to 230 million. In this worst-case scenario, it is indicated that world unemployment rate will rise from today's 6,0% to 7,1 % in 2009.

The most developed economies and the EU would be most affected by these changes. The unemployment rate in these countries would rise by 2,2 percentage points between 2007 and 2009. Next in line would be the countries of Eastern Asia, with unemployment rising by 1.9 percentage points in the same period, and then the countries of South Eastern Europe and the ex-USSR countries, where the unemployment rate would rise by 1.3 percentage points, from 8,5% in 2007 to 9,8% in 2009.

Serbian Labor Market Fluctuations

As it is already explained in the section „Employment and Wages" in this issue of *QM*, the apparently spectacular improvement of key indicators of the labor market in 2008 is owed first and foremost to the methodological enhancement of the Labor Force Survey, while the real trend can generally be estimated as mildly positive. The extensive character of employment growth is clearly presented in the next Table:

Table 2. Employment Structure of the Adult Population of Serbia (15+), Labour Force Survey

	October 2007	October 2008	Difference
Wage employees	1,941,000	1,904,000	-37,000
Self-employed	535,000	661,000	126,000
Unpaid family workers	180,000	241,000	61,000
Total	2,636,000	2,806,000	170,000

Table 2 shows that the entire employment growth in 2008 is owed to the mixed growth (mostly because of the larger scope) of two forms of employment characterised by the ILO as "vulnerable" employment – unpaid contributing family workers and self-employed workers. These two „inferior" forms of employment make up almost a third of the overall employment in Serbia today, which is more than double the EU average. On the other hand, the most desired form of employment – paid employment, is even lower than in 2007.

This negative result, bearing in mind the stagnation of public sector employment, confirms that the process of job destruction, as a consequence of privatisation and restructuring, was more significant than the process of creating quality jobs in private sector in 2008, as well. In conditions of zero or negative economic growth, no employment increase can be expected in 2009.

The most effective way to monitor the effects of the global financial crisis on the labor market is precisely the permanent monitoring of the category "employed" from the Labor Force Survey and the category "employees in legal entities" and within the latter, especially those employed outside the public sector from the Survey RAD-1.[1] The said categories are the only ones among labor market contingents which are **pro-cyclical**, while the other categories of employment and the category "Inactive" are **counter-cyclical** (they rise in times of crisis) and thus significantly deform the expected counter-cyclical unemployment flows. To put it more simply, it is better to measure the effects of the crisis by monitoring the fluctuation of categories "employed" (Labor Force Survey) and "employees in legal entities outside the public sector" (RAD), than to monitor the fluctuation of unemployment.

Facing the Labor Market Crisis

The financial crisis has revealed that the present Serbian economy is fragile and not sustainable in the long-run. We enter 2009 with an enormous "party state", a weak economy, bad infrastructure, significant imbalances and a sobering discovery that up until now we lived far beyond our means.

A part of facing reality is the knowledge that for years now the only segments of employment on the rise are

1 RAD is not an abbreviation, and means labor in Serbian. We have, however, opted not to translate it.

the least productive ones – employment in public and local administration, informal employment, illegal work, self-employment, contributing family workers, agricultural workers. Paid employment in the formal private sector is permanently decreasing. Those work places are the most precious ones, since they reflect most clearly the economic health of a country.

The first reactions to the crisis are indicative of today's governing economic ideology. The taxation of foreign currency savings accounts has been abolished. In order to make up for this, the already symbolic increase of the non-taxable part of the wage from five to eight thousand dinars has been abandoned. The sent signal is devastating, at least at the symbolic level – investing in work and production is being punished in order to support financial rentiers.

A range of short-term measures for the maintenance of employment in times of crisis is well known. The most general and the least selective measures are expansive monetary and fiscal policies. In Serbia, unfortunately, fiscal policy needs to be restrictive, since the state spent too much during good times. Serbia does not have enough of its own resources to finance a growth in public investments, because they are pushed out by public consumption. What is left is the monetary policy, where there is still some space for changes: interest rates can be further decreased and restrictions on credit expansion should be additionally loosened.

Specific measures of providing support for companies, such as credit subsidies for firms, which in order to get them are required to abandon dismissals or create new jobs, always have two sides to the story. Subsidies are expensive and thus always selective and favour those using them compared to the excluded ones or those that benefit less from them. Subsidies will certainly help the companies that receive them, but it is much less certain that their overall effect on growth and employment will be positive.

Active labor market measures, such as training, counselling unemployed persons, supporting self-employment, organising public works etc. are completely marginalised. They make up only one thousandth of the GDP, and the budget does not even envisage their nominal growth for this year relative to 2008.

Another way to face the labor market crisis is a social pact. In times of crisis, a social pact means that employers oblige themselves to maintain employment and, in return, trade unions have to renounce strikes and demands for wage increases. Unfortunately, the bizarre history of the negotiations regarding the larger scope of application of General Collective Agreement shows that social partners, including the Government, are not at all ready to be confronted with such a serious situation.

This analysis shows how limited the possibilities of economic policy makers and social partners to ease the negative effects of the crisis on the labor market, really are. If there is something useful in this incapacity, then it is the fact that economic authorities must direct their activities towards a long-term strategic turn towards the real sector and employment.

This turn should be based on a thorough reform of the entire tax and contributions system in order to: decrease companies' labor costs and make them more competitive, stimulate foreign investments and the formalisation of the informal economy, make work profitable and solve the problem of the "working poor". The main elements of this reform should be the increase of the non-taxable part of wages up to the level of the gross minimum salary, an introduction of a non-taxable meal allowance not higher than 10% of the average salary, introduction of a synthetic progressive income tax, and the most radical of all measures, the abolishment of health insurance contributions and financing general health insurance from indirect taxes.

At this moment, there are still no indications that things could turn that way. Contrary to Hungary, which, under thee watchful eye of the EU and the IMF, is currently introducing a reform which will decrease labor taxation by five percentage points, and which will be compensated by an increase in the Value Added Tax (VAT) by two percentage points, in Serbia there are often announcements of a VAT increase, but without the corresponding decrease in labor taxation. Instead of a "soft landing" of the labor market, which means employment maintenance together with nominal wage flexibility, the protection of low-wage workers and a decrease in labor taxation, concessions continue to be made to powerful interest groups, especially in the protected public sector.

The future of this *status quo* strategy (if it can be referred to as a strategy at all), depends the most on the duration and the depth of the crisis ahead of us. The rigidity of wages, the surplus of employees in the public sector and the accumulated obligations towards retired persons can be maintained for some time, but still at the cost of unemployment growth (or, more precisely, as described above, a drop of employment in the private sector) and the poverty amongst the population excluded from the primary labor market.

The truth is that nobody knows how long the global crisis will last and how munch it will impact the economy and the labor market in Serbia. Nevertheless, if the international business climate does not start improving soon, the risk from a "hard landing" of the labor market in 2010 will become real. The traumatic experience from many transition countries suggests that this hard landing can take three forms: first, a massive devaluation of real revenues, especially fixed ones, through high inflation; second, massive delays in wage payment; and third, massive lay-offs. Economic policy makers have a great responsibility to do everything they can to prevent history from repeating itself.

SPOTLIGHT ON:

Corporate Governance in Serbia: Transparency and Disclosure of Information

Katarina Đulić*

This paper presents and analyzes the chief findings of a survey conducted by the International Finance Corporation (IFC). The goal of the survey was to examine how and to what extent Serbian joint stock companies apply OECD corporate governance principles. The results show that the quality of corporate governance in Serbian joint stock companies is still at a very low level. In Serbia, joint stock companies emerged as a result of privatisations (not economic reasons). The ownership structure of joint stock companies is highly concentrated. The majority of listed Serbian joint stock companies are *de facto* not raising capital on the capital market. The survey has also shown that corporate governance is much more developed in the Serbian banking sector. The major problems related to specific aspects of corporate governance include: lack of understanding of the function of specific monitoring and control procedures and of the composition and functioning of managing boards. However, lack of transparency and disclosure are the gravest problem the joint stock companies in Serbia face. The companies, for their part, feel that the inefficient enforcement of company and securities regulations by the courts and other state authorities are the main cause of low quality corporate governance.

1. Introduction

Definition: internal and external aspects of corporate governance. There is no single definition of corporate governance that can be applied to all situations and all legal systems.[1] However, most definitions take into account both the *internal and external* aspects of corporate governance. The *internal aspect* is directed at the very company; corporate governance is perceived as a system of relations defined by structures and processes, which usually focus on mechanisms for ensuring effective company performance and informing investors and the public. The internal aspect of corporate governance has evolved around the principal-agent tension within the company. The *external aspect*, on the other hand, focuses on relations between the company and its stakeholders. Stakeholders are individuals or institutions with interest in the company, such as investors, employees, creditors, suppliers, consumers, regulatory and other state authorities, as well as the local community in which the company is operating. This aspect also analyzes the company's status in the capital market.

This paper takes a somewhat specific **approach** to the analysis of corporate governance in Serbia. It analyzes corporate governance from the viewpoint of the *quality of protection* the corporate governance system provides to external investors.[2] Ensuring the inflow of fresh external capital, the company's efficient business performance and, consequently, maximisation of revenues from invested funds are the main goals of a good corporate governance

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1 The wording of the definitions mostly depends on the institution, author, country, legal tradition. For instance, the International Finance Corporation (IFC) defines corporate governance as "structures and processes for the direction and control of companies". The Organisation for Economic Cooperation and Development (OECD), which published its Principles of Corporate Governance in 1999, defines corporate governance in greater detail, as "the system by which business corporations are directed and controlled" [...] and which "involves a set of relationships between a company's management, its board, its shareholders and other stakeholders Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring" (OECD Principles of Corporate Governance", www.oecd.org).

2 External investors as opposed to insider investors, comprising employee shareholders, managers -shareholders and the controlling shareholders.

system. All three goals will be achieved if the status of the investor – the owner of the capital which the company aims to attract and whose revenue from invested capital is to be maximised by efficient business activity – is defined correctly. The definition of the status of the investor, for its part, entails the correct definition of the investor's rights and obligations in the company and in the capital market. Within the company, the design of the corporate governance system defines above all the role of the manager (the agent whom the investor is entrusting with the management of his/her capital) and the relations between the manager and the investor (*internal aspect of corporate governance*). In the capital market, it is crucial to define the relationship between the issuer and the external investor (*external aspect of corporate governance*). **This paper focuses on the determinants of the actual functioning of the chief mechanisms of internal protection of external investors in open joint stock companies in Serbia and chief mechanisms for reporting to the investment public in the capital market**.

Investor protection has a legal aspect and a factual aspect. The legal protection of investors entails the definition of the status of investors in laws and subsidiary legislation. The most important laws in that respect are the ones regulating companies (investors' status in the company – *internal aspect of protection*) and those regulating the securities market (investors' status on the capital market – *external aspect of protection*). An investor, however, does not enjoy effective, factual protection even when the "letter of the law" protects him if he cannot protect an abused right before enforcement authorities (courts, the Securities Commission)[3]. **This paper endeavours to assess the factual quality of investor protection and corporate governance in Serbia.** The OECD Principles of Corporate Governance have served as a proxy for quality corporate governance; the survey presented in this paper examined the factual implementation of these principles in the practice of Serbian companies.

The last point the author would like to draw attention to regards the **concentration in the ownership structure**. The paper uses the concentration of the ownership structure of joint stock companies as an indicator of the factual quality of protection and a "control variable" to verify the conclusions. It departs from the presumption that a concentrated ownership structure runs against the nature of an open joint stock company growing on the external capital of numerous investors. Theory and empirical studies have corroborated that an owner, who cannot legally protect himself from insiders (above all managers, but also from major shareholders), will, as a rule, agree only to be a majority i.e. controlling shareholder because such a shareholder is actually protected by his size and is in no need of legal protection.[4] The concentrated ownership structure is thus rightly qualified as the primary substitute for the weak legal protection of investors. On the macro level, the concentrated ownership structure leads to an undeveloped and illiquid capital market, because no one wishes to assume the role of an external, minority owner, wherefore the company actually closes as soon as the controlling package in it is consolidated, although it formally and legally continues to exist as an open joint stock company.

The paper begins with a general overview of the internal aspect of corporate governance in Serbian companies and then focuses on the issue that has been identified as the chief problem – non-transparent business operations and low quality reporting (disclosure) to the investment public, which are the key elements of the external aspect of corporate governance.

2. Methodology for Assessing the Application of Corporate Governance Principles by Joint Stock Companies in Serbia

Reference framework. The definition of a reference framework i.e. identification of standards to enable comparison is the first step to developing a methodology for assessing a country's corporate governance system. The World Bank has used the OECD Principles as framework standards in its initiatives related to this field. Its choice was to an extent logical given that 29 countries with different legal, economic and cultural traditions had agreed on the Principles after extensive consultations with the World Bank, the International Monetary Fund, the Bank for International Settlements, representatives of companies in Japan, Germany, France, the United Kingdom and the USA, as well as with international investors, trade unions and other stakeholders. Governments of some countries known as so-called emerging markets were also involved in the consultations. It is crucial to have standards that are equally acceptable both to countries with continental law and countries with common law systems, countries with various degrees of ownership concentration in the capital markets and various approaches to appointing company managements.

3 La Porta R., Lopez-de-Silanes F., Shleifer A., Vishny R., "Investor Protection and Corporate Governance", *Journal of Financial Economics 58*, 2000, 3–27.
4 La Porta, Rafael, Florencio Lopez-de-Silanes and Andrei Shleifer, "Corporate Ownership around the World", *Journal of Finance,* April 1999, vol. LIV, No. 2, 471–517.

The OECD corporate governance principles are based on the following four main concepts: (a) accountability (in management), (b) accountability to the principal, (c) equity and (d) transparency. All four Principles may be respected by diverse sets of positive legal norms. The Principles above all regard companies listed on the stock exchange. They are divided into five categories (1) rights of shareholders, (2) equitable treatment of shareholders, (3) the role of stakeholders in corporate governance, (4) disclosure and transparency, and (5) the responsibilities of the board[5]. Although the These principles are not binding. Rather, they constitute an excellent analytical and reference framework. Moreover, they formulate the analysis in an internationally recognisable manner. For instance, the regional roundtables on corporate governance, jointly initiated by the World Bank and the OECD, used these very Principles as a basis i.e. structure for dialogue.

As mentioned, the paper focuses on the internal mechanisms of investor protection given that the OECD Principles mostly deal with these mechanisms. These internal mechanisms are in Serbia defined above all in the Law on Companies[6]. An empirical survey, the results of which are presented in this paper, aimed at establishing how Serbian companies apply OECD corporate governance principles. Given that these principles are codified in the Serbian Law on Companies, the author began by conducting a legal analysis of the Law[7]. Roots of poor management structures in Serbian corporations are usually presumed to be lying in the weaknesses of the law. Such presumptions as a rule lead to new proposals to amend the existing regulations or even adopt new laws (e.g. the "package" of financial laws adopted in June 2006). The legal analysis conducted by the author in her dissertation (the overview of which goes beyond the scope of this paper), has, however, shown that the Law on Companies provides a very high level of protection, even relatively greater protection than the laws of many more developed countries, and that it is nearly fully in accordance with the OECD principles.

Legal analysis cannot be the only step in assessing the quality of corporate governance. The institutional aspect is crucial for establishing the actual protection the investor enjoys; indeed, it has proven more relevant in transition countries.[8] Even if the catalogue of rights provided to the investor is satisfactory (advanced legal solutions adopted by reform), it becomes meaningless if (1) those rules are massively abused due to lack of understanding and/or legitimacy and (2) a shareholder cannot ensure their enforcement because institutions are weak (which is frequently the case in transition countries). In that respect, the legitimacy and implementation i.e. application of the law, and the quality of institutions (and organisation) enforcing the legislation, also impact the effectiveness of investor protection (the actual degree of protection), even independently from a formally defined catalogue of rights.

The paper gives an overview of the results of the survey, the purpose of which is to determine the voluntary implementation of corporate governance principles by Serbian joint stock companies. The survey was conducted between the 4th and 31st of May 2006 and included 130 joint stock companies of various sizes and in various sectors and regions of Serbia. It showed that the quality of corporate governance in Serbia is extremely low notwithstanding modern legal regulations. Banks are the only exception. This paper presents only the chief results listed in two categories of this extremely extensive survey. It will start with the identified general features of Serbian joint stock companies that decisively impact the quality of corporate governance. It will then focus on one of the chief problems identified in the survey – non-transparent business and inadequate disclosure.

The survey focused on joint stock companies in Serbia (the real sector and banks). The sample was formed on the basis of annual financial statements of companies collected by the National Bank of Serbia and stratified according to the following criteria: *company size* (number of employees), *industry* i.e. *main activity* (business sector), region in which the company is headquartered and type of ownership. The stratification aimed at ensuring that the selection of interviewed companies best reflected the demographic breakdown i.e. the features of the population as closely as possible. These criteria were used to form an accidental (to the greatest possible extent) and quota sample of companies. In 2004, 68,871 companies submitted annual financial statements; 2,617 of them were joint stock companies. The sample was narrowed down to joint stock companies in specific industries (manufacturing, construction, wholesale and retail trade, banking) wherefore the set (population) of companies to choose for the sample fell to 2,219. These companies are headquartered across Serbia and the stratification ensured adequate representation of all regions in Serbia. Two-thirds of the companies in the sample were open joint stock companies and one-third closed joint stock

5 IOSCO principles focus on capital market regulators, enforcement of regulations, cooperation in regulation, investment funds, market intermediators, secondary securities market, issuers, etc. In that respect, the OECD principles may be viewed as complementary with IOSCO principles, above all in the field of disclosure and transparency.

6 *Službeni glasnik RS*, No. 125/2004.

7 The author analysed the Law in her PhD dissertation "Corporate Governance and Ownership Concentration in Serbia".

8 Berglof, Erik and S. Claessens, "Enforcement and Corporate Governance", 2004, World Bank Policy Research Working Paper 3409.

companies. The breakdown of the participants in the survey was satisfactory: 80% of the interviewees were members of supervisory boards, chairmen or members of managing boards, general managers or their deputies, financial directors or chief accountants, secretaries of managing or supervisory boards; one was a Director of the Corporate Governance Sector. The questionnaires were completed in full by 118 companies and 12 banks. Two questionnaires were handed out – one for the real and the other for the banking sector. The questionnaires were nearly identical, apart from the way in which some questions were formulated to reflect the specific features of the banking business.

3. Survey Results: General Features of Joint Stock Companies

Of the surveyed companies, 90% belonged to the general manufacturing and services sector, while banks accounted for around 9% of the sample. Large joint stock companies with 250 or more employees accounted for 24.4% of the sample; small joint stock companies with 25 or fewer workers made up 22.1% of the sample. Companies employing between 26 and 100 people accounted for 36% of the survey sample. Most of the large companies are headquartered in Belgrade – around half of the interviewed companies; most of them have over 250 employees. This can be partly attributed to the fact that every interviewed bank has over 250 workers, and that nearly all of them are based in Belgrade.

The survey showed that nearly half of the companies (which are not banks) "opted" for the legal form of a joint stock company *ex lege* (48%) and not for economic reasons. Only one-third of the companies in the sample listed economic reasons (attracting fresh/external capital) for choosing this legal form. Only 8% of the companies in the sample were joint stock companies from the moment they were established, while 56% gained the status during the privatisation process. These results show that shareholding has in Serbia mostly been imposed through privatisation or by the law and the state, that it has not evolved naturally because of the economic motives of the participants in the market. This has created a discrepancy between a company's institutional-legal form and its economic reality. This fact has decisively affected the degree of the development of the capital market in Serbia, the quality of protection of shareholders and the level of corporate governance in Serbian companies.

Ownership structure. The Serbian stock market has a tendency of ownership concentration wherefore the ownership structure of Serbian companies is (consequently) concentrated. With respect to the companies covered by the survey, 38% had up to 10 shareholders (a very small number for joint stock companies on markets with developed shareholding) and 19% had over 500 shareholders. The ownership structure in (above all foreign) banks is highly concentrated; 42% of the banks in the sample had three or fewer shareholders and another 8% had up to 10 shareholders. Notwithstanding the number of shareholders, the ownership structure of the companies is highly polarised. One shareholder owns over two thirds of the shares in nearly half of the joint stock companies in the real sector and two thirds of the banks. The ownership structure is more dispersed in local banks or banks with state ownership. However, it is highly probable that the ownership structure in these banks, too, shall be concentrated if they are privatised or sold to a foreign strategic partner. The ownership structure of companies is dominated by employees or retired employees (in absolute terms, but relatively as well, as minority shareholders) – particularly in companies founded before 1999 (which underwent insider privatisation) and companies in Vojvodina. Management comes in second, owning around 19% of the shares, the state owns 16%, while local companies and natural persons each own 12%. Managerial ownership dominates in companies in construction, companies in Central Serbia and companies that became joint stock companies in the 2000-2005 period. The ownership structure of banks is very different. Neither workers, nor pensioners nor management have significant stock packages in banks; bank shares are predominantly owned by foreign legal persons, foreign institutional investors and foreign banks. Family ties dominate in the construction sector but are non-existent in the banking sector.

As mentioned, ownership concentration is closely linked to the quality of protection of shareholders. Conceptually, there are at least two crucial reasons why poor protection leads to concentrated ownership.[9] First, for an owner to be able to supervise a manager and prevent the expropriation of his ownership rights, he must own enough capital to ensure a critical mass of controlling rights. Ownership concentration is an important mechanism of corporate governance in that respect. Second, where protection is poor, small investors are prepared to invest in companies only if they are given a large discount. Weak demand and low prices thus render direct funding by ownership shares unattractive to companies (entrepreneurs) and indirectly contribute to ownership concentration.

9 La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny, "Law and Finance", 1998, *Journal of Political Economy*, Vol. 106, No. 6, 1113–1155.

Although it is sometimes useful to have a majority shareholder who can address numerous principal-agent problems, concentrated ownership serves primarily as a substitute for legal protection in countries with poor investor protection because only a majority shareholder can ensure himself a return on investments. In countries where formal law enforcement institutions are weak, an owner needs to have a factual controlling stake. It is easy to prove ownership of over 51%; counting of votes becomes superfluous after such a shareholder expresses his view. This fact is the key to explaining the link between ownership concentration and protection of shareholders. Concentrated ownership has its price. The impossibility to diversify and excessive risk are the most obvious expenses a majority investor has to bear.[10] From the viewpoint of the company, the majority investor repels other potential investors, thus raising the price of the company's external funding and restricting it.

By the quality of protection it provides to investors, the legal system therefore sets the value of private benefits of control, thus defining the ownership structure which will exist in equilibrium. Hitherto empirical studies confirm the relationship between investor protection and the ownership structures of corporations. Results have been obtained for many individual countries – Germany[11], Italy[12], seven OECD countries[13] and for groups of countries. For instance, in two studies[14], La Porta et al. demonstrate that concentration of control in companies is greater in countries with poor investor protection than in countries with higher quality investor protection. Claessens et al.[15] confirm this thesis in their study of a group of East Asian countries.

The 1990s in Serbia were characterised by a relatively dispersed ownership structure, primarily and almost exclusively in companies that privatised socially-owned capital by distributing free shares (in the first round) and selling shares under special conditions (in the second round) in accordance with the 1997 Ownership Transformation Law. Privatisation created a minority insider owner - the employee shareholder - defined by two specificities: (1) he did not pay the real price for the ownership package he holds and (2) the agent (manager) can dismiss i.e. fire such a principal. Secondary turnover of such shares after their distribution (or sale under special conditions) mostly led to a concentration of ownership in the hands of a smaller number of shareholders. Simultaneously with this trend, the privatisation model envisaged by the 2001 Privatisation Law resulted in a majority participation in the capital of a company by one or a small number of (related) shareholders in all companies undergoing privatisation since 2001. The latter privatisation model in Serbia created a specific type of Serbian shareholder – an external owner – a strategic partner holding the controlling package. The choice of this privatisation model corroborates the implicit presumption that private benefits of control are very highly valued in Serbia. Therefore, many companies in Serbia are today controlled by one shareholder or a smaller group of related parties (insiders). The concentrated ownership structure often leads to an abuse of minority and external shareholders.

Issuance and trade of securities. Over two-thirds of the surveyed companies have issued common shares and hardly any have issued preferred (priority) shares or bonds. Excluding the banks, two-thirds of the companies have not issued additional shares (i.e. have not increased capital by issuing new shares after entering the organised stock market). Particularly "conservative" views of increasing initial share capital have been demonstrated by companies in Vojvodina (82% of them have not issued additional shares) and by older firms (87% of the companies founded before 1999). Older firms had as a rule became joint stock companies by privatisation i.e. *ex lege*, which partly explains their lack of interest in raising fresh capital in the market. These data corroborate that most Serbian joint stock companies, although *de lege* organised as joint stock companies and present in the capital market, are not *de facto* raising capital in the market. Shares of only one-fourth of the companies were traded on the secondary market in 2005, which indicates also weak liquidity.

Increasing initial share capital. In the sample, 89% of the companies had not received any foreign investments in the past five years. Banks and manufacturers accounted for most of the mere 6%, which stated that they had received

10 Demesetz, Harold, and Kenneth Lehn, 1985, "The Structure of Corporate Ownership: Causes and Consequences", *Journal of Political Economy* 93, 1155–1177.

11 Edwards, J., Fischer, K., 1994, *Banks, Finance and Investment in West Germany since 1970*, Cambridge University Press, Cambridge UK. Also, Gorton, G., Schmid, F., 2000, "Universal Banking and the Performance of German Firms", *Journal of Financial Economics* 58, 29–80; Franks, Julian and Colin Mayer, 1994, "The Ownership and Control of German Corporations", manuscript, London Business School.

12 Barca F., 1995, "On Corporate Governance in Italy: Issues, Facts and Agency", unpublished working paper, Bank of Italy, Rome.

13 European Corporate Governance Network (ECGN), 1997, "The Separation of Ownership and Control: A Survey of Seven European Countries Preliminary Report to the European Commission", Volumes 1–4, Brussels, ECGN.

14 In the first study (La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny, "Law and Finance", 1998, *Journal of Political Economy*, Vol. 106, No. 6, 1113–1155) prove this finding on a sample of 49 countries, and, in the second, (La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1999, "Investor Protection and Corporate Valuation", NBER Working Paper 7403, National Bureau of Economic Research, Cambridge, MA.) the authors examine matrices of control in the largest companies in 27 rich economies.

15 Claessens, S., Djankov, S., Lang, L., 2000, "The Separation of Ownership and Control in East Asian Corporations", *Journal of Financial Economics* 58, 81–112.

external investments. This confirms that local companies are not attractive to external investors. Of the 6% (that managed to attract investors), foreigners accounted for 38% and local investors for 12.5% of the investors in share capital, while 12.5% of investors bought new share issues in the market (the questionnaire allowed companies to list *all ways* in which they attracted external investors). Interestingly, construction companies had obtained capital only through credits approved by local banks, while wholesale and retail traders had obtained capital only through FDIs in share capital. As per banks, two-thirds of the fresh capital came from FDIs and one third from credits approved by their parent institutions abroad. Moreover, nearly half of the surveyed companies (45%) do not expect to attract external investments in the following three years, citing a lack of attractive projects and sufficiency of internal resources as the chief reasons. Of those expecting new investments, the interviewed banks are the most optimistic – nearly all of them expect foreign investments (either direct ones or credits). Of the interviewed companies, 90% are not planning to issue new shares or raise fresh capital in the capital market in the following three years and cite the wish to retain the existing ownership structure as the main reason for their decision. This finding is closely connected to the main presumption that owners protect themselves by concentrating ownership and controlling rights. Only 6% of this part of the sample (90% of the sample) said that they avoided the capital market because issuing shares was much too expensive compared to credit funding.

Corporate governance principles. There is no consistency or uniformity in sharing responsibility amongst specific participants in the corporate governance process, setting the rules of the game, or the practice of applying specific principles by joint stock companies in Serbia. The survey has shown that banks are much more progressive in applying corporate governance practices. This can be ascribed to the fact that the practice of the banking sector is traditionally more advanced than that of the other sectors and to the strong influence of foreign shareholders in Serbian banks.

It first must be mentioned that the leading managers in two-thirds of the interviewed joint stock companies in Serbia are unaware of the OECD Principles of Corporate Governance. This is especially evident in joint stock companies in the construction sector (80% of the companies in this sector) and in smaller companies employing up to 250 people. The situation is, however, altogether different in the banking sector – 92% of the interviewed banks were aware of the OECD Principles of Corporate Governance. The following two conclusions can be drawn from this finding: (1) that it is necessary to educate and build the capacities of the main stakeholders (management-agents), and (2) that foreign investors are actually improving corporate governance practices and, thereby, performance of companies. However, a mere 3.8% of the interviewees stated that corporate governance was not adding any new value in general, although it did facilitate abidance by regulatory requirements, while all others were of the view that corporate governance may achieve at least one of the company's strategically important goals.

The survey also strove to identify the *main obstacles* to improving corporate governance practices in Serbia. Interestingly, 44% of the companies (50% of the banks) laid the biggest blame on inefficient company and bank regulations. The Law on Banks seems to have been rated even lower than the Law on Companies given that banks criticised regulations more than companies. At first glance, this finding stands in sharp contrast to the legal analysis that assessed the Law on Companies as a relatively progressive piece of legislation. Also, 40% of the companies cited lack of qualified experts and 37% lack of knowledge and information as additional reasons for poor corporate governance. This again corroborates the need for corporate governance training. Notwithstanding, 23.7% of the companies in the sample and 42% of the interviewed banks stated they were not interested in training. But, let us go back to the law. A deeper analysis shows that the Law on Companies should not be blamed the most. Namely, two-thirds of the interviewed companies stated that commercial dispute settlement was the greatest problem in the field of regulation. The provisions of the Law on Companies were qualified as bad in a few cases – 11% cited those on convening shareholder assemblies, 9% mentioned provisions on holding shareholder assemblies, 12% quoted the regulations on the establishment and working procedures of supervisory boards, 4% listed the provisions on the establishment and working procedures of managing boards and 12% the provisions on the division of duties amongst company bodies, while 14.5% were dissatisfied with the provisions on the control of the companies' financial and economic activities. Low grades were awarded to: *bankruptcy regulation* (by 36% of the interviewees), *securities regulation* (24.4% thought that the issuance of shares was not regulated well, while 21.4% had a poor opinion of information disclosure). *Shareholder protection* was qualified as bad by 26.7% of the interviewed companies; 17% of the 26.7% were banks. In a nutshell: the survey in the field also qualifies the Law on Companies as solid, while regulations on securities are rated somewhat worse. The main obstacle arises with respect to the implementation of the law and realising rights in court, corroborating theoretical deliberations on the importance of institutions and enforcement of the law for a legal reform.

4. Survey Results: Transparency and Disclosure

Regular, timely, reliable and comparable information is the essence of corporate governance[16]. In the absence of such information, owners of capital cannot take correct investment decisions, which results in a higher cost of capital and worse and inefficient allocation of resources on the macro level. Quality information allows shareholders and the public to evaluate the work of the management and provides the management with quantitative instruments which enable it to manage the company more efficiently. Lack of information on the macro level results in an inefficient allocation of resources and a higher level of systemic risk i.e. a higher cost of capital. It sometimes appears that lack of transparency pays in the short term but, in the long term, the costs exceed the benefits by far.

Although most SEE country regulations set high disclosure requirements, they are rarely respected in practice, wherefore the credibility of the disclosed information remains the central problem. Moreover, national accounting standards still dominate for various reasons in many countries in the region, including Serbia, although these states have begun harmonising them with the international accounting and auditing standards. These national systems present problems in some areas of critical importance to investors. Investors and the public today mostly do not trust the information published by the companies in the region. The survey results clearly demonstrate that transparency and disclosure are the greatest problem of joint stock companies in Serbia. Improving the quality and accessibility of information about a corporation calls for a deep change in the attitude towards the very idea of transparency amongst all stakeholders. Their negative attitude can largely be attributed to the socialist system of management in which accounting primarily served statistics and tax purposes and information was the primary power weapon in the command economy[17]. Companies should be convinced that transparency is in their interest, that it is an asset and an advantage rather than a burden. In this respect, the lack of clear and articulated demand for information from actual or potential shareholders remains the primary reason why the companies themselves are not interested in or feel obligated to publish even basic, let alone extensive information. Who seeks information in Serbia?

First of all, a well-ordered and efficient banking system can produce competition amongst companies that may have a positive impact on corporate governance. Namely, credit approval conditions usually entail high information demands that must be fulfilled by companies if they are to be granted a credit. In addition, rationally managed banks should force all those companies in need of credits to maintain good business and management practices, because that should be the only way they may be granted a bank credit. In reality, however, banks usually focus on the collaterals and do not go into what the company and its operations are like.

The tax administration is definitely the second source of demand for information. It has been and always will be interested in information about Serbian companies.

The Serbian investment public ought to be the third source of demand for information. However, as the interviewed representatives of the four leading auditing companies (the so-called Big Four) opined, investments in the Serbian stock exchange are irrational, based on inside information, rumours, speculations on takeovers, rather than on reason or on the basis of financial and non-financial reporting. Securities of companies without prospectus (they are labelled WP – without prospectus on the stock exchange) or of companies that have continuously failed to disclose information to investors are also publicly traded in Serbia. This is due to the fact that the stock exchange is still predominated by speculative funds hoping to conclude a controlling i.e. transaction premium in a potential take over of a company, by banks and insurance companies which have to hold marketable securities under the law or by 'capillary' investors hoping to strike it rich overnight. The market is not efficient yet. The price of shares has been less affected by auspicious contracts with foreign partners than by a few transactions contracted with the sole aim of manipulating the price. Major local firms as a rule do not choose the Big Four to audit them. They simply do not realise what value their company can gain from the reputation, knowledge and methodology of the Big Four. They still do not feel the need for highly sophisticated reports and find the services of the Big Four simply too expensive.

Apart from the tax administration, only foreign investors are genuinely interested in information about Serbian companies. A shareholder - headquartered abroad and asking accountants or auditors in Serbia for specific information to prepare a consolidated group report for the investment public and to assess the success of the Serbian branch he is doing business in – is extremely interested. Serbian companies as a rule take only such reports seriously. This is why

16 The obligation to disclose such information ought to be binding on quoted companies i.e. companies whose securities are traded on the free stock exchange (over-the-counter) market; some experts are of the view that they should also be binding on companies whose securities are still not traded, but which have a large number of shareholders due to the insider type of privatization.

17 White Paper on Corporate Governance in South Eastern Europe (pp. 27–28).

foreigners account for most of the Big Four's clients. Foreigners are the main "engine" for creating demand for higher quality and more sophisticated financial reporting.

Who ought to be accountable for providing information? The company management has the primary responsibility to establish an efficient internal system for collecting, processing, checking and disclosing relevant information to shareholders, stakeholders, regulatory and supervisory bodies and the market as a whole. The system ought to ensure equal access to information to all persons and sanctions for those disrespecting rules and procedures. The experience of Western countries teaches us that it is wise to form an audit committee (i.e. Audit Commission) that will supervise the company's financial situation and accounting system and help the management effectively fulfil its obligations related to disclosure of information. The audit committee has to comprise so-called independent management members and thus be independent from the management but simultaneously be part of the management in order to have access to information. It must also be charged with monitoring the relationship with the external auditor and ensuring his independence as well. The latter is to be tasked with ensuring that all financial reports and other financial information correctly reflect the company's business operations and financial situation in accordance with accounting and auditing standards and relevant legal regulations.

What is the situation in Serbia and how close is it to fulfilling those standards? Around three-fourths of the interviewed companies publish annual reports, balance sheets and profit and loss statements. Around 40% publish cash flow reports, the company statutes and/or main acts and reports on materially significant events. Around one-third of the companies publish the external auditor's opinions and appendices to the financial statements. Less than one third publish all other reports (change in equity statements, quarterly reports, lists of related parties (only 6% of the interviewed companies), the identity of the controlling shareholders i.e. persons controlling 50% of the shares (15% of the companies in the sample), the identity of blocking shareholders i.e. persons controlling one-third of the shares plus one vote, remuneration of managing board members on an individual (5%) or collective (5%) basis, resumes of the key company officials (nearly 10%), while as many as 11.5% of the companies have not disclosed any of the above information. To recall, the sample was formed by contacting mostly open joint stock companies i.e. those on the stock exchange. Banks were again the most transparent: 75% of them publish annual reports, balance sheets and profit and loss statements, reports on materially significant events, statutes and main bank acts, and appendices to the financial statements; 58% of the banks publish revised financial statements drafted in accordance with IFRS, the external auditors' opinions and capital adequacy information. Finally, 50% of the banks publish appendices to the financial statements, their organisational structures and the identity of their shareholders. Around one-third of the banks publish the breakdowns of key placements per industrial sector/client and related party and total placements to a related party.

As many as two thirds of the companies failed to reply to the question why they did not disclose information. This may be interpreted as a consequence of the lack of a clear business policy and stable management in the vast majority of Serbian companies. The situation is compounded by weak private and public enforcement institutions (Securities Commission and courts) which let company violations of legal obligations on disclosure and transparency go unpunished. The interviewees who did respond to the question, listed the following two main reasons (1) lack of a clear legal obligation to disclose information and (2) as many as 20.6% replied that there was no demand for such information in the market.

The quality of information disclosed in the annual reports is unsatisfactory as well. More than half of the reports lack information on the company's business goals and strategy, the management's analysis of the financial results and uncertainties the company is facing, the audit committee (supervisory board) reports, the external auditor's reports, the remuneration of the board of directors members, etc. Banks are again an exception – the quality of the information in their annual reports is much higher.

As per investors, the survey shows that the best way to obtain information is to send a query directly to the company (83% of the sample), but that only one-third of the interviewed companies disclose such information on their websites or in their annual reports. As many as 83% of the surveyed banks provide all the necessary information on their websites. Three-fourths of the joint stock companies in Serbia do not disclose information on transactions amongst related parties exceeding 10% of the accounting value.

According to the survey results, only 15% of the Serbian companies in the real sector have either an audit committee or internal auditors. In the companies that have such bodies, their work programmes are as a rule adopted by the company managing boards. There is no uniform practice of supervising internal auditing in Serbia. Most of the

interviewees, who answered this question, listed the managing board as the authority controlling internal audit (which is totally inadequate), while others listed the shareholder assembly, the supervisory board, the audit committee and the management itself. These data show that firms still do not clearly differentiate between internal control and internal audit and that this important body in Serbian companies still does not have a clearly defined role, status, rights or obligations.

Following data also corroborate that companies in Serbia do not understand the purpose of the supervisory and auditing procedures. In 33.6% of the cases, managing boards conduct the supervision of the fulfilment of financial and business plans; in 23.7% of the cases, the supervision is conducted by an external auditor and in 12% of the cases by the supervisory board. The accounting policy is in 39% cases defined by the managing boards and in 25% by the external auditors. In banks, this role is performed by the managing board. Reviews of accounting accuracy and the accuracy and timeliness of business document flow are as a rule conducted by the external auditor (34.4% of the cases), or the managing board (14.5%), the supervisory board (13%) and the management (11.5%). Interestingly, reviews of accounting accuracy of manufacturing companies are conducted by external auditors in as many as 43% of the cases. The companies' (unjustifiably) high expectations of external auditors are reflected also in the fact that 33% of the companies stated that external auditors had the duty to ensure that there were no considerable material inaccuracies in the company financial statements. Only 11.5% said that this was the responsibility of the company management. As per reviews of transactions with related parties and conflict of interest, in one-fourth of the companies they were conducted by the managing board, in 14% of the surveyed joint stock companies by the external auditors and in 8.4% of the companies by the supervisory boards. The management performed this role in only 3% of the surveyed companies. Over one-third of the interviewed companies stated that they did not review transactions with related parties. Interestingly, consultations and recommendations related to improving company business are the responsibility of managing boards in 30% and of external auditors in 34.4% of the surveyed companies. Most companies state that external auditors are charged with promoting integrity and codes of ethics, delegating powers and establishing grounds for accountability and control, the implementation of internal control and risk management procedures and policies and corrective measures recommended by the supervisory bodies. In 31.3% of the interviewed companies, the external auditor was charged with monitoring internal control mechanisms, including the implementation of the law, regulations and business policy; this task is fulfilled by the managing board in 18.3% of the companies and by the management in only 3% of the companies. External auditors are in charge of the implementation of policy and procedures in 57.3% companies, while that is the duty of the management in only 0.8% companies. Simultaneously, one-third of the surveyed companies have tasked no one with defining an efficient audit programme. No one conducts periodic assessments of the internal audit systems in 36% of the Serbian joint stock companies; in 22%, this role is performed by managing boards.

Notwithstanding such high expectations of external auditing, most Serbian joint stock companies do not have audit committees. Those that do, rally extremely qualified committee members, who, however, meet extremely rarely – usually once a year. Another interesting finding is that most companies hire local audit companies (in 46% of the cases) or individual auditors (11.5%) to perform external audits, while only 10.7% hire international audit companies. This finding is corroborated also by the responses provided during the interviews with the Big Four auditors and partners. The situation in banks is, of course, different. As many as 67% entrusted external auditing to international audit companies. This may be partly ascribed to the law, the fact that the banks are mostly owned by foreigners and that foreign shareholders insist on such audits, as well as to the attested fact that banks are far ahead of other Serbian companies with respect to good corporate governance practices. Moreover, 81% of the joint stock companies in Serbia have used the same external auditor in the past three years. Finally, apart from auditing services, external auditors also offer business consulting services in 14.5% of the cases, tax services in 13.7% of the cases and legal services in 8.4% of the cases.

There are two main reasons for this state of affairs: (1) inadequate and conflicting regulations, and (2) lack of experts. Some of the interviewed auditors honestly voiced their doubts whether Serbia should have introduced the IAS, at least at this moment.

In developed markets, International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) are applied to big (in terms of developed markets) and listed companies. In Serbia, these standards are actually applied to nearly the whole economy. Three-fourths of the companies in the survey (and 83% of the banks) stated that they drafted financial statements in accordance with the IFRS (IAS). Small companies may deviate to an extent from these standards. Notwithstanding such comprehensive implementation, only ten or so people really know how

to apply the IFRS or IAS in Serbia, as the Big Four staff admit. The IAS are extremely complicated and sophisticated and are constantly evolving. One of the problems related to the introduced standards is that some of them cannot actually be applied in Serbia.[18] Furthermore, the accounting treatment of shares in Serbia has been burdened with a series of unsuccessful reforms.[19] The already difficult situation is further exacerbated by the lack of trust arising from competition amongst the auditors, wherefore audit companies have been unable to agree on a common policy and always apply the same "interpretation" of the standards in identical situations. The problems accompanying the "import of rules" from developed countries do not plague only the IAS, but other aspects of regulating the profession as well. The rotation of auditors has been a shining example of good practice since the Enron scandal. Rotation aims at preventing the manager and the auditor from becoming "too friendly". Most of the audit companies we talked to think that three-year rotation in the Serbian banking sector is unrealistically short. This regulation is bypassed in practice in the following manner: after cooperating with one auditor for three years, the bank changes its auditor for one year and then reverts to the "old" auditor the following year. This poses a major outlay for all stakeholders – for the banks, because the first year of auditing is the most expensive, for the new auditor, who must invest huge resources in auditing the bank's financial statements for one year and is placing his reputation on the line, and for the "old" auditor, who bears the major risk of losing track during that year. Another big problem the auditors noted is the impermissibly short deadline within which the financial statements must be submitted; this deadline was set primarily to cater to the needs of the tax administration.

5. Corporate Governance in Serbian Companies: Conclusion

The quality of the (internal aspect of) corporate governance in Serbian joint stock companies is at a low level. This finding stands in sharp contrast to the one that the Law on Companies by and large enshrines the OECD Principles and is primarily the consequence of the fact that shareholding in Serbia was in most cases the result of privatisation and had in that sense been imposed by law and state intervention, rather than having evolved naturally from the economic motives of the market participants. This created a discrepancy between a company's institutional – legal form and its economic reality. The companies think that the inefficient application of the existing legislation on companies and securities by the courts and other state authorities is the main cause of poor corporate governance. Corporate governance is also largely the reflection of the ownership structure of joint stock companies, which is highly concentrated in Serbia. Ownership concentration is especially dramatic in the banking sector; the vast majority of companies in the real sector (including those with large numbers of shareholders) also have controlling shareholders. These facts have decisively affected the development of the capital market in Serbia as well. However, the finding that most listed joint stock companies in Serbia do not *de facto* raise capital in the market gives rise to concern: 89% of the surveyed companies have not had an external investment in the past five years and 90% of the interviewed companies do not plan to issue new shares or raise fresh capital in the capital market in the following three years, explaining that they wish to preserve the existing ownership structure that protects the controlling shareholder.

The survey further demonstrated that corporate governance is much more advanced amongst banks given that the banking sector has traditionally more progressive practices than the other sectors and given the strong influence of foreign shareholders in Serbian banks.

18 **For instance, if a bank wants to assess losses in accordance with the IAS, it must predict what will happen to a credit in the future. The IAS define rules** for making such assessments. The banks thus need specific macroeconomic statistics to make the assessment, but these statistics are either non-existent or unreliable in Serbia. The regulation of the treatment of so-called employee benefits is another problem arising in the application of the IAS. In Western countries, the term 'employee benefits' usually denotes the employers' payment of mandatory pension contributions (Tier 2). This standard is in Serbia applied to bonuses paid out in accordance with the Collective Agreement or retirement packages. The problem arises with respect to the determination of the adequate discount rate that needs to be applied to calculate the present value of the employers' future payments. The IAS prescribe the application of a discount rate that ought to be applied to the employer's debt securities or, in the absence of such securities, the application of a discount rate that would be applied to state securities in the same currency and maturing at the same time as the employee benefits. No company currently has debt securities on the stock exchange in Serbia while maturities of state securities issued in the domestic currency are not long-term enough. Therefore, when applying this standard, the auditor can either ignore the employee benefits item because the discount rate applied to long maturity dinar securities would be so huge that it would approximate the value to zero, or he can (disrespect the IAS and) apply a discount rate which would be applied to state securities in euros maturing near the time when employee benefits are to be paid. In companies with large numbers of workers, the effects of applying different methods in drafting financial statements are drastic. This is not an academic but a very real problem.

19 **The reforms of the accounting system were not aimed at accurately determining the value of company capital. The frequent changes in the legislation** and bylaws on accounting led to an inconsistency of time series of accounting data. The demands for accuracy and reliability of information in the prospectus could not have been fulfilled. Furthermore, the share revaluation mechanism totally decoupled the nominal value of shares from the issuers' balance sheets and profit and loss statements. In practice, there is confusion over the nominal, accounting and real values of shares in view of the fact that several different sets of shares have been issued during the privatisation process. The new legislation leaves the problem to the IAS but does not address it fully due to the inefficient Serbian capital market in terms of pricing. Begović. B. et al., *Unapređenje korporativnog upravljanja* (*Advancing Corporate Governance*) Centre for Liberal Democratic Studies, Belgrade, 2003, p. 91.

As far as specific aspects of corporate governance are concerned, the greatest problem arises with respect to transparency and disclosure. Another (related) problem is the fact that the companies by and large do not understand the purposes of specific monitoring and auditing procedures and thus inadequately define and structure them and have trouble differentiating between them. They particularly have trouble understanding the role of the external auditor. The supervisory boards are a relict of the past and the consequence of the strong influence of Germanic law on this part of the world. These boards in Serbia, however, are assigned different duties, which are frequently purely protocolary. The companies either do not have internal auditors at all or their jobs are inadequately structured (serving merely to formally fulfil the legal obligation), while management does not consider itself responsible for the functioning of the internal audit and risk management systems and thus rarely establishes them. The lack of transparency is undoubtedly exacerbated by the weak public and private enforcement institutions (Securities Commission and courts), which let the firms violating the legal obligations on disclosure and transparency go unpunished. Weak demand for information is, however, the main reason for the problems in transparency and disclosure. Real demand is generated only by the state (for tax reasons) and foreign investors.

Surveys in the fields of finance, law, institutional economy and public policy have in the past few decades increasingly concentrated on corporate governance. This trend has been observed in Europe, Asia and America. The latest approach to the issue focuses on protecting investors (and shareholders and creditors) from expropriation by the managers controlling the firm. Expropriation and lack of transparency have resulted in a number of corporate scandals which have shaken markets across the world and caused strong and dramatic reactions of the regulators. Expropriation leads to lesser investments, higher systemic risks and higher cost of capital for companies, to undeveloped and illiquid capital markets; it also considerably retards economic development. The other symptoms of poor shareholder protection and corporate governance entail concentrated ownership structure, lack of connection between the control of cash flows and ownership rights, low dividends and inefficient management.

Genuine reform is the logical approach a company with corporate governance problems ought to take. Corporate governance rules are dispersed in regulations on companies, bankruptcy and securities. The legal provisions, however, must be effectively applied if they are to affect economic reality. This is ensured by adequate combinations of institutional solutions that have proved useful in specific local contexts and secures the integration of new rules in the economic systems. Strong formal law enforcement institutions are the last necessary link guaranteeing effective investor protection and thus the companies' access to cheaper capital and their more efficient business operations.

Good corporate governance rules, developed over a long time in Western market economies, do not have a long tradition in Serbia and thus have not taken root in everyday business practices. They had not evolved in Serbia, but were imposed on the companies in a "revolution" in the late 20th century, when politicians and the society opted for a market economy. In result, Serbia has mostly been following the achieved regulation standards, but is still lacking in relevant business and court practices. Such practices call for a lot more time and an amenable environment, which is just in the making. This is why investors in Serbia are still effectively unprotected and the managers are insufficiently professional, which all leads to difficult and expensive access to capital and inefficient management in Serbian companies.

Anatomy Of Russia's Financial Crisis[1]

Željko Bogetić*

After a decade of high growth, the Russian economy is experiencing a slowdown in the wake of the global financial crisis. While Russia's strong short-term macroeconomic fundamentals make it better prepared than many emerging economies to deal with the crisis, its underlying structural weaknesses and high dependence on the price of a single commodity make its impact more pronounced than otherwise. Prudent fiscal management and substantial financial reserves have protected Russia from deeper consequences of this external shock. The government's policy response so far—swift, comprehensive, and coordinated—has helped limit the impact. Short-term macroeconomic stabilization and cushioning impact on the poor have to be the immediate priorities as the authorities continue to adjust their short-term policy responses to changing economic circumstances. But the crisis also presents an opportunity to address the medium- to longer term challenges of competitiveness, economic diversification, and financial sector modernization which are necessary to boost growth and living standards. This would ensure that Russia emerges from this global crisis with a stronger basis for dynamic, productivity-led growth and is better placed to take advantage of global integration. The note also draws some parallels and policy comparisons with some smaller European middle income countries that were exposed to similar external shocks––Serbia and Montenegro.

1. Recent Economic Developments

After a decade of high growth, the global financial crisis has affected Russia, posing a new challenge for macroeconomic policy. On the heels of high oil prices, a favorable international environment and prudent macroeconomic policies, Russian economy has grown at an impressive 7% a year during the decade 1999-2007––and at an overheated 8% in the first half of 2008. Since July 2008, with the collapse of oil prices and capital flows, Russian economic growth has slowed to only 1.1% in the last quarter of 2008. For the entire 2008 year, growth was still healthy at 5.6%. But 2009 will clearly be a difficult year with the intensification of the global financial crisis around the world.

Before the crisis, in the first six months of 2008, real GDP growth in Russia continued at a brisk pace of about 8%, reflecting a booming economy, rapid credit growth and strong macroeconomic fundamentals (table 1). This growth exceeds the long-term potential of the economy (estimated in the 6%-7% range), with clear signs of overheating. An upturn in inflation, a decline in unemployment, a rise in capital utilization, and real wages significantly outpacing productivity growth all indicated an overheating economy against the backdrop of binding supply (infrastructure) constraints.

Russia's strong macroeconomic fundamentals, prudent fiscal policy, and lack of exposure to the US sub-prime crisis have partially protected its economy and helped limit the impact of the global financial crisis. Thanks to low sovereign external debt, large twin surpluses (fiscal and external current account), one of the world's largest international reserves, and favorable rating agency assessments, until mid-2008, foreign investors viewed Russia as a "safe heaven," fairly "decoupled" from the worsening global financial environment. By building significant fiscal and reserve cushions relative to most other emerging markets, Russia has also managed to delay and limit the impact of the global crisis.

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1 This note is based on the World Bank's Russian Economic Report No. 17 (www.worldbank.org/russia) prepared by a World Bank team led by Zeljko Bogetic, Lead Economist for Russia and PREM Country Sector Coordinator. The team members were: Karlis Smits, Sergey Ulatov, Stepan Titov, Olga Emelyanova, Annette de Kleine, Victor Sulla, and Marco Hernandez.

Table 1. Main macroeconomic indicators, 2003–2008

	2003	2004	2005	2006	2007	2008	Q4 2008
GDP growth, %	7.3	7.2	6.4	7.4	8.1	5.6	1.1
Industrial production growth, y-o-y, %	8.9	8	5.1	6.3	6.3	2.1	-6.1
Fixed capital investment growth, %, y-o-y	12.5	13.7	10.9	16.7	21.1	9.1	1.8
Federal government balance, % GDP	1.7	4.3	7.5	7.4	5.5	4	4
Inflation (CPI), % change , e-o-p	12	11.7	10.9	9	11.9	13.3	2.5
Current account, billion USD	35.4	58.6	84.2	95.6	76.6	98.9	8.1
Unemployment, %	8.6	8.2	7.6	7.2	6.1	6.3	7.1
Reserves (including gold) billion USD, e-o-p	76.9	124.5	182.2	303.7	478.8	427.1	427.1

Source: Rosstat, CBR, Ministry of Finance.

Four major, related shocks appear to have transmitted the global crisis to Russia:

– First, the intensification of the global crisis started affecting Russia as well, when it caused a sudden stop and then a reversal in capital flows as investors across the world fled to quality markets.

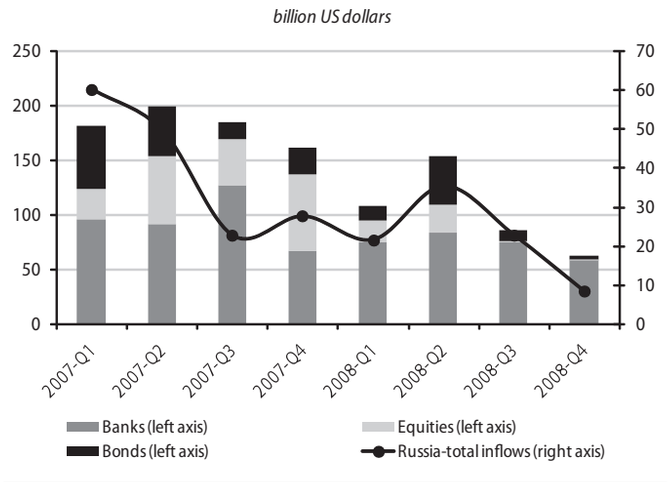
– Second, the global credit crunch and tightening external borrowing conditions have affected Russia's banking system, which faces its own liquidity problems against short-term external repayment obligations.

– Third, a sharp drop in the price of oil began to erode Russia's fiscal and external account surpluses and its very large international reserve buffer.

– Fourth, Russia's stock market experienced a massive decline––largely reflecting the global loss of confidence and the precipitous drop in the price of oil––losing two-thirds of its value in less than the five months up to mid-November 2008.

Total gross capital flows to emerging markets plummeted in Q4 2008 – down 61% over Q4 2007. Bond issuance and equity placements collapsed, while cross-border syndicated bank lending remained relatively resilient. In comparison, total flows to Russia showed a steeper 70 percent drop in Q4 2008 relative to Q4 2007, with nearly all inflows limited to bank lending. For emerging markets, among the types of inflows, equities posted the steepest decline in 2008, falling 76% over 2007, followed by a 51% decline in bond issuance. Bank lending posted a less stark 23% decline over the same period. In Russia, total gross flows contracted by 45% in 2008 over 2007, averaging $7 bn per month. With the deepening spread of the financial crisis to the real sector, the Institute for International Finance projects that net inflows to emerging markets will shrink dramatically, from $929 bn in 2007 and $466 bn in 2008 to only $165 bn in 2009 (Figure 1.1).

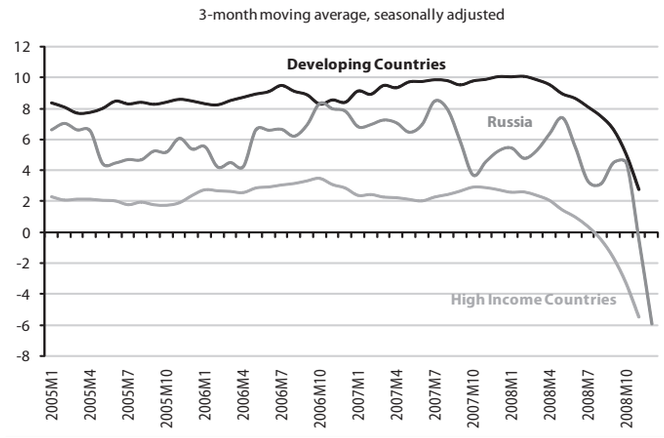
Graph 2. Gross Capital Flows to Emerging Markets and Russia



Source: Dealogic and World Bank.

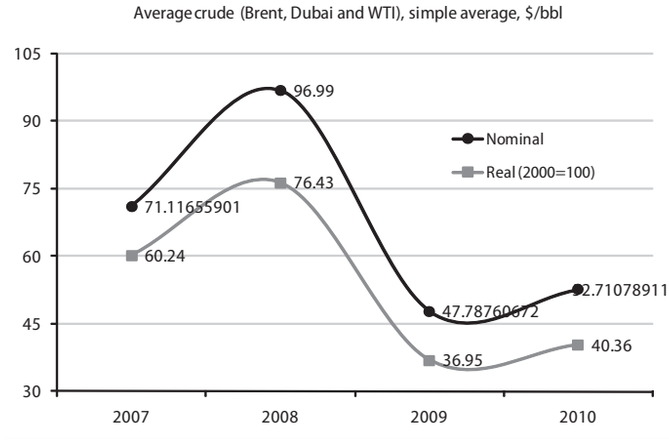
World economic activity collapsed in the final months of 2008, the depth of the downturn surprising many analysts. Measured by industrial production (IP), output contracted 5.4% (y/y, 3mma) in high-income countries as of November 2008 – down from a recent peak of 2.9% in October 2007 (Figure 1.2). IP slowed sharply in developing countries, posting a fraction of the recent high of 10% growth in December 2007 to 2.8% in November 2008. In Russia, IP growth contracted 0.5% (y/y, 3mma) over the same period, with the contraction deepening to 5.9% in the final month of the year. This compares with a recent high of 7.4% growth in May 2008. A confluence of negative factors have led to a plunge in activity, as consumers and businesses alike are being squeezed by tighter credit conditions, a severe deterioration in business and consumer confidence, and negative wealth effects from falling asset prices. This is all followed by negative feed-back growth effects, which point to a deepening of the current downturn and significant downside risks.

Graph 3. Industrial Production, Annual % Change



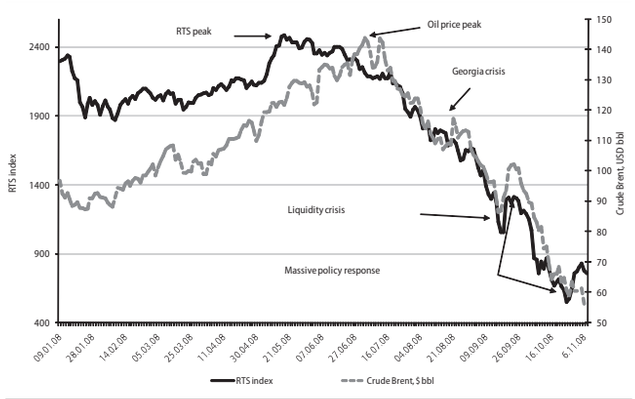
Source: IMF, Datastream Thomson and World Bank.

Graph 4. World Bank Oil Price Forecast



Source: World Bank Staff.

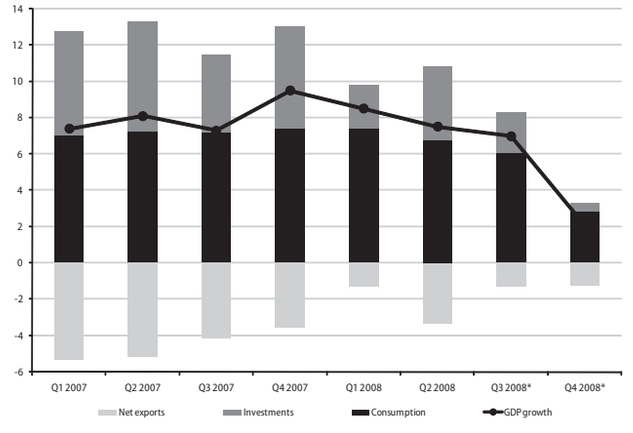
Graph 5. Russia's Stock Market Collapse and Oil Prices



Crude oil prices collapsed from over $140/bbl in July 2008 to an average $43.8/bbl in January 2009, bringing down the Russian stock market, which heavily over-represents the oil and gas sector (over 60%) in its capitalization. U.S oil demand fell nearly 6% in 2008, with gasoline consumption off 3.3%. Demand has declined in other OECD countries, and has recently started to fall in some developing countries, notably in Asia. Meanwhile, OPEC agreed to cut production by 2.2 mb/d as of January 1, 2009 bringing total cuts since September to 4.2 mb/d., the largest coordinated cut in a very long time. Going forward, weak demand and rising supplies are expected to contribute to a decline in the World Bank's average crude price forecast from an annual average of $97/bbl in 2008 to over $40/bbl in 2009 and $52.7/bbl in 2010 (Figure 1.3-1.4; preliminary, subject to revision).

The deceleration of investment growth in the first half of 2008 has marked the beginning of a gradual slowdown in aggregate demand, with consumption following suit. Following the boom in the first half of 2008, investment––with consumption, the main driver of short-term growth––slowed significantly, due to state corporations and to extraction industries. Supply constraints and a gradual rise in global uncertainties and associated changes in investment sentiments, international and domestic, played a role in these developments. Foreign direct investments have slowed. And tighter credit conditions and rising uncertainty and weak labor market outlook have adversely affected consumption growth (figure 1.5).

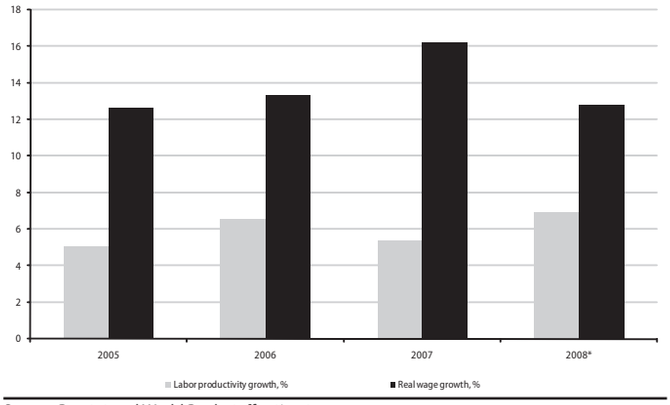
Graph 6. Demand Sources of Russia's Real GDP Growth by Quarter, 2007-2008 (percentage change)



Source: World Bank decomposition and estimates based on Rosstat data.
* World Bank staff projected estimate.

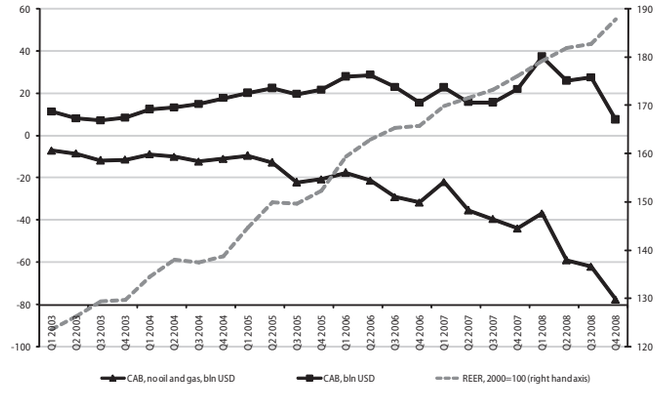
Starting from full employment as late as September 2008, Russia's unemployment has shot up sharply in the last quarter of 2008, but real wage gains still outpaced productivity. The unemployment rate went up from 5.3% in September to an estimated 7.7% in December 2008. Large, non-tradable and labor-intensive sectors such as construction and trade were particularly hard hit, delaying the execution of existing and new projects and adjusting to higher borrowing

Graph 7. Labor Productivity and Real Wage Growth, 2005-2008 (in percentages)



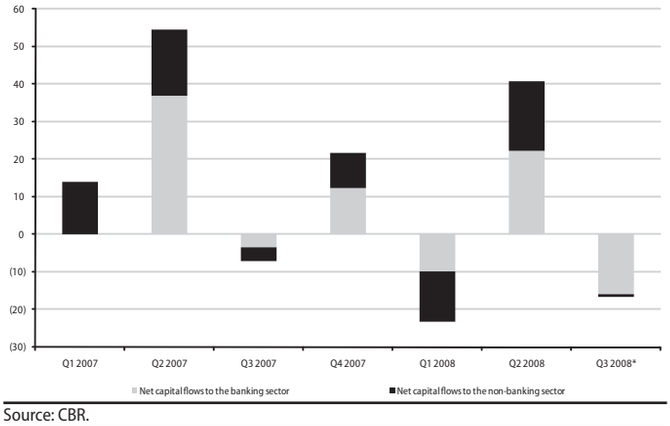
Source: Rosstat and World Bank staff estimates.
* Labor productivity growth January-June 2008, real wage growth January-September 2008.
Note: Labor productivity calculated as output (GDP) per employed person.

Graph 8. Current Account Balances and the Real Effective Exchange Rate



Source: World Bank staff calculations based on Rosstat and CBR data.

Graph 9. Quarterly Net Capital Flows in USD billion, 2007–2008



Source: CBR.

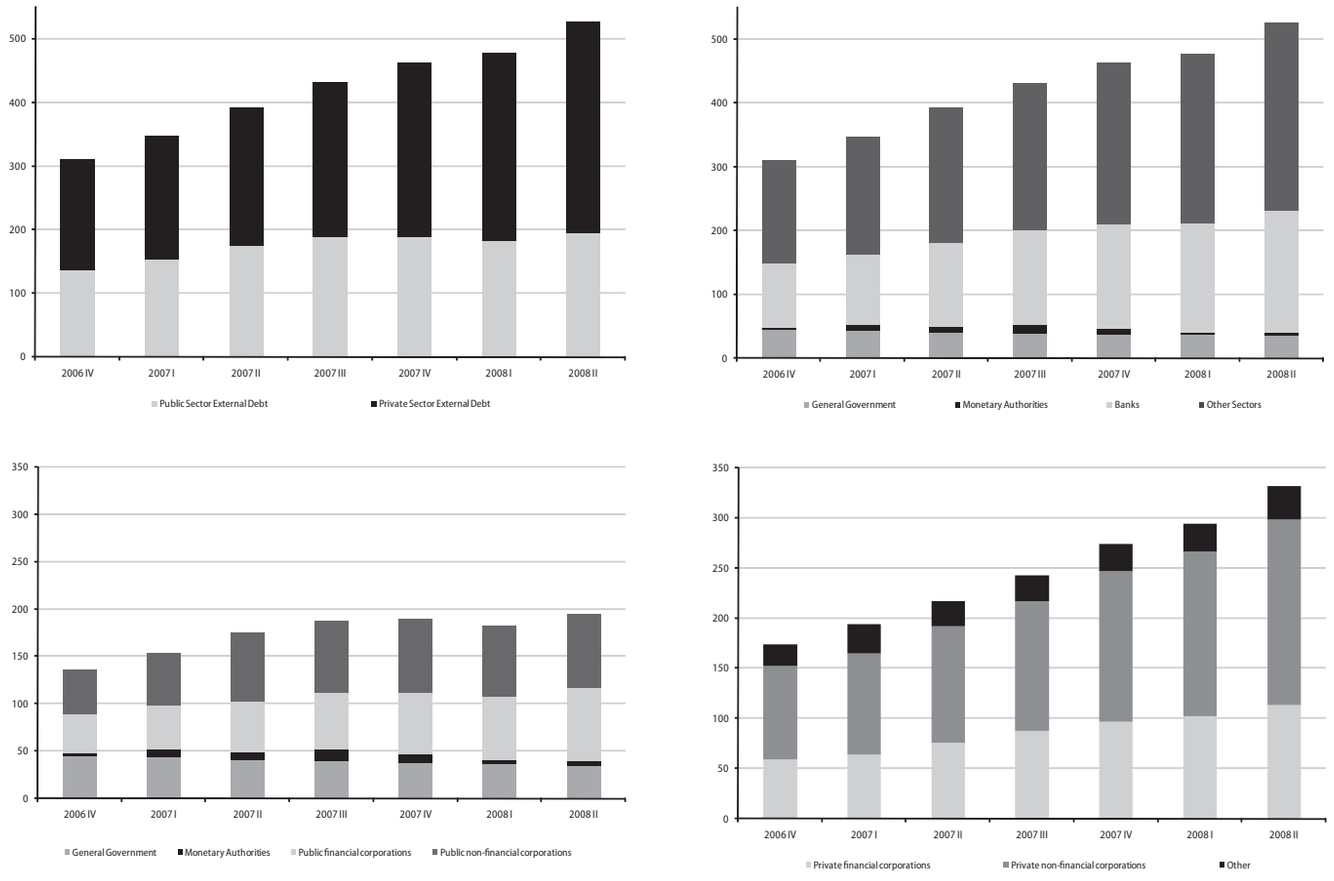
costs, more difficult access to credit, uncertain demand, and therefore, lower profit margins. Similarly, the ongoing restructuring in the banking sector has resulted in a rapid increase in the number of "white collar" unemployed. Despite the softening of the labor market, real wages continued to outpace productivity in 2008 as a whole, although the latest monthly data suggest that this trend is now being reversed (Figure 1.6).

The non-oil external current account continued to widen, partly in response to the past appreciation of the ruble (1.7). For oil-rich countries, the non-oil current account is a better measure of the underlying external trade and service account developments than the full current account.

After record inflows in 2007, Russia has experienced a classic "sudden stop" and, then, reversal in capital inflows since mid-2008. Moreover, in 2007-2008, capital flows became more volatile, and the banking sector experienced a sharp reversal of capital inflows (figure 1.8). After reaching a peak $84.3 bn in 2007, the account turned to a massive deficit of about $130 bn in 2008, reflecting mainly a sudden reversal in capital inflows in the third and fourth quarter of 2008. With a tightly managed exchange rate, this resulted in a decline in the stock of official reserves from about $600 billion in the summer 2008 to about $383 billion in early February 2009. There were two main factors were behind the deterioration of the capital account. First, changes in investment sentiment triggered a reversal of capital flows, including short-term speculative flows and FDI. Second, changes in foreign exchange expectations resulted in the unwinding of ruble positions held by foreign investors betting on a continuing ruble appreciation.

Russia's private corporate $1 bn in the second quarter of 2008 and rollover risk has risen. Although the general government's external debt remains modest, the private corporate and banking debt increased by $37.8 bn in the second quarter of 2008. The corporate sector—officially classified as "private" but including such state-controlled enterprises as Gazprom—accounts for most of the debt stock (figure 1.9). In the corporate sector, both financial and nonfinancial institutions have increased their debt stock, but nonfinancial institutions have increased it more rapidly. Public external debt has moderated. While the overall share of short-term external debt of Russia remains low, accounting for less than 20 percent of total external debt, the share of short-term debt in private financial institutions is significantly higher around 40%. High levels of short-term debt make these private financial institutions, predominantly small and medium-size banks that were able to tap into international capital markets funding, vulnerable to the rollover risk and sudden changes in investment sentiment.

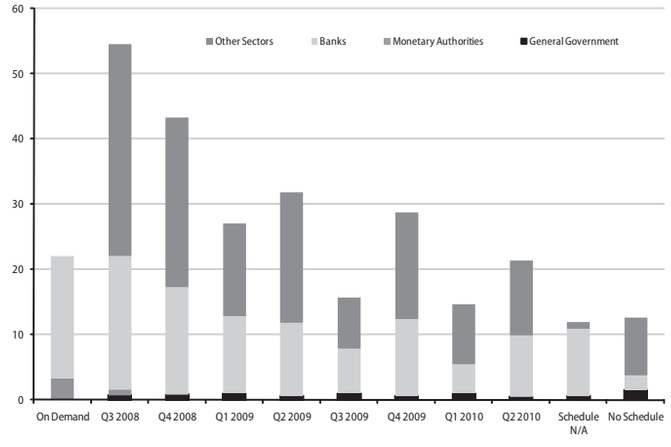
Graph 10. Russian Total External Debt Stock (USD billions)



Source: CBR and World Bank staff calculations.

Despite hefty repayment obligations at a time of sharply tighter global credit and higher rollover risk, systemic risk remains limited. Russia's has successfully weathered a difficult period of the last two quarters of 2008 during which some USD100 billion matured. In 2009, these repayments amount so some $120-140 billion and should be manageable under the baseline economic outlook (Figure 1.10, see below). Certain sectors, especially private financial corporations, are likely to face challenges in rolling over their external debt. In addition, higher prices for debt refinancing are inevitable. Even so, systemic risk to the banking sector appears limited because of the government's demonstrated resolve to support the systemically important banks and a sizable package of measures taken to date. A recent IMF mission has also concluded that the systemic risk remains limited.[2]

Graph 11. Repayment Schedule of Russia's External Debt (in USD billion)



Source: CBR.

For the first eight months of 2008, the monetary policy aimed to gradually tighten liquidity conditions to fight double digit inflation fueled by large capital inflows in the context of tight exchange rate management. Yet, the gradual tightening of money was not sufficient to engineer a decline in inflation, which remained high on the back of high food import prices, inflation expectations and high aggregate demand (Figure 1.11).

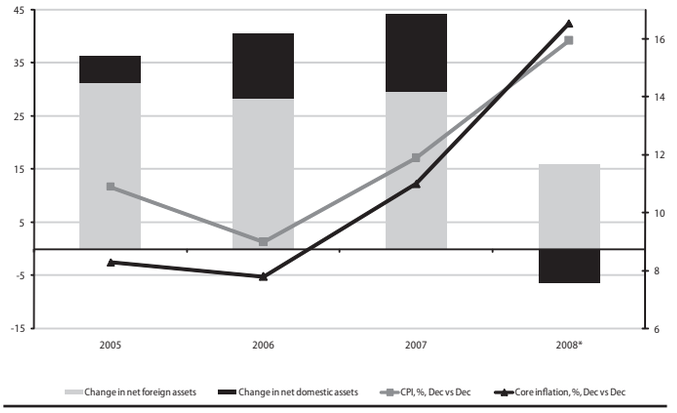
But with liquidity risks rising sharply since September 2008, the central bank moved decisively to support the system's liquidity and help restore confidence. A dramatic worsening of global financial conditions in September

2 See IMF's Press Release www.imf.org No. 08/225 of September 26, 2008.

2008 and the liquidity crisis caused the central bank to change its policy course and provide substantial liquidity in its efforts to alleviate the confidence crisis and unfreeze the interbank credit market.

These actions were swift, appropriate, and proportionate to the problem at hand. And they helped to temporarily stabilize financial markets after the tumultuous week of 15-19 September. An estimated 400 bn rubles of additional liquidity ($15 bn or 1.2% of GDP) were pumped into the economy in September and October, when the reserve requirements were dropped sharply to 0.5%. This temporarily alleviated the sharp liquidity and confidence crisis in mid-September, but liquidity pressures continued later in October and prompted the government to take additional measures to ensure the rollover of external obligations by banks and corporations. In hindsight, this was the right decision, helping to avoid more difficult liquidity conditions in September and early October than otherwise.

Graph 12. Monetary Growth and Inflation (in percent; monetary growth-left scale; inflation-right scale)



Source: CBR; Rosstat; World Bank calculations
Note: 2008 data are as of September.

2. Policy Response

Russia's consolidated (general) budget was executed with a strong surplus of about 4 percent of GDP in 2008, but the 2009 budget is now revised, and is likely to result in a significant fiscal deficit. Given the balance of risks that has shifted dramatically toward growth, the financial sector, and the real economy, and the fact that Russia has substantial resources accumulated in the two oil funds (about $210 billion), Russia has fiscal space to allow the fiscal deficit to grow during 2009 in order to cushion the impact of the crisis. Long-term, public expenditures will clearly need to be adjusted, however, to keep the overall fiscal balance on a long-term sustainable path in case of prolonged periods of very low international oil prices and weak global demand. In the short-term, however, and given Russia's large fiscal resources, the authorities are appropriately targeting a significant fiscal deficit, which is emerging in large part because of the collapse of the oil tax base and additional, crisis-related spending.

Although the direct fiscal costs of the announced anti-crisis measures so far are manageable, quasi-fiscal costs are much larger. Estimated direct fiscal costs implemented through November 2008 are only 190 bn rubles ($7.6 bn or about 0.58% of Russia's GDP in 2007) but the quasi-fiscal and contingent costs could reach up to about 4,639 bn rubles ($185 bn, or about 14.7% of Russia's GDP in 2007) (Table 2). These additional commitments have reduced the fiscal space and halted many important initiatives, especially large capital expenditures to address infrastructure bottlenecks that might be scaled down or postponed. Nevertheless, Russia has some $210 bn of reserves in its oil funds reserves that could be used to finance a sizeable fiscal deficit emerging in 2009. It is likely to use this financing option to continue cushioning the impact of the crisis on the economy and the poor.

Table 13. Aggregate Fiscal, Quasi-Fiscal and Monetary Cost and Sources of Financing of Anti-Crisis Policy Measures (in billions of rubles, unless otherwise indicated)

	Fiscal	Quasi-fiscal	Monetary	Total
Federal Budget	190	up to 2,839	...	up to 3,029
..o/w National Welfare Fund	...	*up to 700*	...	*up to 700*
Central Bank of Russia	...	up to 1,800	830	up to 2,630
Total (in bln rubles)	190	up to 4,639	830	up to 5,659
Total (in bln USD)	7.6	up to 185.0	33.0	up to 225.6

Source: World Bank staff estimates.

3. Policy Challenges Going Forward

Russia's first challenge is to limit the overall impact of the crisis on liquidity and the real economy while not losing control of the public finances and not letting inflation get out of control. This will be a delicate balancing act. But Russia is better prepared today to deal with these new challenges than at any time since the beginning of the transition. Despite some similarities with the crisis triggers of 1998, Russia today is a much larger economy with much stronger macroeconomic fundamentals. Its policy response––loosening monetary policy, supporting the banking sector and tge repayment of short-term corporate and financial obligations, and implementing a number of quasi-fiscal measures––so far has been swift, massive, and broadly appropriate.

The second challenge is to intensify the efforts to diversify the economy, strengthen institutions as well as the financial sector for sustained, long-term growth. Oil and gas exports continue to account for more than two-thirds of Russia's export revenue and more than 15% of GDP. But the crisis shows how dependent the Russian economy is on oil prices and how much it needs to diversify and strengthen its financial sector for sustained, long-term growth. Despite strong macroeconomic fundamentals, structural weaknesses in the banking sector and a limited economic base make Russia vulnerable to highly correlated, multiple shocks of a decline in oil price, a sudden reversal in capital flows, and a drop in the market sentiment and the stock market. Russia's economic recovery will depend largely on its ability to regain the confidence of domestic consumers and domestic and foreign investors. The crisis can be a catalyst for continuing the structural reforms to improve productivity and the business climate and fiscal reforms to strengthen the economy's non-oil tax base. The way forward is diversification through greater openness, greater macroeconomic stability, more use of cutting-edge technology and knowhow, more foreign direct investments, and a stronger and healthier banking system.

The third challenge is to continue the integration into the global economy, including the acceleration of accession to the WTO. Russia has benefited substantially from being more integrated with global markets. Indeed, integration of trade, capital, and finance has helped Russia reap important benefits during the past decade of rapid economic growth. A key source of investment and growth in the past years has been long-term equity and debt from foreign investors. The WTO accession can be used as a means towards locking in domestic reforms, ensuring that Russia benefits from a rules-based international trading regime, as well as to strengthen Russia's future integration into the world economy by improving its policies and institutional capacity. Russia's active participation in the design of the new international financial architecture will solidify its role in global financial markets.

The fourth challenge is to limit the impact of the crisis at the regional level and be vigilant to the emergence of non-payment problems. First, the credit crunch is likely to have a negative effect on regions that have relied on debt financing and narrow tax bases. Although aggregate sub-national debt levels including guarantees are very small for the economy as a whole (currently 527 bn rubles, or approximately 1.5% of GDP), the slowdown of economic growth and shortfall in tax revenues will put additional fiscal pressures. Furthermore, for regions that have relied on debt to cover their expenditure gaps, the cost of borrowing is likely to increase. Second, in an environment with more limited access to borrowing, different sectors of the economy once again face a risk of an increase in non-payments. In addressing this potential problem, the authorities need to carefully weigh the implications of its policy mix. Although a softening of budget constraint on the state owned companies (especially utilities) or an introduction of administrative price controls might seem as an easy solution to minimize the negative social consequences of the economic slowdown, such policies will distort incentives for enterprises to restructure and use inputs and existing assets more efficiently.

Finally, a prolonged economic recession in 2009 might require an introduction of a well targeted and structured, fiscal stimulus package to enhance key drivers of sustained economic growth. This is the subject of the ongoing policy deliberations around the revised 2009 budget. From a macroeconomic perspective, Russia is probably a good candidate for such a fiscal stimulus as economic activity drops significantly below potential, inflation risks subside, and fiscal reserves remain comfortable. The objective would be to primarily cushion the impact on the poor and unemployed, boost aggregate demand and create more a favorable environment for a more rapid recovery of private investment. To have the desired effect, however, such a fiscal stimulus (which could consist of a combination of spending increases and targeted tax cuts) must be temporary, transparent, affordable, rule-based, and implemented as exceptional policy in an exceptional situation. This is important for governance reasons and for the credibility of the government's policy response discussed below. But it is also important to minimize the potential longer-term "moral hazard" and incentives problems that arise from state support for enterprises and banks that made inadequate commercial and borrowing decisions. In terms of structure, focus of such additional spending might need to be on cushioning

the impact on the poor and unemployed, supporting small and medium size enterprises, and addressing the worst infrastructure bottlenecks.

Finally, it is important to realize that faced with the global crisis governments can and should act but they cannot do everything and, therefore, they must be strategic in their policy response. The scale of the global crisis is such that no country is spared and there is a limit to how much any government can do; those limits are dictated, inter alia, by the fiscal and debt situation and implications of governments' actions for currency stability and inflation. What this means is that governments must allocate scarce resources to the most important uses and pressure points caused by the crisis. In the case of Russia, in 2009, as discussed above, the country is better prepared and has more resources to address some of the consequences of the crisis. But even Russia will have to be selective, focusing its considerable resources on the areas where the crisis is likely to have the biggest impact: the poor, unemployed and the vulnerable, small and medium size enterprises, and infrastructure.

4. Outlook for 2009

Global and Russia-specific outlooks are uncertain and subject to revisions. Given that the global financial outlook remains uncertain as the crisis continues to unfold in the Western countries that are implementing major policy packages, the outlook is especially uncertain both in terms of global demand and oil prices. The key global assumptions are the current, *preliminary* World Bank projections of oil prices in 2009 of about $47/bbl. On that basis, real GDP growth for 2009 as a whole is likely to turn negative (about -1.4%) for the first time since the 1998 crisis and compared with 5.6% growth in 2008. Most of the impact of the crisis is concentrated in the last quarter of 2008.

In sum, the global crisis has affected Russia but the Government has so far responded in a pro-active and comprehensive manner. A lot more may need to be done to implement these measures. Transparency and effectiveness of such policy response is key to ensure that they limit the impact on the real economy. Attention will also need to be paid to longer-term issues of competitiveness, diversification, and growth of small- and medium- sized enterprises. Such reforms and modernization of the banking sector will lead to improvements in productivity and will help Russia emerge from the current crisis with a healthier and more dynamic economy.

5. Parallels with Serbia and Montenegro

Does the Russian experience with the crisis have any parallels or possible lessons for smaller European economies such as Serbia and Montenegro facing similar impacts of the global crisis? While not engaging in a complete comparative analysis, there are interesting parallels here. The initial conditions of Russia, Serbia, and Montenegro were quite similar. All three countries experienced high growth before the crisis, in part driven by large capital inflows, which fed domestic liquidity, credit, construction and the overall demand boom. Second, the crisis began to bite at about the same time and with a lag compared to the developed industrial countries; the crisis in these countries hit especially in September 2008 at the time of the global financial panic following the failure of the Lehman brothers as global investors engaged in a massive flight to quality. And third, the three countries experienced a significant worsening of their export environment. In the case of Russia and Montenegro, the prices of their key export commodities, oil and aluminum, respectively dropped significantly, contributing to the economic, budgetary and external pressures. And fourth, domestic banking sectors were not exposed to the original subprime/derivative crisis.

The transmission of the crisis to the real economy was also similar. The banking sectors in each country were relying, to a varying degree, on external borrowing, allowing banks to expand loans to the private sector beyond its traditional (deposit) funding base. And some of the banks were exposed in the risky construction and real estate markets during the booming period. When external liquidity dried out, the domestic credit boom ended and banks ended up with short term debt obligations and gradually worsening quality of their portfolios. Moreover, the social impact via a rise in unemployment and pressures on real wages is playing out in a similar fashion and at about the same time.

Early policy responses in each country were focused on supporting liquidity and limiting the systemic bank risk. But more might have to be done to deal with the social impact of the crisis going forward. Also, addressing some major infrastructure bottlenecks will be important in order to support the eventual recovery. Each country has major infrastructure bottlenecks as a result of years of underinvestments and inadequate maintenance. While Russia has fiscal resources to expand the deficit and cushion the impact during 2009 without recourse to external official borrowing, fiscal space in Serbia and Montenegro is more limited. As a result, these countries are more dependent

on securing external financial resources to help weather the crisis.

Final observation. The crisis is global and no country is spared. Its transmission mechanism seems quite similar in several middle income countries such as Russia, Serbia and Montenegro, and relatively predictable in the short term. The next pressure point will be the social situation. The economic and social outcomes in each country will depend in part on the governments' policy response and to what extent it is focused on these pressure points as opposed to supporting specific banks, corporations or sectors.

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