quarterly monitor

OF ECONOMIC TRENDS AND POLICIES IN SERBIA

Issue 7 • October–December 2006

Belgrade, March 2007

PUBLISHERS
The Foundation for the Advancement of Economics
Kamenička 6, Belgrade
Tel/Fax: 011 30 21 069
E-mail: fren@ceves.org.yu
http://*www.fren.org.yu*

Center for Advanced Economic Studies
Lazarevačka 1, Belgrade
E-mail: ceves**@ceves.org.yu**
http://*www.ceves.org.yu*

DESIGN OF INNER PAGES
Stefan Ignjatović

PRINTING PREPARATION
Maja Tomić

COVER DESIGN
Nikola Drinčić

PRINTING OFFICE
Alta Nova

VOLUME
300 copies

Our deepest gratitude goes to USAID and Bearing Point – the USAID's partner on Serbian Economic Growth Activity (SEGA) project – who supported both the publication of this issue and the research that underlies it.

Table of Contents

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

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

It is with pleasure and excitement that I take up the role of editor in chief of the *Quarterly Monitor* as of this issue. It is not often that everything comes on a platter. All the credit for the great efforts to launch this periodical, assemble and train a young team to look at the data and to think and write analytically about the Serbian economy goes to Kori Udovički. The result of the team's work is this issue of *QM*. It is only natural to aspire to be even better, and it is my hope that together we will do so.

Since this is my first encounter with *QM* readers in an editorial capacity and this note deals with the whole of 2006, it will be longer than usual and differently structured.

Economic trends in 2006

The Serbian economy scored good results in 2006 with respect to economic growth, reining in inflation and solid growth of exports.

Economic growth accelerated in 2006 relative to 2005, even though GDP data indicates otherwise. When the effect of the collected VAT is excluded, the economy grew at a rate of some 6.5% in 2006, compared to 5.5% in 2005. The article *Spotlight on: 3* explains the relative drop in the amount of collected VAT in 2006. An alternative measure of economic activity – the non-agricultural GDP – also indicates a somewhat faster growth of the economy in 2006 (6.8%) than a year ago (6.3%). It was realized solely through the growth of productivity, which was the result of the restructuring (scaling down or closure) of inefficient parts of the economy. Nonetheless, the growth was insufficient to generate a net rise in employment. Exports recorded solid growth of about 30% annually. In 2006, the growth of exports was a healthy driver of sustainable economic growth from aggregate demand side. The pace of exports did not slow down in Q4 and early 2007. But, since Serbia's exports are small, the growth was from a low base. In relation to the growth of imports, the growth of exports was insufficient, as evidenced by the rise in the trade deficit.

Curbing of inflation started in late 2005, and in the first semester of 2006 it was cut from 19% to 12% annually. In Q4 and in January and February of 2007, it was reined in strongly and ran at a 2.5% annual rate in those five months. Core inflation, which is formed on the market and is targeted by the NBS, was practically reduced to zero in the five months – only 0.6% annually. The figure is considerably below the NBS's announced target of 4% to 8%, and above the standards of developed economies.

On the reverse side of the 2006 coin were the major foreign trade and current account deficits, a considerable appreciation of the dinar, and the high rise in wages, which exceeded the growth of productivity, as well as the fiscal expansion in the second semester.

Despite the solid growth of exports, Serbia's large trade deficit continued to rise - by 15.7% in 2006. Owing to the low starting point, exports would have to grow twice as fast as imports, at about 40% a year, just to stop the trade deficit from widening. Hence the optimism about the 30% growth of exports is not justified. Nor does the solution lie in slashing imports as, comparatively speaking (Table T6-1), they are not large. The current account deficit in 2006 was 11% of GDP, which is very high. Croatia, for instance, has a deficit of 6% to 7% (see *Spotlight on: 1* in this issue). Over the medium term, a large deficit can be sustainable if it is financed from foreign direct investments, not borrowing. In 2004 and 2005, FDIs were insufficient to cover the current account deficit, which, however, was the case in 2006. But since these were FDIs primarily linked to *ad hoc* sales, not new investments, it is not clear whether or not the pattern, and therefore the deficit too, is sustainable over the medium term.

The current account deficit deteriorated seriously in Q4, to 16.2% of GDP, with the tendency apparently continuing in the first months of 2007. The trade deficit rose at the same time (while Q3 saw a 3.5% y-o-y reduction of the deficit, in Q4 it recorded 10.4% increase), an indicator of growing domestic demand due to higher public spending and the rise of wages. The dinar's appreciation added to the widening of the trade deficit.

Serbia's foreign debt increased because of the growth of the private debt and reached 67% of GDP, a high

level though still below the critical 80% of GDP. The experience of Croatia, whose debt exceeded this limit, is relevant for Serbia and is analyzed in the article *Spotlight on: 1*.

The dinar appreciated strongly in real terms, increasing its value by 12.1%. Nominally, in the first semester of 2006, the exchange rate was *de facto* constant, while the nominal increase in value in the second half of the year was 9.2%.

Wages grew over 11% in real terms in 2006, far more than in 2005 when the figure was 7%, and certainly more than productivity. In conjunction with the dinar's appreciation, this resulted in the lower competiveness of the Serbian economy. The gross wage expressed in euros increased from 336 euros in Q4 2005 to 452 euros in Q4 2006, or as much as 35%. Besides reducing competitiveness, the ever-rising euro-wages lead to growing imports. The declining competitiveness due to the appreciation of the dinar and wage rise is happening in conditions of an already wide trade deficit.

The jump in real wages was particularly pronounced in Q4 (16%), which led also to a rise in unit labor costs and reduced the competitiveness of the economy. The highest rises were recorded by salaries and wages paid out of the budget, a result of fiscal expansiveness in the quarter. Wages continued to climb quite steeply in early 2007 which, coupled with fiscal expansion, could increase the balance of payments deficit and trigger inflation.

Economic policy in 2006

The main challenge to economic policy in 2006 was to halt inflation, which had run out of control in the preceding year. Monetary policy was charged with this task. The basic cause of inflation in 2005 was the large inflow of foreign capital through borrowing and privatization – foreign direct investments (Table T6-2), which resulted in the growth of money supply and consequently aggregate demand. The phenomenon is nothing novel in emerging markets including countries in transition and the responses of economic policy and their effect are known. Experience has shown that fiscal tightening is a durable solution, namely that the government should restrain it's spending and thereby leave room for the growth of private sector investments and spending without triggering excessive demand and inflation. This, however, did not happen in Serbia. The government showed it found it hard to abstain from spending in favor of the private sector when money from privatization was at hand. Hence the main activities took place in the central bank.

The NBS kept inflation in check by withdrawing the money that had caused the inflow of capital (repo operations), by keeping inflow under control through high reserve ratios, and by appreciating the dinar. Various combinations of these measures were used throughout 2006.

In the first semester of the year, the NBS reduced inflation by slowing money growth and maintaining a practically constant nominal exchange rate of the dinar. In the second semester, it relied almost exclusively on the exchange rate; it was then that the dinar began its sizable nominal appreciation.

Slowing down money growth with repo operations proved to be very expensive. The 20% interest rate the NBS gave in the first half of the year and the constant exchange rate meant a yield of 20% in euros. This attracted even more foreign capital, which led to fresh growth of the supply of dinars, which then had to be withdrawn again. In retrospective, the NBS may have gone overboard with the interest rate. In any event, the cost of the money withdrawal was high – about 155 mn euros in 2006.

Controlling the inflow of capital was used in parallel to prevent monetary expansion, but did not ultimately prove to be successful. The high reserve ratio on banks' foreign borrowing, as a form of control, led to the avoidance of domestic banks in favor of direct foreign borrowing (see T8-5 and Table P-7, Analytical Appendix).

The strong nominal and even more so real appreciation of the dinar in the second half of 2006 and beginning of 2007 acted as a powerful brake on inflation. The inflation targeting announced by the NBS in September 2006 was therefore almost exclusively through the appreciation of the dinar. Inflation fell to below the projected target (7% to 9%); hence the appreciation, too, could have been more moderate. Although it claims not to have a direct effect on the exchange rate, the NBS intervened vigorously on the foreign exchange market in November, December and January, first to prevent even greater appreciation of the dinar and then its depreciation (Table T8-7). Curbing inflation with the appreciation of the dinar, however, is very expansive since it undermines the competitiveness of the economy. It is also a question whether it is sustainable as it generates a major external imbalance – large current account deficit.

Where fiscal policy is concerned, matters are much simpler, but the consequences are more dangerous. In the second semester of 2006, "big politics" harnessed economic policy into the ruling coalition's election campaign. Besides fiscal policy, this also included the policy of wages in the public sector, where they grew, and the pricing policy, where necessary adjustments were put off. *Spotlight on: 2* analyzes a neglected

problem – collection of rents for the use of crude oil and other mineral resources, which could have fiscal consequences.

After announcements in the course of 2006, fiscal policy did undergo a change and in Q4 became expansive, recording a deficit of 5.4% of GDP at quarterly level, or 1.5% annually. The deficit was caused by the growth of expenditure – the government obviously could not just "sit" on its privatization revenues. Unless this is revised, the expansiveness will spill over into 2007. Wages and salaries of budget beneficiaries have been raised, and spending in the framework of the National Investment Plan is slated, while public revenue has been decreased by the reduction of tax on wages. This policy will result in a fiscal deficit of 3% to 4% of GDP in 2007.

The strong inflow of foreign capital anticipated in 2007 will generate private investments and spending. If the government adds to this a growth of its own expenditure and creates a fiscal deficit, the result will be a sizeable rise in total aggregate demand. This would impact directly on the foreign trade deficit, causing it to grow, which already happened in Q4 2006. Another effect would be a return of inflation. The NBS, naturally, would immediately intervene to prevent this, but how? By allowing the dinar to appreciate and raising the interest rate, i.e. with expensive repo operations. Appreciation of the dinar would additionally worsen the trade deficit and, at one point or another, make it unsustainable. A high NBS interest rate expressed in euros would be a strong magnet for foreign capital, inciting a new expansion of money and aggregate demand, and thus create a vicious circle. This certainly would not be a sustainable solution.

A radical revision of public finances must be carried out in 2007, and produce a binding medium-term framework for fiscal policy under which the government, in addition to reducing public spending, would also encourage savings, i.e. a surplus. Adoption of a medium-term framework would make it possible to avoid the major oscillations in fiscal policy that were evident in the past three years, and which were reflected in the instability of the economy, requiring harsh responses by monetary policy like those described above. A credible, binding medium-term fiscal framework would create a predictable macroeconomic environment, which would be a strong support for high, sustainable economic growth.

Fiscal policy in 2007 must be revised in order that a balanced budget could be achieved. This would leave enough room for the growth of private investments and spending without triggering inflation and worsening the foreign trade deficit. The NBS could then continue lowering the interest rate, which would do away with pressures for appreciation of the dinar, and it could even depreciate mildly and enhance the competiveness of the economy. Such a combination of fiscal and monetary policy would be sustainable over the medium term and would be a good basis for economic growth.

TRENDS

1. Review

The macroeconomic situation in 2006 was marked by two mutually connected developments: the strong appreciation of the dinar (whose nominal appreciation against the euro was 8.3% and real appreciation 12.1%). The upshot was the slashing of inflation, with the 12-m figure dropping from almost 18% in December 2005 to 6.6% in December 2006. Following the change in the NBS's exchange rate policy in December 2005, the dinar appreciated in real terms during the first semester (constant nominal rate in an inflationary environment), while there was a nominal appreciation of almost 10% in the second half of the year. The dinar appreciation was due to the sizable inflows of capital from abroad and the restrictive response of monetary policy: in 2006, the NBS, thanks to the exceptional real yields on repos, was able to sterilize these inflows and prevent them from exerting inflationary pressures. The stock of repos increased tenfold, from dinar equivalent of 200 mn euros in early 2006 to almost 2 bn euros at the year-end.

Neutral or mildly restrictive in the first semester, fiscal policy about-faced and became expansive in the second half of the year, mainly out of day-to-day political motives relating to the January 2007 elections. Intensified fiscal spending was realized through the adjusted budget and National Investment Plan, both of which were adopted in the summer of 2006. The expansive public spending was financed from the exceptional privatization revenues (sale of the Mobtel cellular phone operator and Vojvodjanska Banka), as well as from the sale of a cellular telephony licence. At the end of the year, the fiscal deficit reached 1.5% of GDP.

Solid economic growth was another characteristic of 2006. The GDP grew by 5.3% over the whole year (as against 6.2% in the preceding year. Although below the 2005 figure, this did not signify a slowing of economic activities. Because of the exceptional performance of the tax component in GDP in 2005 and somewhat less so in 2006, the total GDP growth was below the figure recorded in 2005. But if only the growth of gross value added is observed, it amounted to 6.5% in 2006, higher than the 5.5% in the preceding year.

The main characteristic of the external sector in 2006 was the stable and sizable growth of exports (28.5%) as well as of imports (21.9%). This led to a major current account deficit (11.7% of GDP) which, however, was more than covered by the record capital account surplus (7.353 mn euros, or some 30% of GDP). The surplus was the result of record privatization revenues, and the high borrowing and recapitalization of the banking sector. Because of the bypassing of the NBS's restrictive measures, the second semester witnessed a major growth in direct foreign borrowing by companies, which, in turn, led to a record increase in the central bank's foreign exchange reserves (4.240 mn euros).

Q4 2006 was marked by major fiscal expansion (with a deficit of almost 6% of GDP in the quarter), realized primarily through the rise in wages in the public sector and spending in the framework of the National Investment Plan, which was expected in the quarter before the January 2007 elections. *QM* estimates that the deterioration of the foreign trade balance in late 2006 and the recovery of industrial production in December can be ascribed in good part to the growth of public spending. At the same time, however, inflation continued to slow (the y-o-y rate was cut to 6.6% in December), mainly because of the appreciation of the dinar, as well as the measures taken to prevent a significant expansion of monetary supply. Operations on the open market (repo operations) became the basic instrument of NBS monetary policy after it switched to inflation targeting. In Q4, the central bank embarked on intensive purchases of foreign exchange on the interbank market, thereby preventing further appreciation of the dinar under pressure from the excess supply of foreign exchange. The economy continued growing at a stable rate in the quarter (a GDP growth of 4.9%), in spite of the drying up of domestic

credit to companies, which was compensated by increased borrowing abroad. Exports were not affected to any major extent by the appreciation and continued their stable growth. The current account deficit worsened in Q4, but the extremely high capital account surplus (as a consequence primarily of FDIs and high borrowing by companies) resulted in a further growth of the NBS foreign exchange reserves in the quarter (1.232 mn euros).

Inflation was vigorously curbed in Q4, with the 12-m growth rate of prices standing at only 6.6% in December. The first tentative signs of slower inflation were visible in the first semester and became quite obvious as of Q3. Though the 12-m inflation rate in December was the lowest since the start of the transition process, the 2006 average (12.7%) was higher than in 2003 (11.7%) and 2004 (10.1%) because of the somewhat higher rate in the first half of the year. The fact that core inflation slowed further in Q4 is especially important. It fell to a 12-m level of 5.7% in December, far below the 7%-9% target of the central bank, and this in spite of the expansive fiscal policy. The main reason for this trend was the nominal appreciation of the dinar. In Q4 too, the dinar appreciated strongly in nominal terms against the euro (some 5% relative to the preceding quarter). The total nominal appreciation in 2006 was 8.3% and as much as 12.1% in real terms. Both total and core inflation remained very low in January and February 2007. A more serious threat to price stability will come from the wages and salaries in the government sector, which were raised considerably, and the consequential rise in overall demand. The effects remain to be seen. In addition, prices of electricity and utilities are slated to go up shortly. The high growth of wages in Q4 (16.4% in real terms relative to the same period in 2005), stemmed for the most part from the adjusted budget and raising of wages in the government sector. The highest rises were in health and social welfare. Although they were due in part to one-off bonuses, *QM* estimates that at least half has been "built into" spending in 2007. Although it would be premature to predict the effects on the growth of prices, in our view they could be destabilizing.

Economic growth maintained the same solid pace characteristic for the whole year. In Q4, the y-o-y GDP growth was about 5%, slightly lower than in the first semester. The lower figure in the second semester relative to the first is the result of comparison with the higher base in the second half of 2005. The y-o-y growth of industrial production in Q4 was 2.9%, with the total annual growth of 4.7% being considerably higher than in 2005. Q4 saw a mild departure from the trend of the first three quarters, with leaders in industrial production recording somewhat lower growth rates, whereas production picked up in a broad front of less successful sections. The recovery may have been due in part to the increased government spending, which made it possible for less competitive enterprises to raise their production. Construction continued recording very good results, with a y-o-y growth of some 20%, thanks primarily to the good weather conditions. Thus 2006 saw the highest growth of construction in the past five years – about 13% (the average growth rate in the preceding two years was below 5%).

Employment in September 2006 was slightly lower than in March (by 6,000 jobs or about 0.3% of the total number of employed). Its structure continued to change; a very high rise in the number of new entrepreneurs and their employees was recorded (this, admittedly, may be due to the legal obligation of all entrepreneurs to register with the National Register of Private Entrepreneurs), and the constant decline of employment in enterprises (where the manufacturing industry is still prevalent).

The sudden worsening of the current account deficit in Q4 (16.2% of the estimated quarterly GDP) was not good news. Although exports kept up their good performance, the trade deficit grew because of high imports, primarily of energy products, in Q4. Exports remained on the satisfactory medium-term growth trend of about 28% annually. Though the growth rate was somewhat lower in December, the January results confirm that there has been no essential change in the trend thus far. In addition to the growing exports, the current account balance was affected by the higher deficit in factor transfers (interests) and the drop in current transactions. On the other hand, the capital account continued recording exceptional inflows, with a record high surplus of 2,232 mn euros in Q4. The surplus was the result of both high FDIs (primarily

privatization and consolidation of the banking sector), and the ever-increasing foreign borrowing by companies. Domestic foreign exchange savings also grew, and the NBS foreign exchange reserves increased by an additional 1,232 mn euros in Q4.

The fiscal deficit in the quarter hit its record in the past three years due to the expansion of expenditures, both current and capital. Revenues increased in line with the GDP growth. The deficit was financed from government deposits accumulated earlier, mainly from privatization revenue and the sale of the cellular telephony license. Close to half the increase in public spending and the deficit during Q4 was the consequence of the rise in one-off expenditures (early payment of pensions and outstanding debts, higher spending on commodities and services, and the like, and will have only a temporary effect on aggregate demand. The other half, however, was related to a growth of expenditure which will remain permanently at a higher level (wage increase in the government sector). The outcome of maintaining labor costs and other constant expenditures at the high level recorded in late 2006 will be a constant rise in the level of aggregate demand and, in consequence, pressures on the external sector and prices.

Although inflation was successfully reduced in Q4, monetary supply accelerated its y-o-y growth to 39.1% toward the end of the year, which was a change in trend relative to the previous two quarters (34.4% in Q3 and 37.9% in Q2). Despite the persistent sterilization, growth of primary money speeded up in Q4 due to government spending, which was not fully neutralized through the repo market. The created money was sterilized quite efficiently but expensively, by the NBS, which resulted in a record increase in the stock of repos in Q4 (dinar equivalent of some 800 mn euros). Domestic banks put as much as 80% of new placements into new repo transactions with the NBS. Although the real yield on these instruments declined at end-Q3, it remained very high even in Q4. Credit to the non-government sector from the domestic banking sector was strongly reined in and credit to companies dried up completely. Companies offset this with direct foreign borrowing. As in Q3, banks' funding came mainly from domestic deposits (increase of 900 mn euros in Q4) and the rise in their capital (530 mn euros), while new foreign borrowing amounted to only 220 mn euros. Companies' liquidity rose in Q4, as reflected by the surprising growth of their dinar deposits by 450 mn euros.

The financial markets recorded very good results in Q4. Both Belgrade Stock Exchange indices – BELEXfm and BELEX15 – rose strongly and achieved all-time highs of 1.952 and 1.675 index points, respectively. The total rise in the indices in 2006 was as much as 22% (BELEXfm) and 58% (BELEX15). Q4 also saw an all-time high in stock trading volumes measured in dinar-denominated turnover. After rising by some 100 basis points in early October, the average yield on FFCD bonds stagnated at about 6% during the quarter while, on the other hand, there was a major increase in turnover.

Serbia: Selected Macroeconomic Indicators, 2004-2006[1)]

	annual data			quarterly data						
	2004	2005	2006	2005			2006			
				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	17.2	17.1	17.8	14.8	15.6	12.5	8.2
Retail Price Index - core inflation[3)]	7.9	14.7	9.7	15.9	14.2	14.1	11.0	10.8	10.4	6.7
Real fx dinar/euro (Dec.02=100)	106.3	105.8	97.4	106.7	105.8	104.5	102.7	100.3	95.5	91.4
Nominal fx dinar/euro (period average)[4)]	72.62	82.92	84.19	81.89	83.83	85.71	87.09	86.87	83.25	79.55
Economic Growth						y-o-y[2)]				
GDP (in billions of dinars)	1,431	1,750	2,077	…	…	…	…	…	…	
GDP	8.4	6.2	5.3	7.8	7.4	5.0	6.2	5.6	4.6	5.0
Industrial production	7.1	0.8	4.7	-1.5	3.2	3.2	5.3	6.1	3.9	2.9
Manufacturing	9.7	-0.7	5.3	-4.1	3.6	1.8	7.5	6.2	4.4	2.9
Average net wage (per month, in dinars)	14,108	17,478	21,745	17,122	17,969	19,680	19,284	21,126	21,986	24,585
Fiscal data	in % of GDP			y-o-y, real growth						
Public Revenues	41.2	40.1	38.9	-0.5	-0.6	1.3	4.8	3.8	4.4	5.9
Public Expenditures	-40.0	-38.3	-38.3	-2.0	-2.5	0.7	8.1	-2.4	5.2	21.0
				in billions of dinars						
Consolidated balance	17.5	33.8	11.8	3.9	9.9	15.2	0.4	16.3	9.9	-14.8
Analytical balance (FREN's definiton)[5)]	-7.7	-2.9	-37.4	-13.4	0.8	7.3	-4.0	-0.8	-0.2	-32.3
Balance of Payments				in millions of euros, flows						
Imports of goods	-8,302	-8,286	-10,096	-2,100	-2,234	-2,455	-2,139	-2,494	-2,541	-2,910
Exports of goods	2,991	4,006	5,146	1,011	1,019	1,163	1,039	1,244	1,368	1,484
Current account balance	-2,197	-1,805	-2,892	-291	-519	-671	-679	-469	-633	-1,111
Foreign direct investments	773	1,248	4,077	240	495	250	164	545	1,671	1,668
NBS gross reserves (increase +)	229	1,857	4,240	281	454	738	390	1,079	1,539	1,232
Monetary data[6)]				in billions of dinars, e.o.p. stock[2)]						
NBS net own reserves[7)]	103,158	175,288	303,849	137,044	159,055	175,288	182,772	224,808	244,631	303,849
NBS net own reserves[7)], in mn of euros	1,291	2,050	3,846	1,656	1,878	2,050	2,103	2,614	2,983	3,846
Credit to the non-government sector	342,666	518,298	610,305	409,397	456,541	518,298	547,564	591,270	614,698	610,305
FX deposits of households	110,713	190,136	260,689	141,477	162,667	190,136	207,609	222,105	243,328	260,689
M2 (y-o-y, real growth, in %)	10.4	20.8	29.8	22.1	22.4	20.8	24.7	19.8	20.5	29.8
Credit to the non-government sector (y-o-y, real growth, in %)	27.4	26.4	9.8	25.0	27.6	28.6	26.9	25.4	20.7	9.8

Source: FREN.

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

2) Unless otherwise indicated.

3) The definition of core inflation used by QM differs somewhat from the NBS definition. See footnote 1) in Trends section "Prices and the Exchange Rate".

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

5) Under FREN's definition, the analytical balance includes on the expenditure side the payment of old (domestic) debts, specifically payments for FFCDs, the Serbia Reconstruction Loan, debt to pensioners, etc. Defined in this way, the result measures the liquidity effect government transactions have on the economy.

6) Monetary data that are used in this issue of QM differ from those used in previous issues of QM due to the change in methodology in the Statistical bulletin of NBS. QM methodology remains the same but only based on a slightly modified database.

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.

2. International Environment

Economic developments in Europe in Q4 look stimulating: the EU recorded good results (growth of 3.3%), while the overall growth in 2006 (2.7%) is a significant improvement from 2005 (1.5%). ECB, however, continues to carefully monitor possible inflationary risks. It raised its reference rate twice in Q4 (from 3.00% to 3.25% and then again to 3.50%). Eastern European countries continue to show growth rates that are twice as high as those in the euro zone, but inflation, although slightly lower in Q4 than in Q3, is still relatively high. On the other hand, growth in the United States was bellow expectations, and further slowdown is still possible. Overall US growth in 2006 (3.3%) is lower than in the previous year (3.5%). After 17 consecutive interest rate hikes, it seems that FED has mostly curbed inflationary pressures. That, combined with lacklustre growth, meant that the reference rate has been left unchanged since June 2006.

Table T2-1. World: GDP growth and inflation, 2006

in %	Real GDP						Inflation	
	real GDP growth		real GDP growth[1)]				annualised rates	
	2005	2006	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Q3 2006	Q4 2006
World total	3.2	3.6	4.6	3.5	2.8	3.7	2.7	2.1
out of which:								
USA	3.5	3.3	5.6	2.6	2.0	2.2	2.2	0.2
Canada	2.9	2.8	3.6	2.0	1.7	1.0	1.7	1.5
Japan	2.7	2.8	3.2	1.5	0.8	3.8	0.6	0.3
China	10.2	10.6	8.8	13.1	10.4	10.4	1.3	2.0
India	8.4	8.0	12.4	7.7	9.6	8.0	6.2	6.2
Euro area	1.5	2.7	3.1	2.7	2.7	3.3	2.1	1.8
Germany	1.1	2.8	3.2	4.4	2.6	4.0	1.6	1.6
France	1.2	2.1	1.8	4.9	0.0	2.1	1.9	1.3
UK	1.9	2.6	2.6	2.8	2.8	3.4	2.4	2.7
Italy	0.1	1.9	3.1	2.6	1.1	1.5	2.3	2.0
Russia	6.4	7.0	5.1	9.9	1.8	15.0	9.6	9.2
Bulgaria	5.5	5.5	5.6	…	…	…	6.6	6.0
Romania	4.1	6.9	…	…	…	…	5.5	6.1
Hungary	4.1	3.8	2.9	4.1	2.9	2.9	4.1	6.4
Croatia	3.8	…	6.0	…	4.7	…	3.0	2.2
Macedonia	3.8	…	0.5	…	3.6	…	0.6	…
BIH	5.0	…	…	…	…	…	7.6	…

Izvor: JPMorgan, National Bank of Bulgaria, National Bank of Romania, National bank of Republic Macedonia, National bank of Croatia.
1) Seasonally adjusted annual rate.

Solid growth in the EU in Q4…

European Union. Annualized GDP growth in Q4 stood at 3.3% in the euro zone, or 3.4% in the EU as a whole (Q3 annualized GDP growth was 2.7% in the euro zone and 3.0% in EU25). Over the whole of 2006, EU GDP growth amounted to 2.7%, in line with expectations. Personal consumption and exports remained the driving force behind the euro zone's growth in Q4. Industrial production growth slowed in the quarter (3.6%) in relation to Q3 (4.5%). Capacity utilization was as high as 84%. Annualized euro zone inflation in the last quarter amounted to 1.9% (1.6% in Germany, for instance). The hike in Germany's VAT rate - from 16% to 19% - certainly had an impact on GDP growth and inflation. VAT's contribution to increasing inflation in Germany was only 0.5% in January, instead of the expected 1.5%;[1] the effects will probably be spread over the coming several months, as prices will be adjusted across all sectors.[2] Inflation in the euro zone should grow at a modest rate, and, barring unforeseen movements in the oil price, will remain below the 2% threshold. The ECB is planning its next move along these lines: the

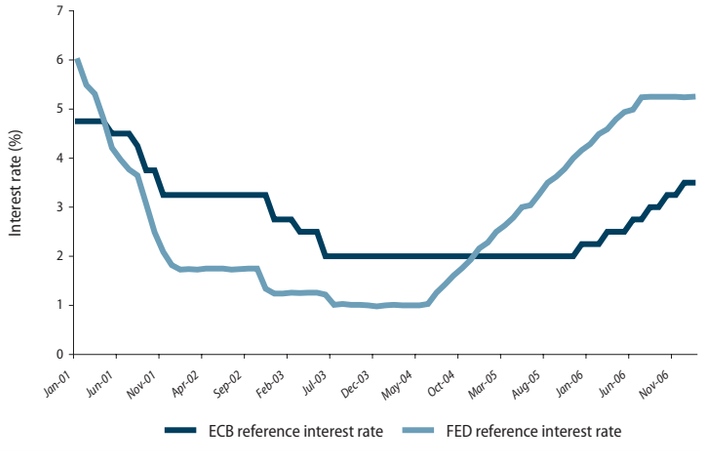
…amid moderate inflation…

1 JP Morgan Chase Bank: Economic Research, 9 February 2007.
2 The tobacco industry has already adjusted cigarette prices in December. Consumer goods retailers will do so after the winter sales, while the energy and services sectors are to correct their prices in January.

…and slight increase of the trade surplus

reference interest rate is expected to rise from the current 3.50% to 3.75%. In Q4, the observed period, the foreign trade surplus in the euro zone amounted to €10.3 bn (with exports standing at €372.4 bn, and imports at €362.1 bn); the figures in Q3 were €1.8 bn (exports €341.5 bn, imports €339.7 bn). Over the whole of 2006, the euro zone ran a foreign trade deficit of €8.2 bn (total exports €1,380.6 bn; total imports €1,388.8 bn). The energy deficit grew in 2006, from €202.3 bn to €259.7 bn. The chemical industry expanded the most in 2006 (from €69.4 bn to €72.4 bn), followed by exports of equipment and motor vehicles (from €91.2 bn in 2005 to €103.4 bn in 2006). The volume of trade with key commercial partners increased: imports from Russia grew by 27%, and those from China and Norway by 21%; exports to Russia also grew, again by 27%, followed by exports to China (24%) and Norway (14%). It is interesting to note that the EU is recording a foreign trade deficit with all its key partners (€117 bn with China, €61.2 bn with Russia, and €38 bn with Norway).[3] Germany saw the highest foreign trade surplus, €151 bn, followed by the Netherlands and Ireland, with €33 bn and €29 bn, respectively. The highest deficits were recorded by the UK (€116.1 bn), Spain (€81.4 bn), and France (€31.4 bn).

Graph T2-2. Selected Reference Interest Rates



Source: European Central Bank, Federal Reserve Bank.

US results fall bellow expectations

United States. According to the latest national statistics, the US economy grew at an annual rate of 2.2% (in comparison to 2.0% in Q3), which was much lower than the initial estimate of 3.5%. A positive contribution to GDP growth was made by personal consumption (which grew by 4.2% compared to the previous quarter), rising exports (10.5% in comparison to Q3), and budget spending (which grew by 4.4%). Residential construction recorded a steep fall of 19.1% relative to the previous quarter, thereby continuing the trend since the start of the year. Annualized inflation amounted to 1.9% (as against 2.2% in Q3). However, the core inflation rate grew in relation to the previous quarter, from 2.2% to 2.4% at an annualized level. Exports stood at $1,500 bn in the period (a rise of 10.5% over Q3), while imports amounted to $2,200 bn (a fall of 15% against the previous quarter).[4] At the level of 2006 as a whole, GDP growth stood at 3.3% (as against 3.5% in 2005). The fall in construction sector activity, as well as the drop in real estate prices – in spite of considerable fears – did not have a pronounced negative effect on the US economy. Although this sector has been recording double-digit drops in activity, average GDP growth amounted to 2.7%, while personal consumption grew at 3.3%.[5] Significant political changes took place in the last quarter of 2006, heralding a turn in foreign policy and an accompanying change in budget spending, primarily in the military-industrial complex.

High growth in CEE; Baltic countries lead the pack

East, Central-east, and South-east Europe.[6] The economies making up this group recorded GDP growth in excess of 7%, primarily due to the development of domestic markets, i.e. growth of domestic demand. Only Hungary lagging behind – with a GDP growth rate of only 3.8% – while the head of the list was occupied by Lithuania and Estonia, whose GDP grew by over 11%. The greatest fluctuations were noted in the growth of Russia's economy; its total GDP growth stood at 6.7% in 2006, with expansion fuelled by rising domestic demand and high construction

3 Source: Eurostat website.
4 Annualized seasonally adjusted data.
5 Which matches results for the same period in 2005. Source: JP Morgan Chase Bank, *Economic Research*, 2 February 2007, p. 9.
6 This group comprises Poland, Russia, the Czech Republic, Hungary, Slovenia, Croatia, Slovakia, Bulgaria, Romania, Estonia, Latvia, and Lithuania.

growth. Inflation in this region was estimated at an annualized 6.7% in Q4, slightly lower relative to the previous quarter (7%). Poland and the Czech Republic saw the lowest inflation rates, of 1.3% and 1.5%, respectively, at an annualized level, while Russia's inflation stood at 9.2%.[7] Romania recorded the largest foreign trade deficit in 2006, of €12.8 bn, followed by Poland with €9.9 bn; all other members of the group have significantly lower foreign trade imbalances, which is only logical, bearing in mind the size of their economies. The largest exports were recorded by Poland (€80.7 bn), the Czech Republic (€69.7 bn), and Hungary (€54 bn); the same countries also saw the largest imports of goods and services in the period observed: Poland, €90.6 bn, the Czech Republic, €68.1 bn, and Hungary, €56.1 bn.[8]

A good quarter for Asia as well

Asia. Japan's estimated GDP growth in the last quarter of 2006 reached an annualized 3.8%. While the foreign trade surplus and industrial production continued to grow, personal consumption was fairly unstable. Although consumption generally made a recovery in relation to the previous quarter, its growth was not high enough to make up for the Q3 fall. When viewed at a monthly level, consumption can be seen to have been the highest in October, and was followed by a drop in December. While China's GDP slowed to an annualized 10.4% in Q4 2006, inflation jumped from 1.3% in Q3 to 2.0% in Q4 (with the core inflation rate standing at a low annualized 1.5%). According to the latest data, China's foreign trade surplus reached $178 bn in 2006, a rise of 74% over the previous year. This extremely high surplus was the result both of rising exports and declining imports. It would seem that imports were increasingly being replaced by domestic production in the automotive industry, capital goods production, and electronics. Imports grew by 37% in 2004, and 17% in 2005; 2006 estimates put the growth of imports at 20%. Exports grew at an annual rate of 28% throughout the period. Inflation is believed to be potentially the greatest threat to China in 2007. The other developing economies in Asia felt the impact of China's slower imports, with exports slumping in almost all these countries. Their GDP growth, however, was not seriously affected: the average growth rate in all the countries, excepting Thailand, stood at between 5% and 6%, as in previous periods. Employment grew strongly across the region, mainly owing to the economic restructuring after the 1997 financial crisis, the technology boom, and China's strong growth. Labor shortages are increasingly becoming an issue, especially in India. There, wages in the industry grew on average by 10%, while earnings in services rose by 20%. The lack of highly-educated professionals is especially pronounced; their salaries are close to those in the developed western countries.[9]

A slight drop in China's imports…

…but economies in the region are not seriously affected

Box 1. Insurance Markets in Serbia and the Region

After the stabilization of Serbia's banking sector, the coming period can be expected to see a consolidation of positions in the insurance market, as well as an expansion in the provision of insurance as a sophisticated financial service. A stable and robust insurance market is a very important precondition for the development of the capital market, since insurance companies, as institutional investors, are among the key players here.

The potential size of Serbia's insurance market is estimated at about €480 mn. The share of insurance in GDP is 2.1%, while the gross insurance premium per capita amounts to €64. Average growth recorded in this sector from 2004 to 2006 was 50%, although *life insurance* doubled its share in total gross premiums. In the first nine months of 2006, total gross premiums amounted to about €360 mn, of which *non-life insurance premiums* made up 89%. A total of 17 insurance companies are operating in Serbia, of which three offer reinsurance. Seven insurers are majority foreign-owned, while the two largest domestic companies, Dunav Osiguranje a.d. and DDOR Novi Sad a.d., control about 65% of the insurance market. In addition to the insurers themselves, intermediary and representative agencies are involved in the distribution of services, with commercial banks also being allowed to sell insurance as of last year. Although the market concentration is very high, more well-established foreign insurance companies entered the Serbian market in 2006,[1] not

1 The Italian insurer Generali acquired Delta Osiguranje (at 50% plus one share, for €30 mn); Austrian Uniqa bought Zepter

7 JP Morgan Chase Bank, *Economic Research*, 9 February 2007.
8 Source: Eurostat official website.
9 JP Morgan Chase Bank, *Economic Research*, 2 February 2007, p. 3; pp. 19-21, 79-80.

attempting to undercut existing insurers, but, rather, hoping to procure their own "slice of the cake," since the market's growth potential is high, especially in the field of *life insurance*. This is, therefore, the area where market expansion is mainly expected to be found.

Countries in the region went through this initial phase of stabilization of the insurance sector in the second half of the 1990s. Central and Eastern Europe has seen dynamic insurance sector growth: from 1993 to 1999, the average annual growth of the volume of gross life insurance premiums amounted to 17%, thanks to macroeconomic stability and the introduction of tax breaks for voluntary pension insurance schemes. The field of non-life insurance recorded an average annual growth of 7.6%, mainly driven by the introduction of mandatory third-party liability insurance and extremely high demand for accident insurance and voluntary medical insurance. The legal framework also had a beneficial influence on the development of the insurance market: nearly all the countries of the region, with the exception of Russia and Croatia, started EU accession negotiations, and were required to harmonize their legislation with the EU's in this sector as well. One of the changes made was in connection with powers over the sector: the market was largely liberalized, government monopolies were reduced, barriers to foreign investor entry were dismantled, and EU solvency criteria introduced. These measures ensured greater competition in the shape of major European insurers that entered the market. Former monopolists saw their market share drop to below 60%, but were able to keep their leading positions. At the end of the first phase of development of the insurance market, the average share of gross premiums in GDP for non-life insurance stood at 1.7% – about half as much as in Western Europe – while the figure for life insurance was about 0.7%, or about 1/7 of the western European level.[2] In the next period, starting in 2001, unlike *life insurance*, which continued robust growth, *non-life insurance* saw a slowdown.[3] An overview of the current situations in the insurance market in selected countries in the region is given below.

In **Croatia**, the total value of premiums exceeds 3% of GDP, standing at €274 per capita. Annual growth of gross premiums over the past four years stood at a stable 10%. The share of non-life insurance is still very high – 79% of total gross premiums. The market is concentrated, with Croatia Osiguranje controlling 35% of the total market. Domestic insurers are still dominant, and, of the 25 existing insurance companies, the top five control 72% of the market. Foreign insurers entered the market after 1996, mainly in the field of life insurance, establishing their own companies. The strongest foreign company is Allianz, with a market share of about 8.5%.[4] Total gross premium per capita in **Slovenia** amounts to as much as €978 (i.e. 5.7% of GDP), and is the highest of all new EU members. The reason for such high premiums is primarily the highest level of income in the region. Life insurance makes up 30% of the total portfolio. From 2001 to 2004, insurance grew at double-digit rates due to pre-EU-accession economic expansion. The year 2005 saw an annual market growth of 6.5%. As in other fields, Slovenia has not permitted more significant inflows of foreign capital into insurance. The largest insurer, Triglav, is still state-owned and controls about 40% of the market. Foreign insurance companies, such as Grawe and Wiener, hold market shares of less than 2%.[5] On the other hand, the situation in the **Hungarian** market is different: it is less concentrated, with foreign insurers leading the field. Allianz controls 26% of the market, Generali-Providencia 15.5%, and ING 11.6%. Additionally, life insurance makes up as much as 44% of the total insurance portfolio. The share of insurance in GDP is 2.8%, with gross premium per capita standing at €250. As in Croatia, the market has been growing at an annual rate of 10% since 2001.

A common trait of all these markets is that growth is based primarily on the expansion of life insurance, which used to be at a relatively low level in all these countries. In addition to rising standards of living, the growth of life insurance was also affected by reforms to pension and health insurance, the introduction of mandatory liability insurance, and the rise in awareness of the public of investment opportunities. Bearing in mind that the patterns of economic growth are similar, these trends can also be expected in Serbia in period ahead.

Osiguranje (80% of capital, for €16 mn); Slovenian Triglav bought Kopaonik Osiguranje (90% of capital, for €17.5 mn), and another Slovenian company, Sava Osiguranje, acquired Polis Osiguranje (majority package).

2 **In western Europe, the share of life insurance in total insurance is about 60%.**

3 **Swiss Reinsurance Company, Economic Research & Consulting (2001):** *Insurance Industry in Central and Eastern Europe – current trends and progress of preparations for EU membership*.

4 **Source: HANFA, Croatia's financial services watchdog, and** *Osiguranje*, a Croatian magazine for insurance theory and practice, www.osiguranje.hr.

5 **Slovensko Zavarovalno Združenje (Slovenian Insurance Association), www.zav-zdruzenje.si.**

3. Prices and the Exchange Rate

The obvious slowing of inflation in Q3 continued into Q4 2006. The y-o-y rate fell to only 6.6% in December, the lowest recorded since the beginning of the transition process. Average inflation in 2006 (12.7%), however, was higher than in 2003 (11.7%) and 2004 (10.1%), because of the higher rate in the first semester of the year. Slowing of core inflation also continued in Q4, with the y-o-y rate falling to 5.7% in December. The slowdown was primarily the result of the appreciation of the dinar, as well as the cap on prices under direct administrative control, and the fall in oil prices on the world market (had the prices of oil products remained, for example, at the April level, inflation in December would have been 7.3%; had they stayed at the highest level of August, it would stand at 7.8%). Very low inflation (both core and total) was also recorded in January and February 2007. The dinar continued its trend from June, appreciating strongly in nominal terms against the euro in Q4 (around 5% relative to the previous quarter). Total appreciation in 2006 was 8.3% in nominal terms, and as much as 12.1% in real terms.

Table T3-1. Serbia: Comparative Price Growth, Selected Indices, 2004–2007

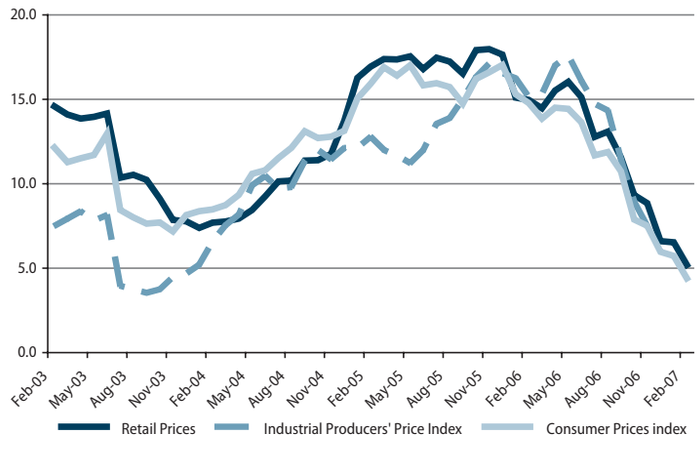
	RPI		Other price indices			
			RPI	Consumer price index	Industrial producers' price index	Agricultural producers' price index
	period average increase[1]	annual cumulative[2]	y-o-y[3]			
			annual indices			
2004	10.1	13.7	13.7	13.1	12.1	10.6
2005	16.5	17.7	17.7	17.0	16.5	11.8
2006	12.7	6.6	6.6	6.0	7.3	7.3
			quarterly indices			
2005						
December	4.2	17.7	17.7	17.0	16.5	11.8
2006						
March	3.4	2.2	14.5	13.9	15.3	6.9
June	3.5	5.7	15.1	13.6	16.1	9.8
September	0.8	6.0	11.6	10.7	11.4	8.9
December	0.4	6.6	6.6	6.0	7.3	7.3
			monthly indices			
2005						
March	0.8	5.1	17.4	16.9	12.0	12.0
June	0.8	8.0	16.8	15.8	12.0	8.5
September	1.1	11.8	16.5	14.7	15.0	9.1
December	2.2	17.7	17.7	17.0	16.5	11.8
2006						
January	0.5	0.5	15.1	15.3	16.3	10.3
February	1.4	1.9	15.0	14.8	15.1	6.6
March	0.4	2.2	14.5	13.9	15.3	6.9
June	0.0	5.7	15.1	13.6	16.1	9.8
September	-0.3	6.0	11.6	10.7	11.4	8.9
October	-0.4	5.7	9.3	7.9	8.9	7.1
November	0.8	6.5	8.8	7.5	7.5	7.2
December	0.1	6.6	6.6	6.0	7.3	7.3
2007						
January	0.4	0.4	6.5	5.7	…	…
February	0.1	0.5	5.2	4.4	…	…

Source: Table P-1 in Analytical Appendix.
1) Ratio of given and preceding period.
2) Cumulative index- ratio of given period and December of previous year.
3) Data refers to given month, for period average data see Table P-2 in Analytical Appendix.

Major slowing of inflation continues in Q4...

The slowing of inflation indicated in the first semester became very evident in Q3, and continued and gathered pace in Q4, reaching 6.6% at the year-end relative to end-2005. This was the lowest rate since the transition process started. The average 12-m rate in Q4 was 8.2%, significantly lower than the 12.5% in Q3 and 15.2% in the first half of the year. Average inflation in 2006 was 12.7%, which is, however, higher than the average rates in 2003 and 2004 (11.7% and 10.1%, respectively).

Graph T3-2. Serbia: Selected Price Indices, 2003–2007 (Y-o-y growth)



Source: Table P-2 in Analytical Appendix.

Core inflation[1] too started decelerating appreciably in Octo-ber, standing at 5.7% in December relative to the end of 2005.[2] The y-o-y rise in the consumer price index also slipped to its lowest level since the beginning of the transition process, standing at 6.0% in December. The average y-o-y cost of living fell from 11.4% in Q3 to 7.1% in Q4. December saw the y-o-y growth of the industrial producers' price index at 7.3% (Table T3-1 and Graph T3-2).

...the main reason being further appreciation of the dinar

The slowdown of total inflation in Q4 can mainly be ascribed to the further appreciation of the dinar, which rose by almost 5% from the last week of September to the last week of December. Monetary policy in Serbia still has an impact on prices mainly through the exchange rate channel, while it seems that the effect of the interest rate channel and the credit channel is still marginal. Appreciation of the exchange rate affects inflation by lowering import prices and slowing economic activity. The low inflation in Q4 was also driven by other factors: relatively low oil prices on the world market and restraining the rise of prices under direct administrative control (because of the election campaign).

As hinted in the first semester of 2006, core inflation is also slowing down

After showing a tendency of descending from its long-term y-o-y trend of 11% in the first half of the year, core inflation continued slowing in Q4, standing at 5.7% on the 12-m level at the year-end (Table T3-3). Annualized average monthly core inflation for the first six months of 2005 was 14.1%, and the figure was almost the same (14.2%) for the second semester of 2005. However, when calculated for the first six months of 2006, this rate declined to 7.6%, indicating a serious slowdown of core inflation for the first time. When calculated for the last six months of 2006, this rate fell to only 3.7%. Although total inflation started declining substantially already in July, the y-o-y core inflation rate noticeably slowed down later on (in October). The growth of each component of core inflation slowed down evenly in Q4.

1 The definition of core inflation used by QM differs somewhat from the NBS definition. The NBS does not publish the weighting of products included in their core inflation, so that we are not able to reconstruct the series. Under the QM definition, core inflation comprises: industrial food products (excluding bread and cereals), industrial non-food products (excluding medicines, liquid fuels, lubricants, lighting and fuel) and services whose prices are freely formed (crafts and personal servies, financial and other services, and educational and cultural services).

2 Core inflation under the definition of the NBS stood at 5,9% in December.

Halted growth of energy prices was the key reason for the fall of non-core inflation

Non-core inflation[3] fell to 7.8% on the y-o-y level in December. The average non-core inflation declined by 4.6 percentage points relative to the previous quarter, falling from 14.5% on the average in Q3 to 9.9% on the average in Q4 (Table 3-3).

The appreciable decline of core inflation was mostly the consequence of the halted growth of energy prices, whose y-o-y growth in Q4 was lower by almost 18 percentage points relative to the first half of the year (the y-o-y growth was 23,4% in the first half of year, and only 5,7% in Q4). On the one hand, this is the result of the drop in oil prices on world markets: the average price of Ural type oil (expressed in dinars) was lower by almost 20% in Q4 relative to Q3. It is noteworthy that had the price of gasoline in December remained at the April level, inflation would have been 7.3% instead of 6.6% at the end of 2006, and had it remained at the highest level from August, inflation would have been 7.8%. On the other hand, the price of electricity has remained unchanged since April 2006 (although there is an obvious need for an adjustment – the price in Serbia is still by far the lowest in the region). Keeping the electricity price unrealistically low (mostly because of political reasons) has at least two negative effects. First, it sends a bad signal to consumers, who are motivated by the low price to use more electricity than they would rationally spend. Among other things, this erodes the energy efficiency of the economy and decreases its medium-term competitiveness. Second, low electricity prices adversely affect the Serbian Power Company, hindering its operations and the neccessary investments and repair and maintenance work. In the medium term, this will have an adverse effect on both the economy and population. Postponements in adjusting utility prices also contributed significantly to slowing down non-core inflation. Their y-o-y growth was 7.0% in December as against 14.4% at the end of Q3. Agricultural produce prices also declined significantly as well. The rise in prices accelerated only within the group *Other* compared with the first half of the year, mostly because of the rise in tobacco products prices in July and October (Table T3-3).

Table T3-3. Serbia: Retail Prices (y-o-y Indices According to FREN's Classification), 2005–2006

	Inflation total	Non-core inflation[1]					Core inflation[1]			
		Total	Agricultural products	Energy[2]	Services w/ administered prices	Other[3]	Total	Food[4]	Non-food[5]	Services w/market-set prices
					y-o-y indices					
2005										
March	17.5	17.8	18.3	19.4	20.9	5.7	15.5	19.6	10.1	19.1
June	16.8	16.6	27.2	15.6	21.7	2.7	15.8	20.9	9.8	18.5
July	17.4	17.9	37.3	17.4	23.7	2.2	15.7	19.8	10.4	19.0
August	17.2	18.8	33.3	20.2	25.1	-0.4	14.1	18.9	10.4	12.3
September	16.5	18.3	22.1	20.0	25.5	0.8	13.4	16.5	10.2	14.2
October	18.0	20.2	26.2	21.3	26.3	4.8	14.3	17.4	11.2	14.8
November	18.0	20.0	29.0	18.5	28.7	5.1	14.7	17.7	11.9	14.3
December	17.6	19.9	36.1	17.1	25.1	10.4	14.1	16.7	11.4	14.3
2006										
March	14.4	17.8	31.4	19.2	17.6	11.3	10.8	12.6	9.6	9.1
June	15.1	19.3	19.6	25.9	17.2	11.0	10.8	12.5	9.6	9.5
July	12.7	14.6	8.9	15.7	15.0	13.5	10.9	12.7	9.6	9.2
August	13.1	15.6	7.9	17.7	14.4	16.3	10.6	12.7	9.2	7.9
September	11.6	13.3	9.6	11.4	14.4	16.3	9.9	11.7	9.0	6.7
October	9.3	10.8	2.5	6.2	13.8	17.3	7.8	8.9	7.3	5.9
November	8.8	11.1	8.6	5.6	13.7	18.2	6.6	7.5	5.8	5.6
December	6.6	7.8	6.2	5.4	7.0	15.0	5.7	6.1	5.4	4.9
MEMORANDUM ITEMS										
					weights					
2005	10,000	5,024	309	1,837	1,928	950	4,976	2,117	2,166	693
2006	10,000	5,027	325	1,820	2,010	872	4,973	2,164	2,075	734

Source: SBS.
1) For core and non-core inflation components see footnotes 1) and 3) in text.
2) Energy includes: liquid fuels and lubricants, and lighting and fuel.
3) Other includes: bread, cereals, pharmaceuticals and tobacco.
4) Excluding bread and cereals.
5) Excluding pharmaceuticals, liquid fuels and lubricants, and lighting and fuel.

3 Non-core inflation includes: agricultural produce, energy (liquid fuels and lubricants, and lighting and fuel), services whose prices are under administrative control (housing, utilities, social services, and transport and telecom services), and the group «Other», which consists of bread and cereals, pharmaceuticals and tobacco.

The contribution of non-core inflation to total inflation still exceeds the contribution of core inflation. However, with the slowdown in the second half of the year, non-core inflation decreased its contribution to total inflation from around 64% in first half of the year to approximately 59% in the second half. The biggest contribution to total inflation still comes from services whose prices are under administrative control (slightly over one-quarter of the total price growth, Table T3-4).

Table T3-4. Serbia: Retail Prices (Contribution to Index Growth by Components According to FREN's Classification), 2005–2006

	Inflation total	Non-core inflation[1]					Core inflation[1]			
		Total	Agricultural products	Energy[2]	Services w/ administered prices	Other[3]	Total	Food[4]	Non-food[5]	Services w/market-set prices
		contribution to y-o-y growth								
2005										
March	100.0	53.7	3.4	21.4	24.2	3.3	46.3	24.9	13.2	8.0
June	100.0	51.5	5.2	17.7	25.8	1.6	48.5	27.4	13.1	7.9
September	100.0	57.9	4.3	23.1	30.9	0.4	42.1	22.0	13.9	6.2
October	100.0	58.7	4.7	22.7	29.4	2.6	41.3	21.4	14.0	5.9
November	100.0	57.8	5.1	19.6	31.8	2.8	42.2	21.6	14.8	5.7
December	100.0	58.8	6.5	18.4	28.4	5.8	41.2	20.7	14.5	5.8
2006										
March	100.0	62.7	7.1	24.4	24.7	6.9	37.6	19.0	13.9	4.7
June	100.0	64.4	4.2	31.3	22.9	6.4	35.7	17.9	13.2	4.6
July	100.0	57.4	2.3	22.4	23.7	9.2	42.4	21.6	15.6	5.3
August	100.0	59.8	2.0	24.7	22.1	10.9	40.1	21.1	14.6	4.4
September	100.0	57.6	2.7	17.9	24.9	12.3	42.3	21.9	16.1	4.2
October	100.0	58.2	0.9	12.0	29.6	16.1	41.8	20.6	16.3	4.7
November	100.0	63.2	3.1	11.4	31.1	17.9	36.8	18.4	13.6	4.7
December	100.0	58.2	3.0	14.6	20.9	19.4	41.5	19.5	16.5	5.3

Source: SBS.
1) For core and non-core inflation components see footnotes 1) and 3) in text.
2) Energy includes: liquid fuels and lubricants, and lighting and fuel.
3) Other includes: bread, cereals, pharmaceuticals and tobacco.
4) Excluding bread and cereals.
5) Excluding pharmaceuticals, liquid fuels and lubricants, and lighting and fuel.

Very low inflation in the beginning of 2007 as well...

January 2007 also saw very low inflation (6.5% on the y-o-y level), which confirms expectations that there will be no significant rise in prices at the beginning of the year. The fact that the monthly growth of prices rose from 0.1% in December to 0.4% in January may indicate a slight acceleration of price growth, although the registered price growth was mostly the result of the rise in the price of cigarettes at the end of December 2006. However, inflation again slowed down in February, going down to a very low monthly rate of 0.1% and a y-o-y rate of only 5.2%. A slight rise in prices will occur in March in April, with the expected hikes in the prices of electricity and utilities. These could increase the y-o-y inflation rate by two to three percentage points. Core inflation also continued to slow down, standing at 5.3% in January on the y-o-y level relative to 5.7% in December, while core prices remained unchanged in January relative to December 2006. February even saw a fall in core prices relative to January, with the y-o-y core inflation falling below 5%.

Besides the stable nominal exchange rate (slightly below 80 dinars for one euro), low inflation in January and February was also driven by the continuing decline of oil prices on the world market. The average price of Ural type oil was down 15% in January relative to December. Monetary policy moves also contributed to maintaining low inflation at the beginning of the year – the growth in lending to companies was completely stopped in December, and the growth of credits to households was slowed considerably[4]. Furthermore, the NBS withdrew around 32 billion dinars through the foreign exchange market in January, additionally decreasing money supply.

…and the NBS continues to lower the reference interest rate

On the other hand, the reference interest rate of the NBS was decreased to 13.0% in January, and after very low inflation in February as well, it was decreased again – to 11.5%. The end of 2006 saw a significant easing of fiscal policy, which will also exert pressures for price growth in

4 See *Monetary Flows and Policy.*

Large wage growth in the public sector – a challenge for further price stability?

the period ahead. Even though the planned realization of the National Investment Plan was not achieved (about one third of the planned amount was actually spent on the NIP in Q4), there was a significant rise in salaries in the public sector. The conduct of fiscal and monetary policy will have a decisive influence on the inflation trend in the period ahead.

Table T3-5. Serbia: Dinar/Euro Exchange Rate, 2003–2007

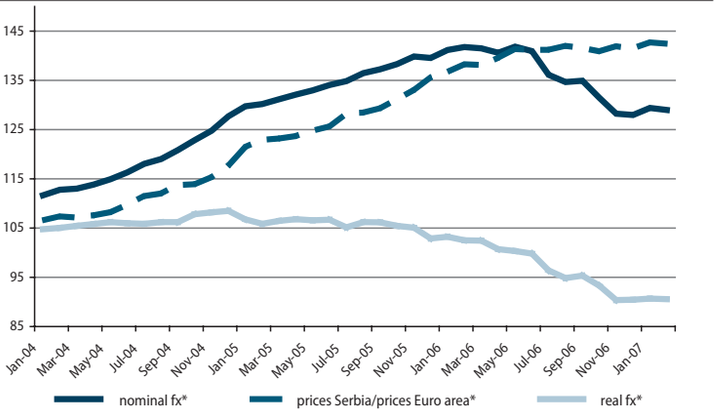
	Nominal				Real			
	exchange rate (FX)[1]	base index[2] (Dec.02=100)	y-o-y index[3]	cumulative index[4]	real FX[5] (Dec.02=100)	y-o-y index[3]	cumulative index[4]	USD/EUR rate[6]
				annual exchange rate				
2003	64.9743	105.6	107.1	110.5	102.4	97.8	104.4	1.1241
2004	72.6215	118.0	111.8	115.6	106.3	103.8	103.9	1.2392
2005	82.9188	134.7	114.2	109.3	105.8	99.5	94.9	1.2433
2006	84.1879	136.8	101.5	91.7	97.4	92.1	87.9	1.2537
				monthly exchange rate				
2005								
March	80.7498	131.2	116.1	102.7	106.5	101.0	98.1	1.3074
June	82.5172	134.1	115.3	105.0	106.7	100.7	98.3	1.2180
September	84.4958	137.3	113.6	107.5	106.2	100.0	97.8	1.2265
December	85.9073	139.6	109.3	109.3	102.9	94.9	94.9	1.1861
2006								
March	87.1033	141.5	107.9	101.4	102.5	96.2	99.6	1.2013
June	86.7609	140.9	105.1	101.0	99.8	93.6	97.0	1.2677
July	83.7931	136.1	101.0	97.5	96.4	91.7	93.7	1.2684
August	82.8893	134.7	98.7	96.5	94.8	89.3	92.2	1.2803
September	83.0621	134.9	98.3	96.7	95.3	89.8	92.6	1.2748
October	80.9242	131.5	95.0	94.2	93.3	88.5	90.7	1.2615
November	78.9404	128.2	91.7	91.9	90.4	86.0	87.8	1.2876
December	78.7812	128.0	91.7	91.7	90.4	87.9	87.9	1.3210
2007								
January	79.6587	129.4	91.7	101.1	90.7	87.8	100.3	1.2993
February	79.3993	129.0	91.0	100.8	90.5	88.3	100.1	1.3075

Source: Table P-3 in Analytical Appendix.
1) Month average, official daily NBS mid rate. 2) Ratio of fx in column 1 and average fx in Dec 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 Euro area inflation. Index calculation: RE=(NE/p) x p*
RE - real fx index NE -nominal fx index p - Serbia RPI index p* -Euro area CPI index
6) Period average.
Note: Twelve-month averages for annual data, i.e. three-month averages for quarterly data.

Nominal dinar appreciation in Q4 stands at 5%, relative to Q3...

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

...and in the end of 2006 at 8.3% relative to the end of 2005



Source: Table P-3. in Analytical Appendix.
*Dec 02=100. See definition of real fx in Table T3-5.

The strong nominal dinar appreciation since June continued in Q4 as well. The average exchange rate in December appreciated by approximately 5% in both nominal and real terms relative to September (Table T3-5). The dinar nominally appreciated by 8.3%, and by as much as 12.1% in real terms at the end of the year, relative to end-2005. Although the competiteveness of the Serbian economy very probably rose over the past few years, these trends can adversely affect the balance of foreign trade to some extent. The nominal appreciation was stopped and reversed in January, which saw a slight nominal depreciation (the average exchange rate depreciated by around 1% in January relative to December). The average nominal exchange rate appreciated slightly in February relative to January (0.3%).

4. Employment and Wages

Employment was cut in September 2006 by approximately 6,000 jobs relative to March. This was a much slower decline than in the first semester of the year. The structure of employment continued to change, with an exceptionally high growth of the number of entrepreneurs and their employees, and a constant decline of employment in legal entities, with manufacturing still leading the way. A major y-o-y real wage growth of 16.4% was recorded in Q4 2006 relative to the 7.5% growth in Q4 2005, with the highest leap in health care and social work: 25.5% in Q4 2006 as against 4.9% in Q4 2005. The wage growth in Q4 may largely be attributed to the Government budget rebalance, under which wages in the public sector were raised.

Employment

Table T4-1. Serbia: Registered Employment, 2003–2006

	Total No. of employed (employees and entrepreneurs)	Employees in legal entities	Employees with natural entities			Total No. of employees
			Total	No. of entrepreneurs	No. of employees within entrepreneurs	
	1 (=2+3)	2	3 (=4+5)	4	5	6 (=2+5)
			in thousands			
2003						
March	2,046	1,628	418	198	220	1,848
September	2,036	1,595	441	202	239	1,834
2004						
March	2,065	1,601	464	208	255	1,856
September	2,037	1,560	477	210	267	1,827
2005						
March	2,070	1,557	513	228	285	1,842
September	2,067	1,536	531	230	300	1,836
2006						
March	2,032	1,496	536	228	308	1,804
September	2,026	1,447	578	245	333	1,780

Source: SBS Semi-annual Report on the Employed and Wages RAD-1/P; Additional Survey to the Semi-annual RAD-1 Report; Semi-annual Report on Small Businesses and Their Employees RAD-15.
Notes by column:
1) The total number of employed (employees and entrepreneurs) includes those employed by legal entities (enterprises, organizations, institutions) - Column 2, and small businesses i.e. natural entities - Column 3 (including store owners, self-employed professionals, etc., and those working for them). Employees of the Ministry of Defense of Serbia, and the Serbian Ministry of Internal Affairs are not included.
2) Employees in legal entities (companies, organizations, institutions).
3) Owners of small businesses and self-employed persons (natural entities) and their employees (Column 4 + Column 5).
4) Owners of small businesses and self-employed persons (natural entities).
5) Employees of small businesses (natural entities).

A slow decline in employment between March and September

The total number of employed fell to 2.026 million in the March-September period, which was approximately 6,000 less jobs than in March 2006. The figures are based on the latest SBS data, corrected by the semi-annual reports on employment in both legal and natural entities[1]. Because of this unexpected slowdown in the decline in employment, in the previous issue of QM we underestimated the number of employees in September by approximately 16,000.[2]

Employment in legal entities continues to fall...

The structure of employment continued to change. Employment in legal entities declined at the same rate as in the preceding period. Manufacturing still led with a drop of approximately 23,000 between March and September 2006. It was followed by wholesale and retail trade, with 11,000 jobs less in September relative to March (Table P-5 in Analytical Appendix). Concurrently, in

1 RAD-1/P, Additional Survey to the Semi-annual RAD-1-P and RAD-15 Reports.
2 Also, we underestimated the decline in employment in legal entities and the employment growth in natural entities (though both estimates moved in the right direction).

...while the number of entrepreneurs and their employees is rapidly growing

the March-September period, the number of entrepreneurs increased significantly, by around 17,000, with additional 25,000 employees being hired by these new businesses (see Table T4-1). This was an enormous leap in the number of entrepreneurs and was the highest such growth in the last three years. There were two possible reasons for this growth: the increasing availability of microcredits for financing small businesses in Serbia in 2006, and the fact that every entrepreneur was legally obliged to register with the National Register of Entrepreneurs by 13 June 2006[3]. Which of these two factors contributed more to the jump in the number of small businesses will become evident only after longer monitoring of the trends. By observing a time series of the number of private entrepreneurs, we will be able to assess the sustainability of this growth and determine if this was just a one-off effect of the registration. Longer term monitoring could also provide more information about the overall effectiveness and sustainability of government policies to encourage entrepreneurs.

Official employment data for Q4 is available only for October and November, while for December we made an estimation (Table P-4 in Analytical Appendix). According to the latest figures, total employment continued to decline at a similar rate, with the number of employees in November standing at 2.021 million (employment recorded a drop of 5,000 in the September-November period). This decline in total employment was entirely caused by terminations in legal entities.

Wages

Wages in Q4 are increasing...

partially due to regular seasonal effects...

...and partially due to the budget rebalance which raised the wages in the public sector

Average monthly net wages rose in Q4 by approximately 2,500 dinars relative to Q3 (Table T4-2). We also noticed a significant y-o-y real wage growth of 16.4% in Q4 2006 relative to the growth of 7.5% in Q4 2005 (Table T4-3). One part of the growth between Q3 and Q4 can be attributed to the seasonal rise of wages in December, due to various year-end bonuses.

The wage growth, however, was largely affected by the hike of wages in the public sector in Q4 2006 under the budget rebalance, which will have a lasting effect. Since the SBS calculates the average wage primarily taking into account average wages of employees in legal entities (mostly those in the public sector), the biggest contribution to wage growth in Q4 can be attributed to this rise in public sector salaries. This was upheld by the y-o-y wage growth of 20% in January 2007, which is almost identical to the y-o-y wage growth of 20.8% in December 2006.

Table T4-2. Serbia: Aggregate Wages and Average Monthly Wages, 2003–2006

	Aggregate wages (MoF)[1]		Aggregate wages (SBS)[2]		Average monthly wages (SBS)		
	in 000 dinars	in % of GDP[3]	in 000 dinars	in % of GDP	Gross, in dinars	Net, in dinars	Gross, in euros
2003	391,657,571	33.5	367,111,910	31.4	16,612	11,500	256
2004	462,905,007	33.3	454,125,726	32.7	20,555	14,108	283
2005	564,699,486	32.6	562,194,386	32.5	25,514	17,478	308
2006	693,178,315	33,7[4]	684,758,123	33,3[4]	31,801	21,745	379
2005							
Q1	117,781,793	33.0	122,356,320	34.3	22,166	15,140	276
Q2	138,985,971	33.8	137,692,500	33.5	25,035	17,122	306
Q3	145,027,114	31.6	144,569,591	31.5	26,280	17,969	313
Q4	162,904,607	31.9	157,575,975	30.9	28,781	19,680	336
2006							
Q1	153,488,429	35.2	152,864,571	35.1	28,209	19,284	324
Q2	168,572,637	33.6	166,655,577	33.2	30,914	21,126	356
Q3	171,161,743	31.7	172,539,890	32.0	32,130	21,986	386
Q4	199,955,507	34,5[4]	192,627,244	32,2[4]	35,951	24,585	452

Source: MoF (Public Revenue Office) and SBS.
1) Wage tax based.
2) Calculated as No. of employees multiplied by average wage (SBS data).
3) We use RPI to calculate aggregate wages as % of GDP.
4) GDP for Q4 and 2006 are FREN's estimates.

3 Most entrepreneurs were previously registered only in local registers.

The biggest wage growth was registered in health care and social work

Q4 saw high real growth of wages in almost all activities relative to Q4 2005 (only financial intermediation and mining and quarrying recorded a fall). The highest y-o-y leap of 25.5% was recorded in health care and social work, followed by construction and electricity, water and gas supply, which recorded a real y-o-y growth of 14.9% (Table T4-4).

The difference between aggregate wages derived from Public Revenue Office data and those derived from SBS data in Q4 is much bigger than in previous quarters (Table T4-2), as shown by the hitherto trend of these figures coming closer together in 2006. A possible explanation is that taxes outstanding from previous quarters were collected at the end of the year, this being one of the reasons why aggregate wages derived from the PRO data exceeded aggregate wages derived from the SBS data.[4]

With wage growth, unit labor costs increase in 2006

The percentage of aggregate wages in GDP and non-agricultural gross value added (GVA) from both sources rose in 2006 relative to 2005 (Table T4-2), which can be ascribed to the already mentioned rise in wages[5] and to the increase in the collected tax on meal allowances and vacation bonuses (for more details see Box 1). Since the share of wages in the GDP and non-agricultural GVA can be treated as an approximation for unit labor costs, the assumption is that unit labor costs rose in 2006 relative to the previous year. If this trend continues in 2007, it could lead to pressures on prices from both expenditure and production sides, as well as affect medium-term competitiveness of the Serbian economy.

Table T4-3. Serbia: Wage Indices, Y-o-y data, 2003–2006

	Aggregate wages (MoF)[1)]		Aggregate wages (SBS)[2)]		Average gross monthly wages (SBS)	
	nominal	real	nominal	real	nominal	real
2003	117.6	107.0	123.0	111.9	125.3	114.0
2004	118.2	106.1	123.7	111.0	123.7	111.1
2005	122.0	105.0	123.8	106.3	124.1	106.8
2006	123.1	109.2	121.8	108.1	124.4	111.3
2005						
Q1	119.6	103.1	121.6	104.9	121.8	105.0
Q2	124.4	106.9	124.1	106.6	125.3	107.6
Q3	125.4	108.5	124.1	107.5	124.3	107.6
Q4	118.9	101.9	124.8	107.1	125.3	107.5
December	..	..	..	..	127.0	108.4
2006						
Q1	130.3	113.7	124.9	109.0	127.3	111.0
Q2	121.3	106.2	121.0	106.0	123.5	108.1
Q3	118.0	105.9	118.9	106.7	122.3	109.7
Q4	122.7	114.6	122.2	114.1	124.7	116.4
December	..	..	..	..	128.1	120.8

Source: MoF (Public Revenue Office) and SBS.
1) Wage tax based.
2) Calculated as No. of employees multiplied by average wage (SBS data).

4 In Q4 2005, we also saw a bigger difference between these two **values than in other 2005 quarters.**
5 Since total employment declined in the same period.

Table T4-4. Serbia: Average Gross Wages by Activities, Y-o-y Real Indices, 2005–2006

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

Source: SBS, RAD-1.

Box 1. Payment of meal allowances and vacation bonuses in 2006

Beginning with the January 2006 salary, employers were *obligated* to pay meal allowances and vacation bonuses to their employees. Up to the end of 2005, these payments were *optional.* As the Law treats every payment arising from employment as wages, meal allowances and vacation bonuses are taxable in the same way as wages and contributions for compulsory social insurance are to be made for these payments.

This amendment to the Labour Law increased wages, i.e. the taxable base, for *all* employees registered to receive the official minimum wage, and to *some* employees who receive wages above the legally fixed minimum. We cannot be sure how many employees receiving above the minimum wage had their wages affected by this measure, since the employer had a choice of continuing to pay them the same net amount and only report the wage differently (i.e. reduce the wage by the amount of the meal allowances and vacation bonuses), or increase the wage by the amount of the allowances and bonuses.

FREN estimates that there are approximately half a million employees[1] whose salaries (i.e. their taxable wage base) rose as a consequence of the new legislation. This increased their official gross and net wages by the amount of the meal allowances and vacation bonuses.

Based on the assumption that these half a million employees did get a rise in salaries,[2] FREN estimates that an extra 3bn dinars went into taxes in 2006, which means that no less than 21bn, or 15% of the total growth of aggregate wages[3] in 2006 can be attributed to the newly introduced obligation of meal allowances and vacation bonuses payment.

1 Natural entities, which employ approximately 300,000 employees, are still out of fiscal control. Most of them, hence, report the minimum wage for their employees (according to the Public Revenue Office), while their real wages are higher. In addition, employees in some activities indeed receive minimum wages, and the obligatory payment of meal allowances and vacation bonuses also raised the wages of some employees who were receiving above-minimum wages.

2 Although it is possible that many more employees received higher salaries due to the introduction of obligatory payment of meal allowances and vacation bonuses.

3 Calculated according to the Public Revenue Office data.

5. Economic Growth

All in all, 2006 was a year of stable economic growth of about 5.3%. The impression would have been even better had it had not been for a fall in the tax component of GDP due to a rise in VAT refunds, in this, the second year, since the tax was introduced. Q4 saw lower GDP growth when compared with the rest of the year, about 5%, with nearly all sectors decelerating. Although y-o-y comparisons indicate a slowdown of the economy, the available seasonally adjusted indices show that no such deceleration has in fact happened. Industrial production recorded a y-o-y growth of 2.9% in Q4. Industrial production leaders slowed down in Q4, but a wide front of less successful sections picked up. At 4.7%, total annual industrial production growth was significantly higher than in 2005. Construction saw a y-o-y growth of about 20% in Q4, mainly thanks to favorable weather conditions. With the Q4 results, construction in 2006 achieved the highest growth rate in the past five years, about 13%.

Gross Domestic Product

Estimated GDP growth in Q4 is 5%

QM's estimate, based on SBS methodology and data, puts Q4 GDP growth at 5% relative to the same period of the previous year (Table T5-1). We estimate y-o-y growth of value added at a solid 5.4%, while the tax component of GDP continued to lag behind the growth of the economy – its Q4 growth is estimated at 3%.

Growth is slower than in Q3, but...

The y-o-y growth of *gross value added* was in Q4 slightly lower than in Q3 (Table T5-1), which only at first sight indicates a slowdown in economic activity. In our opinion, however, no such slump has in fact occurred, for the following reasons: 1) the Q4 2005 base, used for comparison with Q4, is exceptionally high, and 2) growth indicators used by the SBS for individual sectors of the economy do not reflect their actual Q4 trends.

...seasonally adjusted indices do not indicate a slowdown

As far as material production is concerned, *agriculture*, with a lower y-o-y growth in Q4 than in Q3, was heavily impacted by external factors; *manufacturing* also recorded a drop in its y-o-y growth rate in Q4, but seasonally adjusted industrial production indices do not point to a slowdown. Only *construction* accelerated its y-o-y growth in Q4. Due to its lower share in gross value added, this acceleration did not significantly affect economic growth as a whole.

Table T5-1. Serbia: Gross Domestic Product, 2004–2006[1)]

	y-o-y indices							base index	GDP share
	2004	2005	2006	2006				2006/2002	2005
				Q1	Q2	Q3	Q4[2)]		
Total	108.4	106.2	105.3	106.2	105.6	104.6	105.0	124.3	100.0
Taxes minus subsidies	109.3	110.2	99.6	98.4	101.5	95.3	103.0	131.4	16.2
Value Added at basic prices	108.3	105.5	106.4	107.7	106.4	106.4	105.4	123.1	83.8
Non agricultural Value Added	107.5	106.3	106.8	108.2	106.6	106.4	106.1	124.4	86.5
Agriculture	119.0	95.1	102.0	98.1	102.1	105.8	100.7	107.4	13.5
Manufacturing	108.8	99.9	105.2	107.7	106.4	104.5	103.0	107.5	16.3
Construction	103.5	102.0	112.4	125.5	106.5	102.7	120.2	131.5	3.4
Transport	115.8	123.4	126.5	128.1	126.8	127.0	124.6	198.0	10.8
Wholesale and retail trade	117.0	122.0	109.1	116.6	107.4	108.4	106.5	173.8	11.1
Financial intermediation	109.9	117.4	114.6	117.6	116.6	114.6	110.5	161.4	6.8
Other	99.8	99.9	100.3	99.4	100.0	99.9	100.1	92.3	38.1

Source: SBS.
1) In constant prices in2002.
2) QM estimate.

In services, *financial intermediation* was the most interesting case. It is important to draw attention to the fact that the slowdown recorded in this sector's statistics does not reflect actual trends. The SBS uses *deposit and credit growth* as the indicators for assessing quarterly GDP growth in financial intermediation. While deposits continued to grow at high and stable y-o-y rates, credit continued slowing as consequence of monetary policy measures. In total, the indicator for

Official methodology underestimates the financial sector in Q4

assessing value added growth in the financial sector, therefore, shows a deceleration of the entire sector in Q4. The problem is that financial intermediaries in 2006 turned increasingly to the repo market, which went unrecorded when estimating their growth. *QM* believes that GVA growth estimates using SBS methodology produced underappreciated values for financial intermediation since they do not take into account a major part of the sector's operations.

Economy is increasingly financed by direct foreign borrowing

Additionally, a slowdown in credit activity by domestic banks does not necessarily lead to a commensurate downturn in economic activity. The growth of the economy's direct borrowing abroad[1] indicates that companies have found a way to avoid the high interest rates in the domestic financial market, and continue further growth without substantially losing pace.

Transport continued to see extremely high growth in Q4, primarily because of the high growth of telecommunications services. Wholesale and retail trade recorded the only real slowdown, due to lower demand in October and November. December's turnover values for the retail trade indicate a renewed acceleration.

We conclude that economic activity does not slow down in Q4

In view of the above, it may be concluded that y-o-y GVA growth in Q4, although lower than in Q3, is not an indicator that convincingly points to a slowdown in economic growth in Q4.

2006 registers 5.3% GDP growth...

QM estimates GDP growth in 2006 at 5.3%,[2] while GVA growth stood at 6.4%. The lower growth of GDP in relation to GVA reflects the GDP tax component, i.e. lower VAT-based budget revenue in 2006.[3] The year also saw rise in a VAT refunds relative to 2005, which ultimately resulted in a y-o-y drop of the GDP tax component. The situation in 2005 was the opposite (Table T5-1). A two-year cycle, affected by the change in the tax system, ends in 2007. We expect that VAT collection and refunds will stabilize, and that growth of the GDP tax component will be in better harmony with growth of the economy as a whole.

If 2006 is observed by quarters, it becomes apparent that GVA recorded the highest y-o-y growth in Q1, was because of comparison with the low 2005 base. Overall tendencies in 2006 and the rise in GVA of between 6% and 6.5%, probably best reflect Q2 and Q3. Economic growth slumped somewhat in Q4, with the caveat that we still do not have sufficient data to conclude that economic growth has indeed slowed down.

...which corresponds to the regional average

Although the GDP growth of 5.3% in 2006 may at first glance seem high, when viewed in the context of economic growth in the region,[4] it is actually average.

In closing this summarized survey of 2006, it must be underscored that GDP figures since 2002 were officially corrected in that year. According to the revised data, the total value of GDP is about 10% higher than the hitherto figure. GDP growth, however, was revised downward, by about 10% (Table T5-1).

Industrial Production

Industrial production y-o-y growth in Q4 at 2.9%

According to SBS data, industrial production was up 2.9% in Q4 relative to the same period in 2005 (Table T5-2). Year-on-year industrial production growth in Q4 was somewhat lower than in Q3, as forecast in our last issue. To a large extent, however, industrial production in Q4 signifies a break with the trends that marked the first three quarters of the year. Industrial production leaders – sections characterized by high growth in 2006 – have slowed down. Other sections, which mainly declined throughout the year – started on the road to recovery. The unusual picture of industrial production in Q4 was the consequence of (1) the expected changes in industrial production trends (slowdown on the part of leaders), (2) establishment of new credit

1 **For more details see** *Monetary Policy and Trends* in this issue of QM.
2 GDP growth estimates, as published by the SBS, stand at 5.8%. For this forecast to be true, and taking into account official data for the first three quarters, Q4 GDP growth would have had to amount to 6.8%. Our estimate of Q4 growth, based on available indicators, is substantially lower, as is total estimated 2006 growth, which we put at 5.3%. It is possible, however, that the SBS will revise existing data for the first three quarters (as has often happened in the past), and that total growth will come closer to their estimate. We are using the current official data.
3 **For more details, see** *Fiscal Flows and Policy* in Trends of this issue of QM and *Spotlight on: 3*
4 **For more details, see** *International Environment"* in Trends in this issue of *QM*.

Leaders slow down while other sectors recover

channels (direct borrowing abroad by a rising number of companies led to a recovery in sections hit by high interest rates in the domestic financial market), and (3) changes in fiscal policy ahead of the elections (growth in demand due to the expansive fiscal policy).

Very high industrial production in December

Industrial production in Q4 was furthermore distinguished by a substantial acceleration in December, which, though it did not have a decisive impact on the quarterly y-o-y growth index, does indicate an extremely high level of industrial production in Q1 2007. The y-o-y growth of industrial production in January –11% – confirms these expectations. For a more detailed discussion of the causes of the December acceleration, see Box 1.

Industrial production growth in Q4 was quite uniform when viewed by sectors (Table T5-2). Mining and quarrying led with a y-o-y growth of 4.6%, followed by manufacturing with2.9%, while electricity, gas and water supply grew by 2.1%, which constituted a slowdown relative to 2005.

Table T5-2. Serbia: Industrial Production Indices, 2004–2006

	y-o-y indices							base index	share
	2004	2005	2006	2006				2006/2002	2005
				Q1	Q2	Q3	Q4		
Total	107.1	100.8	104.7	105.3	106.1	103.9	102.9	109.6	100.0
Mining and quarrying	99.3	102.1	104.1	104.0	102.6	102.8	104.6	106.4	6.3
Manufacturing	109.7	99.3	105.3	107.5	106.2	104.4	102.9	109.4	75.4
Electricity, gas, and water supply	102.4	106.6	102.2	99.3	107.6	101.6	102.1	111.4	18.4

Source: SBS.

Industrial production grows by 4.7% in 2006...

...with manufacturing leading the way

Considered as a whole, 2006 recorded a high growth of industrial production, as much as 4.7%, a significant acceleration in relation to 2005. The highest growth was achieved by manufacturing - 5.3%. Mining and quarrying followed with a y-o-y growth of 4.1%, while only electricity, gas and water supply slowed relative to 2005, growing by 2.2% in 2006.

Box 1. Industrial Production Trends in 2006

In Q1 industrial production stagnates

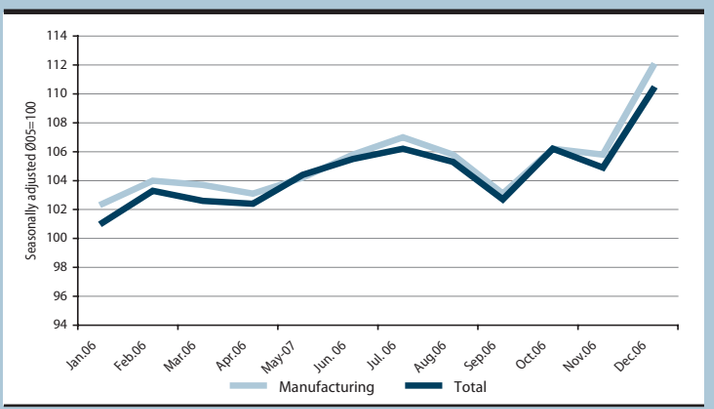
Industrial production was stagnant at the start of 2006 (Graph T5-3). Year-on-year indices showed, however, extremely high growth rates (Table T5-2) because of comparison with the low level in early 2005, immediately after VAT was introduced. Seasonally adjusted indices are therefore indicative of the real industrial production trends in the period.

It picks up in Q2 which lasts until July...

Q2 brought accelerated industrial production growth, which lasted up to July. A sharp slowdown ensued (Graph T5-3), which, we believe, can be explained by the effects of monetary policy: credit was less easily available and the dinar appreciated. The impact of monetary policy was extremely selective. Companies whose productivity growth outstripped the dinar's appreciation, as well as those that were able to borrow directly from abroad, were not as badly affected by the measures. It would seem that smaller companies were harder hit. A survey of small enterprises' industrial production, conducted by the SBS, which is not included in the total industrial production index, showed that the industrial production of small enterprises grew at a lower rate in June than that of large and medium-sized ones. This prevailed up to the end of the year.

...when industrial production suddenly slows down

Graph T5-3. Serbia: Industrial Production, seasonally adjusted indices, 2006



Source: SBS.

Growth trends diverge by sectors in Q3...

Stratification of industrial production between the leaders[1] and other sections reached a peak in Q3. It seemed then that Serbia's industrial production was specializing in production in a small number of successful sections dominated by large privatized companies with direct access to foreign loans (Table T5-4). Thus 16 of the 23 sections of manufacturing recorded a y-o-y drop in production in Q3.

In late 2006, we expected the leaders to exhaust their high growth potential, and were worried about total industrial production growth in Q4.[2] A general slowdown, however, failed to materialize (Graph T5-3). And while the leaders did record the expected fall in growth, most other sections – that had mainly recorded double-digit y-o-y drops in industrial production in Q3 – began to recover in Q4.

...and many sectors recover in Q4

The possibility of directly borrowing abroad ceased to be the privilege of a small number of large companies in Q4. The establishment of new credit channels revived industrial production across a broad front. It is noteworthy that small enterprises have retained lower growth rates than large and medium-sized companies, presumably due to the still present differences in access to credit. Additionally, toward the end of the year, economic policy went into fiscal expansion with the implementation of the NIP and increased spending ahead of the election in January 2007. This, we believe, gave a fresh impetus to accelerating total industrial production in Q4 –especially in December.

1 **The leaders are six sections contributing the most to growth in the manufacturing industry (basic metals, food and beverages,** furniture and related products, chemicals and chemical products, tobacco products, and products made of non-metallic minerals).

2 **For more details, see** *Economic Growth* in QM6.

Manufacturing realizes solid y-o-y growth in Q4

In Q4, manufacturing saw a moderate y-o-y growth of 2.9%. In the structure of the growth, there was a narrowing of the gap between industrial production leaders and the rest of the industry. Table T5-4 shows sections that contributed the most to industrial production growth in 2006 (*leader sections*). These are: basic metals, food and beverages, furniture and related products, production of chemicals and chemical products, tobacco products, and non-metallic minerals products.

Table T5-4. Serbia: Sub-Sectors with Highest Growth Rates in 2006, 2004–2006

	y-o-y indices							share
	2004	2005	2006	2006				2005
				Q1	Q2	Q3	Q4	
Manufacturing	109.7	99.3	105.3	107.5	106.2	104.4	102.9	100.0
Total-selected sectors (leaders)	115.5	108.3	111.9	110.6	114.4	117.4	106.9	67.5
Basic metals	140.9	121.8	122.7	116.6	131.7	135.4	109.8	16.6
Food and beverages	103.4	104.6	105.3	104.2	105.1	109.5	102.5	28.3
Furniture and related products	92.1	92.2	165.5	134.3	163.0	197.8	160.2	1.5
Chemicals and chemical products	118.2	103.8	108.3	105.1	107.7	112.8	107.5	15.4
Tobacco industry	97.6	114.6	111.3	158.6	128.2	80.1	106.1	2.0
Non-metal mineral products	102.8	97.7	106.6	119.3	107.8	103.3	103.1	3.7
Other	97.6	80.6	91.7	101.1	89.3	77.5	94.7	32.5

Source: SBS.

The leaders' growth of 6.9% was the lowest recorded in 2006. The remaining fields also registered a y-o-y drop in production, but it was significantly lower than in Q3, amounting to 5.3%.

Basic metals production in Q4 attains lowest y-o-y growth since 2003

Production of basic metals in Q4 was up 9.8% on the same period in 2005. This result was the lowest quarterly y-o-y growth figure in the production of basic metals since 2003 and the start of privatization in the sector. Possibilities for further high growth are slowly becoming exhausted, as experience so far has shown that foreign investors are disinclined to invest more seriously into new production capacities, and prefer to revitalize existing, already substantial, plants. It is possible that the slowdown is only temporary in nature. It remains to be seen what will happen with the privatization of the Bor Copper Mining and Smelting Plant: this could provide a fresh impetus to the faster growth of production of basic metals.

Food industry had a successful year

Production of food and beverages recorded a y-o-y growth of 2.5% in Q4. The growth of the food and beverages industry in 2006 stood at 5.3%, the same level as that of the domestic manufacturing industry as a whole. It can be said that 2006 was a successful year for the domestic food and beverages industry: a significant rise in productivity[5] of some 15% was recorded, well over the dinar's real appreciation. Thus it is no wonder that this sector increased its imports and achieved a foreign trade surplus.

Furniture production continues with high growth rates in Q4

The production of furniture and related products had the highest growth of all sections in Q4, 60.2%.[6] This extremely high growth was somewhat lower than in Q3, which was to be expected as this section has been growing strongly since Q3 2005. We expect a further reduction in the y-o-y growth index in 2007. Production of furniture and related products, recorded the highest growth in manufacturing in 2006 – as much as 65.5%.

Chemical industry registers high overall growth in 2006, with significant volatility through quarters

The production of chemicals and chemical products also slowed its y-o-y growth in Q4 in relation to Q3; the rate now stands at 7.5%. The year 2006 was also marked by significant variations in industrial production of chemicals and chemical products. As a rule, lower values in one month were made up for by acceleration the next month, which was often caused by external factors, such as January's disruptions in gas supply. All things considered, production of chemicals and chemical products grew by 8.3% in 2006; we expect this trend to continue in 2007.

Production of tobacco products was higher by 6.1% in Q4 in relation to Q4 2005; total industrial production growth in 2006 amounted to 11.3%. The industrial production index in the production of tobacco products in 2006 was indirectly affected by the investment activities of the two largest manufacturers, which almost ceased production in the first half of 2005. This is why y-o-y growth indices were very high in the first half of the year. In 2007, economic policymakers will have to deal with the problems in the tobacco industry, primarily the limitations imposed by the new Tobacco Production Act and the consequences of the signing of the CEFTA Agreement.[7]

Production of products made of non-metallic minerals saw y-o-y growth of 3.1% in Q4. The most important condition for growth in this section – growth of construction– was met both in Q4 and in 2006 as a whole. As companies making products of non-metallic minerals have been completely privatized, the continued expansion of construction in 2007 will probably result in this section retaining its leader status in the coming year as well.

The production of industrial products by use is shown in Table T5-5.

5 SBS, Bulletin IN41.

6 We analyzed the high growth of the production of furniture and related products in QM5. In short, the 1990s saw a fall in domestic demand and an inability to export, which led to a virtual demise of industrial production of furniture. Once-mighty socially-owned companies disappeared, furniture production fell into the hands of private entrepreneurs, and dropped below the radar of statistics. A growth in demand over the past several years has led to the consolidation of this section. New companies, their owners recruited from among the pool of former entrepreneurs, became visible to official statistics. A consequence of this process is the high growth of industrial production of furniture and related products.

7 Under the Act, tobacco manufacturers are obliged to use domestic tobacco for at least 50% of their production. Manufacturers are warning that the Act could lead to a shortage of raw materials, as tobacco production has not kept pace with the increasing capacities and the volume of production of tobacco products. The Act, it needs to be underlined, will be in force only temporarily.

Table T5-5. Serbia: Components of Industrial Production, 2004–2006

	y-o-y indices							base index	share[5]
	2004	2005	2006	2006				2006/2002	2005
				Q1	Q2	Q3	Q4		
Total	107.1	100.6	104.7	105.3	106.1	103.9	102.9	109.6	100.0
Energy[1]	101.8	103.9	102.5	100.7	104.8	99.9	102.7	111.2	23.1
Investment goods[2]	118.8	74.2	90.0	107.2	87.9	78.4	90.3	64.9	7.7
Intermediate goods[3]	116.0	104.9	106.7	109.4	109.1	106.5	102.3	123.0	33.9
Intermediate goods without basic metals	111.0	101.5	101.3	107.9	104.5	96.7	99.8	92.1	25.3
Consumer goods[4]	102.7	101.6	112.0	107.5	110.0	116.2	110.2	118.2	35.3
Consumer goods without food industry	101.4	96.3	128.3	113.4	118.6	132.5	128.9	134.2	10.3

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.

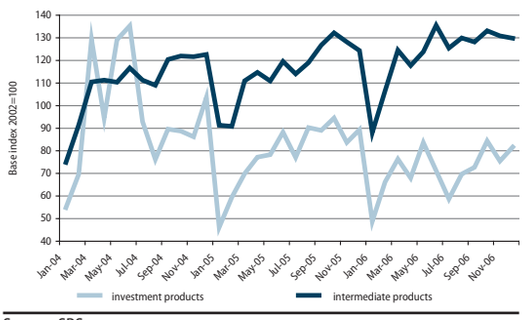
Consumer goods production leads the way in Q4

When production is viewed by use, consumer goods stand out with a double-digit y-o-y growth of 10.2%. This growth was achieved mainly through the results in the production of furniture and related products. Although high, the Q4 growth was still lower than in Q3. Production of intermediate goods has also seen a slowdown in y-o-y growth in relation to Q3. Year-on-year growth in the production of intermediate goods was 2.3% in Q4, the lowest since the beginning of the year. The reason for this was a slowdown in the production of basic metals. Production of intermediate goods, excluding basic metals, stoods at the Q4 2005 level, and showed no signs of slowing down. Energy production accelerated growth in Q4 in relation to Q3, standing now at 2.7%.

Investment goods in Q4 notably above their hitherto trend

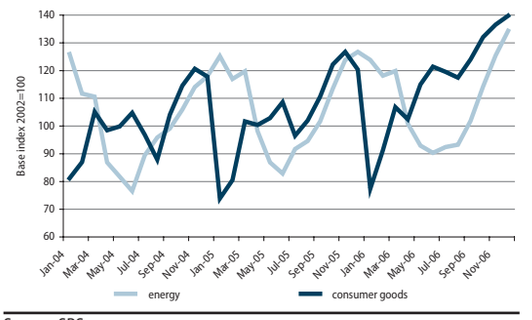
Significant changes also occurred in the production of investment goods. The y-o-y fall in the production of these goods in Q4 was reduced to below 10%. The competitiveness of domestic production of investment goods was covered in more detail in *QM*4. In short, in spite of the growth of investment into equipment in Serbia, the share of domestic equipment fell sharply,[8] with domestic production losing out to foreign competition. One consequence is the long-term decline in the production of investment goods, which was over 20% in Q3 2006, measured against Q3 2005. In Q4, however, there were hints of a recovery (Graph T5-6). So far, we are more inclined to believe that this is a temporary effect caused by increased demand in Q4, and especially by capital investments by the central and local governments. More time needs to elapse

Graph T5-6. Serbia: Components of Industrial Production, 2004–2006



Source: SBS.

Graph T5-7. Serbia: Components of Industrial Production, 2004–2006



Source: SBS.

8 Changes in ownership of a large number of companies have brought a more responsible approach to managing own investment, while changes to acquisition procedure in the social sector have also reduced the market for non-competitive domestic investment goods.

before it becomes clear whether the changes in the production of investment goods in Q4 are really only temporary, or if they indicate a real recovery of this part of the industry.

Construction

We estimate y-o-y growth in construction at around 20% in Q4

Construction recorded high year-on-year growth in Q4, which we estimate at 20%. The reason for this unusually high rate in the quarter was mainly the favorable weather conditions, which made possible an extraordinary increase in the number of working days. Due to construction's pronounced seasonal characteristics, Q4 (like Q1) was marked by significantly lower activity than Q3 and Q4. Sharp y-o-y changes to quarterly growth in Q1 and Q4 are nothing out of the ordinary, but have less of an effect on total annual construction growth (Table T5-8).

Such high growth is a consequence of favorable weather

An estimate of the underlying trend in construction based on Q4 indicators is made all the more difficult by the impact of these seasonal components. Still, it is our estimate that approximately half the growth achieved by construction in Q4 is the consequence of extraordinary circumstances, while the underlying trend of construction growth was responsible for about 10% of the year-on-year growth.

The most reliable among the several indicators describing trends in construction is, in our opinion, the cement production index (Table T5-8).[9] Cement production grew by 20.2% in Q4 2006 relative to the same period of the previous year.

Table T5-8. Serbia: Cement Production, 2001–2006

	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

Source: SBS.

As for the remaining construction indicators published by the SBS, the value of construction works in Q4 was nominally 30.4% higher than in the same period the previous year; in real terms, the increase amounted to 15.8%. The number of workers at construction sites fell by 2.4%, while the y-o-y rise in in work hours was 2.1%.[10]

High growth of construction in 2006 (13%)

Viewed at the annual level, construction achieved high growth in 2006; we estimate it at some 13%. Quarters especially marked by high growth were Q1 and Q4. In both cases the growth can be ascribed mainly to better weather than in the previous year, and for Q1 also to comparison with Q1 2005, which saw the introduction of VAT, which additionally reduced construction activity, especially residential construction.

The underlying growth trend of construction is borne out by Q2 and Q3 results: it points to the conclusion that actual construction growth in 2006 amounted to approximately 8%, with an extra 5% added by the extraordinary circumstances in 2006.

9 Cement consumption would be a more appropriate indicator, but this is not available at the quarterly level. Research has shown that cement production approximates consumption relatively reliably.
10 The imbalance between the published indicators points to a high increase in productivity, but also, in our view, reflects the low reliability of available data.

6. Balance of Payments and Foreign Trade

Rapid widening of the current account deficit (16.2% of estimated GDP in Q4) was the most important feature of the external sector in Q4 2006. The deficit of the merchandise trade balance increased, primarily due to the import growth driven mainly by the strong growth of energy imports. Export growth appeared to decelerate slightly in Q4, predominantly because of the December slowdown. Yet, judging by the available data on January exports, the December deceleration was of a temporary nature. The poor performance of the current account was offset by exceptional capital inflows. Q4 saw a record-high surplus in the capital account (2,232 mn euros), both from high FDIs (mainly through privatization and consolidation of the banking sector), and from the continued growth of foreign borrowing by enterprises. Domestic foreign currency savings also grew, with the NBS foreign reserves going up in Q4 by another 1,232 mn euros.

A record-high current account deficit (16.2% of GDP) marked Q4

The deficit in the current account of the balance of payments in Q4 was record-high (1,111 mn euros, or 16.2% of quarterly GDP). Such a high deficit is attributable to the widening of the deficit in the trade balance (-1,463 mn euros), and to low current transfers (373 mn euros). The trade deficit deteriorated primarily due to accelerated import growth, above all of energy imports, and due to the drop of current transfers, owed to low inflow into non-residents' foreign currency accounts, as well as to a high outflow of cash money withdrawn from individuals' foreign currency accounts.

Y-o-y growth of exports in Q4 was 27.6%, of imports 18.5%.

The trade deficit went up by 11.4%

The merchandise trade balance in Q4 worsened by 10.4% relative to the previous year despite y-o-y export growth of 27.6% in the quarter. In that period, goods worth 1,484 mn euros were exported, while imports valued 2,910 mn euros. Import acceleration (from 14.1% in Q3 to 18.5% in Q4, the y-o-y growth rate) was a consequence of strong energy and raw material imports, as well as of the strengthening of personal demand, which, despite the strong export growth, caused the worsening of the merchandise trade balance. In order for the merchandise trade deficit to be reduced, exports should grow approximately twice as fast as imports. However, this did not happen in Q4, although the export performance was acceptable. Though, on the face of it, exports slowed down slightly in Q4, they have essentially continued to grow steadily, because Q4 of the previous year, as a basis for comparison, was exceptionally high, which resulted in a lower level of the y-o-y growth rate. This is also confirmed by the preliminary data on January exports, since the y-o-y growth of exports for the period December–January was 27.8%, which corresponds to the medium-term trend.

Box 1. Trade balance: Comparison between Serbia and Countries in the Region.

The underlying problem with Serbia's deficit in foreign trade is the low level of exports. If Serbia's external sector performance is compared with those of countries in the region, we see that *imports* of goods and services[1] are lower relative to the region (47.9% of GDP in Q4, Table T6-1), but that *exports* of goods and services (27.6% of GDP in Q4) are considerably lower than the level recorded in the countries of the region.

Table T6-1: Exports, Imports, and Trade Balance, Countries in the Region[1)]

	Croatia	Bosnia	Bulgaria	Romania	Hungary	Serbia
			in % of GDP			
Exports (goods and services)	49.3	36.0	60.8	33.3	68.1	27.6
Imports (goods and services)	-56.5	-80.1	-77.4	-43.5	-68.9	-47.9
Trade deficit	-7.2	-44.1	-17.3	-10.3	-0.8	-20.1

Source: Central banks of respective countries, NBS.
Note: Data for Serbian are for 2006, other countries 2005.
1) For the sake of comparability with the regional data, we compare imports and exports of goods and services, while in the remaining part of the text we refer to the imports and exports of goods.

Table T6-2. Serbia: Balance of Payments, 2004–2006[1)]

	2004	2005	2006	2005		2006			
				Q3	Q4	Q1	Q2	Q3	Q4
				flows, in millions of euros					
CURRENT ACCOUNT	-2,197	-1,805	-2,892	-519	-671	-680	-475	-625	-1,111
Balance of goods	-5,311	-4,279	-4,950	-1,215	-1,292	-1,101	-1,256	-1,167	-1,426
Exports of goods	2,991	4,006	5,146	1,019	1,163	1,039	1,243	1,380	1,484
Growth rate (12-m, in %)	*15*	*34*	*28*	*23*	*19*	*28*	*23*	*35*	*28*
Imports of goods	-8,302	-8,285	-10,096	-2,234	-2,455	-2,140	-2,498	-2,548	-2,910
Growth rate (12-m, in %)	*29*	*0*	*22*	*15*	*-8*	*43*	*19*	*14*	*19*
Balance of services	155	-5	-49	0	-22	-31	4	16	-37
Income, net	-172	-260	-314	-56	-62	-58	-97	-81	-79
Current transfers	2,728	2,471	2,240	686	586	474	828	566	373
F/X purchases, net	1,592	1,631	1,447	445	303	289	593	284	281
Non-resident's accounts	568	460	561	151	202	183	94	218	67
Grants	403	268	181	66	120	36	45	42	58
ERRORS AND OMISSIONS	168	-384	-221	-130	-179	-31	-32	-83	-75
CAPITAL AND FINANCIAL ACCOUNT	2,377	3,863	7,353	1,103	1,587	1,100	1,587	2,247	2,232
Foreign direct investment (FDI)	773	1,248	4,077	495	250	164	574	1,671	1,668
Other investments	1,604	2,615	3,276	608	1,337	936	1,013	577	564
Medium and long-term loans, net	1,221	1,820	3,140	387	819	443	1,242	771	684
Extraordinary debt and interest repayment[2)]	...	...	-1,060	0	0	0	-189	-188	-683
Other[3)]	383	795	1,196	220	518	493	-40	-6	563
NBS Reserves, net[4)], (increase +)	-349	-1,675	-4,240	-454	-738	-390	-1,079	-1,539	-1,232
MEMORANDUM ITEMS									
Capital balance excluding com.banks deposits in NBS	2,188	2,963	5,868	925	1,124	830	724	1,979	2,334
Com. banks' foreign liabilities, net[5)]	391	159	170	-91	271	88	93	-211	200
NBS reserves excl. com. banks deposits	-299	-679	-1,679	-185	-225	-92	-340	-181	-1,066
Total foreign loans minus com. banks' deposits with NBS	1,195	1,236	1,825	214	652	385	358	337	745
				in % of GDP					
External debt	52.5	62.0	66.9	...	...	...	...	...	...
Public debt	41.5	44.8	37.7	...	...	...	...	...	...
Private debt	11.0	17.2	29.1	...	...	...	...	...	...
Net external debt[6)]	41.2	43.0	29.4	...	...	...	...	...	...
Exports of goods	15.2	19.0	20.9	18.5	19.8	19.2	20.7	21.6	21.6
Imports of goods	-42.1	-39.3	-40.9	-40.5	-41.7	-39.6	-41.6	-39.8	-42.4
Balance of goods	-26.9	-20.3	-20.1	-22.0	-21.9	-20.4	-20.9	-18.2	-20.8
Balance of services	-11.1	-8.6	-11.7	-9.4	-11.4	-12.6	-7.9	-9.8	-16.2
GDP in euros (annual)[7)]	19,723	21,107	24,670	5,516	5,889	5,397	6,006	6,403	6,864

Source: Table P-7 in Analytical Appendix.
1) Original US dollars monthly data are converted to euros using monthly averages of official daily NBS mid rates.
2) Includes extraordinary repayment of principal and interests on WB and IMF loans
3) Includes short term trade credits, unpaid imports of oil and gas, short-term loans, other assets and liabilities, and gross reserves of commercial banks.
4) Excluding IMF. 5) Commercial banks' long term foreign debt, and inflow of short term foreign loans. Excludes statuary reserves on Fx liabilities
6) Foreign debt minus NBS Fx deposits
7) GDP converted into euros using annual average of official daily NBS mid rates. GDP 2006: FREN's estimate.

Imports accelerated in Q4, primarily due to rising energy imports

Service revenue and expenditure both continued to grow steadily in Q4, almost at an identical pace as in Q3 (y-o-y growth in revenue of 30.8%, and in expenditure of 33.0%), which resulted in a minor deficit in the service balance (-37 mn euros).

Net factor transfers (interest) were higher in Q4 by 26.3% than in Q4 2005. The net repayment under this item of the balance of payments was 79 mn euros. A rise in the high NBS foreign reserves invested in first-class foreign securities, as well as the increase in reference interest rates in the world, resulted in a substantial rise in interest earnings (49 mn euros), which was a y-o-y growth of 81.2%. On the other hand, continuous growth in foreign borrowing resulted in a rise in interest payments (42.9%). Interest payments from Serbia[1] in Q4 amounted to 127 mn euros.

Current transfers were by 36.3% lower than in Q4 2005...

...which contributed to a higher current account deficit

Inflows from exchange operations were still below their levels in the previous year

The positive balance in current transfers dropped in the observed period by 36.3% relative to the same period of 2005, thus strongly contributing to the worsening of the current account deficit. Inflows from remittances remained stable (y-o-y growth of 14.7%) and amounted to 312 mn euros. However, withdrawals of cash money from foreign currency accounts of individuals grew substantially (48.8%) and amounted to 322 mn euros, for which reason the remittance balance became negative (11 mn euros). Inflows in non-residents' foreign currency accounts were exceptionally low in Q4, a mere 67 mn euros, 66.7% less than in the same quarter of the previous year, which contributed to a lower balance of current transfers. After the drop in foreign exchange purchases recorded in Q3[2] (-36.4%), in Q4 they again remained below their value in the previous year (a y-o-y drop of -7.1%).

1 Excluding early interest payments on World Bank loans.
2 For more details on underlying causes for a decline in inflows from exchange operations see FREN (2006) *Quarterly Monitor no.* 6 *"Balance of Payments and Foreign Trade."*

The record capital account...

The capital account in Q4 reached its all-time peak (2,418 mn euros) as a consequence of high FDIs (1,668 mn euros), as well as of further direct foreign borrowing by enterprises (545 mn euros), and short-term and long-term foreign borrowing by banks (304 mn euros), which, at a y-o-y level, decelerated considerably. The exceptionally high level of FDIs in Q4 2006 was a direct consequence primarily of the processes in the banking sector. High foreign-financed capital increases of domestic banks and the December payments under privatization deals for Vojvođanska[3] and Panonska Banka accounted for more than 50% of FDIs in Q4.

...was a result of high FDIs and direct borrowing

Medium-term and long-term borrowing is rising

Medium-term and long-term borrowing slowed down slightly in Q4 in relative to the previous year, as a consequence of the high NBS prescribed reserve requirement on banks' direct foreign borrowing. For that reason, as suggested by QM in its last issue, a significant change occurred in the structure of foreign medium-term borrowing. Namely, foreign-owned domestic banks are being more and more financed by increases in their own capital, rather than by borrowing. As of late, however, these banks have been advising their large corporate clients (and ever more frequently smaller ones, too) to borrow directly from their parent banks abroad. Thus, on a net basis, in total medium-term and long-term foreign borrowing (684 mn euros) – the share of banks was only 20.3% (139 mn euros), while direct enterprise borrowing accounted for as much as 79.7% (545 mn euros). In the first half of the year the situation was dramatically different – bank borrowing accounted for 66.6% of total medium-term borrowing, while enterprises accounted for 28.4%. Direct enterprise medium-term borrowing was by 83.0% higher than in the same quarter of 2005. After a cut in the reserve requirement on short-term foreign loans[4] in December, this type of borrowing started to go up again in Q4 (165 mn) after it had been almost halted in Q2 and Q3.

...primarily due to the strong growth of direct enterprise borrowing

Newly deposited foreign currency savings, after strong growth in Q3 (78.1%), continued to grow in Q4 as well, albeit at a somewhat slower pace: 223 mn of newly deposited foreign currency savings in the observed period (y-o-y growth of 48.0%).

The NBS prevented further appreciation of the dinar despite high foreign currency inflows

An increase in the NBS own net reserves was a consequence of its intervention on the foreign exchange market in a broader sense[5] in the course of Q4, aimed at preventing further appreciation of the dinar. The NBS foreign reserves kept growing (a rise of 1,223 mn euros over the observed period), mainly as a consequence of the dinar issue through the foreign exchange channel. The NBS own net reserves (gross reserves reduced by banks' required reserves and government deposits) in Q4 amounted to 1,066 mn euros.

Exports[6]

Y-o-y growth of exports in Q4 seemingly slowed down (28.7%)...

Export growth in Q4 2006 decelerated relative to its extraordinary performance in Q3 (y-o-y growth in Q4 was 28.7%, against 35.3% in Q3, Table T6-3). However, this deceleration occurred primarily due to the slowdown in exports in December (growth of a mere 15.7%), so that the actual export-related developments can be reliably analyzed only after the January and February data becomes available. The preliminary January data confirms that the December decline in exports was of a temporary nature. A comparison of the y-o-y export growth rates for the two-month period January–December (27.8%) with the 2006 annual export growth rate relative to 2005 (28.3%) – corroborates this. Likewise, in the record-high November 2006, exports crossed the barrier of 500 mn euros of monthly exports (501 mn euros).

3 **Although the privatization of Vojvodjanska Banka was completed back in July, the contract stipulated that the price was to be paid** only in December.

4 **See Section 8:** *Monetary Policy a*nd *Trends*, Box 1.

5 **The NBS intervention in a broader sense** includes NBS interventions on the interbank foreign exchange market and foreign exchange purchases from NBS exchange offices.

6 **As of September, the official statistics publishes data which includes trade with Montenegro.** *QM* used in this analysis the data for Q3 and Q4 of 2005 and 2006, which includes trade with Montenegro.

Table T6-3. Serbia: Exports growth, 2005–2006

	2005		2006			
	Nov.	Dec.	Sep.	Oct.	Nov.	Dec.
	y-o-y growth in %					
Total	14.9	38.3	34.9	35.7	36.9	15.7
Bulky exports	-5.8	25.0	75.0	76.7	58.1	30.6
Underlying exports	25.7	44.3	22.5	22.2	28.6	9.9
Core	39.4	63.7	20.4	18.8	25.1	5.8
Other	9.0	21.4	26.0	27.5	33.9	16.2

Source: SBS.

...but that was predominantly a consequence of high Q4 2005, which distorts the comparison

As clearly illustrated by Table T6-3, the unusual export acceleration in December of the previous year, was the underlying reason for the decline in the export growth rate in December 2006. Export growth in October and November 2006 was stable and strong (35.7% and 36.9%, respectively), and was a consequence of the growth in both Bulky, and Underlying Exports. *Bulky Exports*, which cover the most important export sub-sectors,[7] grew strongly in October and November (76.7% and 58.1% respectively) and greatly contributed to the extraordinary export performance in this period. *Underlying Exports* (exports excluding *Bulky Exports*) that grew in Q3 at a y-o-y rate of 26.3% – in October grew at a rate of 22.2%, while in November the growth of Underlying Exports accelerated (28.6%).

Table T6-4. Serbia: Merchandise Exports Growth, 2005–2006

		mil.euros	y-o-y growth in %							
	Exports share in 2005 (in %)	2006	2005				2006			
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total	100.0	1,474.4	50.2	40.3	28.5	25.6	26.2	21.6	35.3	28.7
Bulky exports	17.5	473.6	144.3	139.7	0.0	5.4	32.7	13.1	65.8	52.8
Iron and steel	8.0	187.2	146.2	83.0	-13.6	5.4	2.2	24.7	92.5	43.4
Non ferrous metals	5.6	154.2	103.7	66.2	76.1	67.7	79.9	53.5	58.8	73.3
Cereal and cereal products	2.8	77.9	64.5	119.4	130.5	77.1	88.0	31.9	21.2	29.6
Sugar and sugar products	1.2	54.4	1,509.3	3,558.9	-92.2	-63.7	18.5	-47.7	13.8	79.8
Underlying exports	82.5	1,000.8	27.0	14.9	40.3	35.3	23.2	26.2	26.3	19.7
Core	24.1	590.5	36.1	23.3	40.4	47.8	29.6	24.0	22.7	16.0
Organic chemicals	3.4	75.9	9.0	7.9	19.2	8.5	8.6	1.4	20.5	26.9
Manufactures of metals, n.e.s.	2.9	73.6	75.7	68.6	69.9	55.8	34.8	21.8	19.1	28.0
Medicinal and pharmaceutical products	2.4	60.1	20.6	16.0	40.5	32.9	24.1	14.7	7.2	4.5
Electrical machinery, apparatus and appliances	2.0	50.7	20.0	20.3	36.2	17.8	19.7	9.5	10.0	17.7
Footwear	2.7	69.5	-1.1	16.3	37.1	36.6	61.4	69.6	68.8	50.8
Clothes	0.5	13.0	19.2	44.1	57.4	57.6	30.2	11.7	20.6	16.8
Oil and oil products	1.0	16.2	229.5	21.9	14.4	139.5	45.2	19.4	29.6	-52.8
Paper, paperboard and articles of paper pulp	1.6	44.9	151.8	-30.2	20.0	29.8	20.2	72.1	16.9	36.0
Miscellaneous manufactured articles, n.e.s.	1.4	32.5	89.1	87.7	55.0	60.0	32.5	33.8	21.6	22.2
General industrial machinery and equipment	1.1	29.7	6.8	24.2	58.9	119.5	11.5	48.4	5.2	-24.7
Plastics in primary forms	0.8	19.6	49.8	40.1	71.4	78.8	39.1	5.8	-4.5	-9.5
Rubber products	1.2	28.4	8.2	13.1	93.2	78.7	8.0	14.1	25.9	15.2
Machinery specialized for particular industries	1.2	28.5	44.4	31.1	36.2	61.9	63.0	16.3	18.0	22.1
Fruits and vegetables	1.8	47.9	6.2	13.4	49.6	81.9	70.5	53.6	70.5	56.1
Other	58.4	410.2	15.3	4.3	40.2	19.5	13.4	29.4	31.9	25.5

Source: SBS.

The growth of *Bulky Exports*, (32.1% of total exports) – decelerated in Q4 2006 (y-o-y growth of 52.8% in Q4, as against 65.4% in Q3, Table T6-4), but this deceleration has to be taken cautiously, due to the already mentioned reasons related to the December behavior of exports. In terms of structure, iron and steel exports (12.7% of total exports) in Q4 had a y-o-y growth of 43.4%. Exports of non-ferrous metals (10.5% of total exports) in Q4 2006 accelerated their growth (y-o-y growth of 73.3% in Q4, as against 58.3% in Q3)[8]. At the same time, exports of *cereals* and *sugar* (5.3% and 3.7% of total exports respectively) accelerated their growth in Q4 2006 (annual growth of 29.6% and 79.8% respectively), thus contributing to the increase in total exports with 5.4% and 7.3%. Still, it is necessary to point to the fact that the growth in exports of sugar and sugar preparations was associated with their relatively low values in Q4 2005.

7 *Bulky Exports* include ferrous and non-ferrous metals, cereals and cereal preparations and sugar and sugar preparations.

8 **It should be mentioned that a dramatic deceleration of the growth in non-ferrous metal exports was registered in December, and** that their quarterly acceleration was driven by dynamic growth in October and November.

Underlying Exports stayed on the medium-term trend of solid growth

Underlying Exports (67.9% of total exports) – cover wide groups of exported goods and therefore are less vulnerable to possible risks of poor performance of some of them. In the period October–November they grew at a rate of 25.3%, retaining the pace of growth from the previous two quarters (26.2% in Q2 and 26.3% in Q3). In the whole of Q4, the growth of *Underlying Exports* decelerated (y-o-y growth in Q4 of 19.7% as against 26.3% in Q3) due to the mentioned specific nature of the December exports.

Besides the activity of large exporters, the growth of Serbian exports is a result of dynamic developments in different sections of the industry, of which some are gaining new impetus and others seem to be running out of steam. Numerous sectors from the group *Other*, whose export performance in the course of 2004 and 2005 was not particularly remarkable – are gaining momentum and contributing to the stable export growth on a broad basis. On the other hand, the *Core Group,* which QM has defined as an export category that included the most propulsive export sectors in 2005, is no longer a dynamic driver of the growth of total exports, since certain groups of goods in it show no potential for further growth.

From the group *Underlying Exports,* the largest shares in total exports in Q4 2006 were those of: vegetables and fruit (5.1%), clothing (5.0%), manufactures of metals, n.e.s. 4.7%) and miscellaneous manufactured articles (4.1%). By taking into account the groups of exported goods whose growth was higher than 2%, the highest export growth was recorded by: electrical machinery, apparatus and appliances (56.3%), manufactures of metals, n.e.s. (50.8%), organic chemicals (36.0%), clothing (28%) and vegetables and fruit (26.9%), while, on the other hand, the decline in exports of medicinal and pharmaceutical products was a surprise (-24.7%).

Imports

Imports accelerated...

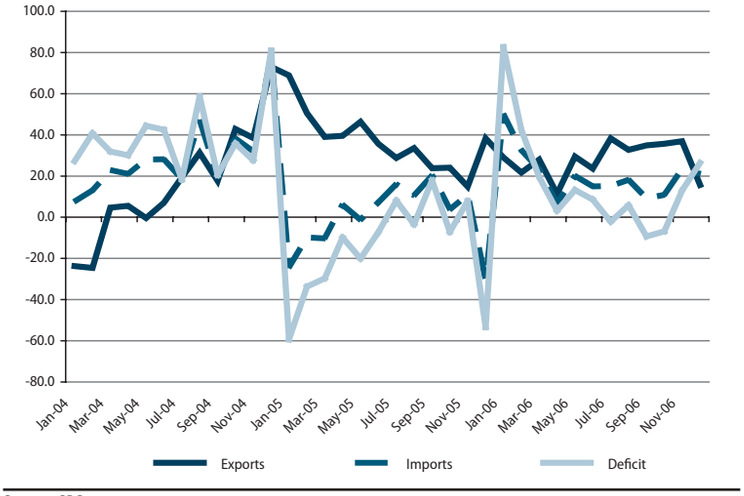
primarily due to growing energy imports...

as well as due to the expansive fiscal spending...

and the consequential rise in domestic demand...

Merchandise imports accelerated in Q4 and, in relation to Q3, their growth was higher by 4.6 percentage points (y-o-y growth in Q4 of 18.5%, 13.9% in Q3, Table T6-6). Imports accelerated primarily due to the strong growth in imports of fuels and raw materials. Analysis of the movements in imports excluding energy brings out that the Q4 acceleration was less intensive than in Q3 if we observe imports including energy (y-o-y growth in Q4 of 17.3% and 16.6% in Q3). Furthermore, consumer goods imports also rose, as a consequence of the dinar appreciation, as well as of the expansive fiscal policy (which was launched in Q3 and intensified in Q4), that probably spurred domestic demand.

Graph T6-5. Serbia: Merchandise Exports, Imports and Trade Deficit, Y-o-y Growth Rates 2004-2006



Source: SBS.

If the disaggregated imports classified according to the EU economic purpose are observed, it is clear that in Q4 2006 energy imports had the fastest growth (y-o-y growth of 24.1%). A dramatic acceleration of the import growth of those products in October and November crucially contributed to the acceleration of the growth in total quarterly imports. Energy import growth was influenced by the higher needs of the Serbian Power Company for petroleum products and the gradual depletion of the existing stocks in the previous

period. That growth would have been even higher if the oil price on international markets had not fallen in Q4. Imports of intermediary goods recorded a stable and high growth in Q4 (y-o-y growth of 21.1%), which is in line with the constantly high needs of the economy for raw materials and semi-manufactures. These imports were directly connected with the strong export growth in Q4. Intermediaries accounted for the largest part of total imports (36.6%) and they contributed to their growth the most (40.8%). The growth in imports of capital goods (23.9% of total imports) slightly decelerated in Q4 2006 (y-o-y growth in Q4 of 13.7% relative to the growth of 15.4% in Q3). Imports of non-durable consumer goods (14.8% of total imports) accelerated and grew in Q4 at a y-o-y rate of 19.3%. Likewise, in Q4 2006 imports of those products accelerated as a consequence of the dinar's appreciation against the euro, wage growth, and rising broader aggregate demand.[9] Finally, imports of durable consumer goods had the lowest y-o-y growth (6%).

Table T6-6. Serbia: Imports, Y-o-y Growth, 2004–2006

	2005	2006	2005				2006			
	Q4	Q4	Dec - Mart	Q2	Q3	Q4	Dec - Mar	Q2	Q3	Q4
	mil.euros		%							
Total	2,539	3,007	12.1	3.9	15.7	-9.4	4.4	14.0	13.9	18.5
Energy	442	549	21.5	22.4	66.0	3.9	-5.1	12.3	3.6	24.1
Imports excluding energy	2,097	2,459	10.1	0.8	7.3	-11.7	6.3	14.3	16.6	17.3
Intermediate products	909	1,100	18.4	18.8	14.5	-0.1	15.9	11.4	22.5	21.1
Capital products	631	717	11.4	-12.6	-2.0	-28.8	-9.8	17.9	15.4	13.7
Durable consumer goods	112	119	2.5	-17.9	-0.3	-17.8	-2.5	14.5	1.7	6.0
Non-durable consumer goods	374	446	1.3	-12.0	6.5	-3.3	17.4	18.7	11.2	19.3
Other	71	76	-19.1	28.5	38.0	25.1	8.1	2.9	-2.9	7.0

Source: SBS.

9 Similarly, in the course of Q4, at the monthly levels, a slowdown was observed in the growth of imports of these products.

7. Fiscal Flows and Policy

The turnaround in fiscal policy toward greater expansiveness, initiated in Q3, reached its full realization in Q4 2006. The fiscal deficit in Q4, irrespective of the method used to measure it, reached its highest level in the last three years. The actual deficit was a consequence of higher expenditure, both current and capital, while revenue grew commensurate with GDP growth. The fiscal deficit was financed by running down government deposits built up in the previous period, mainly from privatization proceeds and the sale of licenses for cellular phone operators. QM estimates that the worsening of the trade balance in late 2006, and a recovery of industrial production in December can for the most part be explained by the rise in public spending. A cut in public spending in Q1 2007, caused by the temporary financing of the Serbian budget, will contribute to the amelioration of the consequences of fiscal expansion in Q4 2006. Resumption of the fiscal policy conducted in Q4 after the expiry of the temporary financing period would further widen the trade deficit and contribute to increasing inflationary pressures. Therefore, we are of the opinion that revising fiscal policy should be the priority task of the new government.

General Trends

Fiscal policy expansiveness has been considerably intensified

Consolidated public revenue in Q4 2006 was higher by 14.4% in nominal terms relative to the same quarter of the previous year (Table T7-1), while its real growth in the period was 5.9% (Table T7-2). The revenue-to-GDP ratio remained unchanged, since the real rise in revenue was approximately equal to the estimated real GDP growth. Relative to Q3 2006, consolidated public revenue went up by 16% in nominal terms, mainly due to seasonal effects[1].

Table T7-1. Serbia: Consolidated General Government Fiscal Operations[1)], 2005–2006

	2005		2006				
	Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1-Q4
	in billions of dinars						
I TOTAL REVENUE	210.2	701.6	175.4	201.6	207.5	240.6	825.0
II TOTAL EXPENDITURE	-195.1	-667.8	-174.9	-185.3	-197.6	-255.4	-813.2
III "OLD" DEBT REPAYMENT AND NET LENDING	-7.8	-36.6	-4.4	-17.1	-10.1	-17.5	-49.1
o/w III.3 Net lending [2)]	*-1.5*	*-4.9*	*-1.8*	*-0.8*	*-1.3*	*-3.2*	*-7.1*
IVa CASH BALANCE (I+II), MoF definition[3)]	15.2	33.8	0.4	16.3	9.9	-14.8	11.8
IVb OVERALL BALANCE (IVa+III.3.), MF definition[3)], MoF data	13.7	28.9	-1.4	15.5	8.6	-18.0	4.7
IVc ANALYTICAL BALANCE (I+II+III), FREN's definition[3)]	13.7	28.9	-3.9	-0.8	-0.2	-32.3	-37.3
V FINANCING (FREN's definition)	6.9	27.7	8.5	1.4	103.2	8.7	121.7
VI ACCOUNT BALANCE CHANGE (IVc+V)	14.2	24.8	4.5	0.5	103.0	-23.7	84.4
MEMORANDUM ITEMS							
Government net position in banking system, change (NBS)	-4.2	16.0	10.6	6.7	90.1	-31.5	75.9
Enterprises' claims on VAT (FREN's estimate)[4)]	7.5	17.1	-1.6	2.1	0.0	0.0	0.5
License fee[5)]	..	..	..	..	27.0	..	27.0

Source: Table P-8 in Analytical Appendix.
1) Includes all levels of government (central, provincial and municipal) and their budget beneficiaries and social security organizations (Serbian Pension and Disability Insurance Funds, Health Insurance Funds, National Employment Service, but not public enterprises and the NBS.
2) The item corresponds to the item "Net acquisition of financial assets for policy purposes" in the PFB (in accordance to GFS 2001), i.e. to the item "net lending" or "lending minus repayment" in the IMF presentation (i.e. GFS 1986). It comprises loans to students, financing of the National Corporation for Housing Loan Insurance and the like.
3) See Table P-8 in Analytical appendix and/or Box 1. in QM3.
4) FREN's estimate based on informal information regarding VAT credits and on analysis of VAT redemption PFB data.
5) Regarding to the fact that fee from license for mobile is one off revenue, this fee was regarded in our table se financing item, dispite the definition of MoF, that threats this license as a non-tax revenue.
Note: Details are given in Table P-8 in Analytical appendix.

1 Real growth was approximately equal to the nominal, because inflation in Q4 relative to Q3 was a mere 0.2%.

Consolidated public expenditure in Q4 2006 increased by 30.9% nominally (Table T7-1), and by 21% in real terms, relative to the same quarter of the previous year (Table T7-2). It has been estimated that the expenditure-to-(quarterly) GDP ratio went up by around six percentage points relative to the same quarter of 2005. Consolidated public expenditure rose by 29.2% in nominal terms relative to the previous quarter. Public expenditure growth in Q4 was less the consequence of seasonal factors (an increase in payments for public investment at all levels of government), and more of the economic policy measures (wage growth, the National Investment Plan - NIP).

The consolidated deficit reaches its highest level in three years

Estimates are that the consolidated fiscal deficit, defined on the basis of the impact of expenditure on aggregate demand (FREN's analytical definition) in Q4 amounted to 1.5 of the 2006 GDP, that is, around 5.4% of GDP realized in Q4.

The deficit was financed by a drawdown in government deposits

The fiscal deficit in Q4 was financed by running down previously built up government deposits that were formed predominantly from privatization proceeds and the sale of licenses for cellular phone operators. Net government deposits with the banking sector in Q4 were reduced by 31.5 bn dinars (Table T7-3), which is in the ballpark of FREN's estimate of the fiscal deficit and constitutes a measure of the impact of government spending on the rise in aggregate demand[2].

Table T7-2. Serbia: Consolidated General Government Fiscal Operations[1], 2005–2006

	in billions of dinars					Real growth (in %)				
	2005		2006			y-o-y			comparing to previous period	
						2006			2005	2006
	Q4	Q1-Q4	Q1-Q3	Q4	Q1-Q4	Q1-Q3	Q4	Q1-Q4	Q4/Q3	Q4/Q3
I PUBLIC REVENUES	**210.2**	**701.6**	**584.5**	**240.6**	**825.0**	**4.3**	**5.9**	**4.7**	**14.1**	**15.7**
o/w: Public revenues excluding VAT liabilities to enterprises and offsets with SDF [2),3)]	*200.9*	*191.1*	*579.9*	*235.1*	*815.0*	*6.3*	*8.2*	*6.8*	*11.6*	*15.2*
1. Current revenues	207.8	693.7	577.5	237.3	814.8	4.2	5.6	4.6	14.1	15.5
Tax revenues	185.8	638.9	533.0	218.2	751.3	3.1	8.6	4.6	9.7	15.4
Personal income taxes	27.2	94.3	84.3	34.3	118.6	10.2	16.5	11.9	8.4	16.9
Corporate income taxes	2.8	10.3	14.3	4.0	18.3	66.1	34.0	58.0	43.8	15.2
VAT and retail sales tax	62.2	215.9	161.1	64.0	225.1	-8.2	-4.9	-7.3	9.8	12.0
o/w: Net VAT and retail sales tax [2)]	*54.7*	*198.8*	*160.6*	*64.0*	*224.6*	*-2.4*	*8.2*	*0.4*	*3.2*	*12.0*
Excises	20.0	71.3	57.4	24.2	81.6	-1.8	11.8	1.8	-2.3	11.7
Custom duties	12.3	39.0	32.2	13.1	45.3	6.0	-1.5	3.7	13.2	32.1
Social contributions	54.6	184.0	162.0	70.2	232.2	9.7	18.9	12.3	12.8	17.8
o/w: contributions excluding offsets with SDF [3)]	*52.7*	*178.6*	*158.0*	*64.7*	*222.7*	*10.1*	*13.5*	*11.0*	*10.8*	*16.3*
Other taxes	6.8	24.1	21.7	8.5	30.1	9.2	15.8	11.0	12.5	7.1
Non-tax revenue	22.0	54.8	44.4	19.1	63.5	19.2	-20.0	4.1	71.8	16.6
2. Capital revenues	2.4	7.9	7.0	3.3	10.3	11.6	25.6	15.7	15.7	24.3
II TOTAL EXPENDITURE	**-195.1**	**-667.8**	**-557.8**	**-255.4**	**-813.2**	**3.4**	**21.0**	**8.3**	**12.0**	**28.9**
1. Current expenditures	-184.3	-634.8	-526.5	-222.8	-749.3	2.5	11.7	5.0	11.0	20.5
Wages and salaries	-47.7	-166.3	-138.9	-59.6	-198.6	2.7	15.7	6.2	10.4	26.3
Wages and salaries excluding severance payments [4)]	*-45.5*	*-164.1*	*-136.6*	*-59.6*	*-196.3*	*0.9*	*21.1*	*6.2*	*5.4*	*-23.6*
Expenditure on goods and services	-29.7	-92.2	-76.7	-37.5	-114.1	7.4	16.7	10.3	22.9	28.7
Interest payment	-7.8	-24.5	-19.5	-9.4	-28.9	2.5	10.8	5.0	31.8	6.1
Subsidies	-15.8	-54.5	-36.4	-18.0	-54.4	-17.4	5.2	-11.2	8.5	32.2
Social transfers	-78.7	-281.5	-242.8	-93.1	-335.8	5.0	9.3	6.1	6.7	13.6
o/w: pensions [5)]	*-51.5*	*-186.1*	*-166.9*	*-60.8*	*-227.7*	*8.7*	*9.2*	*8.8*	*5.3*	*3.6*
Other current expenditures	-4.6	-15.8	-12.2	-5.2	-17.4	-4.5	4.5	-2.0	5.6	26.8
2. Capital expenditures[6)]	-10.8	-33.0	-31.3	-32.6	-63.9	23.0	180.1	71.8	32.1	147.0
III "OLD" DEBT REPAYMENT AND GOVERNMENT NET LENDING	**-7.8**	**-36.6**	**-31.6**	**-17.5**	**-49.1**	**-3.8**	**106.5**	**18.6**	**-15.8**	**72.7**
1. Debt repayment-FFCDs and LRS	-0.8	-21.9	-20.4	-1.4	-21.8	-15.7	56.7	-13.2	-84.7	-71.5
2. Pensions	-5.6	-9.8	-7.3	-13.0	-20.3	49.1	115.4	85.5	260.9	224.1
3. Net lending[7)]	-1.5	-1.3	-4.0	-3.2	-7.1	3.1	100.0	30.8	-41.4	134.4

Source: Table P-8 in Analytical Appendix.
1) See footnote 1) in Table T7-1.
2) Retail sales tax/VAT minus new tax credits to enterprises.
3) Social contributions reduced by refunds between Pension Fund, Serbian Development Fund and enterprises that are debtors of the Pension Fund.
4) FREN's estimate, for details see Table P-8 in Analytical appendix.
5) Refers to the current expenditures on pensions.
6) Capital expenditures exclude projects financed from abroad (apart in 2004, see footnote 7) in Table P-8)
7) See footnote 2) in Table T7-1.
Note: Real growth is obtained by comparing quarterly data expressed in 2003 constant prices.

2 It is possible to interpret the change in the net government position in this manner, since in Q4 there were no substantial outlays for foreign debt servicing, and the proceeds from the sale of the third license for the cell phone operator were carried over to 2007.

Macroeconomic implications of fiscal policy

Macroeconomic implications of the fiscal expansion in Q4 heavily depend on whether the underlying costs are non-recurrent (one-off) costs or higher recurrent costs whose increased level is now permanently built into public spending.

Half of the public spending increase is non-recurrent, while half is recurrent

According to our estimate, roughly half of the increase in public spending and the deficit that was run in Q4 was a consequence of the rise in one-off expenditures, such as early payment of pensions, arrear clearance, higher outlays for purchases of goods and services, etc. The impact on aggregate demand is temporary and will be reflected in an increase in the external deficit and inflation in the course of Q1 and Q2 2007. The other half of the increase and the deficit is associated with the growth in wages[3] and other expenditure components that will permanently remain at the higher level. The maintenance of labor costs and other recurrent expenditure at the high level attained in late 2006 will result in a permanent increase in the level of aggregate demand, as well as in the consequential pressure on the external sector and prices.

Payroll tax cuts and NIP implementation will additionally boost the expansiveness of fiscal policy

The described fiscal expansion in Q4 2006 constitutes only one of three key elements of the turnaround in fiscal policy. The other two elements are the payroll tax cuts and the launching of the National Investment Plan[4]. Although these two measures are supposed to generate favorable medium-term effects on employment and economic growth, their short-term implications for macroeconomic stability will be negative. The main macroeconomic problem in the fiscal policy mix prepared in the course of 2006 is that generally desirable tax cuts and a rise in public investment are not supported by adequate cuts in current spending. Instead, the level of public spending was increased through pay rises in Q4 2004.

The decrease in the payroll tax revenue as of the start of 2007, which will not be offset by public spending cuts, will further contribute to the intensification of the fiscal policy expansiveness. According to estimates, if such a fiscal policy is pursued, the consolidated fiscal deficit, defined based on the impact on aggregate demand (FREN's definition), would reach 3–4% of GDP.

Macroeconomic implications of expansive fiscal policy will crucially depend on the monetary policy response

The overall effect of all the above measures be to spur aggregate demand, which is already at a high level (in the last couple of years, domestic demand has been 20–25% higher than GDP). The macroeconomic consequences of such fiscal policy will depend on the monetary policy response. If the NBS fails to intervene, inflation can be expected to accelerate and the current account deficit to widen. If the NBS undertakes restrictive measures, which is more likely, interest rates can be expected to go up and private consumption and investment will be crowded out by the government.

The new government's priority – redesigning fiscal policy so that it serves the purpose of maintaining macroeconomic stability and growth

The priority task of the new government should be a thorough re-examination of overall fiscal policy. As part of that re-examination, it is necessary to run a surplus of current fiscal revenue over current expenditure, as well as to revisit the NIP with a view to aligning it with sustainable macroeconomic stability and fast economic growth. In that respect, measures are necessary to ensure a rise in tax revenue in order to run a surplus of current fiscal revenue relative to current expenditure. It seems that a drop in the oil price on the international market in late 2006 and early 2007 was a good opportunity to reduce the fiscal imbalance, by increasing excises while keeping the retail prices at the same level. Another direction of activities should be a thorough redefinition of the NIP with a view to determining priority projects (Corridor Ten), postponing certain projects and excluding local projects and current maintenance from the NIP. Likewise, at the very beginning of the NIP implementation, an institutional form should be provided aimed at improving the efficiency of public investment. To this end, one possible solution is to set up a body (agency or the like) that would report to Parliament and whose responsibility would be to exercise control of public investment realization – starting from the selection of contractors and

3 The wage growth in December 2006 included a temporary component related to the higher-than-average cash bonuses (relative to the real level paid in previous years) that public sector employees received for Christmas and New Year.

4 In addition to macroeconomic implications, a special problem is posed by the structure of the projects under the NIP. A considerable part of the NIP includes local projects, current maintenance and standard current spending. Moreover, institutional mechanisms have not been created to ensure the efficiency of investment, that is, the implementation of investment in the shortest period of time, at the lowest cost and with a high quality of implementation.

suppliers, up to the economic efficiency of the performance of the contracted works (the lowest prices, the shortest execution periods, the good quality of works, etc.).

Analysis of individual tax instruments and individual expenditure items

Revenue developments were mainly in line with the seasonal pattern. Somewhat stronger growth of the contribution revenue is a reflection of the high wage growth, prompted by the election campaign.

Modest nominal growth of collected VAT in Q4...

In Q4 2006, trends in consumption taxes were divergent. While VAT had a moderate nominal growth (and a fall in real terms) relative to the same quarter of the previous year, the excise revenue rose significantly.

VAT revenue in Q4 was higher by a mere 2.9% nominally relative to the same quarter of the previous year, which implies a real revenue reduction by around 5% (Table T7-2). A moderate VAT revenue growth relative to the same quarter of the previous year partly reflects actual factors (higher exports, more tax evasion), while for the other part it is a consequence of the unusually high revenue in Q4 2005, for which the underlying reasons were delays in the payment of tax refunds and prepayments into the budget.

...and strong growth of excise revenue

The excise revenue, after stagnating for the most part of 2006, in Q4 grew strongly. The nominal rise in excises of 20.9% relative to the same quarter of the previous year can partly be explained by the low excise revenue in Q4 2005.

The customs revenue in Q4 2006 was higher by 6.5% nominally relative to the same quarter of the previous year. The slower growth in the customs revenue, despite a strong import growth, is a consequence of the appreciation of the nominal exchange rate of the dinar. Relative to the same quarter of the previous year, the nominal dinar rate appreciated against the euro by more than 8%, while in relation to the weighted average of the euro (70%) and the dollar (30%) it appreciated by around 11%.

The y-o-y rate of growth in the personal income tax and social security contribution revenue reached a higher-than-average level in Q4. The accelerated growth of revenue from the personal income tax and contributions was a consequence of accelerated wage growth initiated by pay rises in the public sector.

The y-o-y- rates of growth in corporate income tax revenue throughout 2006 stayed at a high level despite a noticeable deceleration trend. Only a detailed microeconomic analysis could provide an answer to the question as to the extent to which the increase in the corporate income tax revenue reflects higher efficiency in the economy, and the extent to which it can be attributed to the curbing of the gray economy. Similarly, it is possible that a low fiscal burden on the corporate income in comparison with the fiscal burden on other types of income creates an incentive to fictitiously overstate corporate income while understating other incomes.

In the general expansion of public expenditure, the growth of expenditures for public investment, employees and purchases of goods and services was particularly strong.

Expenditure for employees and public investment are the key drivers of public spending growth

The expenditure for employees in Q4 was increased by 25.1% in nominal terms and by 15.6% in real terms relative to the same quarter of 2005 (Table T7-2). Relative to Q3 2006, this expenditure was increased by some 26.6% in nominal terms, which, due to low inflation, implies approximately the same real growth. In Q4 *per se*, there was a remarkable upward trend in the expenditure for employees. Thus, in December, it was some 44% higher than in October. The intensive wage growth in Q4 was a result of a cumulative effect of seasonal factors (New Year and Christmas holidays) and the courting of voters ahead of the elections. A strong impact of non-seasonal (political) factors may also be observed from the fact that the expenditures for wages in December 2006 were around 40% higher than in the same month of the previous year. Because of the wage growth in the course of Q4 2006, the share of labor costs in public spending and in GDP was again substantially raised, which offset the effects of the 2005 public sector downsizing.

The expenditure for purchases of goods and services continued its rapid growth, which started in Q3, at an annual rate of 26%, which corresponds to the real growth of 16.7%. The rise in expenditure for purchases of goods and services, together with wage growth, constitutes the main driver of the rise in current public spending and can be directly linked to the election campaign.

The expenditure for subsidies in Q4 2006 was increased by 13.8% in nominal terms relative to the same quarter of the previous year, which roughly corresponds to the nominal GDP growth rate.

The early repayment of public debt in one bullet contributed to the increase in public expenditure

The repayment of the pension-related debt, including the early payment of pensions, amounted to 13 bn dinars in Q4, which was by 133% higher than in the same quarter of the previous year.

In Q4 capital expenditure at all levels of government was increased considerably. Its nominal value more than doubled relative to Q4 of the previous year, while the increase over Q3 2006 was almost 150%. The main trigger for the rise in this expenditure was the beginning of the implementation of the National Investment Plan. The Q4 rise was for one part a consequence of seasonal factors, which reflected payments by local communities and by the Republic to contractors at the end of the construction season. Higher payments for this purpose partly reflect the clearance of government arrears to enterprises.

Table T7-3. Serbia: Government Position in the Banking Sector, 2005–2006

	2005				2006			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	in billions of dinars, stocks							
Total	-25.8	-22.0	-32.8	-43.1	-53.7	-60.4	-150.5	-119.0
Republics and State Union	-6.9	-1.6	-10.2	-27.8	-31.1	-34.0	-124.2	-100.5
Municipalities	-19.0	-20.4	-22.6	-15.3	-22.6	-26.4	-26.3	-18.5
	cummulative, from the beginning of the year							
Total	-18.7	-14.9	-25.7	-36.0	-10.6	-17.3	-107.4	-75.9
Republics and State Union	-12.8	-7.6	-16.2	-33.8	-3.3	-6.1	-96.3	-72.7
Dinar position	-7.3	-10.1	-16.8	-27.9	-3.1	-16.3	-13.1	-12.0
Fx position	-5.5	2.6	0.6	-5.9	-0.2	10.2	-83.2	-84.7
Municipalities	-5.9	-7.3	-9.5	-2.2	-7.3	-11.1	-11.0	-3.2
NBS	-5.3	-3.2	-5.0	-0.8	-6.1	-5.1	-5.5	-3.5
Commercial banks	-0.6	-4.1	-4.5	-1.4	-1.2	-5.8	-5.5	0.3

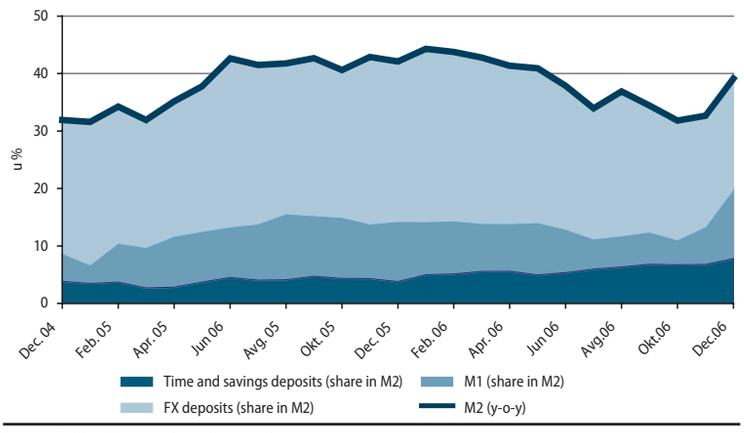
Source: NBS.

8. Monetary Flows[1] and Policy

Though inflation was succesfully reduced in Q4 too, toward the end of 2006 monetary supply accelerated year-on-year growth to 39.1%, a change from the trend recorded in the preceding two quarters (34.4% in Q3 and 37.9% in Q2). Credit to the non-government sector by domestic banks was reined in, while credit to companies came to a complete standstill, with companies compensating by borrowing directly abroad. Domestic banks put as much as 80% of new placements into new repo transactions with the National Bank of Serbia (NBS). As in Q3, bank credits were mainly financed from domestic deposits (increasing by 900 mn euros in Q4) and the growth of bank capital (530 mn euros), while new foreign borrowing of banks accounted for only 220 mn euros. Company liquidity increased in Q4, as reflected in the surprising rise of their dinar deposits by 450 mn euros. Monetary policy was evident in the intensive purchase of foreign exchange on the inter-bank market, which prevented further appreciation of the dinar under pressure from excess foreign exchange supply. The NBS was sterilizing primary money successfully, but it was expensive, and resulted in a record increase of the stock of repos in Q4 (dinar equivalent of some 800 mn euros). Despite the persistent sterilization, primary money recorded a significant acceleration of growth in the quarter because of government spending, which was not fully neutralized through the repo market.

Monetary System: Structure and Flows of Money Supply

Graph. T8-1. Serbia: Money and Component Aggregates[1)], 2004–2006



Source: Table P-9. 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).

Growth of nominal M2 accelerates again at end-Q4

The y-o-y growth of total money, measured by the M2 aggregate, accelerated at the end of Q4. This was a change of the trend recorded in the first three quarters of the year, during which y-o-y growth of monetary supply declined continuously. Nominal y-o-y growth was 39.1% (34.4% in Q3, Table T8-1), while real growth was even more accelerating in Q4 than nominal growth, reaching 29.8% (20.5% in Q3). When the contribution of different forms of holding of money (cash in circulation and dinar sight deposits) is considered, Graph T8-1 shows that the share of the dinar component of monetary supply increased in relative terms compared to foreign exchange deposits.

The Q4 monetary growth was due to the rise in foreign exchange reserves and spending of the government deposit with the monetary sector

As Table T8-2 shows, the 39.1% increase in total monetary supply over the whole of 2006 was generated by the rise in NFA amounting to 41% of opening M2 and the drop in NDA of 1.9% of opening M2. In the increase in NDA of -1.9% of opening M2 over all of 2006, 27.5% of opening M2 refers to the growth of credit to the non-government sector, and 17.5% of opening M2 to net credit to government (generated mainly through the increase in the government deposit with the monetary sector). When Q4 2006 is observed, it is evident that the 15.3% increase (difference between the total 39.1% increase in M2 in 2006 and the cumulative increase over the first three quarters of 23.8% of opening M2) consisted of: NFA increase of 10.1% of opening

1 Monetary data that are used in this section of QM differ from those used in previous issues of QM due to the change in methodology in the Statistical bulletin of NBS. QM methodology remains the same but only based on a slightly modified database.

M2, and NDA increase of 5.2% of opening M2 (these percentages were obtained in the same way as for the whole of M2, by subtracting the cumulative increase for the whole year and the cumulative increase for the first three quarters for each of the M2 components). Table T8-2 also shows that the 5.2% increase of NDA in Q4 was achieved primarily though the rise in net credit to government (spending of government deposit with the monetary sector) by 4.3% of the M2 at the beginning of the year. The remainder of the NDA increase consisted of other components not specified in Table T8-2, while domestic bank credit to the non-government sector ceased relative to end-Q3 as its increase in Q4 was only 2.5% of opening M2, viewed in the form of flows adjusted for the effect of changes in the foreign exchange rate (see footnote 3, Table T8-2).

Credit to the non-government sector continues slowing...

Viewed through y-o-y growth rates of nominal and real credit, the slowing of credit to the non-government sector started in Q3 and continued in Q4 2006. Table T8-2 shows that the y-o-y growth of credit to enterprises at end-Q4 was 17.8%, compared to 34.6% at end-Q3. The slowdown is also obvious but somewhat less pronounced when viewed on the basis of flows corrected for fluctuations in the exchange rate (for details on methodology used for the corrections, see footnote 3, Table T8-2 and Box 2, *QM*6, *Monetary Flows and Policy*): the 12-m nominal growth at end-Q4 was 24.4% (38% at end-Q3 and 45.6% at end-Q4 2005.

Table T8-2. Serbia: Monetary Survey, Selected Indicators, 2004–2006

	2004	2005				2006			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
					y-o-y, in%				
M2[1]	31.9	37.0	42.6	42.7	42.1	42.8	37.9	34.4	39.1
Credit to the non-government sector[2]	44.3	50.9	46.0	48.7	51.3	45.3	44.4	34.6	17.8
Credit to the non-government sector[2], adjusted[3]	30.6	39.2	34.6	38.6	45.6	39.6	41.6	38.0	24.4
Households	107.0	100.2	94.7	91.3	92.5	100.6	96.6	80.8	63.6
Enterprises	19.8	29.7	24.2	27.6	34.3	25.0	26.9	24.7	10.9
					real y-o-y, in %				
M2[1]	10.4	16.3	22.1	22.4	20.8	24.7	19.8	20.5	29.8
Credit to the non-government sector[2]	27.4	28.0	25.0	27.6	28.6	26.9	25.4	20.7	9.8
Credit to the non-government sector[2], adjusted[3]	28.2	28.2	28.2	28.2	28.2	21.5	22.7	23.6	16.0
Households	59.1	59.1	59.1	59.1	59.1	74.8	70.4	61.9	52.7
Enterprises	18.2	18.2	18.2	18.2	18.2	8.8	9.9	11.7	3.5
					cumulative, in % of opening M2[4]				
M2[1]	31.9	2.6	15.9	30.8	42.1	3.1	12.4	23.8	39.1
M2 dinar[1]	8.7	-0.8	4.4	10.5	14.2	-0.5	3.6	8.8	19.8
Foreign deposits (households and enterprises)	12.8	2.5	9.2	16.1	22.5	2.6	8.4	18.1	25.7
Valuation adjustments[5]	10.5	0.8	2.3	4.3	5.4	1.0	0.4	-3.1	-6.4
NFA, dinar increase	-3.8	0.5	7.0	17.1	18.0	-4.0	2.4	30.9	41.0
NFA, fx increase	-13.3	-0.2	5.0	13.3	13.5	-4.7	2.1	34.3	48.3
Valuation adjustments[6]	9.5	0.7	2.0	3.8	4.4	0.7	0.3	-3.4	-7.3
NDA	35.8	2.1	8.9	13.7	24.2	7.1	10.0	-7.1	-1.9
o/w: credit to the non-government sector[2], adjusted[3]	15.9	6.7	12.5	21.2	34.1	5.1	15.6	25.0	27.5
o/w: net credit to government[7]	6.1	-3.9	-2.4	-5.0	-10.4	-0.7	-1.3	-21.8	-17.5
o/w: NBS and com. banks capital and reserves	-10.2	-5.6	-8.2	-10.7	-12.1	-1.2	-7.5	-8.5	-11.3
					cumulative, in % of GDP[8]				
Net credit to government[7]	1.1	-0.8	-0.5	-1.0	-1.9	-0.2	-0.3	-4.8	-3.5
o/w: dinar credits	0.1	-0.5	-0.6	-1.0	-1.6	-0.2	-0.9	-0.7	0.6
Credit to the non-government sector[2], adjusted[3]	7.3	2.3	4.2	6.8	10.0	1.6	3.8	4.8	4.4

Source: Table P-9. 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.

Q4 sees substantial rise in foreign exchange reserves

Table T8-3. Serbia: Monetary Survey, 2004–2006

	2004	2005				2006			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
STOCK									
					in millions of dinars, end of period				
NFA	160,868	162,488	183,484	216,183	218,886	200,462	229,984	360,685	407,124
o/w: NBS gross reserves	248,376	274,136	304,386	362,216	424,844	465,497	549,529	648,946	715,118
o/w: commercial bank foreign liabilities	-83,225	-98,169	-114,781	-131,090	-191,124	-229,081	-302,170	-300,781	-307,511
NDA	162,007	168,841	190,622	206,257	239,985	272,642	285,856	207,195	231,381
Net credit to government [1]	5,951	-6,864	-1,602	-10,242	-27,831	-31,129	-33,954	-124,159	-100,534
Net dinar credit	5,524	-1,823	-4,583	-11,268	-22,332	-25,479	-38,649	-35,438	-10,316
Net fx credit	427	-5,041	2,981	1,026	-5,499	-5,650	4,695	-88,721	-90,218
Credit to the non-government sector [2]	342,666	376,883	409,397	456,541	518,298	547,564	591,270	614,698	610,305
Other items, net	-186,610	-201,178	-217,173	-240,042	-250,482	-243,793	-271,460	-283,344	-278,390
M2 [3]	322,876	331,331	374,106	422,441	458,870	473,103	515,840	567,881	638,505
M2 dinar [3]	146,209	143,768	160,351	180,043	192,180	189,911	208,606	232,506	283,048
Fx deposits (households and economy)	176,667	187,563	213,755	242,398	266,690	283,192	307,234	335,375	355,457
STRUCTURAL INDICATORS									
Currency outside banks/Dinar deposits (households and economy), in %	44.7	37.7	35.9	35.6	38.7	31.8	30.6	28.9	31.9
Fx deposits (households and economy) / M2 (%)	54.7	56.6	57.1	57.4	58.1	59.9	59.6	59.1	55.7
Velocity (GDP [4] / M2)	4.4	4.6	4.3	4.0	3.8	3.9	3.7	3.5	3.2
M2 / GDP [4]	0.23	0.22	0.24	0.25	0.26	0.26	0.27	0.29	0.31
Credits to the non-government sector / GDP [4]	0.24	0.25	0.26	0.27	0.30	0.30	0.31	0.31	0.30
Non-perofrming loans [5] (in % of total loans)	..	..	..	..	..	..	..	..	4.7
Money multiplier (dinar M2/H)	1.8	1.8	2.0	2.0	1.9	2.1	2.1	2.1	2.0

Source: Table P-9 in Analytical Appendix.
1) See footnote 7) in Table T8-2.
2) See footnote 2) in Table T8-2.
3) Definitions of M2, M2 dinar, NFA and NDA - see Analytical and Notation Conventions.
4) See footnote 8) in Table T8-2.
5) The figure for December 2006 relates to January, 31 2007 and represents the ratio of loans with overdue payments of 90 days and more to total outstanding loans. The source for this data is The Credit bureau, Association of Serbian banks. For details, see QM6, Spotlight on No.1.

Box 1. NBS Lowers Reserve Rate on Dinar Base and Equalizes Rate on Foreign Borrowing

The NBS twice in Q4 lowered the reserve requirement ratio on the dinar base – to 15% in November and then to 10% in December 2006. It also changed the reserve requirement on the foreign exchange base by equalizing the rates on banks' foreign borrowing at 45%, while the rate on new foreign exchange savings remained at 40%. The overall effect of these changes is hard to estimate since they did not move in the same direction for all components of the base for calculating reserve requirements.

Table T8-4. Banks' Reserve Requirements with NBS[1], 12/ 2004–12/ 2006

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

Source: NBS.

1) Applied to average daily book value of the base from the previous calendar month. na prosečno dnevno knjigovodstveno stanje osnovice u poslednjem kalendarskom mesecu. Effective from the 10th of the next month. Bank is obliged to hold average daily reserve balance at the level of the accounted reserve during the entire accounting period.
2) Up to April 2006 and since December 2006, banks' foreign borrowing was treated equally, irrespective of the repayment period. This sub-category therefore is invalid until March 2006, i.e. the uniform fx base was applied to all foreign inflows on the basis of commercial banks' borrowing.
3) Up to December 2005, reserve requirements on new fx savings of households (fx deposits collected after 30 June 2001) were regulated by a special NBS decision. In December 2005, the regulation became uniform since the NBS introduced a unique reserve requirement rate for all commercial banks' fx accounts.
Note:
Under current regulations, banks' reserve requirements with the NBS include:
- dinar base: dinar deposits (including the government), dinar credits (including the government), securities and other dinar liabilities;
- fx base: fx deposits (including the government), fx-indexed dinar deposits, fx credits (including the government), subordinated capital, securities, other fx liabilities and other fx funds received from abroad for bank services on behalf and for the account of third persons.
Excluded from the dinar/fx-denominated base are: liabilities to the NBS; up to December 2005 – liabilities arising from household fx savings deposited after 30 June 2001; the amounts generated with the settlement of debts for FFCDs, and those arising in the rescheduling of debt to creditors from the Paris and London Clubs. Amount of long-term housing mortgage credits insured with the National Corporation for Housing Loan Insurance is deducted from the required reserves base.

Banking Sector: Placements and Sources of Financing

Slowing of loans to enterprises continues in Q4

Table T8-3 shows total credits to the non-government sector in dinars, which fell in nominal terms at the end of 2006 relative to end-Q3. Since some 70% of total bank credits are believed to be foreign exchange-indexed[1], we consider it necessary in this part (where we consider credit flows as one of the forms of bank placements) to make corrections for the fluctuations in the exchange rate. For details on the methodology of these adjustments, see Box 2, section 8, *QM*6, and footnote 3, Table T8-3). Thus Table T8-5, where adjusted flows expressed in euros are presented, shows a positive increase in loans to the non-government sector in Q4, while Table T8-3 shows a reduction in the stock of total loans expressed in dinars because the reduction contains the effect of their revaluation, which was negative as a consequence of the dinar's appreciation.

Table T8-5 shows that the increase in total bank loans to enterprises and households was considerably down on the preceding period, amounting to only 250 mn euros (of the total increase of 1,575 mn euros in 2006). Also evident is the complete standstill of loans to enterprises relative to end-Q3. The lack of funding from the domestic banking system, which is observed here, was compensated by enterprises' direct foreign borrowing, which amounted to some 500 mn euros in Q4 (Table T8-5).

Record rise in repo operations in Q4

In Q4, banks invested 60 bn dinars (approximately 800 mn euros) in new repo transactions (Table T8-5). This record increase accounted for some 75% of the total rise in funding in Q4 (in Q3 the increase of repo transactions accounted for 50% of the total rise in bank funding, and was negligible in Q4 2005).

Domestic deposits are dominant in newly accumulated bank sources...

...with a surprising rise in enterprises' dinar deposits

The increase in banks' capital in Q4 is also significant

The trend established in Q3 of banks being dominant in financing new funding from new domestic deposits continued in Q3. Up until then, this role was played by foreign borrowing, as evident in Table T8-5 in the data for 2005 and the first semester of 2006. Domestic deposits grew by 920 mn euros in Q4 (Table T8-5) in the last quarter (Table T8-5) and capital and bank reserves increased by 530 mn, while banks' foreign borrowing was only 220 mn euros. A surprising growth of company deposits (510 mn euros in Q4), especially their dinar deposits - 440 mn euros in Q4) contributed to the surge in domestic deposits in the last quarter, a trend observed for the first time in Q3. Before Q3, growth of enterprise deposits was extremely modest and never constituted an important source of new funding (only about 100 mn euros in Q4 2005). A possible explanation is that it was the result of the bypassing of the domestic financial sector. An increasing number of clients borrowed directly from banks abroad (the head offices of local foreign-owned banks) with (a) deposits at home being used as collateral or (b) the deposits were only a way of getting around the high reserve ratio on banks' direct foreign borrowing. In the latter case, the dinar deposits of enterprises (that were granted loans by the parent bank of a local bank) with a local bank became a cheaper source of funding since the reserve ratio on such deposits is 10% as against 45% on foreign borrowing.

1 **IMF, Serbia and Montenegro: 2005 Article IV Consultation, Staff Report**

Table T8-5. Serbia: Funding, Credit and Investment Activity, Adjusted[1] Flows, 2004–2006

	2004	2005				2006			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	in millions of euros, cumulative from the beginning of the year								
Funding(-, increase in liabilities)	-1,221	-377	-1,051	-1,712	-2,783	-539	-2,208	-3,468	-5,144
Domestic deposits	-623	-73	-488	-913	-1,314	-116	-550	-1,322	-2,245
Households deposits	-356	-144	-350	-575	-884	-178	-413	-795	-1,201
dinar deposits	9	1	-27	-40	-46	-13	-54	-51	-124
fx deposits	-365	-145	-323	-535	-838	-165	-359	-744	-1,076
Enterprise deposits	-267	71	-138	-338	-430	63	-137	-527	-1,044
dinar deposits	-175	29	-92	-223	-363	36	-52	-295	-738
fx deposits	-92	43	-46	-115	-68	27	-85	-232	-306
Foreign liabilities	-701	-169	-345	-506	-1,194	-401	-1,278	-1,433	-1,657
Capital and reserves[1]	103	-134	-218	-293	-275	-22	-380	-713	-1,242
Gross foreign reserves(-,decline in assets)	-59	-89	-3	-27	-29	-190	-191	-36	-85
Credits and Investment[1]	1,267	402	802	1,369	2,058	417	1,193	1,906	3,057
Credit to the non-government sector, total	1,126	337	651	1,147	1,893	272	847	1,320	1,575
Enterprises	705	274	437	697	1,172	85	390	557	546
short term	488	217	385	597	835	85	254	258	179
long term	217	57	52	101	337	1	136	299	367
Households	421	63	214	450	721	187	457	763	1,029
short term	53	8	18	38	81	50	106	169	199
long term	367	54	196	412	640	137	351	594	830
Repo transactions[2]	0	40	216	242	208	165	453	743	1,560
Government, net[3]	142	25	-64	-21	-43	-20	-107	-157	-78
MEMORANDUM ITEMS									
Direct foreign liabilities of enterprises and banks' credits to enterprises	1,557	353	799	1,281	2,035	325	897	1,599	2,112
o/w: direct foreign liabilities of enterprises	852	79	363	583	863	239	507	1,043	1,567
Mid and long term	829	75	349	589	846	224	479	979	1,523
Short term	23	5	14	-6	17	15	29	64	43
Required reserves and deposits	277	4	221	430	921	213	1,177	1,532	1,884
Other net claims on NBS[4]	-52	-38	-5	-3	54	-56	-75	-46	1
o/w: Excess reserves	-80	-32	-21	-19	12	-55	-59	-73	-50
Other items[5]	-909	61	1	-61	-158	168	130	166	413
Effective required reserves (in %)[6]	27	26	27	28	31	32	38	38	37

Source: Table P-10. in Analytical Appendix.

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

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

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

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

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

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

Domestic bank loans to enterprises stop completely in Q4...

...but is offset by direct borrowing abroad

The rise in household deposits by 400 mn euros in Q4, of which 330 mn were new foreign exchange savings (380 mn euros in Q3, 305 mn in Q4 2005), reflected the stable growth of this traditional source of bank financing. The 80mn euro rise in net credit to the government was related to the spending of government deposits with the banking sector (Table T8-5).

Central Bank: Balance and Monetary Policy

Table T8-6. Serbia: NBS - Foreign Exchange Purchases and Dinar Sterilization, 2004–2006[1)]

	2004	2005				2006			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
FLOW									
					in millions of dinars, cumulative from the beginning of the year				
NBS own resreves[1)]	16,645	9,949	29,646	48,293	63,136	4,628	49,014	78,899	147,062
NBS own reserves (in euros)	*229*	*123*	*364*	*587*	*759*	*53*	*564*	*933*	*1,796*
NDA	-9,384	-18,426	-35,268	-44,208	-46,040	-20,755	-54,348	-74,989	-107,491
Government,[2)] dinar credits	3,356	-284	-4,883	-5,506	-6,077	-1,595	-1,856	-1,858	-1,439
Government,[2)] dinar deposits	-13,760	-12,538	-8,482	-14,796	-18,576	-4,789	-14,422	-10,572	17,540
o/w: municipalities	-3,786	-5,259	-3,213	-4,965	-824	-6,068	-5,339	-5,505	-3,500
Repo transactions[3)]	2,223	-3,206	-17,607	-19,804	-16,829	-14,258	-39,152	-63,335	-125,021
Other items , net[4)]	-1,203	-2,398	-4,296	-4,102	-4,558	-113	1,082	776	1,429
H	7,261	-8,477	-5,622	4,085	17,096	-16,127	-5,334	3,910	39,571
o/w: currency in circulation	2,186	-5,797	-2,849	2,118	8,485	-7,825	-4,724	-1,540	14,739
o/w: excess liquidity	334	-2,403	-3,675	-1,753	3,518	-8,643	-7,916	-2,106	16,588
INCREASE									
					cumulative, in % of opening H[4)]				
NBS own reserves[1)]	55.6	14.9	43.9	72.4	93.4	7.9	52.5	73.5	136.3
NDA	-45.3	-25.9	-51.1	-67.1	-71.2	-25.0	-58.1	-69.4	-94.3
Government,[2)] dinar deposits	-19.4	-16.2	-11.0	-19.2	-24.0	-5.1	-15.3	-11.2	19
Repo transactions[3)]	3.1	-4.1	-22.8	-25.6	-21.8	-15.1	-41.5	-67.1	-133
Other items , net[4)]	-29.1	-5.5	-17.4	-22.3	-25.4	-4.8	-1.4	9.0	20
H	10.2	-11.0	-7.3	5.3	22.1	-17.1	-5.7	4.1	41.9
o/w: currency in circulation	3.1	-7.5	-3.7	2.7	11.0	-8.3	-5.0	-1.6	16
o/w: excess liquidity	0.5	-3.1	-4.8	-2.3	4.6	-9.2	-8.4	-2.2	18
MEMORANDUM ITEMS									
Gross fx reserves (flow, cumulative from	210.3	273.3	568.3	1,167.5	1,860.0	387.7	1,420.9	2,945.0	4,083.2
the beginning of the year, in euros)	77.1	33.3	72.5	147.4	228.4	43.1	132.1	237.5	307.6
Gross fx reserves (in % of opening H in euros)	8.9	18.0	15.0	26.6	22.1	13.7	24.3	20.8	41.9
H (growth rate, y-o-y, in %)	5.1	3.6	4.9	11.4	18.8	16.4	15.6	10.2	27.5
Currency in circulation (growth rate, y-o-y, in %)									

Source: Table P-11. in Analytical Appendix.
1) Net own reserves definition - see Box 4 in QM5, Section 8.
2) Government include: Republic level and cities and municipalities.
3) Up to December 2004, this category included NBS bills, in the January-February 2005 period NBS bills and repo transactions, and as of March 2005 only repo transactions.
4) Other domestic assets, net, include domestic credits (net claims on banks excluding NBS bills and repo transactions; net claims on enterprises together with other assets (capital, reserves and balance items; other assets and liabilities corrected by exchange rate differentials.
5) "Opening H" refers to stock of primary money (H) at the beginning of stated year (i.e. end of previous year).

The liquidity created by the purchase of 850 mn euros...

...was for the most part sterilized by the NBS through repo operations

Primary money increases in Q4 because of government spending

The total increase in primary money (H) in 2006, which amounted to 41.9%, came about through the rise in the NBS's net own reserves of 136.3% of opening H and the -94.3% reduction of NDA, as shown in Table T8-6). In Q4, primary money rose by 37.8% of opening H (difference between the 41.9% increase for the whole of 2006 and the 4.1% in the first three quarters of the year), which represented an acceleration of its growth that is reflected also in the jump of the y-o-y growth of H, which rose from 20.8% at end-Q3 to 41.9% at end-Q4 (Table T8-6).

NBS manages to sterilize primary money growth with high-yield repos

Almost the entire growth of primary money created by the increase in NBS net own reserves (see Table T8-8 and methodology for calculation of this compenent in QM 5, Monetary Flows and Policy, Box 4) of around 850 mn euros in Q4 (68 bn newly created dinars), was energetically sterilized by the NBS through repo operations. The NBS thus withdrew 65 bn dinars through repo operations in Q4 (Table T8-6). The remainder of the primary money growth in Q4 was related to government spending of its deposits with the NBS to the amount of 27 bn dinars in Q4. The major growth of primary money in Q4 was nonetheless party neutralized because banks immobilized a large deposit with the NBS: increase of free bank reserves to the amount of 14.5 bn dinars, Table T8-6 (more details in Box 3).

Table T8-7. Interbank foreign currency market, NBS interventions

	Net monthly intervention[1)]
	in millions of euros
Jan-Oct 2006 [2)]	-64
November 2006	260
December 2006	154
January 2007	-412
February 2007	-15

Source: NBS.
1) Negative sign stands for net sales of foreign currency by the NBS.
2) Average monthly intervention.

In Q4, the NBS defended the exchange rate from appreciating

Table T8-7 shows that up to November 2006, the NBS sold foreign exchange to banks in net terms on the interbank market, i.e. that the balance of total purchases and total sales was negative from the point of view of the central bank (operation reflected in the reduction of the NBS's net own reserves is presented in detail in Table T8-8). In the first 10 months of 2006, the average net sale of foreign exchange by the NBS on the interbank market amounted to 64 bn euros. This was reversed in November when the NBS made "net purchases" of foreign exchange to the tune of 260 mn euros, with the new trend continuing in December, though not on the same scale (154 mn euros net purchases). January saw another reversal and the NBS again made "net sales" of foreign exchange to banks, this time in the suprisingly large amount of 412 mn euros. This turbulence on the foreign exchange market reflected the major oscillations in the supply and demand for foreign exchange over a very short term. QM considers that the phenomenon cannot be explained as a long-term tendency and that some major transaction on the foreign exchange market was probably involved. Because of the very shallow foreign exchange market, it very likely threatened the stability of the dinar, forcing the NBS to intervene to an extent that enabled it to prevent the exchange rate becoming excessively volatile and, in all likelihood, maintain the exchange rate of the dinar at a level consistent with targeted inflation. So much demand for dinars can to an extent be explained by the attractive yields offered by the NBS on dinar repos (more details in Section 9, Financial Markets) or by some stocks traded on the financial market (Box 3). Since the NBS intervened with net sales of foreign exchange (thus withdrawing dinars), the repo market calmed down (the increase in the stock of repo transactions in January 2007 was only 7 bn dinars).

Box 2. Monetary Policy Stance – Measurement

The NBS reference rate was set at 18% in September, lowered to 17.5% in early November, then to 16.5% in mid-November and to 15.5% in early December. Later that month, it was reduced to 14%. Further reductions followed in January and late February, to 13% 11.5% respectively.

To assess the efficiency of monetary policy and the functioning of certain "channels" of its transmission, it is necessary to know the position of monetary policy i.e. a relative measure showing whether or not monetary authorities endeavor to tighten or relax monetary conditions from one period to another. In developed market economies nowadays, the most frequently used and appropriate approximation for the position of monetary policy is the central bank's reference interest rate as, especially in a regimen of inflation targeting, it represents the main instrument for the implementation of monetary policy.

In small open economies where the exchange rate has a major impact on prices, i.e. where it plays an important part in the transmission of monetary policy, the so-called Monetary Condition Index (MCI) is often used in addition to the interest rate. This index is calculated as the weighted relative changes in the exchange rate and the interest rate. Weights are assigned in accordance with a macroeconomic model prepared in advance for each particular country.[1]

The reason why the exchange rate should also be observed in Serbia to determine the position of monetary policy is the model used by the NBS for operational implementation of this policy.[2] Pur-

1 Ericsson N, Eilev J, Kerbeshian N and Nzmoen R, 1998, "Interpreting a Monetary Condition Index in Economic Policy," Topics in monetary policy modeling, BIS Conference Papers, Volume 6, pp. 237-254, Bank for International Settlements, Basel.
2 Report on Inflation in the Fourth Quarter of 2006, NBS, December 2006.

suant to this model, the NBS determines "the paths of the exchange and interest rates, which are consistent with the realization of targeted inflation." The exchange rate is determined as the function of the expected movement of the domestic and foreign exchange rates. The domestic interest rate used in the equation for obtaining the exchange rate is set as a function of the interest rate in the preceding period, the neutral exchange rate, the production gap, and the anticipated deviation of inflation from the target.

If only the interest rate were observed, it could be said that in Q4 the NBS relaxed monetary conditions, as testified also by the growth of the monetary base. But the high appreciation of the dinar (about 10% in the second semester of 2006), meant a restricitve monetary policy, as evident also from the low 12-m inflation rate of 6.6% - which was even lower than initially targeted by the NBS.

Besides the interest and exchange rates, the change in the rate of the reserve requirement is often used in Serbia in the implementation of monetary policy (Box 1), as well as the major number of administrative measures which, by their nature, belong in the area of prudential supervision. The NBS resorts to measures like these because of the lack of more subtle mechanisms to constrain certain sources of monetary expansion. They include classification of credit to households where the monthly installment exceeds one-third of the household's income into the most risky category; the obligation to adjust lending to households so that it does not exceed 200% of the bank's capital, and the like. These are factors that hinder the taking of a consistent stand on the position of monetary policy, i.e. whether it goes from being restrictive in one period to expansive in the next.

In the period ahead, QM intends to additonally investigate the channels of transmission of monetary policy and develop a methodology enabling uniform measurement of the position of monetary policy from period to period.

Table T8-8.Serbia: Foreign Exchange Reserves, Stock and Flow, 2004–2006

	2004	2005				2006			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
					stock, in millions of euros				
NFA of Serbia	2,009	2,028	2,241	2,548	2,544	2,303	2,674	4,403	5,158
Commercial banks, net	-228	-487	-577	-761	-1,451	-2,042	-2,921	-2,920	-3,194
Gross foreign reserves	813	724	810	787	784	594	593	748	699
Foreign liabilities	-1,042	-1,211	-1,387	-1,548	-2,235	-2,636	-3,514	-3,668	-3,893
NBS, net	2,237	2,515	2,818	3,309	3,995	4,345	5,595	7,323	8,352
Gross foreign reserves	3,109	3,382	3,677	4,276	4,969	5,357	6,390	7,914	9,052
Foreign liabilities	-872	-868	-859	-967	-974	-1,011	-795	-591	-700
IMF	-704	-654	-630	-765	-748	-787	-575	-373	-181
Other liabilities	-168	-213	-229	-202	-226	-225	-220	-218	-519
NBS, NET RESERVES-STRUCTURE									
1. NBS, net	2,237	2,515	2,818	3,309	3,995	4,345	5,595	7,323	8,352
1.1 Commercial banks deposits	-821	-877	-1,083	-1,262	-1,725	-1,995	-2,858	-3,126	-3,210
1.2 Government deposits	-125	-223	-79	-170	-220	-247	-123	-1,213	-1,296
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	1,291	1,415	1,656	1,878	2,050	2,103	2,614	2,983	3,846
					in millions of euros, cumulative from the beginning of the year				
NFA of Serbia	-190	19	233	540	535	-240	131	1,859	2,615
Commercial banks, net	-594	-258	-348	-533	-1,223	-591	-1,469	-1,468	-1,742
Gross foreign reserves	91	-89	-3	-27	-29	-190	-191	-36	-85
Foreign liabilities	-685	-169	-345	-506	-1,194	-401	-1,278	-1,433	-1,657
NBS, net	404	278	581	1,072	1,758	350	1,600	3,328	4,357
Gross foreign reserves	273	273	568	1,167	1,860	388	1,421	2,945	4,083
Foreign liabilities	130	4	13	-95	-102	-37	179	383	274
IMF	26	50	75	-61	-44	-38	173	375	567
Other liabilities	104	-46	-62	-34	-58	1	6	8	-294
NBS, NET RESERVES-STRUCTURE									
1. NBS, net	404	278	581	1,072	1,758	350	1,600	3,328	4,357
1.1 Commercial banks deposits	-186	-56	-263	-441	-904	-270	-1,133	-1,401	-1,485
1.2 Government deposits	140	-98	46	-45	-95	-27	97	-993	-1,076
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	358	123	364	587	759	53	564	933	1,796

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).

Box 3. Agrobanka Stock Issuance – Impact on Primary Money Flows

In November 2006, Agrobanka announced an initial public offer of its shares, placing on the market stocks totalling 1.5 bn dinars in nominal value. The mechanism for purchasing stocks consists of interested parties paying the maximum amount they are willing to invest, after which the available stocks are distributed to them in proportion to the total sum collected. Because of the high attraction of investing in the bank's stocks, a total of 32 bn dinars was paid in, which, under the rules, the bank is obliged to deposit in a dinar account with the NBS. Following registration, the bank refunds the excess amounts the bidders paid through the purchase price of shares which they are entitled to register. Ordinary shares were sold at a premium of 100% of the nominal value (20,000 dinars per share), and preferencial shares at a premium of 80% to existing shareholders with an interest in acquiring stocks from new issue. Agrobanka thus increased its capital by about 5 bn dinars. The interest in Agrobanka stocks was very high because at the time they were very profitable. In December, the going price for a share was close to 50,000 dinars, giving a yield of 100% after only one month.

The issuance of Agrobanka stock seems to have had a major effect on the foreign exchange market and primary money flows in the period from November 2006 to January 2007 since it involved a relatively large sum of dinars raised and deposited for the domestic financial system (equivalent of some 400 mn euros, or one-third of the average monthly turnover on the Serbian foreign currency market, both interbank and exchange offices). It may be assumed that most investors sold their euro funds to deposit dinars to buy Agrobanks stocks. The deadline for bidders to make their deposits was 30 November 2006, and the excess was refunded in January 2007.

That November, the foreign currency market was shaken when the NBS intervened with a net purchase of 260 mn euros (up until then it had been a net seller, see Table T8-7), and purchased an additional 130 mn euros from exchange offices, which was also a jump relative to the trend in the preceding period. In the flows of creation of primary money, this massive transaction was reflected in the issuing of dinars, which were sterilized through repo operations, as well as the surge in the free reserves of banks with the NBS amounting to almost one-third of the newly created dinars in Q4, Table T8-6 – the term free reserves is used here as the opposite of reserve requirement though it is obviously not quite appropriate in this case, since what was involved was the obligation to deposit funds in Agrobanka's account with the central bank pursuant to the procedure for public offers). The same trend put pressure on the supply of foreign exchange, forcing the NBS to intervene by purchasing the excess supply to preclude further appreciation of the dinar. The trend continued in December, though it was less intense (Table T8-7). Hence the issuance of Agrobanka stocks should not be seen as the sole reason for the excess supply of foreign exchange. It can also be ascribed to the high yield on dinar repos (see Section 7, Financial Markets). January 2007 saw a reversal on the foreign exchange market in the form of higher demand for euros, which generated pressure for the depreciation of the dinar. This time the NBS intervened with net sales to banks of 412 mn euros. The developments on the foreign exchange market can be explained partly by the refunding to bidders of excess dinars they deposited to buy Agrobanka stocks, which they then converted back into foreign exchange.

Trends

9. Financial Markets

Q4 2006 saw an all-time high in stock trading volumes, measured by dinar denominated turnover. Both indices of the Belgrade Stock Exchange: BELEXfm and BELEX15, recorded strong growth (9.8% and 17.2% respectivly) and again hit new all-time highs of 1,952 and 1,675.20 index points, respectively. The banking sector maintained its leading position in terms of market capitalization. Nominal yields on repos kept falling, as a result of the NBS policy, but, unlike in the previous period, real returns also fell. Investors' interest in repos nonetheless remained high. On the FFCD bond market, the highest yield was on bonds with the shortest maturity. Though average yields stagnated in Q4, turnover still went up significantly.

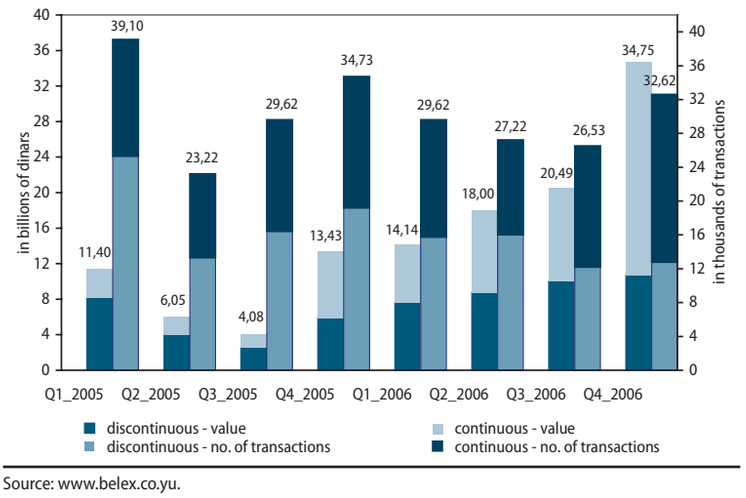
The stock trade volume reached its all-time high in Q4

The volume of trade on the stock market in Q4 2006, measured by dinar-denominated turnover, continued its upward trend and hit a new all-time high of 34.75 bn dinars, which was 69.6% higher than in Q3 and two-and-a-half times higher than at end-2005. In Q4, a turnaround occurred in the volume of trade, measured by the number of performed transactions, after a downward trend which had lasted from the beginning of the year. In Q4 2006, the number of transactions was 32.62 thousand, a maximum in the year as a whole and a rise of nearly 23% relative to the previous quarter. The number of performed transactions in this quarter was close to the all-time high (measured from the beginning of 2005) of 34.73 thousand transactions recorded in Q4 2005.

An analysis of the structure of the trade volume on the stock market shows that the continuous market segment had a crucial effect on the growth trend in Q4. Dinar- denominated turnover in the discontinuous segment went up from 10.01 bn dinars in Q3 to 10.74 bn dinars in Q4, while the continuous segment grew by 129% relative to Q3. The situation is similar if the structure of the trade volume is analyzed in terms of performed transactions. The number of performed transactions in the continuous segment rose by 38%, while in the discontinuous segment, a growth of a mere 4.8% was recorded.

The five most active shares alone accounted for the largest portion of the trade volume on the stock market. In Q4, they accounted for 71.29% of the total trade volume, while that same share in Q3 was 74.03%. The basket of these shares varies from month to month, but in Q4 2006 AIK Banka a.d. Niš (AIKB), Agrobanka a.d. Beograd (AGBN) and Komercijalna Banka a.d. Beograd (KMBN) – were always in the basket of five most active shares and their share in total dinar-denominated turnover was 49.04%.

Graph T9-1. Stock Trading Volume, Value and Structure, 2005–2006



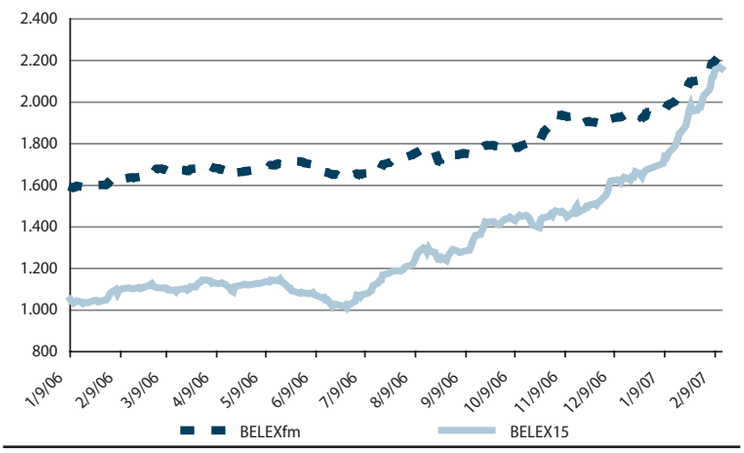
Source: www.belex.co.yu.

The traded volume on the overall stock market is going up

After the trend reversal on the stock market in July, which brought about a recovery of the market, the steady upward trend from Q3 continued in the last quarter of 2006. The official Belgrade Stock Exchange indices, BELEXfm and BELEX15, continued to grow gradually and, like in the previous quarter, reached new all-time highs on the same day at the very end of Q4. The index of all shares, BELEXfm, reached the value of 1,952.30 index points, and BELEX15 reached 1,675.20 index points on 29 December,

which was a growth of 9.84% and 17.12% respectively. The phenomenon of both Belgrade Stock Exchange indices reaching their all-time highs on the same day at the end of the observed period was a harbinger of the continuation of the upward trend in the period ahead, as data from early 2007 confirms.

Graph T9-2. Belgrade Stock Exchange BELEXfm and BELEX15 Indices, 2006



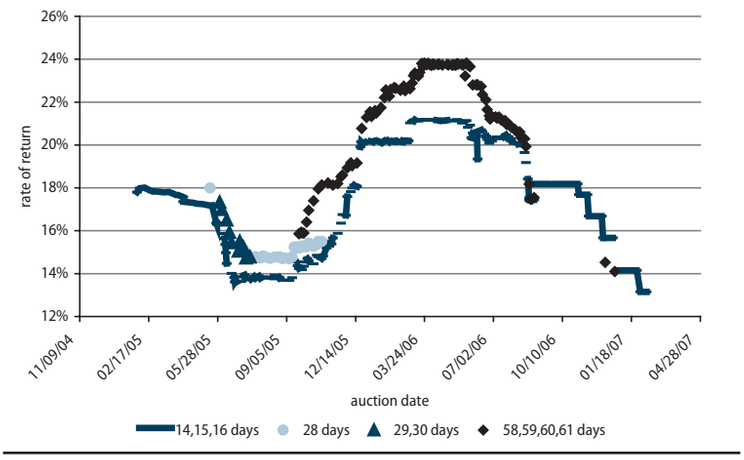
Source: www.belex.co.yu.

The stock market upward trend and new all-time highs for both indices

After a turnaround in August, when financial intermediation, more specifically, banking, took the first position in terms of market capitalization, a new trend on the stock market became evident[1]. Financial intermediation kept the first place throughout Q4 2006 and in January 2007. The most responsible for that new trend is the exit of Hemofarm Koncern a.d. Vršac (HMFR) from the Belgrade Stock Exchange. This resulted in a significant drop in liquidity and investors concentrated their demand on the steadily declining number of liquid shares. The listing of Komercijalna Banka shares to an extent compensated for Hemofarm's exit. Due to frequent capital increases in domestic banks and the generally good performance of the banking sector as a whole, investors' interest in shares from this sector increased.

The example of the Agrobanka (AGBN) stock issue demonstrates how eager investors are to find new possibilities for placing capital. In November 2006, Agrobanka issued a public invitation for subscription of shares worth 1.5 bn dinars nominally. The shares were sold at a premium of 100% of their nominal value (20,000 dinars per share) to shareholders with ordinary subscription rights and at a premium of 80% to shareholders with preemptive rights (existing shareholders interested in the new issue). The mechanism for the subscription of shares through a public invitation comprises, as the first stage, the payment by interested parties of the maximum amount they wish to invest. After the payments have been made, the subscription rights are distributed among the parties commensurate with their respective contributions to the total sum collected. Because of the high attractiveness of investing in the shares of Agrobanka, 32 bn dinars was paid in, as much as 21 times higher than the nominal value of the issue. The fact that holding Agrobanka shares offered prospects for a very high profit, based on the then movements on the stock exchange, is proof that those shares were attractive for a reason: in December, their market price on the stock exchange reached the level of nearly 50,000 dinars at one point, a yield of 100% after just one month of the possession of the share. This certainly impacted on the foreign exchange market as well (for more details see Section 7 - Monetary Flows and Policy).

Graph T9-3. Repo Yields by Maturity, November 2004 - January 2007



Source: NBS and MoF.

Nominal yields on repos declined...

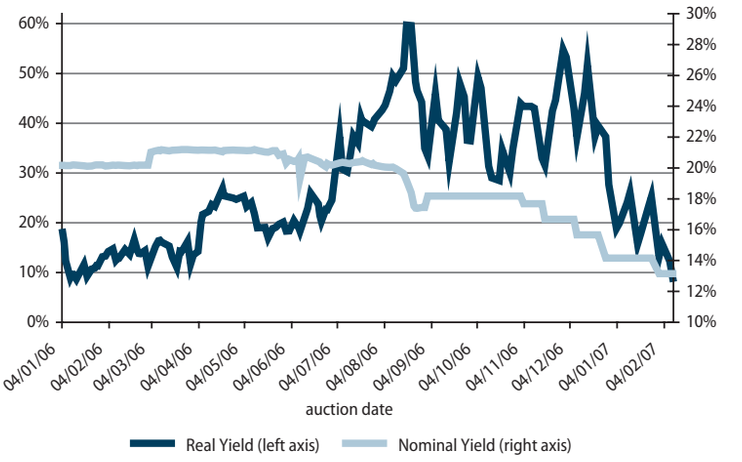
1 Until August 2006, the sector with the highest market capitalization was *manufacturing of food, beverages and tobacco.*

In Q4 2006, the drop in nominal yields on NBS repo instruments continued, but, unlike in previous quarters, real yields also dropped (calculated in relation to the dinar/euro rate and inflation, Graphs T9-3, T9-4 and T9-5). The drop in nominal yields was the consequence of the policy of the NBS, which fixes the return rate on two-week repo instruments (2w)[2]. That return rate had been 18% up until November, and was then reduced, first to 17.5%, and then to 16.5% and 15.5%, only to fall to 14% at the end of the year. The NBS continued to conduct such a policy in 2007 as well, so in late January the return rate on two-week repo instruments was reduced to 13%. A further decline was also recorded in the case of yields on two-month repos. There had been no auctions of these instruments from August, when their nominal yield was 17.55%. In December, two auctions of two-month repos were organized and the yields on them were 14.53% and 14.10%.

A novelty in this quarter, with regard to repo instruments, was that real returns, calculated in relation to the dinar/euro rate (change in the previous three months), instead of in relation to inflation movements, followed the drop in nominal returns. This change in the trend started at the end of the quarter, in mid-December, when real returns fell from around 50% to 28% by the end of the year. The decline continued in Q1 2007, so that in early February the real return on 2-week repos was around 9%. This trend change can be explained by a reversal of the movements in the dinar/euro rate. By observing the three-month annualized dinar/euro rate, it is possible to notice that precisely from mid-December, after a prolonged period of appreciation, the dinar depreciated again until the end of the year, and continued with this trend in 2007, which, combined with the drop in nominal returns, resulted in a drop in real returns on repo instruments. The same phenomenon was also recorded when the real returns on repo instruments were calculated relative to the inflation rate. In early Q4 these yields were around 9%, only to fall to 7.5% at the end of the quarter, and then to 6.6% in February 2007.

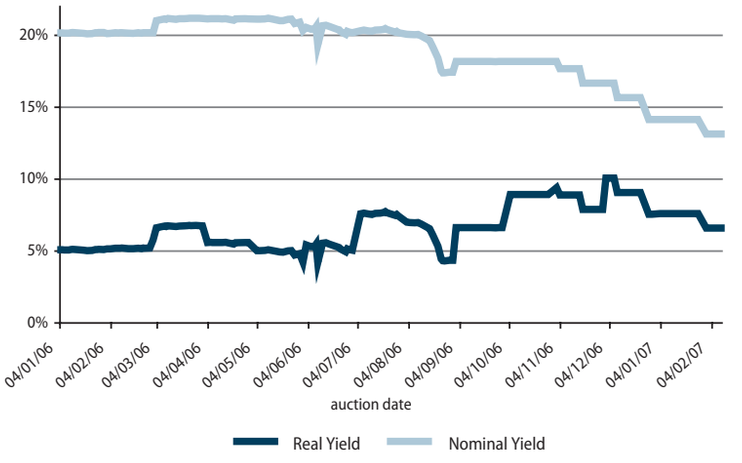
...as did also real yields

Graph T9-4. Real (with regard to RSD/EUR) and Nominal Repo Yields, 2006



Source: NBS and MoF.

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



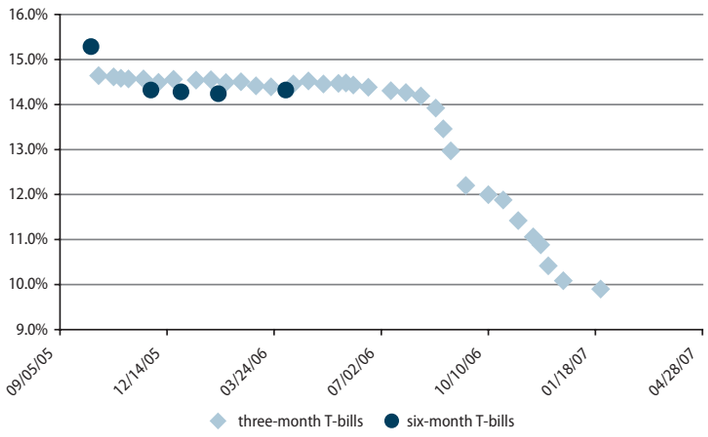
Source: NBS and MoF.

Irrespective of the new downward trend, the attractiveness of two-week repos has not abated since the realization rate has remained 100% in all auctions held so far.

2 The Memorandum of the National Bank of Serbia of 30 August 2006 has made the 14-day (2w) repo instruments the key monetary instrument whose return rate is set by the NBS as a fixed rate.

The sharp drop in return rates on the T-bill market continues

Graph T9-6. Yields in T-Bill Market, 2005–2006



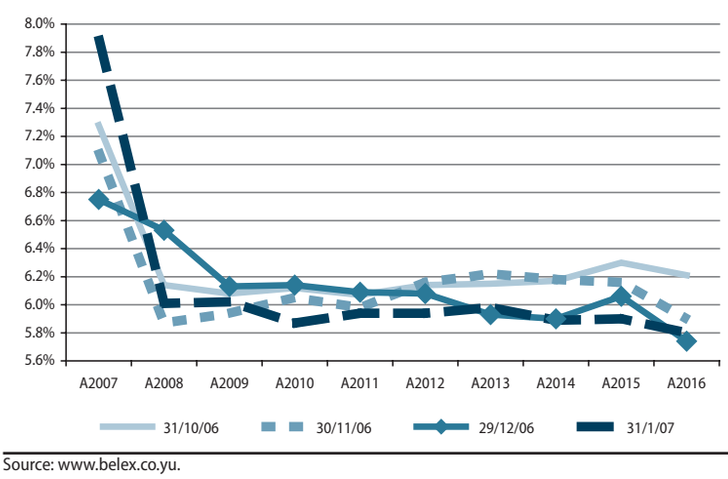
Source: NBS and MoF.

The sharp drop in the rate of return on the T-bill market, which started in August, continued in Q4 2006 and further into 2007 (Graph T9-5). Consequently, the highest rate of return of 12% in Q4 was that of the three-month T-bills offered on 10 October – with a nominal value of 500 mn dinars. The realization rate of all offered three-month T-bills in Q4 was 100%. The values of three-month T-bill issues ranged from 500 mn to 1 bn dinars, while six-month T-bills were not offered in Q4 2006 either. The total nominal value of all T-bills issued in Q4 amounted to 5 bn dinars, as in Q3 2006.

After a rise in the yield on FFCD bonds in Q3 2006, in Q4 they stagnated and then declined towards the end of the quarter, and continued to do so in early Q1 2007 as well. The yield on bonds with shorter maturities went up, while bonds with longer maturities recorded a drop. The yield on A2007 grew by 36 basis points in Q4, on A2008 it rose by 54 basis points, while yields on A2013 to A2016 bonds declined in a band from 9 basis points to 34 basis points, depending on the maturities. Like in the previous quarter, the rise in the yield on bonds with shorter maturities can be explained by investors' expectations regarding the dinar/euro rate movements. Investors still expect, if not stagnation and appreciation, then a mild depreciation of the dinar by the maturity date of A2007 and call for a higher premium. But in the case of bonds with longer maturities, these expectations are different and investors probably forecast dinar depreciation in a more distant period ahead.

Yield curves of FFCD bonds reflect investors' expectations regarding exchange rate movements

Graph T9-7. FFCD Yield Curves



Source: www.belex.co.yu.

Observing the yield curves of FFCD bonds brings out that the nearing of the maturity date of A2007, combined with the mild depreciation of the dinar, resulted in a drop in the bond yield. However, since a further steep depreciation of the dinar did not take place in late January 2007 (after the parliamentary election), as was probably expected by some investors, the yield on A2007 went up again.

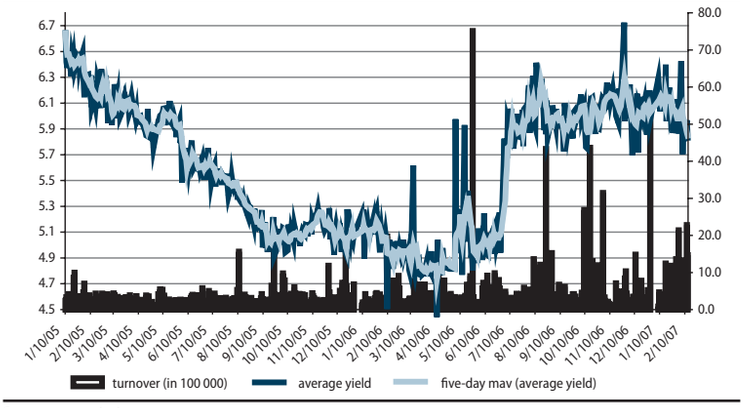
In addition to investors' expectations regarding the exchange rate movements, the increase in the return on bonds with shorter maturities can also be explained by the transaction costs for investors. With the nearing of the maturity date of a bond, investors want ever higher returns in order to cover these costs.[3]

In Q4 2006, the total reported turnover of FFCD bonds went up considerably and amounted to 39.8 bn dinars, an increase by 57.4% relative to Q3, or 77.6% relative to Q4 2005.

3 See: Živković, B.,Urošević, B., Cvijanović, D., Drenovak, M. "Serbia's Financial Market: 2000-2005", QM1, 2005

Average yield on FFCD bonds stagnated in Q4

Graph T9-8. Average Yield on FFCD Bonds[1], 2005–2007

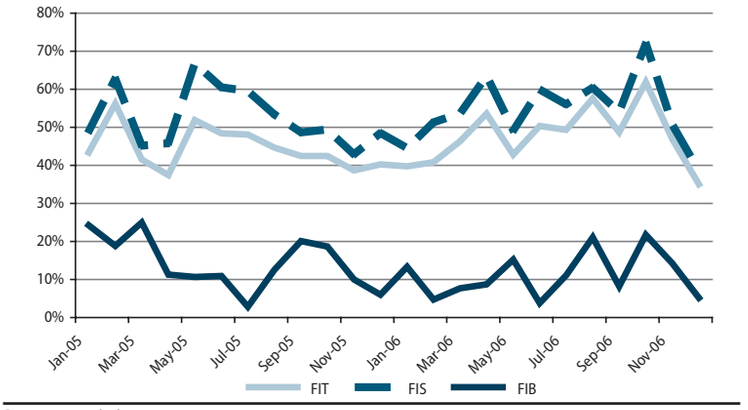


Source: www.belex.co.yu.
1) The graph does not depict extraordinary yield of A2006 bond of 42% on March 10, 2006.
Note: The graph was derived as the weighted average yield on securities from A2006 to A2016. The turnover values for each of securities were used as weights. Left axis refers to average yield,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

A strong decline in foreign investors' participation in the capital market in Serbia started in November.[4] Their participation in the bond market (FIB curve) was 5.16% in December, which was the lowest figure recorded since July 2006. Their participation in the stock market (FIS curve) and in the T-bill market (FIT curve) was at an all-time low in December and amounted to 38.36% and 35.05%, respectively (Graph T9-8). One of the reasons for this may have been the January parliamentary election. Uncertainties regarding the composition of the future Serbian government and its policies seem to have prompted foreign investors to relocate their investments, at least temporarily. It is noteworthy that, despite the so far lowest participation of foreign investors, a record turnover was achieved – both on the stock market and on the FFCD bond market, with both Belgrade Stock Exchange indices reaching their all-time highs.

Foreign investors' activity at its all-time low

Graph T9-9. Foreign Investor Participation, 2005–2006



Source: www.belex.co.yu.
Legend: FIT- foreign investors participation in T-bill market, FIS-foreign investors in equity market, FIB-foreign investors in bond market.

4 The data on foreign investors' participation was obtained from the Belgrade Stock Exchange website. According to unofficial information from the BSE, the term foreign investors refers to individuals and corporate entities with trading orders opened with the Central Securities Depository on the basis of businesses registered abroad or foreign passports. This indicates that the group of foreign investors may actually include local investors owning companies registered abroad (e.g. in some tax havens), or small investors holding dual citizenship.

SPOTLIGHT ON:

Croatia's Recent Experience with Foreign Debt

Evan Kraft*

While Croatia has achieved sustained economic growth with moderate inflation since 2000, it has faced large current account deficits and a high and rising level of foreign debt. Managing the foreign debt is complicated by the strong demand for credit, stemming from catch-up effects and low generally low savings, coupled with a creditworthy, mainly foreign-owned banking sector that can easily and cheaply borrow abroad. Monetary policy has limited instruments available to handle this situation, and its effectiveness is further blunted by high levels of deposit euroization. Croatia has tried a combination of administrative monetary measures and moderate fiscal tightening to stabilize the foreign debt, but greater efforts, especially in the fiscal sphere, will be required in the future.

1. Introduction

While Croatia has achieved sustained economic growth with moderate inflation since 2000, it has faced large current account deficits and a high and rising level of foreign debt. Despite these problems, Croatia has been judged a "functioning market economy" and given the status of a candidate country by the European Union. Furthermore, it recently has been upgraded by several credit ratings agencies. Nonetheless, these external imbalances remain important risk factors that preoccupy economic policymakers.

This article will provide a brief overview of the causes of Croatia's debt problem, and possible lessons for Serbia. Unfortunately, the risks stemming from foreign debt are quite difficult to assess precisely. Perhaps the best characterization of Croatia's situation is that the situation is stable in the short-run, but prudent management requires proactive policy measures to avoid possible problems in the longer-term. The fact that no crisis exists makes it harder to build political consensus for some of the more unpleasant measures that really should be taken, complicated the situation further.

What policy instruments can be used? Monetary policy certainly has a role to play, but high levels of euroization and strong capital inflows severely limit monetary policy's room for maneuver and overall effectiveness. Therefore, fiscal policy should be tightened to provide some insurance against future risks. Furthermore, structural reforms are key to raising productivity and export competitiveness, which would break the cycle of dependence on imports, both of capital goods and of consumption goods.

2. Overview of the Situation

Table L1-1 provides a brief overview of the major macroeconomic developments in Croatia.

We see that gross foreign debt has grown from an already somewhat high level of 60.6% of GDP in 2000 to roughly 84.5% (author's estimate) at end-2006. Since 80% is often used as a critical value, this increase could be considered worrisome. In addition, the net debt grew substantially during the period, albeit by a somewhat lower 16.1 percentage points.

* Advisor to the Governor, Croatian National Bank.

Table L1-1. Croatia, selected macroeconomic indicators, 2000–2006

	2000	2001	2002	2003	2004	2005	2006 p
CPI inflation, in %	5.5	2.4	1.8	1.7	2.4	3.3	3.4
Real GDP growth %	2.9	4.4	5.6	5.3	3.7	4.3	4.6
Bilans tekućeg računa, u % GDP	-2.5	-3.7	-8.6	-7.1	-5.1	-6.3	-7.5
Foreign direct investment, % GDP	5.7	6.8	4.9	6.8	3.5	4.6	7.1
Central bank international reserves, billion €	3.8	5.3	5.7	6.6	6.4	7.4	9.0
Gross foreign debt, % GDP	60.6	60.7	61.5	75.5	80.2	82.5	84.5
Net foreign debt*, % GDP	41.7	36.6	38.4	50.5	57.6	58.5	57.8
Consolidated general government balance,** % GDP	-6.5	-6.7	-5.2	-6.3	-4.9	-4.1	-4.1
Government foreign debt, % GDP	26.4	26.8	24.1	25.2	25.5	22.8	19.8
Bank foreign debt, % GDP	11.0	11.5	15.5	23.3	27.1	29.1	28.8
Enterprise foreign debt, % GDP	18.6	16.5	16.1	18.6	20.5	23.1	27.9
Real effective exchange rate, 2001=100	101.8	98.9	96.2	94.6	90.9	91.0	89.0
Real exchange rate Kuna-Euro, 2001=100	102.3	100.0	99.6	102.1	100.9	98.6	96.8

* net foreign debt = gross foreign debt – central bank international reserves
** includes repayment of "pension debt" in 2006
Sources: Croatian National Bank, Central Bureau of Statistics; author's estimates for 2006.

The growth in foreign debt is mainly concentrated in 2003, with a smaller increase in 2004. 2003 was a year of very high growth, a deteriorating fiscal position, and substantial increases in bank foreign borrowing. 2003 was also a pre-election year, and it saw the culmination of a major construction project, the Zagreb-Split highway. Highway construction was actually initiated in 2002, which helps explain the enormous jump in the current account deficit in that year.

It is interesting to note that the foreign debt increased so strongly despite strong FDI, which in all but one of the years displayed in the table exceeded two-thirds of the current account deficit. In other words, Croatia borrowed substantially more than it needed to cover its current account deficit. This is reflected in strongly increasing central bank reserves.

Looking at the sectoral allocation of the foreign debt, at first blush it would seem that the government sector has not been the generator of the debt problem. Bank foreign debt rose almost 18 percentage points of GDP over the period, and enterprise foreign debt by more than 9 percentage points. However, in light of the substantial government deficits sustained throughout the whole period, it would be premature to let the government off the hook just because of the debt figures.

One can draw some comfort from the fact that much of the increase in debt has been incurred by the private sector, and much of that has been mediated by local banks. Banks might well be expected to do a better job of selecting good borrowers and evaluating risk than the public sector. Furthermore, the shrinking share of government foreign borrowing makes the likelihood of sovereign debt problems smaller.

However, in fairness, recent history provides plenty of cases of imprudent lending by commercial banks, and "overborrowing syndromes" (McKinnon and Pil 1999) led precisely by the private sector. I have argued elsewhere (Kraft and Jankov 2005) that this prescription does not fit Croatia, but the point remains that the mere fact that borrowing is being done by the private sector does not provide substantial comfort.

A small caveat is also in order regarding real currency appreciation. The real effective exchange rate appreciates some 12.8 percentage points over the period. But most of this is due to the depreciation of the Euro (and therefore the Kuna) against the U.S. Dollar. The bilateral exchange rate of the Kuna with the Euro, deflated by Eurozone and Croatian price levels, gives a better indication of the appreciation pressures coming directly from macroeconomic developments in Croatia. Here, we see that there has been substantial real appreciation since 2003, of nearly 2 percentage points per year. While smaller than the real appreciation indicated by the REER, this is still noteworthy appreciation pressure.

3. Significance of the foreign debt problem

Before looking at the causes of the debt build-up, it will be useful to say a word or two about the significance of the debt. At this point, Croatia has no trouble servicing its foreign obligations. International reserves cover more than 5 months of imports, and there is little short-term debt.

Unfortunately, the question of debt sustainability is a rather tricky one. Various methodologies have been suggested for analyzing sustainability, but even the most immodest authors admit that there are few clear guidelines available. (IMF 2002,2003, 2004; Goldstein 2004) Probably the most promising approach is risk management: attempting to map out possible unfavorable scenarios, examining their likelihood and implication, and then looking for policy measures to reduce potential vulnerability without excessive costs.

When this is done for Croatia, one finds that negative scenarios can be rather easily envisioned (Babić et al 2003). Substantial shocks to net exports, or a major growth slowdown coupled with inappropriate fiscal policy, can lead to sharp growth in the debt-to-GDP ratio over a 5 to 10 year horizon. However, with reasonable policies, including continued fiscal consolidation, moderate money growth, and continued GDP growth of 4% or so, debt ratios stabilize or slightly improve. Two further factors provide comfort: first, with growing credibility as a soon-to-be EU member, Croatia's capacity to handle debt should improve. While it would not be wise to expect the EU or even less the ECB to rescue Croatia from debt problems, it is less likely that market sentiment will turn sharply against Croatia once it becomes an EU members.

Second, on a more technical note, Croatia's GDP should be revised upward to include estimates of the unofficial economy. This is a methodological requirement imposed by Eurostat and the EU, in actuality meant to prevent "undeserved" EU transfers based on underestimated GDP. Croatia's GDP will increase by about 11% (Lovrinčević et al 2005), which of course will decrease the headline debt/GDP ratio to a level below the magical 80%. This should not be considered a substantive change, but it could somewhat temper the discussion.

4. The Savings Problem and Fiscal Policy

In short, we can see that Croatia's foreign debt creates certain risks, but that it is difficult to be sure how severe these risks are. Let us now turn to a question that is easier to answer: why is the foreign borrowing problem such a difficult one? It all stems from low savings in the transition countries. Because of low marginal propensities to save, or, equivalently, high marginal propensities to consume, capital is very scarce in the transition countries. Interest rates are substantially higher than in developed markets and capital flows to the transition countries, to a great extent in the form of loans.

In addition, the stock of savings is relatively low as well, and often is poorly distributed (in the hands of a rather narrow group of wealthy individuals some of whom have acquired wealth illicitly, and few of whom are willing to use their savings for economically beneficial investment). However, it must be allowed that the wealth of transition country populations is not well measured statistically, and may in fact be substantially greater than realized. For one thing, large holdings of foreign currency cash exist, and are very difficult to measure. For another, many transition country citizens either have wealth outside their home country (e.g. foreign bank accounts) or have other unregistered assets in country.

Market imperfections, in addition to low savings, are further causes of high interest rates. High degrees of legal uncertainty add to risk premia in financial markets; limited competition and inefficient banks also kept interest rates high until recently. So probably interest rates would be somewhat higher in transition countries even if savings rates were similar to those in developed markets.

But there are good reasons for low savings in transition countries. For one thing, as transition has progressed, expectations of rising incomes have set in. Agents rationally expect that it will be

possible to repay loans taken out today with (higher) incomes tomorrow. For another, citizens of transition countries have not had access to the European material lifestyle. If there is anything that transition has unambiguously delivered, it is access to sought-after consumption goods such as cars, clothing etc (although not by any means for everyone...).

A further factor exacerbating the savings shortage is high government consumption and government investment. Transition countries, in part due to their socialist origins, tend to provide relatively generous social transfers, considering their levels of GDP per capita. And a bloated and inefficient state sector, including both the state administration and public enterprises, gobbles up a large share of GDP.

Furthermore, as Willem Buiter and Clemens Grafe (2002) point out, there are enormous pent-up needs for public infrastructure investment in transition countries. Roads, schools and hospitals, to name the major items, desperately need to be built or renovated. Clearly, these investments will have a positive social rate of return, but perhaps only over a relatively long time period.

But how can all this be financed? Of course! Borrowing from abroad, where interest rates have been unusually low in recent years. Transition countries have enjoyed an interest-rate bonanza from the deflation fears of Europe and Japan. The Croatian government in particular borrowed heavily on the Japanese market in the late 1990's and early 2000's.

The issue of government foreign borrowing seems to be easier to resolve than the pressure of high consumption and large private sector appetites for credit. After all, one can simply stop selling bonds abroad, and sell them at home. Of course, this solution, adopted by Croatia, is inferior to actually cutting the government deficit, because the increase in aggregate demand generated by government deficits indirectly stimulates foreign borrowing by increasing consumption demand. Furthermore, the banks themselves may end up borrowing abroad to buy all the domestically-issued government paper generated by such a strategy. This indeed seems to have happened in Croatia in recent years.

However, in all fairness, Buiter and Grafe's argument deserves consideration. Government borrowing, even foreign borrowing, to finance infrastructure, may increase future output and, more broadly, be wise policy. The best policy would be to restrict current expenditures enough so that a reasonable level of capital expenditures could be financed within an overall budget surplus. This would keep the debt problem under control, and also minimize the appreciation pressures generated by the public sector.

Additionally, it would be worthwhile for policymakers to use privatization revenues to pay down foreign debt. Up to now, Croatia has used privatization revenues to finance spending, and often current spending at that. Using one-time privatization revenues to finance investment or debt repayment would be more sensible.

However, if privatization revenues are in domestic currency, then using this to pay off foreign debt would require buying fx from either banks or (more likely) the central bank. This has been done in Croatia. Its disadvantage is that it will end up decreasing central bank international reserves. In fact, in such a transaction, the country's net debt is left unchanged. Admittedly, this measure is less frequently talked about in popular discussion of foreign debt, but in fact net debt is carefully scrutinized by serious analysts such as ratings agencies and international financial organizations.

5. Banks, Credit and Monetary Policy

If, then, the fiscal side is somewhat less problematic in principle (but perhaps not so much easier in practice when all the accompanying political problems are factored in), the consumption/savings side is indeed very difficult. And one of the most successful policy initiatives of recent years--the privatization of commercial banks to reputable foreign players--actually exacerbates this problem. Now, the banking system is healthy, creditworthy, and making good profits. Households and

businesses are enjoying the benefits of unprecedented access to credit. So why shouldn't Croatian (or Serbian) banks borrow abroad to fund their credit expansion plans? Unfortunately, what is individually rational for the banks is problematic for the economy as a whole.

The hard part is finding instruments to control banks' foreign borrowing. Interest rates are not very useful; raising rates only increases interest-based capital inflows. Admittedly, in theory, there is a chance that raising interest rates would decrease bank foreign borrowing. This would happen if the interest-elasticity of loan demand were very high. In this case, rate increases would have a strong effect on credit demand, and therefore banks would have less need to borrow to fund their lending programs.

The notion that loan demand would be highly interest-elastic in a transition country is a little unlikely, however. Until recently, loans were very hard to get, and interest rates were very high. Borrowers have strong pent-up demand, and are not likely to be extremely sensitive to interest rates. Anyone who has lived in a transition country knows that it has been a major victory to get a loan, any loan. That is beginning to change, but only beginning. In fact, estimates of loan demand in Croatia do show a moderate amount of demand elasticity, but not enough to count on.

There is an additional fly in the ointment, however. Given high bank profits, banks are not likely to pass on higher costs to their lending interest rates. In this situation, which clearly has prevailed in Croatia since 2003, the whole interest rate transmission mechanism breaks down completely.

So what can be done? One possible line of attack is to limit monetary growth. In Croatia, where the main money creation mechanism has been purchases of foreign exchange from banks, this would mean buying less fx, or, to put it slightly differently, allowing the exchange rate to appreciate. With less money creation, banks would have less liquidity to fund loans, and credit growth should decrease.

This idea also has some problems. In Croatia roughly two-thirds of loans are indexed to the exchange rate. This means that appreciation will decrease loan installments, equivalent to an interest rate decrease. Also, if the central bank decreases money creation, it is possible that banks would try to compensate by increasing foreign borrowing. This, of course, would only further intensify appreciation pressures. Which raises the question of how much nominal appreciation the central bank can tolerate, given the risks to exporters.

In Serbia, this whole issue has an additional twist. Inflation remains higher than the central bank would like. Nominal appreciation is a useful inflation-fighting tool. So it might be that simply restricting money creation might be a more useful tool in Serbia than it has been in Croatia, precisely because of its dual use as inflation-fighting tool and as an indirect curb on foreign borrowing.

Croatia has also used some less orthodox measures to deal with foreign borrowing. The main one has been the marginal reserve requirement imposed on the increase in banks' foreign liabilities. Starting from 24% in July 2004, the rate for this requirement has been increased all the way to 55% at the beginning of 2006. Given current interest rate differentials, this marginal reserve requirement should make foreign funds more expensive than domestic sources.

Bank foreign borrowing, however, has not completely dried up in Croatia. It may be suspected that the reason for this is that banks need foreign loans not for their price, but for their tenor. Croatian banks are making more and more long-term loans, and these cannot (or at least should not) be funded with short-term sources. Since the domestic market does not offer long-term funding, the banks are forced to turn to foreign borrowing, even if it is costly.

Two more things should be said about the marginal reserve requirement. First, since it only hits banks, it leaves open space to non-banks. However, the Croatian National Bank has partly succeeded in dealing with this, by classifying deposits made by non-bank companies as subject to the marginal reserve requirement. This means, for example, that if a leasing company associated with a bank borrows from abroad, and then temporarily deposits the money at the bank, the bank is forced to hold 55% of this deposit as a required reserve.

Second, as compared to classical capital controls, the marginal reserve requirement has an important advantage: it can be implemented without any special legislation. It is just an extension of the central bank's usual instruments (the reserve requirement). Of course, this advantage is also a disadvantage in terms of efficacy.

So far, we have discussed fiscal and monetary policy alternatives. But it should be noted that other reforms could also play a part here. To the extent that reforms decreased the obstacles to doing business, or increased the efficiency of markets and spurred innovation, growth would accelerate. Of course, this kind of supply-side response would be very helpful.

6. Lessons for Serbia?

What are the implications of Croatia's experience for Serbia? In principle, Croatia's experience is likely to be quite relevant to Serbia, due to common institutional backgrounds stemming from the former Yugoslavia, the entry of many of the same foreign banks, and high levels of euroization in both countries.

However, there are also important differences. Serbia was able to write-off much of its foreign debt; Croatia has paid all that it owed. Both approaches have advantages; certainly, Serbia's debt burden would have been crushing without the write-off. However, Croatia has the selling point that it has always honored its debts, which has some use as well. (Although, as Jacob Frankel has been known to say, markets have no memory anyway.)

Another important difference is the higher level of inflation in Serbia than in Croatia. This puts inflation-fighting much higher on the agenda, and may make the use of nominal exchange rate appreciation more helpful. Furthermore, Serbia has an advantage in its disadvantage, in the sense that its lack of an investment grade credit rating may limit growth of foreign debt somewhat (Croatia received an investment grade rating back in 1997, for better or worse).

One of Serbia's big advantages so far has been tighter fiscal policy. Unlike Croatia, Serbia has run fiscal surpluses in recent years. This, however, may not prove enough to solve either high inflation or increasing foreign debt (one can cite Bulgaria as another example--despite prudent fiscal management, inflation has risen and foreign debt is growing).

Unfortunately, there are few easy solutions. The point of examining other countries experiences is to try to identify risks early, and to get a sense of the possible effectiveness of policies. In this respect, one would hope that Croatia's experience will be useful to Serbian policymakers.

7. Bibliography

— Buiter, Willem and Clemens Grafe "Patching up the Pact: Some Suggestions for Enchancing Fiscal Sustainability and Macroeconomic Stability in an Enlarged European Union" CEPR Working Paper 3496, 2002.

— Babić, Ante; Krznar, Ivo; Nestić, Danijel; Švaljek, Sandra, Dinamička analiza održivosti javnog i vanjskog duga Hrvatske (Dynamic Analysis of Croatia's Fiscal and External Sustainability) Privredna kretanja i ekonomska politika 13, 2003, p. 77-126.

— International Monetary Fund, "Assessing Sustainability," SM/02/06, May 28 (Washington) 2002

— ———, "Sustainability Assessments – Review of Application and Methodological Refinements," Discussion Paper, June 23, 2003 (Washington).

— ———, "Debt Sustainability in Low-Income Countries—Proposal for an Operational Framework and Policy Implications," Discussion Paper, February 3, 2004 (Washington)

— Goldstein, Morris, "Debt Sustainability, Brazil and the IMF" Institute for International Economics WP 03-1, February 2003

— Kraft, Evan and Ljubinko Jankov. „Does Speed Kill? Lending Booms and Their Consequences in Croatia" *Journal of Money, Banking and Finance* Volume 29, Number 1, January 2005 p. 105-121.

— Lovrinčević, Željko, Davor Mikulić, Andrea Galić Nagyszombati, "Estimate of the Size of the Underground Economy in Croatia and the Impact on the Macroeconomic Policy" Proceedings, 6th Conference "Enterprises in Transition" Split, Croatia, 2005, p. 253-256 (full text on CD).

— McKinnon, Ronald and Han Pil, "Exchange Rate Regimes for Emerging Markets: Moral hazard and international overborrowing" *Oxford Review of Economic Policy* Volume 15, p. 19-38, 1999.

Crude Oil Extraction Fees in Serbia: No Adequate National Policy So Far

Vuk Đoković

Goran Radosavljević

At a time when most nations are seriously tackling the issues of mineral resources exploitation and increasing energy efficiency, these problems have yet to become priorities in Serbia. Preparation for the upcoming privatization NIS, the national oil company, has raised numerous questions; nonetheless, the fate of domestic crude oil sources has attracted the least attention. Under the existing legislation, a company extracting crude oil pays a royalty of 3% of its total revenue, far lower than in other countries. And, low as they are, the royalties are not even being paid, which constitutes direct subsidizing of NIS. The situation is similar with regard to other mineral resources. The state, therefore, must regulate this field before the privatization commences. If the current legislation is retained, the subsidies to NIS would continued even after its privatization.

1. Introduction

The surge in oil prices on the global market over the past several years,[a)] accompanied by dwindling reserves, has led to a number of countries increasing the royalties for use of this natural resource. Governments of countries with large crude oil and gas reserves have seen an opportunity to increase their revenue.[1] The growing "oil taxes" had a mixed reception in the public. While some describe such moves as only normal, others emphasize that it is a bad signal to international investors, as these governments (mainly in Latin America) initially invited major companies to invest substantial sums in the oil business, only to later change their policies and impose high taxes.[b)]

a) From $10 per barrel of crude oil in 1999 to over $70 per barrel in mid-2006.

b) See, for example, "Tax That Fellow Behind The Drill," Forbes, 12/12/2005.

2. Serbia's national resources management policy

As far as regulations governing the use of national resources in Serbia are concerned, the country is still at an early stage compared to other transitional countries. The problem of collecting royalties/fees for the use of domestic resources has not been adequately solved. In the socialist era, the issue was not even raised. The mid-90s saw the passage of a Mining Act[c)] that was supposed to regulate this field as well, but it failed to specify the royalties for using mineral resources. A government decree fixing the amount was only passed in mid-2002.[d)] However, the expected results failed to materialize, primarily because of two factors:

1. The ancillary legislation that was supposed to regulate how the royalties/fees were to be collected was not passed, and, since the collection procedure was not clear, it was consequently not implemented;

2. The price of resources was not specified, resulting in companies (that both extracted and processed mineral raw materials) using internal clearing prices well below global levels.

The latest amendments to the Mining Act[e)] and Regulations on Payment of Royalties for the Use of Mineral Resources[f)] have only partly remedied these shortcomings. The Act stipulates that companies exploiting national resources in Serbia should pay a royalty from 1% to 5% (depending on the resource) of the value of the mineral resource extracted. The royalty for a

c) Official Gazette of the Republic of Serbia, No. 44/95.

d) Official Gazette of the Republic of Serbia, No. 28/02.

e) Official Gazette of the Republic of Serbia, No. 34/06.

f) Official Gazette of the Republic of Serbia, No. 102/06.

1 Governments actively charging crude oil extraction fees have seen fee revenues rise 53% in 2005 over 2004 levels. Source: *The 2006 Global Upstream Performance Review*, John S. Herold, Inc. & Harrison Lovegrove & Co. Ltd.

company extracting crude oil and gas in Serbia is 3% of the its revenue. This definition – taking as it does revenue, rather than the value of the extracted crude oil as the basis for the royalty – has made it possible for NIS to pay a lower amount. The legislation does not adequately define the method used for calculating the reference price to be utilized in determining the value of the raw material. In addition, the royalty has so far not been paid, meaning that the state has directly been subsidizing NIS. As privatization draws closer, a question begs itself: will the buyer of NIS get Serbia's oil as a present?

3. Crude oil extraction fees around the world

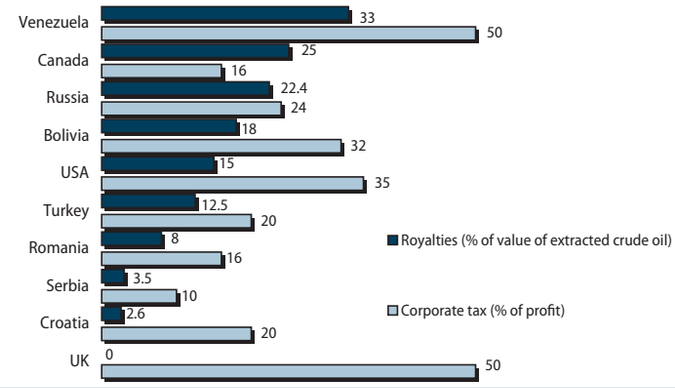
Many, often diverging, views on Serbia's crude oil reserves have been advanced. Without even going into the matter of the size of the reserves, and leaving aside for a moment the procedure of granting concessions for exploiting Serbia's mineral wealth,[2] the fact remains that there are reserves of crude oil, that they are not insignificant, and that they should therefore not be simply given away. Further proof of this are the facts that *crude oil is a rare and non-renewable resource*, that *prices have substantially risen over the past several years*, with a tendency of further growth, and that *Serbia's economy is dependent, to a large degree, on this energy resource*.

The royalty that a company pays for exploiting crude oil and gas in Serbia is far lower than that paid by the major world corporations in developed market economies (Graph L2-1). For example, a company extracting crude oil in the United Kingdom pays corporate income tax at a rate of 50% on revenue obtained by selling the oil.[g)] The situation is similar in the US and Canada. The amount of the "oil tax" in the US depends on *who* owns the land (whether it is the state or a private owner), the company's *revenue*, as well as the *location* of the oilfield. Of 100 revenue units obtained by selling crude oil in the US, the state takes about 50 in various taxes.[h)] In Canada, similar to the US, each province sets the amount of the crude oil extraction fee, which depends on the age of the deposit, production volume, and price in the global market.[3] The state collects on average from 15% to 50% of the value of crude oil extracted, while the company (or part of company) engaged in the exploitation pays another 16% in corporate income tax to the state.

g) Wood Mackenzie, UK Upstream Service, Country Overview, May 2006.

h) Wood Mackenzie, US Upstream Service, Region Overview, May 2006.

Graph L2-1. World: Crude oil royalties in 2006



Source: Wood Mackenzie, Ministry of Finance of selected countries
Notes:
1. US corporate tax of 35% applies to revenue exceeding $100,000.
2. In the UK, an income tax of 75% is payable for exploitation of crude oil sources developed before 1993. As crude oil extraction profits reach up to 80%, the state collects from 40% and 60% of the value of the extracted oil from the company.
3. In Turkey, Romania, Serbia and Croatia, the whole economy pays corporate profit tax.

Until recently, Russia too confronted the problem of (non-) payment of royalties for using mineral resources. Its tax system was too complicated to ensure proper collection of taxes on the vast profits of oil companies, which at the same time extracted, processed, and sold oil. In addition, the price used in calculating the value of domestic oil was far below the global level. A reform of the tax system carried out in 2002 abolished the three different taxes on crude oil and gas extraction and replaced them with a single levy.[4] Collection was simplified, with taxable income now defined as the quantity of oil extracted multiplied by

2 According to EBRD's 2006 Transition Report, Serbia has made considerable progress as far as legislation governing concessions is concerned, but implementation remains a weak point.
3 Alberta Department of Energy, *Oil and Gas Fiscal Regimes*, Electricity & Gas Division, November 2003.
4 Viktor Subbotin (2004), "Tax Reform in the Oil Sector of Russia – A Positive Assessment," Economic Expert Group, Higher School of Economics.

the oil price on the global market. The results were easy to see:

- The profit tax rate was reduced from 35% to 24%;

- Crude oil use fees now stand at about 22.4%;[5]

- The amount of taxes collected rose by 27% in year one compared to the period before the tax reform, although prices in the global market had increased by only 3%.

The potential losses from pursuing faulty national resource management policies can be seen in Romania's example. The law prescribes that a company extracting crude oil in Romania must pay a royalty ranging from 3.5% to 13.5% of the value of its crude oil production, with the amount depending on production volume. The company must also pay corporate tax at a rate of 16%, from which it is exempted in its first year of operation.[i)] Additionally, the system of collecting mineral resource exploitation royalties was inefficient, with resource prices not defined adequately. Romania privatized its national oil company, Petrom, in 2004 (it was bought by Austria's OMV). In the course of 2005 and 2006, the price of crude oil on the global market rocketed from $36 to as much as $72 per barrel. Following these price hikes, Petrom's revenue from crude oil exploitation in 2005 rose nearly fivefold when compared to 2004, and amounted to about €610 million, even though crude oil production fell by 4.5% in 2005. In the first half of 2006, crude oil extraction revenue reached about €300 million.[j)] The exploitation of Romania's crude oil has, therefore, brought OMV enormous excess revenue only from price hikes on the global market (its profit is five to six times higher than in 2004), and it quickly recouped the money for purchasing Petrom. The state received only a small part of the excess revenue; it was left both frustrated and powerless. Finally, the whole privatization of Petrom was declared suspect and an inquiry was launched into the deal.

i) Romanian National Agency for Mineral Resources, 2006.

j) Annual Report 2005 and Results for January-March 2006, www.petrom.ro

4. Profits from crude oil extraction around the world

Rising crude oil prices on the global market over the past ten years or so, due to smaller reserves and growing demand (and, in some years, even falling supply) far outstripped production costs (Table L2-2). While production costs grew at a constant but gradual rate, crude oil prices were very volatile during the entire period, in dependence on supply and demand. The high oil prices over the last four years have made it possible for oil companies to achieve very high profits. The impression is, however, that oil extraction fees have, to a large extent, followed the price rises, i.e. that governments have also endeavored to profit as much as possible from the unprecedented price rise. A typical example is Russia, which has managed to achieve a substantial balance of payments surplus thanks to rising crude oil and gas prices. In addition, some countries later nationalized oil extraction companies[k)] (such as Russia),[6] or completely changed their policy towards foreign oil companies (Bolivia and Venezuela).[7]

k) Most OPEC members did so as early as the 1970s.

Table L2-2. World: Average crude oil prices and extraction costs, 1995–2006

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
							US$/t					
Average world price	126.1	151.2	141.6	95.2	132.9	208.0	178.5	183.2	211.4	277.7	364.5	440.9
Average extraction costs	38.3	39.0	39.6	40.1	40.6	41.5	42.5	43.2	44.0	44.9	45.8	46.7

Source: World bank and Energy Information Administration (EIA).

A partial analysis of extraction costs, exploitation fees, and crude oil prices in a number countries leads to the conclusion that only some of them actually increased exploitation fees. Based on these findings, all countries can be divided into three groups: a) countries with initially high

5 Companies pay an additional export levy at a rate of 16.67%. In other words, the price of oil derivatives in Russia is below the European level, as the state allows domestic crude oil sales at prices below the global level.

6 Viktor Subbotin (2004), "Tax Reform in the Oil Sector of Russia – A Positive Assessment," Economic Expert Group, Higher School of Economics.

7 Jim Bentein, "Latin American Swing to the Left," *Nickle's Profiler*, Nickle's Energy Group, June 2006.

crude oil exploitation fees (the US, UK, and Saudi Arabia); b) countries where fees were initially low, but have risen in the meantime (Bolivia, Venezuela, and Russia); and c) countries where fees are still low and/or not collected (Serbia, Romania, Nigeria, and Croatia).

Table L2-3. World: Crude oil extraction costs, 1995–2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
					US$/t					
Iran	5.7	5.9	6.0	6.0	6.1	6.2	6.4	6.5	6.6	6.7
Iraq	5.8	5.9	6.0	6.1	6.2	6.3	6.5	6.6	6.7	6.8
Saudi Arabia	5.7	5.8	5.9	6.0	6.1	6.2	6.4	6.5	6.6	6.7
Kuwait	11.3	11.5	11.7	11.9	12.0	12.3	12.6	12.8	13.0	13.3
Libya	31.6	32.2	32.7	33.1	33.6	34.3	35.1	35.7	36.4	37.1
Nigeria	30.8	31.4	31.9	32.3	32.7	33.5	34.3	34.8	35.5	36.2
Mexico	29.0	29.6	30.1	30.4	30.8	31.5	32.3	32.8	33.4	34.1
Bolivia	104.8	106.7	108.5	109.7	111.3	113.7	116.5	118.4	120.5	123.1
Venezuela	28.7	29.3	29.8	30.1	30.5	31.2	31.9	32.5	33.1	33.7
Indonesia	49.9	50.8	51.6	52.2	53.0	54.1	55.4	56.3	57.4	58.6
USA	73.1	74.5	75.7	76.5	77.6	79.3	81.3	82.6	84.1	85.9
Canada	106.4	108.4	110.2	111.4	113.1	115.5	118.3	120.3	122.5	125.0
Russian Federation	40.5	41.2	41.9	42.4	43.0	43.9	45.0	45.7	46.6	47.5
Ukraine	21.9	22.3	22.7	22.9	23.2	23.8	24.3	24.7	25.2	25.7
UK	125.4	127.8	129.9	131.4	133.3	136.2	139.5	141.8	144.4	147.4
Europe, average	38.2	38.9	39.6	40.0	40.6	41.5	42.5	43.2	44.0	44.9

Source: World Bank.

Note: The wide variations in extraction costs result from a combination of factors: a) natural causes (assets needed to research and develop new drilling sites, the depth oil is extracted from, whether the sites contain gas or pumps have to be used, the size of the deposits in a site, etc); b) technology (some sites have long since been amortized, while others were opened relatively recently, and the investment has yet to be amortized); c) labor prices; d) exchange rate of the domestic currency against the US dollar (some currencies are underappreciated, so costs expressed in dollars are very low, e.g. in Iraq); e) crude oil density and quality (due to differences in density, a ton of crude oil may contain from 6 to 8 barrels, which is why the price in dollars per ton is not a good indicator for comparison, and price per barrel is used instead).

Therefore, as oil becomes ever scarcer, and its price continuously rises, governments approach the issue ever more seriously, understanding the need for managing this resource as rationally as possible. In addition to current policies calling for enhancing energy efficiency of both the economy and households, as well as attempts to switch to other (renewable) energy sources, serious resources management also involves payment of adequate fees for their use. Little or no account is taken of this in Serbia as yet. The country is at the bottom of the European ladder when it comes to energy efficiency,[l)] while natural resources management policy is still sidelined.

l) National Energy Efficiency Program, Government of the Republic of Serbia, Ministry of Mining and Energy.

5. Conclusion

Serbia faces the privatization of its national oil company and a raft of unresolved problems: NIS enjoys a monopoly on the domestic market,[8] and pays a crude oil extraction fee of only 3% of the oil's value; the price used to calculate the value is lower than that prevailing on the global market, etc. Bearing in mind the above, as well as the fact that the situation is no better with Serbia's other natural resources (water, gas, non-metallic minerals, etc), the impression is that the state is prone to overspending, wasting, and even giving away its natural resources.

It should be stressed at this point that the Ministry of Mining and Energy made a major step forward by adopting the Regulations on Payment of Royalties for the Use of Mineral Resources; unfortunately, it did not have the capacity (and the political will was lacking) to solve the remaining problems. Furthermore, there is no agreement worldwide on the best method of collecting fees for the use of mineral resources.[9] On the one hand, the government wishes to attract foreign investments by reducing corporate profit taxes and other forms of taxation (at

8 An initiative was launched in October 2006 to introduce customs duties on the import of oil products, and thereby wind down the monopoly by 2012; the necessary legislation has, however, yet to be enacted.

9 James M. Otto, "Mining Taxation in Developing Countries", UNCTAD, November 2000; J. Otto et al, *Global Mining Taxation Comparative Study* (2nd edition), Colorado School of Mines, 2000.

10%, Serbia's profit tax rate is one of the lowest in Europe); on the other hand, there is less and less oil and gas in the world. Oil and gas prices are certainly set to rise, and a rational government would not want to renounce the substantial benefits of controlling these resources.[m] Profits from extracting coal and other mineral resources are far smaller; one could agree that fees for using them could be lower. However, profits from crude oil and gas sales are enormous, so fees for their exploitation would have to be higher. The price of these resources on the global market should, therefore, serve as a benchmark for setting the extraction fee.

m) James M. Otto et al, Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society, Chapter 5, The World Bank, 2006.

The conclusions are clear. Changing the legislation after NIS is privatized would send the wrong message to foreign investors.[10] On the other hand, if the existing legislation is retained and the negligible crude oil extraction fee is retained, the state would practically give away about €50 million to whoever buys NIS. An enticing offer, isn't it?

Box 1. Crude Oil Extraction Profits in Serbia

According to NIS data, about 700,000 tons, or some 5.2 million barrels of oil, have been extracted in Serbia each year for the past several years (one ton of domestic oil equals 7.418 barrels). This is about one-fifth of Serbia's annual oil consumption. The average price of Ural crude, taken as the reference price since this oil is closest in quality to Serbia's, was $61 per barrel in 2006 (or about $452.5 per ton of crude oil); although the price fell in late 2006, by February 2007 it had again come close to $60 per barrel. On the other hand, no information could be obtained about the costs of crude oil extraction in Serbia. Still, if it is taken into account that most (maybe even all) of Serbia's oil drills have been amortized, and that the average cost of extracting a ton of crude oil in Europe is about $45, it may be assumed that Serbian costs at least come close to this level. A rough calculation brings out that NIS could make over €200 million each year only from selling crude oil (without factoring in transport costs). According to an estimate by Oil & Gas Journal, the world's leading magazine covering the global oil and gas market, Serbia (including Montenegro) has reserves of about 78 million tons of crude oil.[1] Thus (and this is again a rough estimate), Serbia controls oil worth several tens of billions of euros.

Crude oil extraction royalties/fees are currently not being paid in Serbia. Taking into account current domestic crude oil production, and a possible fee reasonable for our circumstances of, say, 10% to 15%, after NIS is privatized, the state would lose between €30 and €50 million each year in uncollected royalties for the use of domestic crude oil sources. At the current fee level of 3%, the state has, merely by tolerating non-payment of fees for the past two years, subsidized NIS with about €20 million (2005 and 2006 totals).[2]

1 **PennWell Corporation, "Special report: Oil production, reserves increase slightly in 2006",** *Oil & Gas Journal*, Vol. 104.47, December 18, 2006.

2 For more information about this, see Udovički, K, Radosavljević, G, and Djoković, V, "Performance of the Serbian Oil Company (NIS): How Wide is the Gap Between the Actual and the Possible?," Quarterly Monitor 3, October – December 2005.

10 A potential buyer of the Bor Mining and Smelting Plant, Eastern Mining, has requested, as an additional condition for their participation, that existing legislation (the portion of the Mining Act governing the fee for the use of mineral resources) not be changed in the future. Source: B92, Beta, "Kuprom izneo dodatne uslove za RTB," ["Kuprom sets additional conditions for the Bor Mining and Smelting Plant"] 9 January 2007.

6. Bibliography

— Alberta Department of Energy, *Oil and Gas Fiscal Regimes*, Electricity & Gas Division, November 2003.

— B92, Beta, "Kuprom izneo dodatne uslove za RTB", ["Kuprom sets additional conditions for the Bor Mining and Smelting Plant"] 9 January 2007.

— J. Otto et al, *Global Mining Taxation Comparative Study* (2nd edition), Colorado School of Mines, 2000.

— James M. Otto et al, *Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society*, The World Bank, 2006.

— James M. Otto, "Mining Taxation in Developing Countries", UNCTAD, November 2000.

— Jim Bentein, "Latin American Swing to the Left", *Nicle's Profiler*, Nickle's Energy Group, June 2006.

— Kerry Dolan, "Tax That Fellow Behind The Drill", *Forbes*, 12. December 2005.

— Nacionalni program energetske efikasnosti [National Energy Efficiency Program], Government of the Republic of Serbia, Ministry of Mining and Energy

— Petrom, Annual Report 2005, www.petrom.ro

— Petrom, Results for January – June 2006, www.petrom.ro

— Pravilnik o načinu plaćanja naknade za korišćenje mineralnih sirovina, [Regulations on Payment of Fees for the Use of Mineral Resources], *Official Gazette of the Republic of Serbia*, No. 102/06

— Romanian National Agency for Mineral Resources, 2006.

— *Official Gazette of the Republic of Serbia*, No. 102/06.

— *Official Gazette of the Republic of Serbia*, No. 34/06.

— *Transition report 2006*, EBRD.

— *The 2006 Global Upstream Performance Review*, John S. Herold, Inc. & Harrison Lovegrove & Co. Ltd.

— Viktor Subbotin (2004), "Tax Reform in the Oil Sector of Russia – A Positive Assessment," Economic Expert Group, Higher School of Economics.

— Udovički, K, Radosavljević, G., Djoković, V, "Performance of the Serbian Oil Company (NIS): How Wide is the Gap Between the Actual and the Possible?" *Quarterly Monitor* 3, October – December 2005.

— Uredba o visini naknade za korišćenje mineralnih sirovina, [Decree on Royalties/Fees for the Use of Mineral Resources], *Official Gazette of the Republic of Serbia*, No. 28/02.

— Wood Mackenzie, UK Upstream Service, Country Overview, May 2006.

— Wood Mackenzie, US Upstream Service, Region Overview, May 2006.

— Zakon o izmenama i dopunama zakona o rudarstvu [Amendments to the Mining Act], *Official Gazette of the Republic of Serbia*, No. 34/06.

— Zakon o rudarstvu [Mining Act], Official Gazette of the Republic of Serbia, No. 44/95.

VAT in Serbia – Two Years On

Nikola Altiparmakov*

Replacement of the sales tax with the value added tax (VAT) was among the most significant fiscal reforms to be carried out in Serbia since the start of the transition process. This article sets out the improvements the new system has brought to the Serbian economy. It also shows that, despite its economic superiority over the sales tax, VAT is unable to secure a higher fiscal revenue than its predecessor. The article also explains why the claims of a major drop in VAT performance in 2006 are unfounded. Based on analyses of regional and European trends, it concludes that room exists for increased fiscal reliance on VAT revenue in the future. The over-large number of small tax payers in the present system is identified as the biggest obstacle to the future development of the VAT system in Serbia.

Introduction

After years of preparations and delays, value added tax was introduced in Serbia on 1st of January 2005, replacing what had until then been the major source of public revenue – the sales tax. The two years that have passed since then seems to be enough time to objectively assess the effects. After outlining the historical development of VAT in the first part, the article analyses the fiscal effects and explains why the usual cash-flow based analysis is insufficient to describe the VAT performance in Serbia. The third part focuses on the differences between consumption taxation under the sales tax and VAT. Part four contains an analysis of the role of VAT in the current tax system in Serbia and the prospects for increased reliance on VAT revenue in the future, based on the experiences of countries in the region and the European Union. The e*fficiency ratio* is presented in the fifth part as the most relevant statistic for monitoring and comparing VAT performances. Part six explains that the large number of small VAT payers constitutes a major administrative burden on the tax authorities and represents an obstacle to the future development of VAT in Serbia. The findings of the research are summarized in part seven.

1. Development of VAT

The VAT concept was developed theoretically in France in the 1920s as a form of taxing general consumption of goods and services. The motive for the development of the VAT concept was to overcome the flaws of various kinds of sales taxes - the main form of consumption taxation at the time. Different forms of retail sales taxes, assessed only at the very end of the production chain - in retail, were liable to tax evasion. On the other hand, turnover sales taxes assessed at different stages of production were creating cascading "tax on tax" effects, distorting the production process by stimulating vertical integrations and hindering transparent functioning of the economy. The VAT concept was developed to try to capture the "best of both worlds."

In the VAT system, each participant in the production chain calculates and pays the tax proportional to the value he added to the production process. VAT liability is calculated as the difference between VAT charged on outputs (output VAT) minus VAT paid on inputs (input VAT).[1] It should be noted that any registered taxpayer is entitled to a tax refund if he realizes a negative value added in some tax period (for example, due to major investments in fixed assets or the seasonal nature of the business). The tax payer in that case can opt to either receive the

* Researcher, USAID Serbia Economic Growth Activity Project

1 Business entities which do not take part in the VAT system do not charge VAT on their output, but nor are they able to reclaim VAT paid on inputs.

tax refund in cash or in the form of accounting VAT credit to be offset against his future tax liabilities.

By functioning in the manner described above, the entire economic burden of VAT is placed on the final consumer, but the VAT revenue is collected at different production stages from all tax payers participating in the production process, in order to prevent tax evasion as much as possible. A theoretical VAT model which treats the production of all goods and services equally and taxes them at a uniform rate would be completely transparent to the production process and business entities involved. For practical reasons, however, a variety of exceptions are made. Most often certain types of services (primarily financial intermediation) where value added cannot be easily determined, are not included in the VAT system. Furthermore, only business entities with a tangible volume of activities are required to participate in the system, in order not to overload the limited resources of tax authorities. For social reasons, governments frequently introduce reduced VAT rates on food and other goods in the "social" category.

After being introduced in France in 1954, VAT spread rapidly around the world in the latter half of the 20th century and is now the most widespead form of indirect taxation and a precondition for membership of the European Union.

In formulating the Serbian Law on Value Added Tax, legislators drew on international experiences and recommendations. Attention focused on not allowing major exceptions from the tax base; practically only goods of a social nature (food, medicines) are taxed at the reduced VAT rate, and investments in fixed assets are encouraged by having the same treatment as intermediate goods.[2] As in most transitional countries, the introduction of VAT in Serbia required the modernization of tax authorities. As a result, modern IT systems for VAT performance monitoring were developed, as well as the infrastructure required for efficient and timely VAT refunds; the VAT return form was significantly simplified when compared to some other unnecessarily complex forms used in Serbia. Also, the taxpayer self-assessment mechanism was improved, enabling the tax authorities to allocate their resources more efficiently and focus on tax threats and fraud.

2. Fiscal Effects of the VAT Introduction

The performance of public finances (including sales tax and VAT) is measured in Serbia on the basis of cash flow accounting principles set out in the IMF *Government Finance Statistics Manual 1986*. It should be noted that the cash flow approach frequently produces an incomplete or distorted picture, and that performance should also be analyzed with the accrual approach.[a)] The cash flow approach is not the most appropriate for measuring the level of tax evasion since it does not factor in the assessed and reported but as yet unpaid liabilities of tax payers (tax debt to government), which do not constitute tax evasion but rather reflect the lack of tax collection. The difference between the cash flow and accrual performances can be particularly pronounced in the case of VAT, where, in addition to the potential debt of tax payers to the government, there also exist VAT credits (government's debt to tax payers), which may be accumulated by VAT payers. This is exactly what happened in Serbia in 2005.

a) In Government Finance Statistics Manual 2001, the IMF suggests moving from the cash flow to the accrual approach of measuring performance.

Table L3-1 shows that revenue from sales tax grew faster than the estimated consumption growth[3] in 2003 and 2004, which may be explained by the more efficient activity of tax authorities and the reduction of tax evasion. The most noticeable reduction of tax evasion and expansion of the tax base, by some 5%, was in 2004, as the result of the introduction of fiscal cash registers.[b)] The accustomed cash flow approach to performance measurement also suggests that the introduction of VAT in 2005 significantly improved tax collection. The data in Table L3-1, however, brings out a steep drop in VAT performance in 2006. This was explained by a surge in tax evasion,

b) The most significant drop in sales tax evasion was in the services sector, whose real growth in 2004 was 19.4%.

2 **VAT legislation in some countries distinguishes between purchases of intermediate goods and investments into fixed assets** when assessing VAT liability, requiring that investments be amortized over time. The Serbian law encourages investment in fixed assets by recognizing the entire expense at the time it occurs.

3 **Consumption growth was estimated by excluding the agricultural sector from GDP growth, taking into account changes in** the foreign trade balance.

something that was recorded in many countries in the second year after they introduced VAT- when tax payers prone to tax evasion began to find ways around the self-control mechanism inherent in the VAT production chain.

Table L3-1. Sales Tax and VAT Cash Flow Performance

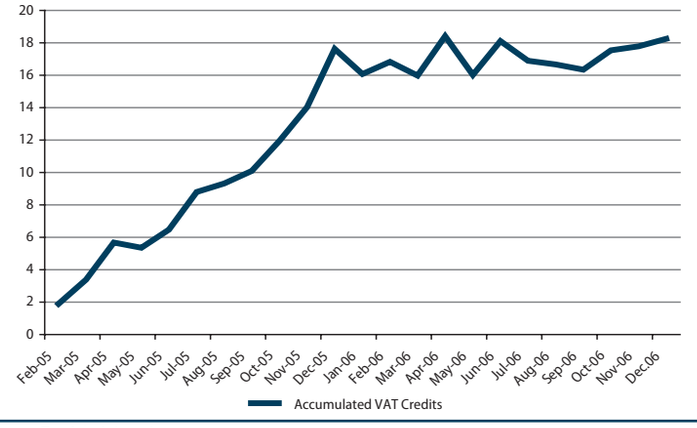
	2003	2004	2005	2006
Tax Cash Flow Data				
			in million dinars	
Sales Tax	126,540	156,863	23,849	6,430
VAT	..	..	191,957	218,737
Total	126,540	156,863	215,806	225,167
			in %	
Real growth in tax collections	5.60	13.10	17.40	-7.30
Estimated real consumption growth	3.00	7.50	6.50	6.00

Source: Ministry of Finance

When VAT was introduced, the limited resources of the Tax Administration were overwhelmed by the large number of tax payers (of which more below). Since false requests for cash refunds constituted the most serious attempts at fraud in many countries, the tax authorities obviously identified them as the prime menace. Whether fearing tax auditors or wishing to cover up their tax evasion in other areas, a major number of VAT payers (particularly those with smaller volumes of business in 2005) refrained from requesting cash refunds and opted instead for the accounting VAT credits. As a result, the level of accumulated VAT credits kept rising.

After initially being swamped, the Tax Administration in 2006 obviously devoted more resources to dealing with other VAT threats, including the credits. Under those circumstance, and faced with a considerable amount of accumulated credits, VAT payers stopped carrying forward VAT credits and their accumulated level thus remained at approximately the level of end-2005.

Graph L3-2. Accumulated VAT Credits, in billion dinars



Source: Tax Administration.

Although the differences in measuring performance with the cash flow and accrual approaches do not seem to be crucial where sales tax alone is involved, the large accumulation of VAT credits[4] in 2005 necessitates analysis of performance by the accrual approach and the accounting data in Table L3-3.[5]

4 The considerable overlap of sales tax and VAT collections in Q1 2005 additionally hinders cash flow analysis.

5 Because accounting based sales tax data in previous years is unavailable, we were forced to use cash performance as an approximation of the sales tax accrual performance. We believe that the difference between the cash and accrual performances of sales tax are less significant than in the case of VAT, where the accumulation of VAT credits in 2005 was the main reason for the difference. The accrual and cash VAT performances in 2006, when there was no major accumulation of VAT credits, are quite close. Hence our belief that the difference between the accrual and cash performances of sales tax in 2004 is not substantial enough to affect the findings of the study.

Table L3-3. VAT Accrual Performance

	2004	2005	2006
Tax Accrual Data			
		in million dinars	
Sales Tax	156,863	..	..
VAT	..	182,288	222,300
Total[1)]	156,863	187,288	222,300
	in %		
Real growth in tax accruals	..	1.90	5.45
Estimated real consumption growth	..	6.50	6.00

Source: Tax Administration.
1) Due to the import structural break in late 2004 and early 2005, we estimate that the accrued VAT in the first quarter of 2005 should be increased by 5 billion dinars in order for annual data to be comparable.

Accrual-based analysis shows no significant fall in the VAT performance in 2006.[6] Accrual data, however, also implies that the introduction of VAT in 2005 did not result in any significant growth of total budget revenues when compared to the sales tax.

3. Consumption Taxation in Serbia: Comparing Sales Tax and VAT

As mentioned above, the newly introduced VAT and the sales tax it replaced, represent different forms of taxation of general consumption of goods and services. This means that both tax forms should be taxing the same tax base, i.e. consumption of goods and services. Also, under both tax systems, the tax burden is borne by the same economic agents – the final consumers. This part analyzes how consumption taxation in Serbia changed with the switch from sales tax to VAT.

General consumption of goods and services was taxed at a rate of 20% in the sales tax system, while the VAT rate is 18%. Consumption of "social goods" (food and medicines) was exempt from sales tax (0%) and is subject to the reduced rate of 8% in the VAT system. Also, financial intermediation is excluded from the VAT system, while the taxation of newly constructed buildings is introduced at a reduced rate of 8%.

In all quarters of 2005 and 2006, the share of total taxable turnover on the domestic market subject to the standard VAT rate was close to 80%, while about 20% of the taxable turnover was subject to the reduced rate. Though comparable data on sales tax in 2004 is not available, the stability of this ratio in all quarters of 2005 and 2006 makes it reasonable to assume that a similar ratio existed in 2004 as well. If taxable turnover subject to the standard and reduced VAT rates is taken as roughly approximating the taxable consumption subject to the standard and reduced rates, it may be concluded that the average tax burden on consumption in Serbia did not change significantly with the switch from sales tax to VAT: 0.8*20% + 0.2*0% = 16% = 0.8*18% + 0.2*8%. Although the introduction of VAT did not appreciably change the average tax burden, it did result in its more even distribution, which should in future lead to more efficient allocation of production resources.

Since VAT did not reduce the average tax rate or manage to secure higher fiscal revenue than sales tax, the question is whether the results in Table L3-3 indicate that the effect of VAT in Serbia is disappointing. Although the legal tax base is almost identical in both systems, one thing must be kept in mind: the VAT system by definition enables tax payers to deduct previously paid tax, which was not possible under the sales tax system, which was plagued with cascading and multiple taxation of the same value added. Though it is not possible to estimate the exact extent of cascading under the sales tax, it was clearly significant, particularly in the area of taxation of services. Thus, for instance, 10 bn dinars was collected in 2004 from sales tax on wholesale services (taxing the difference between the purchase and sales price), although the same goods were taxed in the retail stage at the end of the production chain. This double taxation was eliminated with the introduction of VAT but, at the same time, state coffers were left without a

6 A degree of tax evasion cannot be ruled out since there are indications of an increased appearance of phantom firms in the VAT system. But the figures are far below those wrongly implied by the data in Table 1.

major portion of the 10 bn dinars of double-taxed wholesale trade. A rough calculation, which takes into consideration only the cascading effects in the wholesale trade, indicates that the VAT system would have had to expand the tax scope by some 5% to achieve the fiscal results recorded in 2005.

There is no doubt that the VAT system did expand the tax scope and reduce the gray economy. However, the additional revenue originating from the tax base expansion has compensated the loss of revenue caused by the removal of the cascading effects inherent in the sales tax system. The absence of an appreciable increase in fiscal revenue was therefore not due to the shortcomings of the VAT system. On the contrary, it is a sign of VAT's superiority over the sales tax system from the standpoint of economic efficiency and transparency.[7]

4. The Role of VAT in the Serbian Tax System

Where economic efficiency is concerned, taxing of consumption is in principle a more desirable form of taxation than direct taxes[8] on income, since it is less disruptive to economic decision making, it is more difficult to evade and it affects the economy's regional/global competitivness to a lesser extent. For their part, direct taxes enable progressive taxation and could be more desirable from the standpoint of tax equity. Transitional countries, where tax evasion and the gray economy are rife, traditionally relied more on indirect taxation than the developed countries. Owing to the rapid globalization, however, more and more developed countries have been forced to consider moving to indirect taxation in order to protect their competiveness on the global market. Thus Germany increased its VAT rate from 16% to 19% in 2007 and concurrently reduced contributions on wages and taxes on business activity.

Table L3-4. Growth of indirect taxes importance in Serbia

	2000	2001	2002	2003	2004	2005	2006
				in %			
Indirect taxes share in total tax revenues	42.0	44.4	47.5	49.4	48.8	51.1	46.0
Sales Tax / VAT share in total tax revenues	25.4	28.4	27.5	27.5	27.5	31.3	28.7

Source: Ministry of Finance.

Table L3-4 shows a downward trend for direct taxes (personal and corporate income taxes, property tax, contributions), and an upward trend for indirect taxes (sales tax, VAT, excises, customs) in Serbia's total tax revenue. The interruption of the trend in 2006 was above all the consequence of the reduction in excise rates as well as of the significant growth in the collection of payroll and corporate income taxes. In view of the reduction of payroll taxes in 2007, the share of indirect taxes may be expected to stabilize at close to half of the total tax revenue in Serbia.

In their extensive study of the hitherto VAT experiences in transitional countries [1] Bird and Gendron conclude that of all the forms of taxing consumption (especially direct taxation of income), taxation through VAT leaves the least room for tax evasion, has the least impact on economic growth, and is superior from the standpoint of economic efficiency.

Table L3-5 shows that the VAT rate in Serbia is among the lowest in the region and the EU. This implies that a potential increase in the VAT rate could create room for a more significant reform of direct taxes, if it would lead to a more efficient, equitable or regionally competive tax system.

7 **That the cascading effects were a major burden on wholesale services is evident from the fact that the** *Metro Cash and Carry* chain entered the Serbian market only after the VAT law was enacted.

8 **Direct taxes are those in which the economic burden of the tax falls on the taxpayer. With indirect taxes, the taxpayer** calculates and pays tax, but the economic burden of the tax is borne by some other economic agent. **Taxes on consumption** are the basic form of indirect taxation, while taxes on income and property are the most common direct taxes.

Table L3-5. VAT rates in selected countries

	Standard Rate	Reduced Rate
	in %	
Austria	20.0	12.0
Bosnia & Herzegovina	17.0	..
Bulgaria	20.0	7.0
Romania	19.0	9.0
Croatia	22.0	10.0
Macedonia	18.0	5.0
Slovenia	20.0	8.5
France	19.6	5.5
Germany	19.0	7.0
Poland	22.0	7.0
Italy	20.0	10.0
Greece	19.0	9.0
Finland	22.0	17.0
Sweden	25.0	12.0
Serbia	18.0	8.0

Also, basic economic sense suggests that an increase in consumption tax should have positive effects on some of the most significant macroeconomic challenges for Serbia - excessive consumption and the foreign trade balance.

Where tax equity is concerned, VAT is regressive[c)] since it is paid equally by the rich and the poor members of the society. An increase in the VAT rate, however, does not necessarily imply a rise of regressivness (unfairness) in the society, as it is necessary to look into the fairness of the entire fiscal system in Serbia (both the revenue and expenditure sides), not just a single form of taxation. Increasing the regressive nature of the Serbian fiscal system could be avoided if revenue from a higher VAT rate was channeled into social welfare or additional financing of the pension system (as was done in Germany in 1998).

c) Recent academic researches have brought out that VAT is considerably less regressive than believed earlier.

Box 1. Taxing Financial Intermediation

One of the VAT system's shortcomings in practice is its inability to easily integrate financial intermediation services, which distorts transparent allocation of resources and, potentially, leads to a loss of revenue. Wishing to avoid distortions in transparent resource allocation, some countries have included financial intermediation in the VAT system by approximating the value added with the difference between active and passive interest rate levels (New Zealand). Israel, on the other hand, introduced complementary taxation of financial intermediators on the basis of their annual increase in net worth[4]. Sales tax on financial services accounted for about 4.5% of total sales tax revenue. With the switch to VAT, the majority of this revenue has been "lost". Over time, possible losses to the Serbian budget will become more significant since financial intermediation is exhibiting vibrant growth and may be expected to increase from the present 10% to about 20% of GDP, as is the case in most developed countries.

5. Comparative Performances of VAT

Though there is no simple way of assessing the performance of VAT, the *efficiency ratio*[9] has become the most germane statistic for comparing performance between countries and over time. It compares realized VAT revenue with the hypothetical revenue that would be achieved in a system free of tax evasion and levying a standard VAT rate on all consumption.[10] Hence, in addition to the level of tax evasion, the efficiency ratio also takes into account the extent to which VAT legislation departs from the theoretically most desirable model in which all consumption is treated and taxed equally.

Over the years, the number of VAT allowances and exemptions has grown in some EU countries such as Germany and the UK, resulting in a somewhat lower efficiency ratio. On the other hand, the incidence of tax evasion is the main reason for the lower values of the efficiency ratio in most transitional countries. The best results have been scored by countries such as Belgium, which carried out an extensive reform of its VAT system and broadened the tax base, and Estonia, which, besides a modern VAT law, also boasts a modern tax administration.

The efficiency ratio of the Serbian VAT system, estimated at 77% (Table L3-6) is encouraging and considerably higher than in other transitional countries (62%), and even the EU (71%). The figure must, however, be taken with major reservations since it depends on estimated macroeconomic statistics. In particular, it does not seem very credible that, of all the countries in the region and the EU, the VAT to GDP ratio is in the double-digits only in Serbia. The official statistics evidently continues to understate Serbia's GDP, thereby overstating the efficiency ratio. A more realistic estimate of macroeconomic statistics would probably place the performance of the Serbian VAT system somewhere between the transitional countries and the EU.

Table L3-6. VAT Efficiency ratio in selected countries

	Year VAT Introduced	Standard VAT Rate (in %)	VAT Revenues (in % of GDP)	Private Consumption (in % of GDP)	Efficiency Ratio
Albania	1996	20.00	6.20	90.50	0.35
Belarus	1992	18.00	5.90	58.60	0.50
Belgium	1971	21.00	8.70	54.10	0.76
Bulgaria	1994	20.00	8.40	69.30	0.60
Estonia	1992	18.00	8.80	56.90	0.86
Finland	1994	22.00	8.40	49.70	0.77
Germany	1968	16.00	3.40	58.20	0.36
Greece	1987	18.00	7.90	70.60	0.62
Hungary	1988	25.00	8.30	63.20	0.53
Italy	1973	20.00	5.90	60.10	0.50
Poland	1993	22.00	7.80	63.30	0.56
Romania	1993	19.00	6.10	81.70	0.39
Czech Republic	1993	19.00	7.00	53.40	0.60
Slovak Republic	1993	19.00	7.30	54.50	0.67
Sweden	1969	25.00	6.60	49.00	0.54
Ukraine	1992	20.00	7.10	56.10	0.63
United Kingdom	1973	17.50	6.70	65.40	0.58
Serbia – 2005	2005	18.00	10.70	77.00	0.77
Serbia – 2006	2005	18.00	10.60	76.50	0.78

Source: Bird, Gendron: VAT Revisited, USAID, 2005.

9 **The** *efficiency ratio* is defined as:
Efficiency ratio = Realized VAT revenue / (Standard VAT rate * Private consumption)

10 **The efficiency ratio entails a (necessary) degree of approximation as macroeconomic estimate of private consumption** includes imputed rents (which, of course, are not subject to VAT), but does not include purchases of goods and services by the government on which VAT is levied.

6. VAT Entry Threshold

One of the elements in which VAT legislation significantly differs in European countries is the level of business activity (annual turnover) tax payers need to achieve in order to be included in the VAT system. Thus, the VAT entry threshold is 15.000 euros in France, 50.000 in Germany, 6.000 in Croatia, 1.000 in Denmark, and 60,000 euros in the UK. Spain and Italy do not have an entry threshold at all, but small tax payers in these countries are subject to a simplified presumptive VAT system. Also, some countries, such as Greece, discriminate between different businesses and have different entry thresholds for provision of goods and for provision of services[5].

It is an empirical fact that in all VAT systems, the preponderance of the revenue comes from a relatively small number of large tax payers, with only a modest contribution from small tax payers.[d)] Even though small tax payers represent a major administrative burden,[11] tax authorities in many countries have been hesitant to raise the VAT entry threshold, fearing either loss of revenue or putting small companies in a tax privileged position. It must be stressed, however, that exclusion from the VAT system does not imply a tax exempt status for smaller businesses. Instead, these are treated as final consumers and are taxed indirectly- the tax burden they bear is collected from larger tax payers participating in the VAT system.

d) A rule of thumb is that 15% of the largest tax payers account for up to 85% of total VAT revenue.

Serbian tax payers with an annual turnover of over 2 mn dinars are obliged to participate in the VAT system, while tax payers with a turnover larger than 1 mn dinars may choose to enter the VAT system voluntarily. Businesses with annual turnover below 1 mn dinars cannot enter the VAT system in order not to overload it administratively.

Table L3-7. Domestic VAT Performance in 2005, in million dinars

	Number of VAT taxpayers	Turnover	Share in total turnover (in %)	Net Domestic VAT	Share in total Net Domestic VAT (in %)
Taxpayer annual VAT turnover					
0 - 2 mil. dinars	43,516	30,898	0.7	-304	-0.5
2 - 5 mil. dinars	26,394	87,477	2.0	2,547	4.2
5 - 10 mil. dinars	18,929	134,598	3.0	3,003	5.0
10 - 20 mil. dinars	13,270	186,907	4.2	3,816	6.3
20 - 50 mil. dinars	10,183	317,651	7.2	5,714	9.4
50 - 100 mil. dinars	4,202	294,640	6.7	5,120	8.5
100 - 500 mil. dinars	4,150	853,900	19.3	12,600	20.8
500 - 1000 mil. dinars	512	351,829	8.0	5,665	9.4
> 1 billion dinars	468	2,161,530	48.9	22,350	36.9
TOTAL	121,624	4,419,430	100.0	60,511	100.0

Source: Tax Administration.

Empirical concentration of value added among larger tax payers has also been confirmed in Serbia. Thus, 50% of registered turnover and almost 40% of total domestic VAT revenue is generated by 0,4% of the largest tax payers. On the other hand, the share of almost 50.000 of the smallest tax payers in the registered turnover is virtually negligible. This group of tax payers does not even contribute to VAT revenue; on the contrary, its claims on the government exceed its declared VAT. The group, registered in the VAT system mainly on a voluntary basis, accounts for over 35% of the total number of tax payers and is a tremendous burden for the tax authorities.[12] Removal of the 50.000 smallest tax payers from the VAT system would preclude the losses they cause to the government, and also enable the tax authorities to allocate their resources more efficiently, which should improve tax collection from larger tax payers.

11 In some countries, e.g. Malta, VAT introduction attempts failed due to very low VAT threshold.
12 In order to cut administrative costs, the IMF has suggested increasing the VAT entry threshold to 5 mn dinars – *IMF Selected Issues Report, Serbia*, July 2005

The headlong plunge in VAT performance in Ukraine, for example, is ascribed to the growing private sector, which was able to abuse the weaknesses of the tax authorities that were not evident during state domination of the Ukrainian economy [2]. As the transition process proceeds in Serbia, the tax threats from the expanding private sector may be expected to become increasingly serious. In those circumstances and confronted with 35% of small VAT payers who do not contribute to revenue at all, it is highly unlikely that the tax authorities in Serbia will be able to keep tax threats efficiently under control and maintain the present level of VAT performance.

7. Conclusion

All the indications are that the introduction of VAT in Serbia has been successful. The national legislation is in accordance with international standards and recommendations. For their part, the tax authorities have been able to deal with the challenges of the new system and prevent some forms of tax evasion and fraud reported in other countries following the introduction of VAT.

The new form of consumption taxation is economically more efficient and transparent than the sales tax was. VAT also made Serbian exporters more competitive abroad by completely exempting them from domestic taxation.

The introduction of VAT also expanded the tax scope, reduced the gray economy and made it easier for tax compliant companies to compete with unfair competitors prone to tax evasion. The additional revenue resulting from the expanded tax scope offset the loss of revenue originating from the cascading under the sales tax system. But the more efficient distribution of the tax burden that came about with VAT is unable to generate an increase in fiscal revenue compared to the sales tax.

Although the switch from sales tax to VAT did not improve the quantity of fiscal revenue in Serbia, it did significantly improve its economic quality. A potential increase in the VAT rate, in order to increase fiscal revenue, should be a part of a broader tax and fiscal reform. The over-large number of small tax payers in the present system constitutes a major administrative burden, and is the biggest challenge to the future development of the VAT system in Serbia.

8. Bibliography

— R. Bird, P. Gendron (2005) *VAT Revisited – A New Look at the Value Added Tax in Developing and Transitional Countries*, USAID

— R. Bird (2005) *VAT in Ukraine - An Interim Report*, ITP

— L. Ebrill (2001) *The Modern VAT*, IMF

— P. Gendron (2006) *Value Added Tax Treatment of Financial Services*: A Developing Country Perspective", ITP

— M. Keen, J. Mintz (2004) *The Optimal Threshold for a Value-added Tax*, JPE

ANALYTICAL APPENDIX

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

	RPI			RPI components				
				GOODS	Agricultural products	Food	Non-food	SERVICES
	Dec. 2002=100	y-o-y index	cumulative index[1]	cumulative index[1]				
				annual indices[2]				
2003	104.1	111.7	107.8	106.6	93.6	106.0	107.8	111.1
2004	114.3	110.1	113.7	112.8	108.1	113.9	113.2	116.1
2005	134.0	116.5	117.7	115.4	136.1	115.9	114.0	124.1
2006	151.0	112.7	106.6	106.7	106.1	106.0	106.5	106.2
				quarterly indices[2]				
2005								
Q1	127.5	116.9	105.1	103.8	115.0	104.7	109.6	106.6
Q2	131.2	117.2	108.0	107.0	147.8	107.1	104.6	110.7
Q3	135.9	117.1	111.8	110.7	119.2	110.1	111.2	115.3
Q4	141.6	117.8	117.7	115.4	136.1	115.9	114.0	124.1
2006								
Q1	146.4	114.8	102.2	102.6	111.0	101.5	103.3	101.1
Q2	151.6	115.6	105.7	106.8	129.9	103.7	107.4	102.6
Q3	152.8	112.5	106.0	106.7	96.1	105.9	108.2	104.2
Q4	153.2	108.2	106.6	106.7	106.1	106.0	106.5	106.2
				monthly indices				
2005								
March	128.8	117.4	105.1	103.8	115.0	104.7	109.6	106.6
June	132.4	116.8	108.0	107.0	147.8	107.1	104.6	110.7
September	137.1	116.5	111.8	110.7	119.2	110.1	111.2	115.3
October	139.4	117.9	113.7	112.8	122.7	113.1	112.6	116.3
November	141.1	118.0	115.1	114.1	128.5	114.7	113.5	118.1
December	144.2	117.7	117.7	115.4	136.1	115.9	114.0	124.1
2006								
January	144.9	115.1	100.5	100.4	103.5	100.7	100.7	100.3
February	146.9	115.0	101.9	102.3	107.8	100.7	103.5	100.6
March	147.4	114.5	102.2	102.6	111.0	101.5	103.3	101.1
April	150.0	115.5	104.0	105.1	116.3	102.0	106.4	101.3
May	152.4	116.0	105.7	107.0	132.4	102.8	108.0	102.3
June	152.4	115.1	105.7	106.8	129.9	103.7	107.4	102.6
July	152.3	112.8	105.6	106.6	106.4	104.7	108.0	102.8
August	153.3	113.1	106.3	107.3	99.9	105.4	109.3	103.6
September	152.9	111.6	106.0	106.7	96.1	105.9	108.2	104.2
October	152.4	109.3	105.7	106.0	92.4	106.1	106.4	104.4
November	153.6	108.8	106.5	106.6	102.4	106.4	106.4	106.0
December	153.7	106.6	106.6	106.7	106.1	106.0	106.5	106.2
2007								
January	154.4	106.5	100.4	100.5	101.9	100.0	99.8	100.0
February	154.5	105.2	100.5	99.8	102.0	99.8	98.5	102.4

Source: SBS.

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

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

Table P-2. Serbia: Selected Price Indices, 2003–2007

	RPI		Consumer price index		Industrial producer's price index		Agricultural producer's price index	
	Dec. 02=100	y-o-y	Dec. 02=100	y-o-y	Dec. 02=100	y-o-y	Dec. 02=100	y-o-y
				annual indices[1)]				
2003	104.1	111.7	103.8	109.9	102.1	105.9	102.3	101.1
2004	114.3	110.1	115.2	111.0	111.8	109.5	118.4	115.7
2005	134.0	116.5	133.8	116.1	127.2	113.7	131.1	110.7
2006	151.0	112.7	149.5	111.7	144.1	113.3	142.2	108.5
				quarterly indices[1)]				
2005								
Q1	127.5	116.9	126.9	116.0	119.8	112.3	127.6	112.2
Q2	131.2	117.2	132.0	116.4	123.3	111.6	129.2	109.6
Q3	135.9	117.1	135.2	115.5	129.7	114.2	131.8	111.0
Q4	141.6	117.8	141.1	116.6	136.0	116.7	135.8	110.3
2006								
Q1	146.4	114.8	145.5	114.6	138.5	115.6	137.7	107.9
Q2	151.6	115.6	150.8	114.2	144.2	116.9	140.2	108.5
Q3	152.8	112.5	150.6	111.4	147.2	113.5	145.3	110.3
Q4	153.2	108.2	151.2	107.1	146.7	107.9	145.5	107.2
				monthly indices				
2005								
March	128.8	117.4	128.7	116.9	120.9	112.0	129.69	112.00
June	132.4	116.8	133.5	115.8	124.9	112.0	129.40	108.48
September	137.1	116.5	136.1	114.7	132.2	115.0	135.27	109.12
October	139.4	117.9	139.2	116.2	134.9	116.3	134.33	109.56
November	141.1	118.0	141.0	116.6	136.2	117.1	135.80	109.45
December	144.2	117.7	143.2	117.0	136.8	116.5	137.16	111.77
2006								
January	144.9	115.1	144.3	115.3	137.4	116.3	137.26	110.31
February	146.9	115.0	145.7	114.8	138.7	115.1	137.13	106.58
March	147.4	114.5	146.5	113.9	139.4	115.3	138.70	106.95
April	150.0	115.5	148.8	114.5	142.7	117.0	138.18	107.84
May	152.4	116.0	151.7	114.4	144.8	117.6	140.41	107.85
June	152.4	115.1	151.7	113.6	145.0	116.1	142.11	109.82
July	152.3	112.8	150.4	111.7	146.9	114.7	142.50	110.23
August	153.3	113.1	150.8	111.9	147.3	114.3	146.17	111.73
September	152.9	111.6	150.7	110.7	147.3	111.4	147.35	108.93
October	152.4	109.3	150.1	107.9	146.9	108.9	143.81	107.06
November	153.6	108.8	151.6	107.5	146.4	107.5	145.52	107.15
December	153.7	106.6	151.7	106.0	146.8	107.3	147.22	107.33
2007								
January	154.4	106.5	152.5	105.7	…	…	…	…
February	154.5	105.2	152.1	104.4	…	…	…	…

Source: SBS.

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

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

	Nominal					Real			CPI in Euro area[4](Dec. 02=100)
	Exchange rate (FX)[1]	Base index (Dec. 02=100)	y-o-y index	cumulative index[2]	USD/EUR	real FX[3] (Dec. 02=100)	y-o-y index	cumulative index[2]	
					annual exchange rate[5]				
2003	64.9743	105.6	107.1	110.5	1.1241	102.4	97.8	104.4	101.0
2004	72.6215	118.0	111.8	115.6	1.2392	106.3	103.8	103.9	103.0
2005	82.9188	134.7	114.2	109.3	1.2433	105.8	99.5	94.9	105.3
2006	84.1879	136.8	101.5	91.7	1.2537	97.4	92.1	87.9	107.6
					quarterly exchange rate[5]				
2005									
Q1	80.2421	130.4	115.9	102.7	1.3145	106.4	101.2	98.1	104.0
Q2	81.8942	133.0	115.7	105.0	1.2606	106.7	100.7	98.3	105.2
Q3	83.8302	136.2	114.2	107.5	1.2199	105.8	99.8	97.8	105.6
Q4	85.7085	139.2	111.3	109.3	1.1898	104.5	96.6	94.9	106.2
2006									
Q1	87.0875	141.5	108.5	101.4	1.2031	102.7	96.6	99.6	106.3
Q2	86.8674	141.1	106.1	101.0	1.2552	100.3	94.0	97.9	107.7
Q3	83.2482	135.2	99.3	96.7	1.2745	95.5	90.3	92.6	108.0
Q4	79.5486	129.2	92.8	91.7	1.2893	91.4	87.5	87.9	108.3
					monthly exchange rate				
2005									
March	80.7498	131.2	116.1	102.7	1.3074	106.5	101.0	98.1	104.5
June	82.5172	134.1	115.3	105.0	1.2180	106.7	100.7	98.3	105.3
September	84.4958	137.3	113.6	107.5	1.2265	106.2	100.0	97.8	106.0
October	85.1413	138.3	112.6	108.3	1.2026	105.4	97.8	97.2	106.3
November	86.0770	139.8	112.1	109.5	1.1809	105.1	97.1	96.9	106.1
December	85.9073	139.6	109.3	109.3	1.1861	102.9	94.9	94.9	106.3
2006									
January	86.9033	141.2	108.8	101.2	1.2122	103.2	96.7	100.3	105.9
February	87.2558	141.8	108.9	101.6	1.1960	102.5	96.8	99.6	106.2
March	87.1033	141.5	107.9	101.4	1.2013	102.5	96.2	99.6	106.7
April	86.5391	140.6	106.4	100.7	1.2239	100.7	94.3	97.9	107.4
May	87.3023	141.8	106.7	101.6	1.2750	100.3	94.2	97.5	107.8
June	86.7609	140.9	105.1	101.0	1.2677	99.8	93.6	97.0	107.9
July	83.7931	136.1	101.0	97.5	1.2684	96.4	91.7	93.7	107.8
August	82.8893	134.7	98.7	96.5	1.2803	94.8	89.3	92.2	108.0
September	83.0621	134.9	98.3	96.7	1.2748	95.3	89.8	92.6	108.1
October	80.9242	131.5	95.0	94.2	1.2615	93.3	88.5	90.7	108.1
November	78.9404	128.2	91.7	91.9	1.2876	90.4	86.0	87.8	108.2
December	78.7812	128.0	91.7	91.7	1.3210	90.4	87.9	87.9	108.6
2007									
January	79.6587	129.4	91.7	101.1	1.2993	90.7	87.8	100.3	108.2
February	79.3993	129.0	91.0	100.8	1.3075	90.5	88.3	100.1	108.5

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

1) Month average, official daily NBS mid rate.

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

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

4) Harmonized indices of consumer prices.

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

Table P4. Serbia: Registered Employment, 2004–2006

	Total No. of employed (employees and entrepreneurs)	Employees in legal entities	Employees with natural entities			Total No. of employees
			Total	No. of entrepreneurs	No. of employees within entrepreneurs	
	1 (=2+3)	2	3 (=4+5)	4	5	6(=2+5)
			quarterly data - in thousands			
2004	2,050	1,577	473	210	263	1,840
Q1	2,050	1,589	461	207	253	1,842
Q2	2,059	1,592	468	208	259	1,851
Q3	2,045	1,570	475	209	266	1,836
Q4	2,048	1,559	489	216	273	1,832
2005	2,061	1,540	521	228	293	1,833
Q1	2,065	1,557	507	225	283	1,840
Q2	2,062	1,544	518	228	289	1,833
Q3	2,063	1,536	527	229	298	1,834
Q4	2,055	1,521	533	230	304	1,825
2006	2,022	1,472	562	239	323	1,795
Q1	2,035	1,500	535	228	307	1,806
Q2	2,017	1,481	550	234	316	1,797
Q3	2,012	1,462	571	243	328	1,790
Q4	2,023	1,445	590	249	341	1,786
			monthly data - in thousands			
2005						
January	2,059	1,558	501	221	280	1,838
February	2,065	1,557	508	225	283	1,840
March	2,070	1,557	513	228	285	1,842
April	2,066	1,551	515	228	287	1,838
May	2,060	1,543	517	228	289	1,832
June	2,059	1,538	521	229	292	1,830
July	2,062	1,538	524	229	295	1,833
August	2,062	1,535	527	229	298	1,833
September	2,067	1,536	531	230	300	1,836
October	2,062	1,530	532	230	302	1,832
November	2,054	1,520	534	230	304	1,824
December	2,048	1,514	534	229	305	1,819
2006						
January	2,037	1,506	531	229	305	1,810
February	2,029	1,497	533	228	307	1,805
March	2,032	1,496	536	228	308	1,804
April	2,023	1,487	543	231	312	1,799
May	2,016	1,481	550	234	316	1,797
June	2,011	1,475	557	237	320	1,795
July	2,008	1,472	564	240	324	1,796
August	2,002	1,467	571	243	328	1,795
September	2,026	1,447	578	245	333	1,780
October[6)]	2,026	1,448	584	247	337	1,785
November[6)]	2,021	1,443	590	249	341	1,784
December[7)]	2,021	1,443	596	251	345	1,788

Source: Monthly Statistical Review 1/2007 (data for legal entities until November, data for entrepreneurs until September 2007, the rest of the data has been extrapolated by FREN) ; 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.

Note: Number of employed for Q4 has not been estimated, data from September is being used in calculations for Q4.

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

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

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

4) Owners of small businesses.

5) Employees in small businesses (natural entities).

6) Data on entrepreneurs for October and November are FREN's forecasts.

7) All employment data for December are FREN's forecast.

Table P-5. Serbia: Employees by Activities, 2003–2006

	2003	2004	2005	2005					2006								
				Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar[1)]	Apr	May[2)]	June[2)]	July	Aug	Sep[3)]
Employees in enterprises, institutions and organizations, by sections of activities	in thousands																
Agriculture, hunting and forestry	73	69	64	63	62	62	62	62	61	60	60	59	59	59	58	58	57
Fishing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mining and quarrying	33	32	31	30	30	29	29	29	29	29	28	28	28	28	28	28	29
Manufacturing	525	484	460	447	455	451	445	443	439	434	432	429	425	421	419	415	409
Electricity, gas and water supply	47	46	46	45	45	45	45	45	45	45	45	45	44	44	44	44	43
Construction	89	88	88	86	89	89	88	88	87	86	86	86	86	86	86	85	85
Wholesale and retail trade, repair	201	208	205	202	205	203	203	202	201	202	203	202	202	200	200	201	192
Hotels and restaurants	30	28	27	26	27	26	26	26	26	26	25	25	24	24	24	24	24
Transport, storage and communications	119	119	116	113	115	114	114	114	113	111	112	111	111	110	110	110	109
Financial mediation	30	29	29	29	30	30	30	30	29	30	30	29	30	30	30	30	30
Real estate, renting activities	55	59	63	63	66	66	66	66	66	66	67	67	67	67	67	68	68
Public administration and social insurance	68	71	71	70	70	70	70	70	69	69	69	69	69	69	69	69	69
Education	128	131	129	132	125	127	128	128	128	127	126	126	126	126	126	125	125
Health and social work	163	165	166	165	166	166	162	160	160	160	159	157	158	158	158	158	157
Other communal, social and personal services	48	49	51	51	51	51	51	52	52	52	52	52	52	52	52	52	51

Source: SBS, Monthly Statistical Review, no. 1/2007.
Notes:
1) From March the data are based on the final data for March 2006.
2) Adjusted data.
3) For September the data are based on the final data for September 2006.

Table P-6. Serbia: Average Monthly Wages (SBS), 2005–2006

	Average monthly wages (SBS)	
	Gross, in dinars	Net, in dinars
2005		
January	20,898	14,263
February	22,402	15,295
March	23,198	15,863
April	25,153	17,193
May	24,449	16,731
June	25,503	17,441
July	25,769	17,634
August	26,252	17,928
September	26,818	18,345
October	26,720	18,265
November	27,379	18,696
December	32,243	22,078
2006		
January	26,603	18,191
February	28,657	19,567
March	29,367	20,094
April	30,572	20,887
May	30,305	20,713
June	31,864	21,777
July	31,738	21,774
August	32,098	21,925
September	32,555	22,259
October	32,668	22,340
November	33,892	23,148
December	41,294	28,267

Source: SBS.

Table P-7. Serbia: Balance of Payments, 2003-2006[1)]

	2003	2004	2005				2006			
	Dec.	Dec.	Mar.	Jun	Sep.	Dec.	Mar.	Jun	Sep.	Dec.
	cumulative, in millions of euros									
CURRENT ACCOUNT	**-1,355**	**-2,197**	**-324**	**-615**	**-1,134**	**-1,805**	**-680**	**-1,155**	**-1,780**	**-2,892**
GOODS AND SERVICES	**-3,621**	**-5,156**	**-708**	**-1,755**	**-2,970**	**-4,284**	**-1,132**	**-2,384**	**-3,536**	**-4,999**
Goods	-3,808	-5,311	-683	-1,772	-2,987	-4,279	-1,101	-2,357	-3,524	-4,950
Exports , f.o.b.[2)]	2,447	2,991	813	1,824	2,843	4,006	1,039	2,282	3,662	5,146
Imports , f.o.b.	-6,415	-8,302	-1,496	-3,596	-5,830	-8,285	-2,140	-4,638	-7,186	-10,096
Exports/ Imports (%)	*38*	*36*	*54*	*51*	*49*	*48*	*49*	*49*	*51*	*51*
Services	187	155	-25	17	17	-5	-31	-27	-12	-49
Receipts	906	1,171	251	594	951	1,319	306	697	1,188	1,670
Expenditures	-719	-1,016	-276	-577	-934	-1,324	-338	-724	-1,200	-1,719
Income, net	-180	-172	-59	-141	-198	-260	-58	-155	-236	-314
Earnings	61	64	12	32	53	80	32	66	105	154
Payments	-241	-235	-71	-174	-250	-339	-91	-221	-341	-468
Current transfers	2,020	2,728	410	1,200	1,886	2,471	474	1,302	1,868	2,240
Private remittances, net	332	340	35	167	225	281	-21	90	120	110
Inflow	690	796	184	424	683	955	95	95	200	512
Outflow	-358	-456	-149	-256	-457	-674	-283	-450	-715	-1,037
F/X accounts of non-residents	308	568	37	108	259	460	183	276	494	561
F/X purchases, net	1,106	1,592	320	884	1,329	1,631	289	882	1,166	1,447
Other[3)]	274	228	17	41	73	99	23	54	87	123
Official grants	425	403	33	82	148	268	36	82	124	181
ERRORS AND OMISSIONS	**44**	**168**	**-184**	**-75**	**-205**	**-384**	**-31**	**-63**	**-147**	**21**
CAPITAL AND FINANCIAL ACCOUNT	**1,898**	**2,377**	**710**	**1,173**	**2,276**	**3,863**	**1,100**	**2,687**	**4,935**	**7,166**
Financial account	1,898	2,377	710	1,173	2,276	3,863	1,100	2,687	4,935	7,166
Foreign direct investment (FDI)	1,198	773	262	502	998	1,248	164	738	2,409	4,077
Other investment	701	1,604	448	671	1,278	2,615	936	1,949	2,526	3,089
Medium/long term loans[4)]	628	1,221	159	602	988	1,820	443	1,685	2,456	3,140
Government	206	229	15	44	108	192	73	84	132	132
Commercial banks	106	417	68	209	292	729	146	1,122	1,346	1,484
Other	317	574	74	348	588	886	224	479	979	1,523
Short-term loans	14	164	94	28	33	330	212	-189	25	170
Extraordinary debt and interest repayment[5)]	0	0	0	0	0	0	0	-189	-377	-1,060
Other assets and liabilities	18	187	120	11	186	378	136	115	446	839
Commercial banks F/X reserves (increase,-)	-3	33	77	30	71	100	144	146	-25	1
NBS reserves, net[4)], (increase,-)	**-587**	**-349**	**-202**	**-483**	**-937**	**-1,675**	**-390**	**-1,469**	**-3,008**	**-4,296**
IMF disbursements	246	192	0	0	151	151	75	75	75	75
IMF amortization[6)]	0	-188	-47	-93	-133	-166	-22	-22	-22	-32
MEMORANDUM ITEMS										
	in % of GDP									
Exports of goods and services	19.5	21.1	20.2	22.9	24.0	25.2	24.9	26.1	27.2	27.6
Imports of goods and services	-39.6	-47.2	-33.6	-39.5	-42.7	-45.5	-45.9	-47.1	-47.1	-47.9
Balance of goods and services	-21.1	-26.9	-12.9	-16.8	-18.9	-20.3	-20.4	-20.7	-19.8	-20.1
Current account	-7.5	-11.1	-6.1	-5.8	-7.2	-8.6	-12.6	-10.1	-10.0	-11.7
GDP in euros[7)]	18,008	19,723	5,277	10,554	15,830	21,107	5,397	11,392	17,806	24,670

Source: NBS, SBS.

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

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

3) Includes payments settlement with Kosovo.

4) Excluding IMF.

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

6) Principal repayments.

7) 2006. FREN estimate. Converted into euros using annual average of monthly rates.

Table P-8. Serbia: Consolidated General Government Fiscal Operations[1], 2004–2006

	in billions of dinars							% in GDP		
	2005		2006					2004	2005	2006
	total	Q4	total	Q1	Q2	Q3	Q4			
I TOTAL REVENUE	**701.6**	**210.2**	**825.0**	**175.3**	**201.6**	**207.5**	**240.6**	**41.2**	**40.1**	**38.9**
o/w: Public revenues excluding government VAT liabilities and offsets with SDF [2),3)]	*679.0*	*200.9*	*815.0*	*176.8*	*199.5*	*203.6*	*235.1*	*41.2*	*38.8*	*38.4*
1. Current revenue	693.7	207.8	814.7	173.2	199.3	204.9	237.3	40.8	39.6	38.4
Tax revenue	638.9	185.8	751.3	159.4	185.1	188.5	218.2	37.8	36.5	35.4
Personal income tax	94.3	27.2	118.5	25.8	29.2	29.2	34.3	5.4	5.4	5.6
Corporate income tax	10.3	2.8	18.3	7.9	2.9	3.5	4.0	0.5	0.6	0.9
Value added tax and retail sales tax	215.9	62.2	225.2	46.3	57.9	57.0	64.0	11.1	12.3	10.6
o/w: Net VAT and retail sales tax [2)]	*198.8*	*54.7*	*224.7*	*47.9*	*55.8*	*57.0*	*64.0*	*11.1*	*11.4*	*10.6*
Excises	71.3	20.0	81.7	14.7	21.1	21.7	24.2	4.8	4.1	3.9
Custom duties	39.0	12.3	45.2	9.6	12.7	9.9	13.1	2.4	2.2	2.1
Social contributions	184.0	54.6	232.2	48.5	54.1	59.4	70.2	11.1	10.5	10.9
o/w: contributions excluding offsets with SDF [3)]	*179.1*	*52.8*	*223.5*	*48.4*	*54.1*	*56.3*	*64.7*	*10.5*	*10.2*	*10.5*
Other tax	24.1	6.8	30.1	6.5	7.2	7.9	8.5	2.5	1.4	1.4
Non-tax revenue	54.8	22.0	63.4	13.8	14.2	16.3	19.1	3.0	3.1	3.0
2. Capital revenue	7.9	2.4	10.3	2.1	2.3	2.6	3.3	0.4	0.5	0.5
II TOTAL EXPENDITURE	**-667.8**	**-195.1**	**-813.0**	**-174.9**	**-185.1**	**-197.6**	**-255.4**	**40.0**	**38.2**	**38.3**
1. Current expenditure	-634.8	-184.3	-749.1	-167.6	-174.3	-184.4	-222.8	37.4	36.3	35.3
Wages and salaries	-166.3	-47.7	-198.6	-46.1	-45.8	-47.1	-59.6	9.6	9.5	9.4
o/w: wages and salaries excluding severance payments [4)]	*-1.31*	*-0.2*	-3.2	*-1.5*	*-0.3*	*-0.4*	*-0.9*	..	*0.1*	*0.2*
o/w: Health Insurance Bureau severance payments [5)]	*-2.17*	*-2.17*	-2.3	*-0.9*	*0.0*	*-1.4*	*0.0*	..	*0.1*	*0.1*
Expenditure on goods and services	-92.2	-29.7	-114.1	-22.4	-25.3	-29.0	-37.5	5.5	5.3	5.4
Interest payments	-24.5	-7.8	-28.9	-5.7	-4.9	-8.8	-9.4	1.7	1.4	1.4
Subsidies	-54.5	-15.8	-54.4	-10.1	-12.7	-13.6	-18.0	4.5	3.1	2.6
Social transfers	-281.5	-78.7	-335.8	-79.8	-81.1	-81.7	-93.1	15.2	16.1	15.8
o/w: pensions [6)]	*-186.1*	*-51.5*	*-227.7*	*-52.7*	*-55.7*	*-58.5*	*-60.8*	*10.6*	*10.6*	*10.7*
Other current expenditure	-15.8	-4.6	-17.4	-3.5	-4.6	-4.1	-5.2	0.9	0.9	0.8
2. Capital expenditure[7)]	-33.0	-10.8	-63.9	-7.3	-10.8	-13.2	-32.6	2.6	1.9	3.0
III "OLD" DEBT REPAYMENT AND GOVERNMENT NET LENDING	**-36.7**	**-7.9**	**-49.1**	**-4.4**	**-17.1**	**-10.1**	**-17.5**	**1.8**	**2.1**	**2.3**
1. Debt repayment - FFCDs and LRS	-21.9	-0.8	-21.7	-1.0	-14.6	-4.8	-1.4	1.3	1.3	1.0
2. Pensions[8)]	-9.8	-5.6	-20.3	-1.6	-1.7	-4.0	-13.0	0.3	0.6	1.0
3. Budget credits, net[9)]	-4.9	-1.5	-7.1	-1.8	-0.8	-1.3	-3.2	0.1	0.3	0.3
IVa CASH BALANCE (I+II), MoF definition[10)]	**33.8**	**15.2**	**12.0**	**0.4**	**16.5**	**9.9**	**-14.8**	**1.2**	**1.9**	**0.6**
Republic budget	26.8	17.0	3.3	-9.1	7.5	4.9	0.0	0.1	1.5	0.2
Pension and Disability Insurance Employee Fund	-0.5	-0.7	7.5	1.8	1.4	2.6	1.7	0.1	0.0	0.2
Pension and Disability Insurance Self-employed Fund	2.5	2.3	5.2	0.6	1.2	1.3	2.1	0.2	0.1	0.2
Pension and Disability Insurance Farmers Fund	0.0	-0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance Fund	-0.5	-2.2	4.4	0.9	2.5	3.1	-2.1	0.1	0.0	0.1
National Employment Service	0.8	0.0	0.2	0.3	0.8	0.2	-1.2	0.1	0.0	0.0
Vojvodina budget	-1.8	-1.9	-2.7	0.7	0.0	-1.1	-2.3	0.0	0.1	0.1
Local government	3.8	-2.9	1.3	5.7	3.4	0.3	-8.2		0.2	0.1
IVb OVERALL BALANCE (IVa+III.3.), IMF definition, MoF data[11)]	**28.9**	**13.7**	**4.9**	**-1.4**	**15.7**	**8.6**	**-18.0**	**1.1**	**1.6**	**0.2**
IVc ANALYTICAL BALANCE (I+II+III), FREN's definiton[12)]	**-2.9**	**7.3**	**-37.2**	**-4.0**	**-0.6**	**-0.2**	**-32.3**	**0.5**	**0.2**	**1.8**
V FINANCING (FREN's definition)	**27.8**	**7.0**	**121.8**	**8.5**	**1.4**	**103.2**	**8.7**	**1.7**	**1.6**	**5.7**
Grants[13)]	0.2	0.1	0.7	0.1	0.1	0.2	0.3	0.1	0.0	0.0
Privatization receipts[14)]	21.7	-2.3	106.1	9.1	1.3	103.0	-7.3	1.0	1.2	5.0
Domestic financing[15)]	5.0	1.1	21.0	1.4	0.2	1.4	18.0	0.4	0.3	1.0
Foreign financing[16)]	6.7	3.3	2.0	-0.4	1.4	1.0	0.1	0.5	0.4	0.1
Expenditures for principal repayments to domestic and foreign creditors[17)]	-5.8	4.8	-8.1	-1.7	-1.7	-2.4	-2.3	0.3	0.3	0.4
VI ACCOUNT BALANCE CHANGE (IVc+V)	**24.9**	**14.3**	**84.6**	**4.5**	**0.7**	**103.0**	**-23.7**	**1.1**	**1.4**	**4.0**
MEMORANDUM ITEMS										
Government net position in banking system, change:										
- based on recorded fiscal flows (IVc+V)	24.9	14.3	84.6	4.5	0.7	103.0	-23.7	1.1	1.4	4.0
- based on commercial bank's financial reports (NBS data)	38.1	11.4	75.9	10.6	6.7	90.1	-31.5	0.5	2.2	6.4
Enterprises' claims on VAT (FREN's estimate)[18)]	17.1	7.5	0.5	-1.6	2.1		0.0		1.0	0.0
Offsets with SDF[19)]	5.5	1.8	9.5	0.1	0.0	3.9	5.4	0.6	0.3	0.4
IVb Total fiscal result, IMF data[20)]	25.4	..	..	..	..	..	..	0.6	1.5	..
Investment projects (FLIPs) , IMF data[21)]	-6.1	..	..	..	..	..	..	0.6	0.3	..

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

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

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

3) Contributions revenue reduced by the item "Offsets with SDF" in the Memorandum items (see footnote 19).

4) Account 414 - Social benefits for employees, including sick benefits, expenditure for training employed persons, and severance payments. This

item refers only to the Republic budget.
5) FREN's estimate based on media reports and the MoF website, which tallies with item on receipts from borrowing (Account 91) Serbian Health Insurance Bureau from PFB.
6) Expenditures on current pensions, adjusted for the payment of the "old debt" and debt incurred through the delay in pension payments starting in December 2005 . (See item III.2 and footnote 8).
7) Capital expenditure figures for 2003 and 2004 were taken from the Memorandum on the Budget and Economic Policy for 2006 with Projections to 2009. (see footnote 16).
8) In December 2002, payment started of the "old debt" to pensioners which was incurred in the April 1994-June 1995 period when only 83% of the due pension amounts was paid. Payment was envisaged in 43 installments (mid-2006). In addition, the delay in pension payments inherited from the 1990s was eliminated at the end of last year, with payment of the 1.5 pension arrears starting in December 2005.
9) The item corresponds to the item "Outlays for acquisition of financial assets" in the PFB, i.e. to the item "net lending" in the IMF presentation. This refers exclusively to credits deemed to be for public policy purposes. It comprises loans to students, financing of the National Corporation for Housing Loan Insurance and the like. A large amount in 2003 can probably be explained by the shift in financing of government spending for the period of the temporary budget in the first months of 2004.
10) Cash surplus/deficit under (GFS 2001) represents the difference between current revenue and receipts from the sale of non-financial property (i.e. capital revenues) and current expenditures and spending on acquisition of non-financial property (i.e. capital expenditures). See discussion on methodology in Box 1, QM 3 for more details. The unconsolidated (total of results at all levels of government) and consolidated results should, by definition, agree but differences exist due to inconsistencies in the fiscal data.
11) Overall fiscal balance (GFS 2001) - Cash surplus/deficit adjusted for transactions in assets and liabilities that are deemed to be for public policy purposes (i.e. lending minus repayment - GFS 1986), or what we named "budget credits". See discussion on methodology in Box 1, QM 3 for more details.
12) Under FREN's definition, the analytical balance includes on the expenditure side the payment of old (domestic) debts, specifically payments for FFCDs, the Serbia Reconstruction Loan, debt to pensioners, etc. Defined in this way, the result measures the liquidity effect government transactions have on the economy.
13) Information from IMF CR 06/58. There is no data on grants in the PFB.
14) Estimate based on the reported republic's privatization proceeds, increased by 10% an account of the statutory allocations to the Pension Fund and the Restitution Fund. We have no explanation for the negative privatization proceeds in the PFB in Q4 2005.
15) Financing through the issuance of T-bills of the Republic of Serbia. There is a possibility that new loans to the government extended by domestic banks are included here, in which case they should be excluded from the item: "Change in Government Net Position in the Banking System on the basis of data from commercial bank's balance sheets (NBS data)" in Memorandum items.
16) Foreign financing in the budget of the Republic has been increased by 30% (an allowance for unknown local financing).
17) Expenses for debt amortization from the PFB, which are not included in Section III.
18) FREN's estimate, based on: unofficial information that tax credit of enterprises at end-2005 amounted to around 11 billion, and VAT refund flows presented in the PFB.
19) These are offsets of the Serbian Pension and Disability Insurance Funds debt to the Serbian Development Fund and contribution arrears of companies that are debtors of the Serbian Development Fund.
20) Line item "Overall balance, excluding project loans", Table 8. Serbia: General Government Fiscal Operations, 2003-06, INF Country Report No. 06/58, February 2006, page 37.
21) FLIPs - Foreign loan financed investment projects, data from IMF Country Report No. 06/58. According to the IMF's methodology, FLIPs are classified as part of capital expenditure, while, according to the methodology used by the Ministry of Finance they are not. A comparison with the IMF data, however, suggests that this item may have been included in official capital expenditure figures in 2004 after all.
Note: The figures do not always sum up due to rounding off.

Table P-9. Serbia: Monetary Survey, 2004–2006

	2004	2005				2006			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
				in millions of dinars, end of period[1]					
Net Foreign Assets (NFA)	**160,868**	**162,488**	**183,484**	**216,183**	**218,886**	**200,462**	**229,984**	**360,685**	**407,124**
Net Foreign Assets (NFA) (in euros)	***2,014***	***2,005***	***2,217***	***2,552***	***2,560***	***2,307***	***2,674***	***4,399***	***5,153***
Assets	313,353	332,844	371,427	428,842	491,883	517,118	600,522	710,311	770,332
Assets (in euros)	*3,922*	*4,107*	*4,487*	*5,063*	*5,753*	*5,951*	*6,983*	*8,662*	*9,751*
NBS	248,376	274,136	304,386	362,216	424,844	465,497	549,529	648,946	715,118
NBS (in euros)	*3,109*	*3,382*	*3,677*	*4,276*	*4,969*	*5,357*	*6,390*	*7,914*	*9,052*
Commercial banks	64,977	58,708	67,041	66,626	67,039	51,621	50,993	61,365	55,214
Commercial banks (in euros)	*813*	*724*	*810*	*787*	*784*	*594*	*593*	*748*	*699*
Liabilities (-)	-152,485	-170,356	-187,943	-212,659	-272,997	-316,656	-370,538	-349,626	-363,208
Liabilities (-) (in euros)	*-1,909*	*-2,102*	*-2,271*	*-2,511*	*-3,193*	*-3,644*	*-4,309*	*-4,264*	*-4,598*
NBS	-69,260	-72,187	-73,162	-81,569	-81,873	-87,575	-68,368	-48,845	-55,697
NBS (in euros)	*-867*	*-891*	*-884*	*-963*	*-958*	*-1,008*	*-795*	*-596*	*-705*
Commercial banks	-83,225	-98,169	-114,781	-131,090	-191,124	-229,081	-302,170	-300,781	-307,511
Commercial banks (in euros)	*-1,042*	*-1,211*	*-1,387*	*-1,548*	*-2,235*	*-2,636*	*-3,514*	*-3,668*	*-3,893*
Net Domestic Assets (NDA)	**162,007**	**168,841**	**190,622**	**206,257**	**239,985**	**272,642**	**285,856**	**207,195**	**231,381**
Domestic credits	348,617	370,019	407,795	446,299	490,467	516,435	557,316	490,539	509,771
Net credits to goverment[2]	5,951	-6,864	-1,602	-10,242	-27,831	-31,129	-33,954	-124,159	-100,534
Credits	44,001	46,961	41,744	43,492	40,106	40,311	37,919	31,415	33,338
Dinar credits	30,008	30,237	25,285	23,313	21,272	18,381	16,408	15,322	16,712
NBS	22,407	22,123	17,524	16,901	16,330	14,735	14,474	14,472	14,891
Commercial banks	7,601	8,114	7,761	6,412	4,942	3,646	1,934	850	1,821
Fx credits	13,993	16,724	16,459	20,179	18,834	21,930	21,511	16,093	16,626
Fx credits (in euros)	*175*	*206*	*199*	*238*	*220*	*252*	*250*	196	*210*
NBS	0	0	0	0	181	184	182	0	0
NBS (in euros)	*0*	*0*	*0*	*0*	*2*	*2*	*2*	*0*	*0*
Commercial banks	13,993	16,724	16,459	20,179	18,653	21,746	21,329	16,093	16,626
Commercial banks (in euros)	*175*	*206*	*199*	*238*	*218*	*250*	*248*	196	*210*
Deposits (-)	-38,050	-53,825	-43,346	-53,734	-67,937	-71,440	-71,873	-155,574	-133,872
Dinar deposits	-24,484	-32,060	-29,868	-34,581	-43,604	-43,860	-55,057	-50,760	-27,028
NBS	-22,966	-30,245	-28,235	-32,797	-40,718	-39,439	-49,801	-45,785	-19,678
Commercial banks	-1,518	-1,815	-1,633	-1,784	-2,886	-4,421	-5,256	-4,975	-7,350
Fx deposits	-13,566	-21,765	-13,478	-19,153	-24,333	-27,580	-16,816	-104,814	-106,844
Fx deposits (in euros)	*-170*	*-269*	*-163*	*-226*	*-285*	*-317*	*-196*	*-1,278*	*-1,352*
NBS	-9,990	-18,088	-6,571	-14,392	-18,806	-21,464	-10,586	-99,498	-102,377
NBS (in euros)	*-125*	*-223*	*-79*	*-170*	*-220*	*-247*	*-123*	*-1,213*	*-1,296*
Commercial banks	-3,576	-3,677	-6,907	-4,761	-5,527	-6,116	-6,230	-5,316	-4,467
Commercial banks (in euros)	*-45*	*-45*	*-83*	*-56*	*-65*	*-70*	*-72*	*-65*	*-57*
Credit to the non-government sector	342,666	376,883	409,397	456,541	518,298	547,564	591,270	614,698	610,305
Households	66,514	72,489	86,340	108,053	132,146	150,290	172,185	190,378	205,490
Enterprises	276,152	304,394	323,057	348,488	386,152	397,274	419,085	424,320	404,815
Other item, net[3]	-186,610	-201,178	-217,173	-240,042	-250,482	-243,793	-271,460	-283,344	-278,390
o/w: Capital and Reserves (-)	-142,753	-160,723	-169,226	-177,165	-181,772	-187,095	-216,178	-220,712	-233,805
NBS	-33,580	-39,068	-38,085	-36,571	-41,450	-42,531	-42,364	-27,662	-6,012
Commercial banks	-109,173	-121,655	-131,141	-140,594	-140,322	-144,564	-173,814	-193,050	-227,793
Broad money: M2[4]	**322,876**	**331,331**	**374,106**	**422,441**	**458,870**	**473,103**	**515,840**	**567,881**	**638,505**
Dinar denominated M2[5]	146,209	143,768	160,351	180,043	192,180	189,911	208,606	232,506	283,048
M1	111,258	110,073	120,481	134,727	144,949	137,800	148,694	158,452	200,031
Currency outside banks	45,165	39,368	42,316	47,283	53,650	45,825	48,926	52,110	68,389
Demand deposits (households and economy)	66,093	70,705	78,165	87,444	91,299	91,975	99,768	106,342	131,642
Time and savings deposits (households and economy)	34,951	33,695	39,870	45,316	47,231	52,111	59,912	74,054	83,017
Fx deposits (households and economy)	176,667	187,563	213,755	242,398	266,690	283,192	307,234	335,375	355,457
Fx deposits (households and economy), in euros	*2,211*	*2,314*	*2,582*	*2,862*	*3,119*	*3,259*	*3,572*	*4,090*	*4,499*
o/w: households[6]	110,713	124,107	141,477	162,667	190,136	207,609	222,105	243,328	260,689
o/w: households[6] (in euros)	*1,386*	*1,531*	*1,709*	*1,921*	*2,224*	*2,389*	*2,583*	*2,967*	*3,300*

Source: FREN, NBS: Statistical bulletin.

1) Unless otherwise indicated.

2) Government does not include cities and municipalities, these are treated as a non-government sector.

3) As mentioned in footnote 2 in Table T8-2: Enterprises also include non-profit and other non-government economic entities.

4) M2 refers to M3 in accepted methodology in Serbia, and it includes: currency outside banks; demand deposits of households and enterprises; time and savings dinar deposits of households and enterprises; and time and savings fx deposits of households and enterprises; and time and savings fx deposits of households and enterprises. Enterprises also include non-profit and other non-government entities.

5) M2 dinar refers to M2 in accepted methodology in Serbia, and it includes: currency outside banks; demand deposits of households and economy; and time and savings dinar deposits of households and economy.

6) Household savings.

Table P-10. Serbia: Commercial Banks Balance Sheet, 2004–2006

	2004	2005				2006			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
					in millions of dinars, end of period [1]				
Net foreign reserves	**-18,248**	**-39,461**	**-47,740**	**-64,464**	**-124,085**	**-177,460**	**-251,177**	**-239,416**	**-252,297**
Net foreign reserves (in euros)	***-228***	***-487***	***-577***	***-761***	***-1,451***	***-2,042***	***-2,921***	***-2,920***	***-3,194***
Gross foreign reserves	64,977	58,708	67,041	66,626	67,039	51,621	50,993	61,365	55,214
Gross foreign reserves (in euros)	*813*	*724*	*810*	*787*	*784*	*594*	*593*	*748*	*699*
Gross reserve liabilities (-)	-83,225	-98,169	-114,781	-131,090	-191,124	-229,081	-302,170	-300,781	-307,511
Gross reserve liabilities (-) (n euros)	*-1,042*	*-1,211*	*-1,387*	*-1,548*	*-2,235*	*-2,636*	*-3,514*	*-3,668*	*-3,893*
Net Domestic Assets (NDA)	**18,250**	**39,461**	**47,740**	**64,464**	**124,085**	**177,460**	**251,177**	**239,416**	**252,297**
Domestic credits	177,391	206,895	230,533	263,230	331,378	375,536	481,132	483,067	509,350
Net claims on goverment[2]	8,515	10,731	3,600	7,558	5,838	4,295	-3,369	-8,219	-2,441
Claims	22,863	25,948	25,396	28,062	25,803	27,837	26,044	20,745	23,516
Dinar credits	8,868	9,220	8,932	7,878	7,145	6,086	4,710	4,652	6,890
Fx credits	13,995	16,728	16,464	20,184	18,658	21,751	21,334	16,093	16,626
Fx credits (in euros)	*175*	*206*	*199*	*238*	*218*	*250*	*248*	*196*	*210*
Liabilities (-)	-14,348	-15,217	-21,796	-20,504	-19,965	-23,542	-29,413	-28,964	-25,957
Dinar deposits	-10,750	-11,506	-14,859	-15,702	-14,399	-17,382	-23,171	-23,630	-21,482
Fx deposits	-3,598	-3,711	-6,937	-4,802	-5,566	-6,160	-6,242	-5,334	-4,475
Fx deposits (in euros)	*-45*	*-46*	*-84*	*-57*	*-65*	*-71*	*-73*	*-65*	*-57*
Net claims on NBS	97,706	99,551	136,668	159,585	204,896	235,986	340,148	382,531	467,420
Claims	99,461	101,304	137,187	160,321	205,631	236,443	341,952	382,974	467,862
Cash	4,281	3,812	4,430	4,822	7,053	6,793	6,799	8,654	10,278
Required reserves	20,953	20,676	21,855	24,673	26,046	26,387	33,352	33,602	34,290
Excess reserves	1,481	-1,076	-211	-76	2,621	-2,109	-2,473	-3,440	-1,524
Deposits (-)	72,746	74,685	93,482	111,094	153,016	174,078	247,994	263,765	279,958
o/w: dinar deposits	7,512	3,679	3,827	5,317	5,274	948	2,564	7,535	26,349
NBS bills/repo [3]	0	3,207	17,631	19,808	16,895	31,294	56,280	80,393	144,860
Liabilities (-)	-1,755	-1,753	-519	-736	-735	-457	-1,804	-443	-442
Net claims on the rest of the economy	71,170	96,613	90,265	96,087	120,644	135,255	144,353	108,755	44,371
Claims	333,582	367,552	399,378	446,022	507,171	536,214	579,880	593,628	589,915
Households	66,356	72,261	86,064	107,781	131,860	150,007	171,904	190,098	205,179
Long-term claims	49,563	54,699	67,600	87,403	107,724	121,378	138,539	151,998	165,109
Short-term claims	16,793	17,562	18,464	20,378	24,136	28,629	33,365	38,100	40,070
Enterprises	267,226	295,291	313,314	338,241	375,311	386,207	407,976	403,530	384,736
Long-term claims	127,659	134,122	136,572	143,875	165,442	168,212	178,091	183,205	181,836
Short-term claims	139,567	161,169	176,742	194,366	209,869	217,995	229,885	220,325	202,900
Liabilities (-)	-262,412	-270,939	-309,113	-349,935	-386,527	-400,959	-435,527	-484,873	-545,544
Dinar deposits	-86,669	-84,305	-96,457	-108,557	-121,022	-119,059	-130,309	-150,239	-191,041
Households	-12,733	-12,624	-14,931	-16,017	-16,542	-17,688	-21,273	-20,972	-26,742
Enterprises	-73,936	-71,681	-81,526	-92,540	-104,480	-101,371	-109,036	-129,267	-164,299
Fx deposits	-175,743	-186,634	-212,656	-241,378	-265,505	-281,900	-305,218	-334,634	-354,503
Households[4]	-110,713	-124,107	-141,477	-162,667	-190,136	-207,609	-222,105	-243,328	-260,689
Households (in euros)	*-1,386*	*-1,531*	*-1,709*	*-1,921*	*-2,224*	*-2,389*	*-2,583*	*-2,967*	*-3,300*
Enterprises	-65,030	-62,527	-71,179	-78,711	-75,369	-74,291	-83,113	-91,306	-93,814
Enterprises (in euros)	*-814*	*-771*	*-860*	*-929*	*-882*	*-855*	*-966*	*-1,113*	*-1,188*
Other item, net[5]	**-159,141**	**-167,434**	**-182,793**	**-198,766**	**-207,293**	**-198,076**	**-229,955**	**-243,651**	**-257,053**
o/w: capital and reserves	-109,173	-121,655	-131,141	-140,594	-140,322	-144,564	-173,814	-193,050	-227,793

Source: FREN, NBS: Statistical Bulletin.

1) Unless otherwise indicated.

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

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

4) Household savings.

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

Table P-11. Serbia: National Bank of Serbia Balance Sheet, 2004–2006

	2004	2005				2006			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
					in millions of dinars, end of period [1]				
Foreign assets , net	**113,148**	**132,749**	**143,615**	**173,447**	**194,094**	**204,236**	**235,394**	**344,129**	**406,226**
Foreign assets, net (in euros)	***1,416***	***1,638***	***1,735***	***2,048***	***2,270***	***2,350***	***2,737***	***4,197***	***5,142***
Gross foreign reserves	248,376	274,137	304,386	362,216	424,844	465,497	549,529	648,946	715,118
Gross foreign reserves (in euros)	*3,109*	*3,382*	*3,677*	*4,276*	*4,969*	*5,357*	*6,390*	*7,914*	*9,052*
Gross foreign liabilities (-)	-135,228	-141,388	-160,771	-188,769	-230,750	-261,261	-314,135	-304,817	-308,892
Gross foreign liabilities (-) (in euros)	*-1,693*	*-1,744*	*-1,942*	*-2,229*	*-2,699*	*-3,006*	*-3,653*	*-3,717*	*-3,910*
o/w: fx deposits of commercial banks	-65,565	-71,063	-89,662	-106,865	-147,467	-173,371	-245,784	-256,325	-253,562
o/w: fx deposits of commercial banks (in euros)	*-821*	*-877*	*-1,083*	*-1,262*	*-1,725*	*-1,995*	*-2,858*	*-3,126*	*-3,210*
Net Domestic Assets (NDA)	**-35,895**	**-63,970**	**-71,980**	**-92,104**	**-99,741**	**-126,011**	**-146,374**	**-245,869**	**-272,302**
Domestic credits	-13,459	-37,295	-41,763	-58,665	-64,206	-87,578	-110,436	-220,997	-256,747
Net claims on government[2]	-15,648	-36,568	-25,594	-40,352	-48,936	-57,975	-56,993	-142,239	-116,587
Claims	22,407	22,123	17,524	16,901	16,511	14,919	14,656	14,472	14,891
o/w: other dinar credits	22,407	22,123	17,524	16,901	16,330	14,735	14,474	14,472	14,891
Deposits (-)	-38,055	-58,691	-43,118	-57,253	-65,447	-72,894	-71,649	-156,711	-131,478
Dinar deposits	-28,065	-40,603	-36,547	-42,861	-46,641	-51,430	-61,063	-57,213	-29,101
o/w: municipalities	-5,099	-10,358	-8,312	-10,064	-5,923	-11,991	-11,262	-11,428	-9,423
Fx deposits	-9,990	-18,088	-6,571	-14,392	-18,806	-21,464	-10,586	-99,498	-102,377
Fx deposits (in euros)	*-125*	*-223*	*-79*	*-170*	*-220*	*-247*	*-123*	*-1,213*	*-1,296*
Net claims on banks	1,747	-1,214	-16,782	-18,830	-15,875	-30,218	-53,912	-79,337	-141,353
Claims	1,747	1,992	825	974	954	869	2,069	827	497
o/w: other dinar credits	1,740	1,669	471	612	946	493	1,710	489	489
o/w: Fx credits	7	323	354	362	8	376	359	338	8
o/w: Fx credits (in euros)	*0*	*4*	*4*	*4*	*0*	*4*	*4*	*4*	*0*
Liabilities (NBS bills, repo transactions) (-)	0	-3,206	-17,607	-19,804	-16,829	-31,087	-55,981	-80,164	-141,850
Net claim on the rest of the economy	442	487	613	517	605	615	469	579	1,193
Claims	469	514	640	732	670	674	653	639	1,253
Dinar and fx credits	469	514	640	732	670	674	653	639	1,253
Liabilities (-)	-27	-27	-27	-215	-65	-59	-184	-60	-60
Dinar deposits	-27	-27	-27	-215	-65	-59	-184	-60	-60
Other items, net[3]	-22,436	-26,675	-30,217	-33,439	-35,535	-38,433	-35,938	-24,872	-15,555
Reserve money (H)	**77,257**	**68,780**	**71,635**	**81,342**	**94,353**	**78,226**	**89,019**	**98,263**	**133,924**
Currency in circulation	45,165	39,368	42,316	47,283	53,650	45,825	48,926	52,110	68,389
Commercial bank's reserves	32,092	29,412	29,319	34,059	40,703	32,401	40,093	46,153	65,535
Required reserves allocated	20,953	20,676	21,855	24,673	26,046	26,387	33,352	33,602	34,290
Excess reserves	11,139	8,736	7,464	9,386	14,657	6,014	6,741	12,551	31,245
Overnight deposits	6,858	4,924	3,034	4,564	7,604	-779	-58	3,897	20,968
Giro account and cash	4,281	3,812	4,430	4,822	7,053	6,793	6,799	8,654	10,277

Source: FREN, NBS: Statistical bulletin.

1) Unless otherwise indicated.

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

3) Includes: Other assets; Fx deposits of other financial institutions; Deposits of banks undergoing liquidation; Capital and reserves; and Other liabilities.

CIP - Katalogizacija u publikaciji Narodna biblioteka Srbije, Beograd

33(497.11)

QUARTERLY monitor of economic trends and policies in Serbia / Editor in Chief Pavle Petrović. - 2005, iss. 1 (january/july)- . - Belgrade (Kameni ka 6) : The Foundation for the Advancement of Economics, 2005- (Belgrade : Alta Nova). - 30 cm

Dostupno i na: http://www.fren.org.yu. - Tromesečno. - Ima izdanje na drugom jeziku: Kvartalni monitor ekonomskih trendova i politika u Srbiji = ISSN 1452-2624 ISSN 1452-2810 = Quarterly monitor of economic trends and policies in Serbia
COBISS.SR-ID 126940428