quarterly monitor

OF ECONOMIC TRENDS AND POLICIES IN SERBIA

ISSUE 3 • OCTOBER-DECEMBER 2005

Foundation for the Advancement of Economics

PUBLISHER
The Foundation for the Advancement of Economics
Kamenička 6, Belgrade
Serbia and Montenegro
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http://www.fren.org.yu

CIP - Katalogizacija u publikaciji Narodna biblioteka Srbije, Beograd

33

QUARTERLY monitor of economic trends and policies in Serbia / Editor in Chief Kori Udovički. - 2005, issue 1 (january/july)- . - Belgrade (Kamenička 6) : The Foundation for the Advancement of Economics, 2005- (Belgrade : Alta Nova). - 30 cm

Tromesečno. - Je 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

Our deepest gratitude goes to Fund for an Open Society-Serbia, The Royal Government of Netherlands and USAID, who supported both the publication of this issue and the research that underlies it.

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Analitical 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

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)

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

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

NBS – National Bank of Serbia

OECD – Organization for Economic Cooperation and Development

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

SEPC – Serbian Electric Power Company

SITC – Standard International Trade Classification

SME – Small and Medium Enterprise

VAT – Value Added Tax

WTI – West Texas International oil and oil products quotations

From the Editor

Viewed from a distance of a few months, Serbia's economy seems to have spent 2005 limbering up for a race. The year opened with the stumbles that usually come with the introduction of the VAT and the slowdown in privatization in 2004 possibly also providing stumbling blocks. By the fourth quarter, however, with the help of bank credit, burgeoning exports of a wide range of products, and accelerated privatization, the difficulties were left behind. Everything appears to indicate a new surge, and this time it cannot be ascribed to only a few major "culprits." It appears now that growth is from the roots.

The race may well turn out to be a marathon. However, if the populist economic policy that recently came to the fore is implemented, the economy will have breath enough only for a short sprint. Specifically, the Minister of Finance has announced a significant reduction of the fiscal burden on wages and salaries – from 73% to 60% - and the use of the expected privatization revenue of some one billion euros for public investments.

Such a policy, in particular the easing of the tax burden, would destroy years of effort creating conditions for steady and strong – *marathon* – economic growth. The macroeconomic outcome in 2005 shows that this is exactly the time when it is both *necessary* and *possible* to shift the focus of economic policy from macroeconomic stabilization to structural and institutional change. Necessary – because structural reform is the only way to curb inflation without seriously jeopardizing economic growth. Possible – because the current fiscal framework, coupled with the expected privatization revenues, leaves a margin for the risks and costs that accompany structural reform. All the announced policy would accomplish is to fan inflation to such an extent that only a new cycle of painful macroeconomic adjustments, including raising tax rates again, would bring it down to a tolerable level over the long term.

Without going into the motives for the announced fiscal policy, we point to *five misconceptions* on which it rests.

First, that the *economic reform has almost been completed*, as the Serbian Deputy Prime Minister is wont to say- not only in his own name, we believe. The changes that would ensure long-term development and uniform redistribution of the fruits of that development have hardly begun. Only those segments of reform that have (almost) taken Serbia from a corporate-socialist to a market-capitalist economy are near completion. But, as is known, not all capitalist economies are successful. The greatest risk to Serbia is that it remains a suburb of Europe, one that the young abandon, to return to in retirement.

Second, that *tax rates continue to be the biggest hindrance to business*. Quite to the contrary: thanks to the changes carried out and the accomplished level of legalization of the gray economy, the tax burden on the economy is today much more evenly distributed than four years ago, and the rates are among the lower rates in our region (South East Europe) and beyond (continental EU).[1] Effective fiscal collection is high, though not because of the high tax rates; it is the result of a specific tax structure and administration system, and it is these two that burden the economy. The need for easy and certain collection has over the past five years led to the establishment of one of the most regressive tax structures in the world, a highly protected inefficiency in the oil sector, and of a tax administration system that seriously hampers the conduct of business. Only when both the tax structure and administration are systemically changed – without reducing effective collection – should the issue of lowering rates be put on the agenda again.

The necessary systemic changes require an ability to fine-tune the work of institutions. Relieving the tax burden on the poor – the first step toward correcting the regressive structure – is the easier part of the job. Raising the tax burden on the wealthy is much harder, among other things because this category of the population has many more possibilities to avoid payment. If the effort is to succeed, in-depth changes must be made in how the tax administration works and its efficiency will have to be significantly upgraded. The analysis featured in the third article in the *Spotlight On* section indicates that Serbia could increase its fiscal revenue from oil products

1 Countries following the British tradition (UK, Ireland, Cyprus, Malta) and some countries that emerged in the territory of the former Soviet Union (Russia) have lower fiscal burdens than Serbia. In their cases, the low fiscal burden is possible because of the developed systems of private social security. In Russia, this system collapsed in the 1990s, and is currently being subsidized with revenue from oil and gas exports.

alone by about 300 mn euros annually (over 1,5% of GDP) without raising retail prices. This on condition that the state oil company is put into the hands of an able strategic buyer, that imports of oil products are liberalized, and that the tax collection rate does not decline.

Third, that *the VAT performed very strongly in 2005*, creating room and reason seriously to consider further reductions of the fiscal burden. In the *Review* and *Fiscal Policy* section of this *QM*, we point out that the good collection in 2005 was on the whole an illusion, affected by extraordinary factors. Hence, a very slight increase in real terms or even a drop in the VAT revenue may be anticipated this year. When the rising VAT-related debt of the government to the economy, and its obligation to pay the old debt to the people of Serbia are taken into account, there was no fiscal surplus in 2005. In fact, there was a deficit, and it was about 14 bn dinars higher than the one recorded in 2004.

Fourth – that *public investment was minor over the past few years because of the shortage of financing and, now that the state has more funds, they can be spent on investment without limit.* To recall, in four of the five preceding years, the government planned investments higher than what was actually realized. And in none of those years, with the possible exception of 2001, was lack of funding the reason. The failure was a double one: first, the capacity to realize investment was below plans, wishes and even project funding secured in principle; second, the reduction of investment compensated for the unplanned high growth of other fiscal expenditure – in order to neutralize their inflationary effects.

All government spending, including on investment, and all tax reductions have an inflationary effect. The key question, therefore, is how does the Minister plan to offset the inflationary effect of rising investment and tax reductions? The proposed reduction of the fiscal burden on salaries and wages would cut fiscal revenue by approximately 30 bn dinars, or 1.5% of GDP, while the growth of public investments by 1 bn euros would increase domestic demand by about 4.5% of GDP. If macroeconomic policy were to remain neutral with such a fiscal policy, monetary policy would have to limit credit expansion to one-third of what it was in 2005. There is no need to describe how damaging this would be, just when economic growth in the non-government sector has finally started to surge.

Another issue giving rise to concern is what would happen if such ambitious investment plans collided with the ability of the government to carry them out in a responsible way? Would the plans be implemented at any cost, as was the case with the government's program to cut civil service employment by 10% last year?[2] Or would the funds earmarked for investment be spent in less productive areas?

Fifth, that *the government must invest at any cost.* This view is based on two presumptions: that the level of overall investment in Serbia is exceptionally low so the government must step in to raise productivity in the country; that every investment by the government is a good investment. Neither of these is true. The second article in the *Spotlight On* section features the latest SBS data as well as FREN's estimate that total and public investments in Serbia are much higher (over 20% of GDP) than believed thus far (about 15%). In addition, not every investment is justified, especially if the results obtained are not in proportion to the amount invested. Furthermore, investments by the government threaten to crowd out the private sector, and this will certainly happen if the expansion of spending on investment is neutralized by monetary policy and not by the reduction of other fiscal expenditures.

The public enterprises are the "crown jewels" of Serbia's privatization. It is the government's responsibility to ensure that they are not spent, but rather transformed into another kind of wealth. The privatization revenue should be reinvested at a pace that allows for the design and implementation of good projects as well as for the compensation of the effects of this spending on demand and prices through other policy measures. In the meantime, the proceeds must be protected in an investment fund, and its use made conditional on budget co-financing. The latter is necessary to ensure that the use of privatization revenue for investment does not lead to an increase in current fiscal spending – as it could release the budget from the obligation to finance investment as much as it has up to now.

This government inherited from its predecessor a major acceleration of economic growth and revival of exports that were evident in the first months of its office. If it goes ahead with the announced policy, it will leave to its successor a legacy of spiralling inflation.

2 This program was implemented under strong pressure from the IFIs. The logic of the retrenchment program and ample anecdotal evidence suggest, however, that most of those laid-off left at a cost higher than keeping them in employment until retirement.

TRENDS

1. Review

The macroeconomic results of 2005 are indicative of both the consolidation of the achievements of five years of stabilization policy, and of the increasing need to deepen structural changes in the economy in order to protect those achievements. Though last year's growth was certainly below that recorded in 2004, it appears to have been more deeply rooted. The 2004 growth marked a departure from the difficulties of 2003, and was spearheaded by a handful of enterprises that were among the first to be privatized. After a poor beginning owing to the introduction of the VAT at the start of the year and the slowdown of privatization in 2004, 2005 saw increasing growth driven by exports of a widening range of products and a fresh wave of privatization, and supported by the dynamic credit activity of domestic and foreign sources of financing.

On the other hand, after leaping when the VAT was introduced, inflation stabilized at a high rate of approximately 17%. The contributing factors were the VAT, administrative adjustment of prices in the public services sector, energy prices and, above all, high demand. In spite of some efforts, economic policy failed to have a restrictive effect. Fiscal transactions affecting the liquidity of the economy recorded a deficit, similar to the one in 2004. What is important in the long run, however, is the fact that for the second consecutive year, the size of government, measured by the share of consolidated public expenditures in GDP, were reduced. It was only in Q4 that monetary policy started having an effect on the raising of interest rates, i.e. become effectively restrictive.

In spite of the relatively tighter monetary and fiscal policies, demand pressure intensified in Q4 autonomously. The rise in retail prices – core, those under administrative control, and agricultural - accelerated mildly over the quarter, and ended the year 17.7% up on December 2004. Speedier economic growth relative to Q3 was present across almost all the manufacturing and services sectors. Imports and total exports accelerated mildly, especially exports excluding bulky goods (iron and sugar). These trends were underpinned by the strong expansion of bank credit, in particular to enterprises. In order to finance the expansion, bank borrowing increased by as much as in the first three quarters combined, despite the raising of reserve requirements on foreign borrowing. The fiscal result was positive, partly for seasonal reasons and partly because of the major rise in the governments' VAT-related liabilities.

The world recorded generally high growth in 2005 for the second year running and, in most countries, this was accompanied by relatively low inflation in spite of the surging energy prices. Nonetheless, cutting energy costs is a major preoccupation worldwide. The second part of *Trends* discusses the widening gap between the developed and developing countries in terms of contribution to world growth.

In contrast to the world and due to the administrative capping of the retail prices of energy products, their impact on the retail price index was relatively minor in Serbia. But they did have an indirect effect through the prices of services under administrative control, in particular utilities. The latter gave the biggest contribution to the rise of inflation, both annualized and in Q4 (Box 1 in the third part of *Trends*). In addition to the effect of energy prices, the increase in utility prices probably also reflects structural factors. Core inflation in Q4, which FREN will be computing as of this issue of *QM*, rose from 11.8% in September to 13.5% in December, and there was also a hefty increase in the prices of agricultural products.

Production growth was uneven. After the relatively sharp drop in Q1, particularly in the industry and construction, recovery was mainly linear over the year, with the exception of agricultural production. In Q4, the industry continued the growth from Q3 and surpassed last year's level

in spite of the drop at the beginning of the year. Although the acceleration was particularly widespread, it was still weaker than the extraordinary growth recorded in Q4 2004. Hence, year-on-year comparison brings out a poorer picture, especially where production of investment goods is concerned. The high growth trend of services in the preceding period also continued, though it was probably weaker than reflected by the statistics. With its Q4 growth, the construction industry managed to make up for the steep fall at the beginning of the year and recorded positive growth at the annual level.

Foreign trade performed much better in 2005 than in the preceding year, not only because of the "shifting" of imports from 2005 to 2004 in anticipation of the introduction of the VAT in January 2005, but also because of positive underlying tendencies. At annual level, exports grew by more than 30% and imports, even after corrections for the VAT effect, rose about 10%, largely due to the hikes in energy prices. The corrected trade deficit remained virtually the same at annual level. It is particularly good news that the high growth rates of exports are steady and include an ever-increasing number of products. In Q4, when the effects of extraordinary factors are excluded, the underlying export growth was many times higher than the underlying import growth, which leads to a reduction of the deficit over the medium term. The export growth in Q4 as well as Q3 was marred by the poor performance of sugar, iron and steel, but other products did better than in the preceding quarters. It would appear, however, that the underlying trend of imports growth is accelerating mildly, as became evident in the first months of this year. In 2005, the balance of current transactions went back to the 2003 level (approximately 9% of GDP), but when the VAT effect is excluded, it was about two percentage points higher.

All of 2005, especially Q4, was characterized by a record growth of capital inflows (1390 mn euros in Q4 and 3644 mn over the year) and of the country's foreign currency reserves (690 mn euros in Q4 and 1627 mn over the year). The capital inflows consisted primarily of constantly increasing direct foreign borrowing by enterprises, which were joined in Q4 by the banking sector (543 mn euros). The inflow of foreign direct investments grew strongly over the year (1192 mn euros annualized), but slowed down in Q4 (236 mn euros).

At first glance, consolidation of past achievements and a relative reduction in the size of government seemed to have characterized 2005. A deeper analysis, however, indicates that the fiscal result of the year as a whole and its Q4 were not as successful as it initially appeared on the basis of unrefined official data. The government's unpaid VAT-related refunds and debt are increasing and, if this inflow is excluded, the balance was at best the same, and the liquidity effect of total fiscal transactions more expansive relative to 2004. The relatively mediocre performance of the VAT and a series of tax reduction measures taken by the government in 2004 and 2005 (the latter prompted by a mistaken impression that the VAT performance was very strong) reduced the share of public revenues in GDP by two percentage points (excluding the growth of the government's VAT-related liabilities). On the other hand, the rise in fiscal expenditures was curbed. The fact that this happened for two years running constitutes a major success. Nonetheless, caution should be exercised with regard to these conclusions since FREN was not in a position to eliminate all the inconsistencies in the presentation of official fiscal accounts.

After speeding up in Q2, annualized monetary expansion stabilized at slightly over 40%. Credit expansion was nominally even faster though similar to that in the previous year in real terms until Q4 when, owing to accelerated growth of credit to enterprises, the 12-month growth went up to 57% annualized. Monetary multiplication was triggered by banks' foreign borrowing whose conversion into dinars exerted constant pressure on monetary growth. The NBS endeavored to check the expansion with repo transactions and raising the reserve requirements on banks' foreign borrowing. Nonetheless, monetary policy was far less restrictive than perceived by the public, whose interest focuses on regulations governing retail loans. Up until the very end of the year, interest rates on repo operations did not reach a level that would to any meaningful extent entice banks to pull out of the credit market. At the year-end, the effective rate of reserve requirements was increased to about 31%, and the nominal rate on all foreign currency sources was equalized. We present a new table with details on the structure of the foreign currency

reserves of the country and the NBS, which shows that while their growth was in good part due to the increased reserve requirements, NBS foreign currency reserves rose also at record pace.

Interest rates on the financial markets reflected the growing demand for liquidity caused by the raising of the reserve requirements in November. But when the year is viewed as a whole, it is obvious that yields on FFCDs tended to drop, probably due to the pressure of the continuous inflow of capital from abroad and the improvement in the country's credit rating. The shares market grew in Q4 2005 and, according to cumulative figures, exceeded the value of Q4 2004. The most important factors contributing to the upward trend were the intensified trading in newly listed bank shares and the growth of the discontinuous segment.

As of the next issue, *QM* will be regularly monitoring trends relating to wages and employment. The first *Spotlight On:* article in this issue analyzes in detail the methodology used by the Bureau of Statistics in observing this area. This analysis brings out that the growth of registered wages, though real, was overestimated in the past.

Until recently low level of investment in the country was among the macroeconomic parameters which raised the most concern. The latest official data for 2004, based on an improved methodology, upholds earlier research conducted by CEVES which indicates that investment was 60% higher than previously believed. The second article in the *Spotlight On:* section features FREN's estimate of investment in the 2003-2005 period based on these sources.

And, finally, in the last article in the section, we put the spotlight on the Serbian Oil Company (NIS). In keeping with QM's aim to provide quantitative information of use to economic decision-makers, we measure NIS' performance against three alternative standards of efficiency, and find that its inefficiency costs Serbia at least 300 mn euros a year. This finding is of particular importance in view of the upcoming expiration of the decree banning import of oil products. In the context of the privatization of NIS, an extension of the Decree would de facto enable the new owners to turn this inefficiency loss into windfall profits for themselves.

2. International Environment

The world in 2005 generally recorded high growth and low inflation. The second year in a row the main difference was the high growth in oil prices, which turned conserving energy and securing future sources into a priority for most nations. In all regions, growth was driven by exports. The 2005 results are indicative of the narrowing of the gap between the developed and developing world with respect to their contribution to world growth.

Table T-1. World: GDP Growth and Inflation, 2004-2005

In %	real GDP						costs of living	
	in comparison to the previous year		in comparison to the previous year excl. seasonal effect				in comparison to the previous year	
	2004	2005	Q1 2005	Q2 2005	Q3 2005	Q4 2005	Q3 2005	Q4 2005
World total	**3.8**	**3,0**	**3.5**	**3.3**	**3.0**	**3.0**	**2.5**	**2.9**
USA	4.2	3.5	3.8	3.3	4.1	1.6	3.8	3.7
Canada	2.9	2.9	2.1	3.4	3.5	2.5	2.6	2.3
Japan	2.6	2.8	5.8	5.0	1.4	5.5	-0.3	-0.5
China	9.5	9.9	9.5	8.3	11.4	11.5	1.3	1.4
India	6.9	8.0	6.9	10.4	7.3	9.8	3.7	5.0
Euro area	1.8	1.4	1.5	1.6	2.7	1.0	2.3	2.3
Germany	1.1	1.1	3.0	0.9	2.5	0.0	2.1	2.2
UK	3.2	2.2	1.0	1.9	2.1	2.3	2.4	2.1
Italy	1.0	0.1	-2.1	3.0	1.1	0.0	2.2	2.5
Russia	7.2	6.4	3.2	9.9	7.5	10.0	12.5	11.2
Bulgaria	5.6	6.0	…	6.2	3.4	…	3.7	…
Romania	8.3	3.9	…	…	…	…	8.9	…
Hungary	4.6	4.2	3.6	4.7	4.4	4.6	3.7	3.2
Croatia	3.8	…	…	5.1	5.5	5.6	…	…
Macedonia	4.1	3.8	…	4.7	3.7	…	0.8	0.5
Bosnia and Herzegovina	5.0	…	…	…	…	…	3.8	…

Source: JPMorgan, Central Bank of Bulgaria (www.bnb.bg), Central Bank of Republic of Macedonia (www.nbrm.gov.mk) and Central Bank of Croatia (www.hnb.hr).

US growth below predictions, with no slow down in inflation.

United States of America. GDP growth in the fourth quarter was up 1.6% on the third (annualized, seasonally adjusted), an unpleasant surprise since the expectations were 2.8%. This was due to lower spending (consumer durables went down by 17.5% and military spending was cut by 2.4%) as well as higher energy costs compared to the previous quarter. Total GDP growth in 2005 was 3.5%. A change was noticeable in the structure of economic growth in the fourth quarter: consumer demand fell whereas corporate and export demand increased. On the other hand, fourth quarter inflation was 3.7% (annual level) slightly down on the 3.8% recorded in the third. A concerning fact, however, was the rise of core inflation to 2.2% at an annual level (1.4% in the previous quarter), probably because of the impact of higher oil prices on other prices. At the beginning of the year, the Federal Reserve raised the reference rate to 4.5%, continuing to use this instrument to control inflation. The question is, however, how "sensitive" the US economy is and what effects the change in the interest rate will produce. There have been positive signals from the labor market: in December, the unemployment rate was 4.9%, and the rate of new unemployment was lower than in September[1].

European countries with freer movement of labor record faster growth.

European Union. The relatively good economic results in 2005 gave the European Central Bank reason to consider further raising interest rates to offset inflation, which in the past year exceeded the annual target level of 2%. The ECB estimates that oil prices will continue to rise and affect the general level of prices. In addition, the negative real interest rates in the past two years have

1 www.bea.gov/bea/newsrelarchive/2006

stimulated demand and driven economic growth. The ECB is therefore attentively following the Munich Ifo Institute's reports on corporate and consumer expectations regarding future economic trends. It is, however, concerned about the increase in the household debt (9.4% in 2005). Excessive growth of M2 aggregate could further raise property prices, just as it did prices on the capital market and those of real estate. Indeed, if real estate prices were included in the CPI index, inflation would be half a percentage point higher. Provided that the stable economic growth is confirmed in the first quarter of 2006, the ECB may be expected to continue raising the reference rate, which is predicted to reach 3%[2]. In the long run, the free flow of capital, labor, goods and services is what will affect the prosperity of the EU. Fearing an invasion of cheaper workers from the East, 12 out of the 15 "old" EU member states have imposed temporary restrictions on the free movement of labor. In February, however, the European Commission announced that countries that threw open their labor markets (UK, Ireland and Sweden) recorded faster growth and a declining jobless rate than other "old" members. An example of the obstacles being put to the free flow of capital was the French government's protectionist measures to prevent the takeover of the big steel manufacturer Arcelor, which employs some 30,000 people in France. Trade probably functions best on European soil, but Europe is up in arms against competition from other continents and is even waging a textile war with China[3].

FDIs in Eastern Europe reached 55 mn dollars in 2005.

Eastern Europe. The average growth rate of Eastern Europe in 2005 was 5%. In the previous year, the Central and East European region attracted 55 bn dollars in foreign direct investments, which was 50% up on 2004. The largest were in the Czech Republic and Russia. One of the consequences of the rise in FDIs in the region is high productivity growth - from 4.1% in 2004 to 6.2% in 2005[4]. Another reason for the growth of investments is the vicinity of the EU market and trade benefits, which, unlike China and India for example, this region enjoys. The third is its qualified but cheaper labor force, which encouraged companies such as DHL, Lufthansa and Siemens to transfer their major data processing operations and service call centers to Eastern Europe. Skype, a company that develops software enabling free or very cheap Internet connections, has set up an R&D center in Estonia.[5] Finally, an increase in demand, or spending, is a factor that will affect the stability of the region over the long term. Telecommunications companies, banks, and retail chains, where the service level and market potential utilization are rather low, made hefty investments: in the middle of last year Vodafon acquired the majority packages of the Romanian MobiFon and Czech Oskar, while Telekom Austria has been the owner of MobilTel, the largest cellular phone operator in Bulgaria, for over a year. West European banks paid large amounts to enter the market, a portion of which found its way to Serbia. Tesco recorded booming sales after opening supermarkets in Hungary, Slovakia, the Czech Republic and Poland[6].

China records double-digit growth for the third year in a row.

Asia. Based on the 2005 results, it appears that the sun has finally risen again over the Far East. For the third year in a row, China recorded double-digit growth in spite of predictions of a drop in 2005. Exports remain the mainstay of growth, but are slowing down due to domestic demand. In the fourth quarter, China had tough negotiation on customs tariffs with the USA and EU, and its exports will likely slow down further because of the very high tariffs. The Chinese central bank has decreased its purchase of dollars, since the fall in exports has reduced the pressures for appreciation of the Yuan. In order to ensure future growth, China was actively engaged in negotiations on securing energy sources in the last quarter of 2005. It first acquired oil fields in Nigeria, then obtained "privileged status" in the delivery of Saudi oil, and has plans to build 30 nuclear power plants over the next 15 years[7].

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http://news.yahoo.com/s/nm/20060125/bs_nm/economy_china_dc
Marsha Freeman, China's 21st- century nuclear energy plan, Executive Intelligence Review, February 2005.

According to *The Economist*, India has entered the third stage of its export boom in information technologies and in business process outsourcing. Estimates are that the sectors will be bringing in 60 bn dollars a year by 2010. In the last quarter of 2005 Microsoft, Intel and Cisco Systems announced investments of 1.7, 1.0 and 1.1 bn dollars, respectively, in existing R&D centers in India over the next five years. Furthermore, the three biggest IT companies in India hire 1,000 new workers each month.[8] The available human resources are also conducive to the development of the pharmaceutical industry, especially its R&D sector: India turns out 122,000 chemists every year, and the costs of R&D are eight times lower than in the West. Many leading pharmaceutical companies have transferred their R&D operations to research laboratories in India. Since their countries are now experiencing a shortage of experts and in view of the rising costs of research and the shorter product life cycle, pharmaceutical companies are moving their operations to "cheaper" countries. Besides the highly qualified work force, the developed IT and intellectual property legislation that India has enacted make it a very attractive place for the development of new pharmaceuticals.[9]

Finally a good year for Japan – and the future looks brighter too.

In the fourth quarter Japan had a year-on-year GDP growth of 4.8% and its industrial output rose 11% at the annual level. Total GDP growth in 2005 was 2.8% – higher than in all the G7 countries with the exception of the USA[10]. After 15 years of alternating recession and slow growth, this was great news. Spending increased from quarter to quarter in 2005, reaching 3.2% at the annual level for the first time since 1996. As a result, Japan's growth became less dependent on exports. The end of deflation in November and December helped real interest rates to fall and led to a further rise in demand. At the same time, a balance was established between job vacancies and job-seekers, a situation unheard of since 1992.[11]

BOX 1: The role of developing countries in the world economy is gaining importance

Developing countries accounted for half the global economic growth in 2005.

According to the latest estimates of *The Economist*, the contribution of the developing countries to overall economic growth in 2005 was equal to that of the developed countries.[1] The research brought out three conclusions. First, in 2005 the developing countries produced a little over half of the world's output measured in purchasing power units. Second, developing countries contributed over 50% to the world's GDP growth, measured in current dollar prices. GDP growth of all the developing countries in 2005 was 1,600 bn dollars (of which one-fifth was the growth of China and India) compared to the developed countries' 1,400 bn dollars. Third, all 32 developing countries included in the research had positive growth rates in both 2004 and 2005. In the last 30 years, at least one of the observed countries had a financial crisis or a recession every year. The average GDP growth of the developing countries was 6% as against 2.4% of the developed countries. From 20% in 1970, the developing countries' share in world exports increased to 42% in 2005. Foreign direct investments were 358 bn dollars last year, and these countries also own two-thirds of the world's foreign currency reserves. Their share in oil consumption is 47%.[2]

Their growth is now on much sounder footing.

These results are a product of reforms, doing business in a market-oriented way, and opening up of trade and investments. The picture of the economies of most developing countries is now much healthier: inflation is under better control due to restrictive monetary and fiscal policies, flexible exchange rates and large foreign currency reserves. Many of these countries have balance of payments surpluses. And, unlike the previous booms, their development is in good part based on the increase in domestic savings – the foreign debt/exports ratio has been reduced from 174% in 1982 to 82% in 2005.

1 Coming of age, *The Economist*, 19 January 2006, available at: http://www.economist.com/opinion/displaystory.cfm?story_id=5411977
2 Climbing back, *The Economist*, 19 January 2006, available at: http://www.economist.com/opinion/displaystory.cfm?story_id=5420756

Saudi King Abdullah Visits China to Discuss Energy Security, 22 January 2006, available at: http://news.morningstar.com
8 The next wave, *The Economist*, 14 December 2005
9 Good chemistry, The Economist, 2 February 2006, available at: http://www.economist.com/displaystory.cfm?story_id=5476754
10 Picking itself up, The Economist, 23 February 2006, available at: http://www.economist.com/displayStory.cfm?Story_id=5555870
11 Testing all engines, The Economist, 2 February 2006, available at: http://www.economist.com/displaystory.cfm?story_id=E1_VQSQJGP

Favorable influences in their surroundings also helped the fast growth of the developing countries. First, the rise in raw materials prices spurred the growth of the economies of Russia, Brazil and South Africa, to name a few. Second, low interest rates decreased their foreign debt, which was important especially for South America whose debt is twice as large as its exports. Finally, there has been a major increase in demand for US imports in the developing countries. All this, however, is not sustainable over the long term. Interest rates are already rising, and the high oil prices have considerably constrained US spending.

Globally, the price of labor is falling but productivity is rising.

The growth in the developing world invigorates growth in the developed countries: half the exports of the US, Japan and the EU go to the developing countries, and are increasing twice as fast as exports among the developed nations themselves. Globalization has brought about a change in the relative prices of raw materials and finished products and a consequent redistribution of income. With the introduction of market economies in the countries of the former Soviet Union, China and India, the global labor market has doubled in size, making capital a relatively scarce resource. This caused the price of labor to fall, while the profits of companies in the developed countries accounted for a large share of the national income. The fall in the price of labor was partially compensated by lower consumer prices. Owing to multinational companies outsourcing their operations to the developing countries and application of the economy of scale, consumer prices decreased on the global level. Furthermore, competition from the developing countries should help to make the labor and finished products markets more flexible, which could accelerate modernization and a shift to new industries and services. Fast growth in the developing countries can be credited also to their adoption of the developed countries' technologies. The latter will, however, have to work hard on developing new technologies if they are to retain their comparative advantage.

Developing countries may expect relatively high growth to continue.

It is an economic certainty that in the years ahead at least some of the observed developing countries will fall into stagnation. But relatively high growth rates can still be expected in all the developing countries over the long term.

3. Prices and the Exchange Rate

Retail prices continued rising in Q4 2005 at the fast pace characteristic for the whole year, with inflation reaching 17.7% at year-end. The highest increase in Q4 was recorded by agricultural products. Looking at the year, the biggest contribution to inflation came from public services whose prices are under administrative control, chiefly utilities, as a result of rising energy prices. The first two months of 2006 saw a slowdown, though prices are still driven by non-core inflation.

2005 was a year of high inflation.

After slowing briefly in September, retail prices continued rising sharply in Q4, and were up 5.2% on Q3. The year ended with an average inflation rate of 16.5%, and end-period inflation rate of 17.7% (Table T-2). These figures show that inflation was one of the main problems in an otherwise solid year according to other indicators, and that it will have to be a top priority of economic policy in 2006.

Table T-2. Serbia: Retail Price Index (RPI), 2001-2006

	RPI			RPI components				
				GOODS	Agricultural products	Food	Non-food	SERVICES
	Dec 2002=100	y-o-y index	cumulative index1)	cumulative index[1)]				
				annual indices[2)]				
2001	76.8	194.3	140.6	132.3	127.4	133.1	135.0	175.3
2002	93.2	121.4	114.8	109.4	113.8	98.8	114.1	133.0
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
				quarterly indices[2)]				
2003								
March	101.8	114.1	101.8	100.4	104.6	99.1	100.5	105.8
June	103.7	114.2	103.7	101.9	118.0	99.0	101.2	108.8
September	105.6	110.2	105.6	104.4	90.1	101.1	106.9	109.0
December	107.8	107.8	107.8	106.6	93.6	106.0	107.8	111.1
2004								
March	109.7	107.8	101.8	101.0	105.1	101.6	100.4	103.9
June	113.3	109.3	105.1	105.1	125.6	104.6	103.8	105.3
September	117.6	111.4	109.2	109.4	105.7	110.7	109.3	108.5
December	122.6	113.7	113.7	112.8	108.1	113.9	113.2	116.1
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
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

At 17.7% inflation is back at the 2002 level.

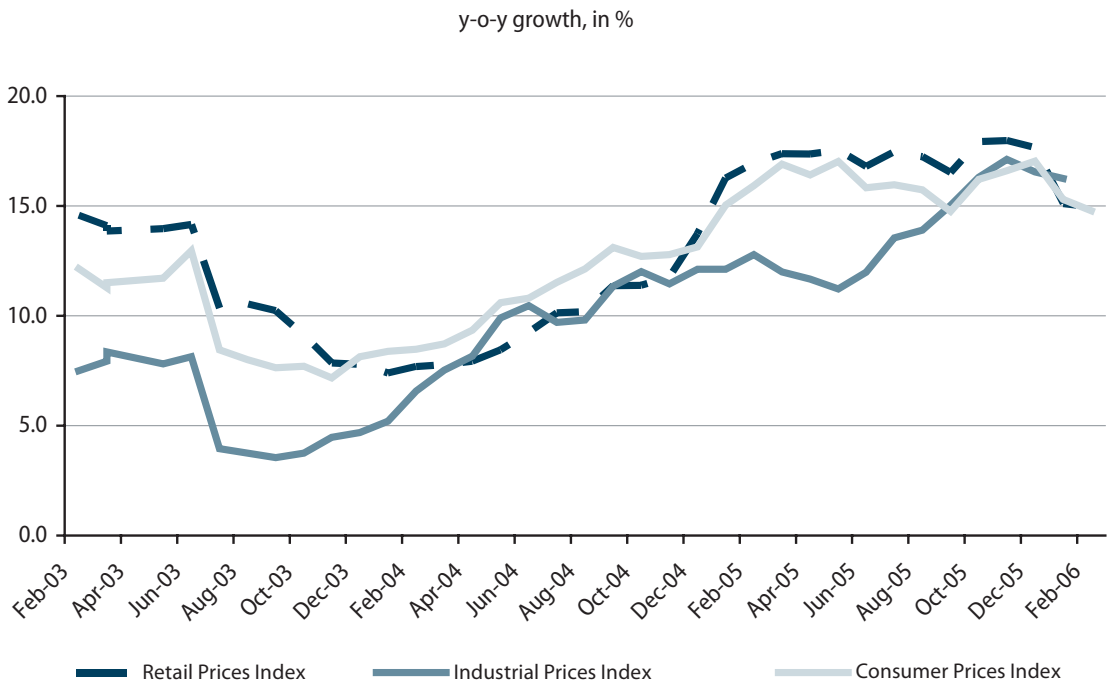
The slowdown in early 2006 seems exactly to shake off the VAT effect.

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

The Consumer Prices Index went up in Q4 by 5.2% compared to Q3, and totaled 17.0% in 2005 (Graph T-1).

Inflation high again in all of Q4 and all indices converges.

Graph T-1. Serbia: Selected Price Indices, 2003-2006



Source: Table P-2. in Analytical Appendix.

FREN forms its own index of core inflation...

For purposes of analysis and assuming divergent behavior, the goods and services in the retail price index were divided into several groups. In forming FREN's index of core retail prices, it was essential to include all the prices contained in the retail price index with the exception of agricultural products, energy, and services with administrative price controls. These three groups of excluded products are considered separately and comprise: *energy* – electricity, fuel, liquid fuels and lubricants sold in retail (which usually excludes heating oil); *services whose prices are under administrative control* – utilities, education and culture, transport, telecom services, and social services; *agricultural products* – only agricultural products in their original form, i.e. fresh fruit and vegetables, fresh fish and eggs. The core prices are grouped as follows: *beverages and tobacco, industrial food products, industrial non-food products, and services whose prices are freely formed* (crafts, personal, financial and other services).

...and the 12 months from July 2002 to June 2003 were taken as the base period.

For the base period of our analysis we took the 12 months from July 2002 to June 2003. Even though prices were not completely adjusted by then, we nonetheless consider it a good choice as, at the time, the government was endeavoring to establish a balance in the relative price ratios after a time in which many products and services were subsidized. Also, enough time had passed since the main price liberalization in late 2000, after which it appears that administrative control of prices was resorted to more frequently. The results of this analysis are presented in Tables T-3 and T-4.

Table T-3. Serbia: Retail Prices, 2002-2006

	Total	Core inflation	Agricultural products	Beverages and tobacco	Energy	Food	Non-food	Services w/ market-set prices	Services w/ administered prices	Public utilities
					base indices[1]					
2002										
December	100.4	99.6	98.9	100.1	101.0	99.8	99.9	96.7	102.7	102.8
2003										
March	102.1	100.7	105.6	101.2	100.7	98.9	100.9	106.1	106.7	108.7
June	104.0	102.1	120.3	106.4	100.3	98.5	102.3	108.1	109.9	115.5
September	105.4	103.0	90.7	107.6	110.0	100.6	103.0	105.5	111.4	116.3
December	107.6	105.6	94.5	109.6	109.9	105.0	104.8	106.5	114.2	123.3
2004										
March	109.5	107.2	100.0	110.3	109.7	106.6	105.7	112.1	118.3	133.5
June	112.8	109.8	119.4	114.4	114.1	109.4	107.8	114.3	119.5	135.5
September	116.4	114.2	95.0	118.4	123.7	116.3	109.5	121.8	120.5	137.0
December	120.6	117.4	97.7	120.5	128.8	120.3	112.7	123.9	127.1	138.1
2005										
March	126.7	122.2	112.4	124.9	131.3	126.2	115.9	132.6	139.0	165.0
June	130.2	125.1	144.5	126.6	132.1	128.9	119.6	134.1	141.6	168.6
September	134.9	127.7	116.6	127.6	149.0	132.5	121.3	139.3	147.5	178.2
December	141.9	133.3	132.9	137.1	151.2	139.4	125.4	141.4	161.3	200.3
2006										
January	142.5	133.9	137.7	137.1	151.2	140.5	125.7	141.8	162.0	200.8

Source: SBS.
1) Base index: average of period June 2002-June 2003.

Services w/ administratively controlled prices are recording the fastest rise.

Core inflation is slower than total inflation.

Concern about the high inflation rate is somewhat eased by the movement of core inflation, which is rising at a slower pace than total inflation. Core inflation (described in the previous paragraph) in Q4 was 4.4% relative to Q3, and 13.5% in December 2005 relative to December 2004. Services whose prices are under administrative control, especially utilities, accounted for a major portion of the price increases. A more detailed analysis of their behavior is given in Box 1.

The seasonally usual rise in prices of agricultural products is unusually steep.

In Q4, prices of agricultural products recorded the highest rise - 14.1%. It would appear that this was not the usual seasonal behavior for, in the past two years, the increase was much milder in Q4. These prices continued to rise sharply in January and February 2006.

Table T-4. Serbia: RPI Components - Index Growth Contribution

	weights in 2005	y-o-y growth contribution, in %				
		2004	2005			
		Dec	Mar	June	Sep	Dec
Total inflation	**10,000**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Non-core inflation	4,195	46.2	48.2	47.5	57.0	55.6
Agricultural products	309	0.9	2.4	4.2	4.4	6.3
Energy[1]	1,837	26.2	23.0	18.7	23.6	18.1
Services w/ administered prices	2,049	19.2	22.8	24.5	29.0	31.2
Public utilities	771	7.7	11.6	12.2	14.6	19.7
Core inflation	5,805	53.8	51.8	52.5	43.0	44.5
Beverages and tobacco	816	6.8	6.9	5.7	4.0	6.4
Food	1,999	24.2	23.4	23.2	17.5	18.0
Non-food[2]	2,418	15.2	14.8	17.2	16.3	15.5
Services w/ market-set prices	572	7.8	6.7	6.4	5.2	4.6

Source: SBS.
1) Consists of: liquid fuels and lubricants, and light and fuel.
2) Excluding liquid fuels and lubricants, and light and fuel.

The contribution of non-core inflation to total inflation rose throughout 2005.

Box 1: Effect of World Oil Prices on Retail Price Index

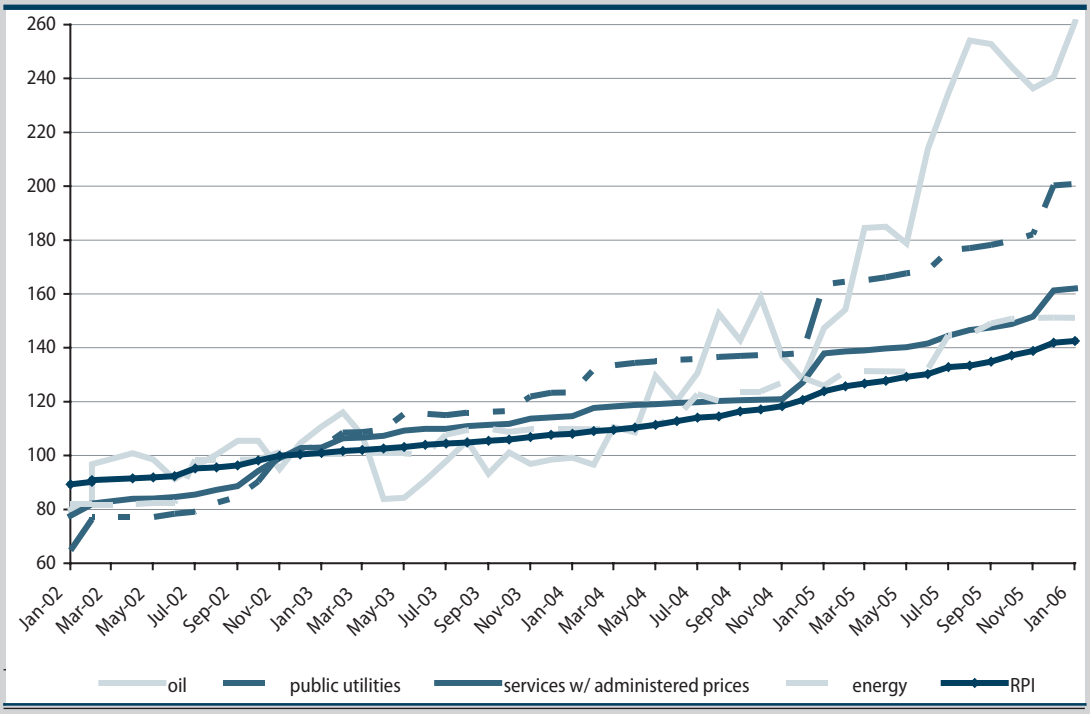
Energy prices in Serbia do not accompany the world trend.

Oil prices on the world market surged in 2005. The average monthly price of Ural was up 98% in August compared to December 2004 and, after dipping slightly at the beginning of fall, ended 87% higher in December 2005 relative to December 2004. The prices in Serbia, however, did not conform to this trend. Graph T-2 shows the movement of world oil prices[1] and energy retail prices in Serbia. The energy group comprises two components of the retail price index: *electricity and fuel*, and *liquid fuels and lubricants* (including gasoline). While oil prices in the world rose 87% from the beginning to the end of the year, energy prices in Serbia in the same period increased only 17.4% (lighting and fuel by 12.0% and liquid fuels and lubricants by 23.1%). A smaller part of the difference can be ascribed to the lowering of the excise tax on oil products in mid-2005 (retail prices of gasoline would have been some 4-5% higher had the tax had remained unchanged), but the rest is the outcome of administrative price controls.

Unrealistically low prices of energy erode efficiency in the long run.

Keeping energy prices unrealistically low is the way into a vicious circle of misleading the economy and consumers (or voters), which in turn encourages the economy to spend more and more of these resources with the support of a complex system of overt and covert subsidies. The subsidies, i.e. the difference to the full price of energy products on the world market, are paid by the Serbian economy. But the consumers are unaware of this and are not cutting consumption in line with the real cost. In fact, they are for all practical purposes stimulated to act irrationally where their costs are concerned. In this way, the energy (and overall) efficiency of the economy is being eroded. Sooner or later, domestic energy prices will have to match those in the world, unless the state intends to subsidize them indefinitely at the expense of the citizenry. Manufacturers who were forced to streamline their production processes and adjust to high energy prices will suddenly become more competitive than our manufacturers, and our problem will escalate to proportions that could have been avoided had it been tackled immediately.

Graph T-2: World Oil Prices and Selected RPI Components in Serbia, 2002-2006



Source: SBS, www.tonto.eia.doe.gov/dnav/pet/pet_pri_wco_k_w.htm

Utility prices contributed significantly to high inflation…

Throughout 2005, utility prices gave the single biggest contribution to the high inflation, owing to these enterprises hiking their prices by as much as 45.1%. Their share in the retail price index is 7.7%, and contribution to the total price increase almost 20% (other services whose prices are under administrative control also gave a disproportionately large contribution to the overall price increase in 2005). What is often not taken into account, however, is the

1 The average monthly Ural oil price is used and, for the base period, the 12-m average from from July 2002 to June 2003.

impact of the oil price trends on these services. Graph T-2 therefore shows the movement of utility prices (and administratively controlled prices in general).

In early 2002, prices of services that are administratively controlled, especially utilities, were considerably below the level of other prices. Since then, they have been rising more rapidly than total inflation, partly as the result of efforts to catch up with other prices.

...but their rise largely reflects the increase in oil prices.

Another major contributing factor is the rising oil prices. Unlike the retail prices of liquid fuels, the purchase price of heating oil was far more in line with world prices. At the start of the current heating season (October 2005), heating oil was up 72% on the previous year, and the purchase price of gas was 68% higher. When this is taken into account, the rise in utility prices no longer appears to be so drastic and unjustified.

Local utilities should be properly regulated.

A proportion of the rises can certainly be attributed to the monopolistic position of local public utility companies and, unlike oil prices, this is a controllable factor. In the efforts to reduce inflation in 2006, one of the key issues will be balancing out prices and service levels of local public utility companies. As market mechanisms do not exist to force these companies to be more competitive and efficient, regulatory bodies must step in. The question is which institution/mechanism should perform this function until the Energy Regulatory Agency becomes operational. In any event, arbitrary government intervention in the prices of local services is no better than a monopoly (this is also discussed in Spotlight on 3 text).

Early 2006, non-core prices drive inflation again.

The inflation rate slowed down in the first two months of 2006 and was driven for the most part by non-core inflation. In January, prices were up 0.4% on the previous month, and up 15.1% relative to January 2005. The biggest contribution to the rise came from agricultural products, followed by milk. A somewhat higher increase in prices was registered in February - 1.5% compared to the previous month, or 15.0% relative to February last year. Two-thirds of this rise can be attributed to energy prices.

Expected inflation in 2006 is much lower.

Two shocks that boosted prices in 2005 probably will not occur in 2006: the introduction of VAT (by now relative prices have mostly adjusted to this effect) and the hikes in oil prices (the expectation is that oil will not go up drastically and the prices even seem set to drop slightly by the end of the year). It also appears that core inflation is decelerating. All this indicates that total inflation in 2006 may be much lower than in 2005. However, since prices of industrial non-food products have been rising for quite some time at a much slower rate than others, they can be expected to accelerate in order to catch up with other prices. This would cause a higher than desired overall increase in prices.

Depreciation decelerated in Q4 - in December the dinar appreciated in nominal terms.

In Q4, nominal depreciation was slowed down by the exchange rate, especially in December when a nominal appreciation of 0.2% relative to the previous month was recorded. This was a change compared to previous years when depreciation usually accelerated in the last month. The December appreciation was probably related to the large inflow of capital at the year-end: banks' borrowing abroad reached 630 mn euros in Q4, more than in the previous nine months combined (471 mn euros). Other capital inflows were also significant.[1] In all, the nominal depreciation of the exchange rate in 2005 was 9.3%, and real appreciation 3.1% (Table T-5 and Graph T-3).
At the beginning of 2006, the dinar nominally depreciated again, but somewhat more slowly than early last year. In February 2006, nominal depreciation was 1.6% compared to December 2005.

1 More on these issues in the articles on the balance of payments and monetary flows and policies.

Table T-5. Serbia: Euro/Dinar Exchange Rate, 2001-2006

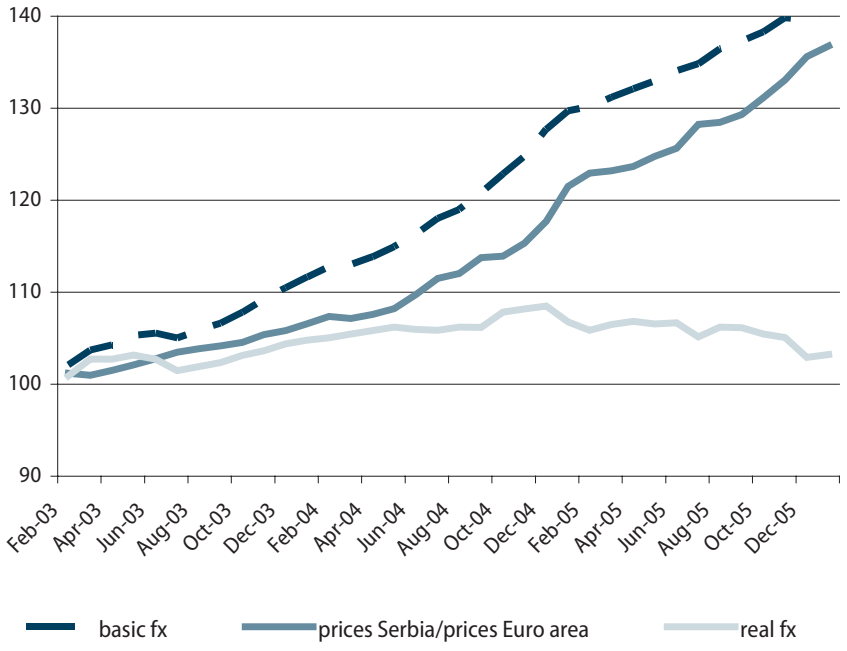
	Nominal				Real			USD/EURO rate
	exchange rate (FX)[1]	base index[2] (Dec 2002=100)	y-o-y index[3]	cumulative index[4]	real FX[5] (Dec 2002=100)	y-o-y index[3]	cumulative index[4]	
				annual exchange rate[4]				
2001	59.4929	96.6	116.5	100.4	122.2	61.2	72.7	0.8920
2002	60.6763	98.6	102.0	102.8	104.8	85.7	91.5	0.9397
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
				monthly exchange rate[4]				
2003								
March	63.8374	103.7	106.1	103.7	102.7	95.1	102.7	1.0743
June	64.9799	105.6	107.3	105.6	102.7	95.6	102.7	1.1663
September	65.6234	106.6	107.7	106.6	102.4	99.7	102.4	1.1175
December	68.0011	110.5	110.5	110.5	104.4	104.4	104.4	1.2180
2004								
March	69.5546	113.0	109.0	102.3	105.5	102.7	101.0	1.2274
June	71.5949	116.3	110.2	105.3	106.0	103.2	101.5	1.2200
September	74.3674	120.8	113.3	109.4	106.2	103.7	101.7	1.2186
December	78.6200	127.7	115.6	115.6	108.5	103.9	103.9	1.3442
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								
January	86.9033	141.2	108.8	101.2	103.2	96.7	100.3	1.2122
February	87.2558	141.8	108.9	101.6	-	-	-	1.1960

Real exchange rate strongly appreciated in Q4…

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) See footnote 1 in Table T-2.
5) Included Euro area inflation. Index calculation: RE=(NE/p) x p*, where:
RE - real fx index; NE - nominal fx index; p - Serbia RPI index; p* - Euro area CPI index.

Graph T-3. Nominal and Real Dinar/Euro Exchange Rate, 2003-2006[1]

…and stabilized slightly above the 2003 average.



Source: Table P-3. in Analytical Appendix.
1) See definition of real fx in Table T-5.

4. Economic Growth

Overall, 2005 was a year of solid growth – officially around 6% (the time figure is probably somewhat lower) – although considerably below 2004. Growth in almost all sectors accelerated in the last quarter, though it remained below the surge recorded in Q4 2004. Hence the year-on-year comparisons show a less favorable picture, especially where manufacture of investment goods is concerned. Industry continued its Q3 growth, surpassing last year's production level despite the sharp decline at the beginning of the year. Services continued the already high growth from the preceding period, but probably less than what the statistics show. With the rise in construction activity in Q4, the sector was able to make up for the steep decline at the beginning of the year and record positive annual growth.

Gross Domestic Product

Based on SBS methodology, QM estimates Q4 2005 GDP growth at 6.3 %.

With reservations as to the methodology and data of the Serbian Bureau of Statistics, *QM* estimates Q4 GDP up 6.3% relative to Q4 2004. The data continues to show unlikely divergent tendencies in different sectors: at one end are the more lethargic agriculture, industry and construction sectors, and on the other the vibrant transport, financial intermediation and commerce with double-digit growth. The trend of their gradual convergence continued in Q4, resulting in slightly higher GDP growth.

While the growth of the material production, especially construction, was probably higher than reflected by the statistics, the tendency toward acceleration in the second half of the year, and especially in Q4, was probably real. As regards the real growth rate of services, it is hard at present to say anything with certainty except that the very high transport services growth indicator (25%) is to a large extent a result of the improbably high growth rate of PTT services. The figure on the recovery of agricultural production is also possible as it is primarily based on the good corn and sugar beet crops. Additional ground for optimism is the fact that the 6.3% growth in Q4 2005 was measured relative to Q4 2004, when many sectors recorded heightened activity due to the introduction in January 2005 of value added tax. But, because of the different methods used, the annual GDP calculation could be at odds with the quarterly estimates of the sectors.

Table T-6. Serbia: GDP in Constant 2002 Prices[1], 2003-2005

	y-o-y indices							base index	share in GDP
	2003	2004	2005				2005/2004[2]	2005/2001[2]	2004
			Q1	Q2	Q3	Q4[2]			
Total	102.4	109.3	105.3	106.8	105.6	106.3	106.0	124.1	100.0
Taxes minus subsidies	109.5	109.3	115.3	110.4	108.1	107.3	109.9	168.1	17.2
VA at basic prices	101.1	109.4	103.3	106.1	105.1	106.1	105.2	117.5	82.8
Agriculture	93.0	119.0	97.1	104.4	91.3	103.1	98.8	105.9	15.7
Manufacturing	94.0	108.8	92.9	96.4	105.3	101.7	99.3	98.7	20.0
Construction	110.8	103.5	79.5	92.7	95.9	101.6	93.4	99.2	4.3
Transport	109.5	115.6	119.7	122.4	123.4	124.5	122.6	158.9	10.0
Wholesale and retail trade	111.5	117.0	121.0	121.6	115.5	111.9	117.0	175.5	10.1
Financial intermediation	109.0	109.8	115.4	116.3	117.2	118.3	116.9	160.0	7.5
Other	101.7	101.3	101.3	101.7	101.7	99.8	101.1	105.4	32.4

In Q4 2005 GDP growth accelerated.

Source: SBS.
1) In real dinars, 2002=100.
2) QM estimate.

Industrial production

Solid growth of industrial production in Q3 and Q4.

In Q4 2005 industrial production grew 4.4% compared to the same period in 2004, reaching an annual growth rate of 0.6%. Two facts must be kept in mind when assessing the importance of this result: first, industrial production rose at a very high rate in 2004 and second, a drop was predicted in Q4 in view of the high growth in the same period of 2004. Over the whole year, the growth of industrial production was based on the good performance of the electric power, gas and water sector (up 6.9% in 2005), which accounts for just under one-fifth of all industrial production (Table T-7). On the other hand, the manufacturing industry, which has the largest share in industrial production, recorded an annual drop of 0.8%.

Table T-7. Serbia: Industrial Production Growth, 2003-2005

	y-o-y indices							base index	share
			2005						
	2003	2004	Q1	Q2	Q3	Q4	total	2005/2001	2004
Total	**97.0**	**107.2**	**96.9**	**98.4**	**103.4**	**104.4**	**100.6**	**109.9**	**100.0**
Mining and quarrying	100.8	100.3	96.8	100.9	104.6	108.1	102.0	106.6	6.8
Manufacturing	95.4	109.7	94.5	95.9	103.9	102.5	99.2	109.5	74.3
Electricity, gas and water supply	102.1	100.4	105.8	112.3	101.0	108.4	106.9	100.3	18.9

Source: SBS.

Electric power contributed significantly to growth in 2005.

Five of six sub-sectors that contributed most to 2005 growth…

Tables T-8 and T-9 show sub-sectors grouped according to their positive or negative contribution to production growth in Q4 and over the whole of 2005. The highest rates were achieved in the manufacture of tobacco products, basic metals, chemical products, food products and beverages, motor vehicles and trailers, and rubber and plastic products (Table T-8). It is interesting to note that most of these sub-sectors turn out consumer goods and/or have undergone significant privatization in recent years. Conversely, the lowest growth rates are exhibited in the production of textiles, furniture and various goods, construction materials, wood products excluding furniture, coke, oil products and nuclear fuel, machinery and equipment excluding electrical (Table T-9). This group includes several sub-sectors whose performance in 2005 could not have been as bad as it appears. The routinely poor performances of the traditional enterprises in these sub-sectors have to be a thing of the past since they practically do not exist today. *QM* assumes that at least some of the new, smaller enterprises in these sub-sectors recorded growth in 2005 without their results being noted in the statistics yet. A more detailed discussion of these sub-sectors follows.

…are among the most extensively privatized.

Enterprises in sectors that were largely privatized in recent years, and recorded production surges in 2004, continued with good results in 2005 as well. Table T-8 shows the performance of sub-sectors that gave the biggest contribution to the growth of industrial production in the preceding year. Although the pace of growth differed, it is noteworthy that some of these sub-sectors, such as the chemicals, basic metals, and rubber and plastic products industries, have been growing since 2001. The food industry recorded a drop in 2003, probably due to the lower agricultural yields that year. Stable growth in the tobacco industry started only in 2005[1]. And, the growth in the manufacture of motor vehicles and trailers is also of more recent date (2005), so it cannot yet be said that the sector is recovering at a stable pace.

The tobacco industry recorded the largest production growth of all sub-sectors in Q4.

The high growth in the tobacco industry can be attributed mainly to the privatization of two leading factories in 2003, the high consumption of cigarettes in Serbia and neighboring countries, as well as the substitution of imports by domestic products. Since another two factories have received production licenses, the forecast is that the growth trend will continue in 2006. The privatization of one more tobacco factory (DIS) is on the slate, and exports are predicted to rise.

A strong expansion was recorded in basic metals manufacturing…

With a year-on-year growth rate of 27.6% in Q4 2005, basic metals continued the growth trend recorded in recent years and, according to the SBS, achieved an annual level of 22.5%. Dominant

1 For more details on trends in tobacco industry see *QM*1, Box 4, p.14.

in this sub-sector are iron and steel (US Steel Serbia) and non-ferrous metals (RTB Bor, Seval, Impol). This group of large exporters (see Table T-15 in the section on Foreign Trade) accounted for the largest share of total Serbian exports in 2005. A continuing growth trend is forecast for 2006 owing to the upcoming partial privatization of RTB Bor, and the turning on of additional production capacities.

…chemicals industry…

The chemical industry continued the growth trend initiated in the preceding years. Though the rise in 2005 was not as intensive as in the previous two years, it was nonetheless stable. This was goods news since the chemical industry accounts for about one-ninth of manufacturing, and sectors within it have varying growth rates. While the pharmaceutical industry (the Ministry of International Economic Relations estimates its annual growth in the 2001–2005 period at around 15%[2]) and production of consumer chemicals are growing fast, other sectors are on the whole stagnant. This could be a reason why the official monthly production indices fluctuate widely.

…rubber and plastic products manufacturing…

The rubber and plastic products sub-sector recorded slightly lower growth in Q4 2005 than in the previous three quarters, but at the annual level had a double-digit growth rate. The largest companies have been mainly privatized (Tigar in Pirot, Rekord in Belgrade) or are currently undergoing privatization (Trayal in Kruševac, Vulkan in Niš, Hipol in Odžaci, and others). Tigar and Trayal accounted for a major share of the 2005 exports. The sub-sector is expected to continue its growth in the period ahead, with a major contribution to this end from the upcoming privatizations.

…food industry…

The food industry, which makes up almost one-third of the manufacturing industry, grew 4.2% in 2005. A wave of privatizations in this sub-sector (dairies, sugar refineries, breweries, beverage and meat processing plants, etc.) was probably why the sub-sector achieved an average annual growth rate of almost 5% in the 2001–2005 period.

…and even in the manufacturing of motor vehicles and trailers.

In 2005, manufacturing of motor vehicles and trailers recorded double-digit growth, primarily because of the low starting base, but also the completed restructuring of some enterprises (e.g. Fabrika Vagona Kraljevo). Former leaders in this field are either undergoing restructuring (Goša-Šinska i Drumska Vozila, FAP, 21. Oktobar Kragujevac) or are due to be privatized (IMR, Fabrika Vagona Kraljevo, segments of Mašinska Industrija Niš and Prva Petoletka Trstenik). In view of all this, the growth of the sub-sector is still unstable, but preconditions do exist for progress, which will naturally depend on the success of the restructuring and privatization of these enterprises.

Table T-8. Serbia's Manufacturing: Sub-Sectors with Highest Growth Rates in 2005, 2003-2005

	y-o-y indices							base index	share
	2003	2004	2005					2005/2001	2004
			Q1	Q2	Q3	Q4	total		
Manufacturing	**95.4**	**109.7**	**94.5**	**95.9**	**103.9**	**102.5**	**99.2**	**109.5**	**100.0**
Food and beverages	97.9	105.8	99.2	107.0	106.3	104.2	104.2	118.8	30.3
Tobacco industry	96.5	118.5	58.2	112.2	208.6	138.2	129.3	116.4	2.6
Chemicals and chemical products	114.6	118.5	102.5	102.4	106.3	105.4	104.1	139.7	11.2
Rubber and plastic products	99.6	103.5	115.6	110.8	111.4	102.5	110.1	118.8	4.3
Basic metals	102.8	143.6	137.9	114.1	110.6	127.6	122.5	180.8	6.2
Motor vehicles and trailers	91.4	101.0	100.0	125.1	137.2	124.5	121.7	127.1	2.8

Source: SBS.

The textiles industry is in difficulties, although the structure of this sub-sector distorts the real picture.

On the other side are sub-sectors which had a negative growth rate in 2005 (Table T-9). The textile industry is probably in the worst position.[3] According to SBS data, it recorded a 19% year-on-year drop in 2005 (14.7% in the whole of 2005). That production fell steeply compared to the late 1980s is undisputed. Nor is it disputed that textile producers were hardest hit by the fiscal

2 Source: Serbian Ministry for International Economic Relations: „Ocena efekata u procesu stabilizacije i pridruživanja EU – Proizvodnja lekova i farmaceutskih sirovina" February 2004.

3 Here we grouped two sub-sectors: yarns and fabrics, and clothes and fur.

measures adopted in 2001, which hiked the cost of labor of the lowest paid workers.[4] However, the official production data shows that the decline continued last year, while export statistics and many examples indicate the opposite. Even though the exports consist mainly of imported lots for finishing, the growth and income rates are so high (both for clothes and intermediate goods, see Table T-15 in the section on Foreign Trade) that the drop registered by the statistics is simply not plausible. The fact that textile production is shifting increasingly from traditional to new companies (large textile enterprises, which were once the mainstay of Yugoslav economic growth, are now all almost bankrupt) may be an explanation. The decomposition of this sub-sector, as well as the large proportion of gray economy in it, distort the real picture of the state of the textile industry.

The real situation is also blurred in the wood industry...

Decline continued in 2005 in the wood industry, including the production of cellulose, paper and furniture, according to the SBS data (annual fall of 8.3%). The situation in this industry is similar to that in the textile industry: large socially owned enterprises are failing, and production is shifting to new companies and numerous small workshops. The furniture sub-sector also includes costume jewelry, musical instruments, sports requisites, toys and the like. In short, it is a very heterogeneous sub-sector, so a fall in one group of products can distort the picture of the situation in the whole sub-sector.

…and construction materials production.

Production of construction materials rose 3.8% in Q4 2005 compared to the same period in 2004. But this was insufficient to compensate for the steep decline at the beginning of the year. According to the SBS, the sub-sector recorded a fall of 3.8% in 2005.

The oil refining sub-sector had a year-on-year production drop of 8% in Q4 of the preceding year in spite of the rising demand for oil products, ever-increasing energy prices in the world market, as well as the monopolistic position of this sub-sector. This could be an indication of low efficiency in Serbian refineries and the industry in general. An in-depth analysis of the situation in the Serbian oil industry may be found in the Spotlight on: section of this *QM* issue.

Table T-9. Serbia's Manufacturing: Sub-Sectors with the Biggest Decrease in Production in 2005, 2003-2005

	y-o-y indices							base index	share
	2003	2004	2005					2005/2001	2004
			Q1	Q2	Q3	Q4	total		
Manufacturing	**95.4**	**109.7**	**94.5**	**95.9**	**103.9**	**102.5**	**99.2**	**109.5**	**100.0**
Textile	64.8	96.6	87.6	86.8	85.7	81.0	85.3	46.0	5.6
Wood except furniture and paper	82.4	106.9	91.1	88.4	86.6	85.1	87.8	83.1	3.9
Coke, refined petroleum and nuclear fuel	110.7	125.2	106.1	91.7	100.3	92.0	97.5	152.7	4.4
Construction material	86.9	102.0	81.9	97.4	101.6	103.8	96.2	85.7	5.8
Machinery and equipment, except electrics	90.0	141.3	63.9	47.4	79.4	82.3	68.3	87.6	5.1
Furniture and related products	97.4	92.5	79.9	83.1	99.8	104.0	91.7	59.4	2.8

Source: SBS.

After the Q1 standstill, production of consumer goods continued rising through Q4 2005.

Table T-8 shows the movement of the industrial production index classified by product use. In Q4, manufacturing of consumer goods continued the recovery registered in Q2 and Q3, though the annual growth of 2.4% was somewhat lower than in the previous year. This was the result of the steep drop in Q1 2005 caused by shutdowns in the tobacco industry and the poor results recorded in the production of consumer durables. As noted in the first issue of *QM*, the DIN tobacco factory was shut down for modernization. When Q1 is excluded, the production growth of consumer goods in 2005 was 5.6 %, confirming our estimate that the fall at the beginning of the year was temporary.

4 The 2001 fiscal reform introduced two measures that had an important fiscal, but also negative effect: (a) a limited scale of contributions was introduced according to the employee's qualifications, the lowest rates of which were still higher than those paid up to then by the textile industry on very high profits; and (b) tax exemption on meal allowances, vacation bonuses, and transport costs was abolished, which burdened the sectors in which these items accounted for a high share in the overall labor costs.

Table T-10. Serbia: Components of Industrial Production, 2003-2005

	y-o-y indices							base index	share[5]
	2003	2004	2005					2005/2001	2004
			Q1	Q2	Q3	Q4	total		
Energy[1]	102.4	99,9	103,7	109,0	100,8	107,2	105,2	106.9	24.9
Investment goods[2]	82.6	118.4	78.5	77.2	100.5	94.8	87.8	78.6	9.9
Intermediate goods[3]	96.7	116.2	104.3	101.2	105.1	104.5	103.8	115.3	27.3
Consumer goods[4]	97.3	105.9	94.2	102.3	109.1	104.2	102.4	103.9	37.9

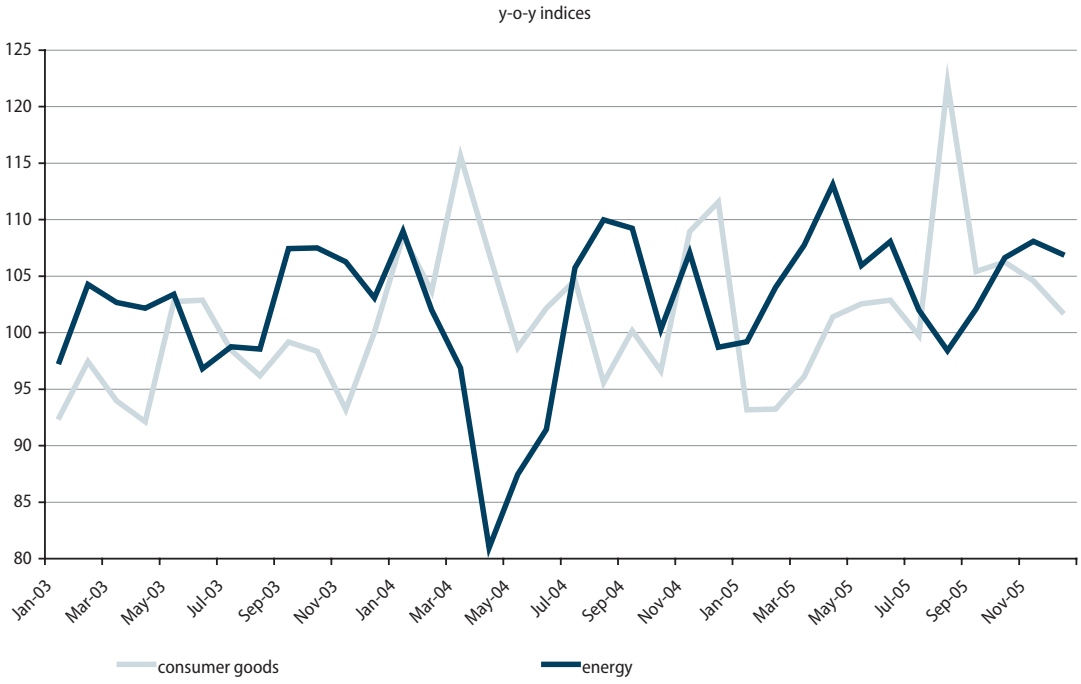
Performance varies by economic use.

Source: SBS.
1) Mining of coal, crude oil and gas, electric power supply and water supply.
2) Manufacture of: metal products, except machinery (sections 281, 282 and 283 Classification of industry), machinery and equipment, except electrics, office machinery and computers, radio, television and communication equipment, precision and optical instruments, motor vehicles and trailers and the production of other transport equipment.
3) Mining of metal, non-metal ores and stone, manufacture of: textile yarns and textiles, wooden and cork products (except furniture), pulp, paper and paper products, rubber and plastic products, chemical industry products (except pharmaceutical and home chemical products), petrochemicals, construction material, basic metals, sub-sector of metal goods production, except machines (sections 284, 285, 286 and 287 Classification of industry), electric machines and appliances and recycling sub-sector.
4) Food industry products, tobacco products, clothing articles, manufacture of leather, leather products and footwear, publishing products, pharmaceutical products and home chemical products, furniture and other various products.
5) Share in total industrial production.

Energy products were up 7.2% in Q4 relative to the same period in 2004. The stable growth, primarily of electricity, is very significant since the share of energy in total industrial production is around 25%. Apart from electricity, which recorded a 9.5% increase in Q4 (8.1% at annual level), the coal mining and processing sector also grew. In a continuing trend, crude oil and gas production fell: crude oil by 47% and gas by 72.2% relative to 1993[5].

Graph T-4. Serbia: Components of Industrial Production, 2003-2005

Energy production was on the whole stable and consumer goods grew throughout the year.



Source: SBS.
Note: Graph T-4 is a depiction of Table T-10.

Production of investment goods slowed after a brief recovery mid-year.

Investment goods recorded a fall in production in Q4, as well as a steep drop at the annual level. The official Q4 data, however, is not quite in line with the recorded rise in imports of these goods

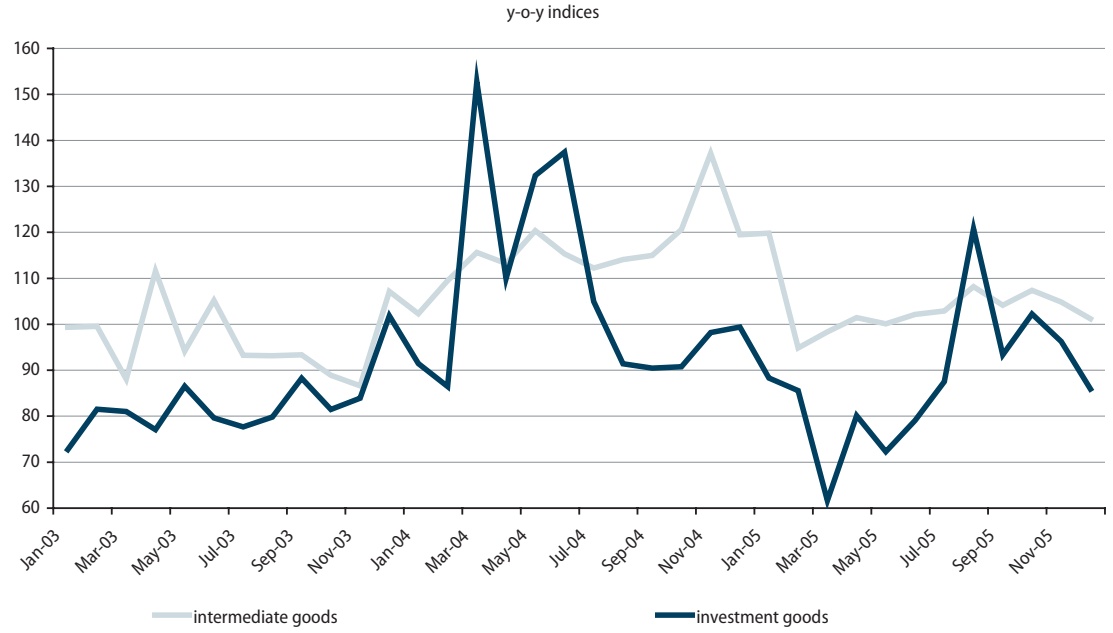
5 The maximum level of production of crude oil (1.357 mn tons) and gas (0.745 mn tons) was achieved that year. Total crude oil processing in NIS refineries was about 4.13 mn tons in 2004. Source: NIS a.d.

in Q4, an indication of a mild recovery of investments in the country. The reason for the fall must be the decreased investment activity in 2005. Since the scale of privatization in 2004 was far smaller than in the 2002–2003 period, production of investment goods could have been expected to fall compared to 2004. This is in accordance with the official data on a double-digit decrease in investments in 2005 compared to 2004. The 12-m capital goods production index shows an increase in Q3 2005, but this was due at least in part to the very low level of production in the same period of the previous year (Graph T-5). The production of investment goods is in line with the FREN's estimate of investments in 2003-2005, that is discussed in the Spotlight on 2 text.

Besides basic metals, several sectors drove the growth of intermediate products…

In Q4 2005, intermediate products recorded a year-on-year growth rate of 4.5%. After the sharp fall at the beginning of the year, this group had a stable growth trend (Graph T-5), with the biggest contribution coming from iron, steel and non-ferrous metals. Besides basic metals, the 2005 growth was propelled also by the following sub-sectors: manufacture of motor vehicles, trailers, and other means of transport, and manufacture of all metal products excluding machinery. Nevertheless, the growth in these sectors cannot yet be said to be completely stable.

Graph T-5. Serbia: Components of Industrial Production: Intermediate and Investment Products, 2003-2005



Source: SBS.
Note: Graph T-5 is a depiction of Table T-10.

…but their recovery may now be faltering.

Construction

Construction continued its recovery, but the indicators are not consistent about it.

The growth initiated in Q3 in the construction sector continued, but the data varies with regard to the level. A reliable indicator is the amount of cement used, and this indicates that construction increased 1.6% in 2005, and 7.4%[6] in Q4. As far as other indicators are concerned, the value of completed construction works in Q4 rose by as much as 28.4%, while man/hours increased only 0.3% relative to Q4 in 2004. The number of workers on construction sites decreased 10% in the same period.

6 As data on total cement use for all of 2005 is not available, we have used the production of cement as a precise approximation. The net effect of foreign trade has only a small share in total cement use and this did not change to any major extent in 2005 compared to 2004.

Table T-11. Serbia: Cement Production, 2003-2005

	y-o-y index				
	Q1	Q2	Q3	Q4	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

Source: SBS.

Cement production suggests a strong recovery...

At the annual level, the value of construction works increased 17% in nominal terms. On the other hand, man/hours fell 7%, and this was followed by a drop of some 13% in the number of workers on construction sites.

...while value and labour indicators are hard to believe.

The data indicates rising productivity in the construction sector. Only man/hours on construction sites are used as indicators of the situation for the purpose of evaluating GDP movement. However, when there is a tangible rise in productivity (which there appears to be), this indicator is not sufficiently stable or representative. Thus calculating construction on the basis of man/hours brings out a decrease of almost 7% (Table T-6) in 2005. But when the value of completed construction works is taken, the result is a nominal growth of 17% and a real growth of around 3%[7]. This raises the question of the reliability of man/hours as an indicator of the movement of construction production in the SBS estimates, or the movements of value added in the quarterly GDP index.

7 Calculated by deflating nominal growth by construction material prices and real wage increases in the construction sector.

5. Balance of Payments and Foreign Trade

The external sector's performance in 2005 was much better than in the previous year. The trade and current account deficits were significantly lower while the capital account and foreign exchange reserves reached record levels. Q4 2005 was marked by a record increase in capital inflows, because of accelerated banks' borrowing. Foreign direct investments declined, however. The trade deficit rose slightly, in line with GDP growth. Export growth was accelerated and imports rose steadily. The current account balance deteriorated somewhat compared to the previous quarter due to a change for the worse in the trade balance, stronger outflows of remittances from individuals' foreign currency accounts, and lower purchases of foreign cash by the NBS. This worsening was outweighed by the capital account surplus, resulting in a record increase in foreign currency reserves in Q4 2005.

The Balance of Payments

The outcome of foreign trade is favorable both in the course of 2005 and Q4.

Developments in foreign trade in Q4 as well as throughout 2005 were on the whole very favorable. This assessment, however, merits an additional comment. Q4 of 2004, i.e. the month of December itself, was extraordinary in that, in order to avoid payment of the VAT, which was to enter into force on 1 January 2005, imports worth 300 – 500 mn euros were "accelerated," which resulted in an overvaluation of imports in Q4 2004, and their undervaluation by the same amount in Q1 2005 (Table T-12). This is the reason why the picture of the developments in 2005 gained on that basis is overly positive. The picture undergoes a major change if the quarters are shifted back by one month and, instead of dividing the calendar year into quarters as usual, December is coupled with January and February, March with April and May and so on. (Since the shift in time by one of the 12 months cannot significantly change the picture of the underlying trend of the phenomenon in the observed period, the behavior of the aggregates in the period provides an approximate picture of the real trends). In a thus "shifted" 2005 (Dec. 2004-Nov. 2005) the merchandise trade deficit amounted to 5.4 bn euros, exports were higher by 32% and imports by 10% than in the previous year (Dec. 2003-Nov. 2004). In the last quarter (Sept.-Nov. 2005), both imports and exports were up 12% higher on the same period in 2004 (Table T-13).

Exports excluding bulky goods accelerated in the fourth quarter…

Export growth was one of the best pieces of macroeconomic news in Q4 2005 as well. Exports of goods grew at a rate of 19.4% in the quarter and 29.5% in the year, relative to the same period of 2004. The growth rate was considerably higher (31.9% for Q4 and 30.1% for the year as a whole) for total exports excluding two bulky products – sugar and iron and steel – which were experiencing temporary difficulties. Moreover, the Q4 exports excluding these two products continued to accelerate and broaden to include new groups of products. Three new product groups have qualified for classification into the *Core* group (see explanation below), and all of them together increased the exports of the *Core* by 42.3% relative to the same quarter of the previous year. Such a growth rate is impressive since a start from a low base was not involved. Indeed, by Q4 2004, exports already had about a year of fast growth behind them.

…but so did imports - maybe too much?

Imports also gained speed in Q4, just as in the preceding two quarters. But due to the extraordinary circumstances mentioned above, it is hard to reliably assess the underlying trend. In any event, the annual import growth rate of 10% overvalues the underlying movements in 2005, because it is strongly influenced by energy product prices, which were higher in Q4 than Q3 2005 by 1.6% and 41.7% higher than in Q4 2004. If they are maintained unchanged at the average 2004 level, then annual import growth in Q4 2005 stood at a mere 6%. At the quarterly level, imports were visibly accelerated (annualized quarterly growth of imports excluding energy amounted to 77% in Q4, in comparison with the annualized quarterly growth of 12% in Q3) and, although it is possible that seasonality played a crucial role, the effects of further relative price adjustments driven by the introduction of the VAT at the beginning of the year cannot be ruled out.

The balance of invisibles brings no surprises.

There were no surprises regarding the balance of current invisible transactions, and on the whole it contributed to a drop in the current account balance of around 700 mn euros, and for the year as a whole by 2.8 bn euros. This was almost entirely due to current transfers: net remittances from abroad, net NBS foreign exchange purchases and a rise in foreign exchange deposits in non-residents' accounts in the country. Exports and imports of services grew mildly but steadily, while their balance, sharply reduced after the introduction of the VAT, oscillated around the zero level over the entire year. Interest payments are also going up, namely both interest revenue and, to an even higher extent, interest expenditure, which is understandable against the backdrop of accelerated borrowing. In Q4, Serbia paid 60 mn euros on a net basis, while for the year as a whole the amount of interest expenditure was 245 mn. Official grants rose over the year yet remained lower in each quarter, including Q4, than in the previous year – 270 mn euros in total.

Table T-12. Serbia: Balance of Payments, 2003-2005[1)]

	2003	2004	2005			
	Dec	Dec	Mar	June	Sep	Dec
			cumulative, in millions of euros			
CURRENT ACCOUNT	-1,515	-2,356	-317	-530	-1,022	-1,679
Balance of goods and services	-3,781	-5,315	-731	-1,811	-3,087	-4,474
Exports of goods and services	3,353	4,003	1,019	2,293	3,598	5,069
Growth rate (12-m, in %)	*12*	*19*	*31*	*37*	*29*	*27*
Imports of goods and services	-7,134	-9,319	-1,751	-4,104	-6,685	-9,543
Growth rate (12-m, in %)	*11*	*31*	*-9*	*-1*	*5*	*2*
Income, net	-180	-172	-57	-130	-187	-245
Current transfers	2,020	2,728	439	1,329	2,104	2,771
o/w F/X purchases, net	1,106	1,592	320	884	1,329	1,631
Official grants	425	403	33	82	148	269
ERRORS AND OMISSIONS	214	327	-185	-174	-295	-339
CAPITAL AND FINANCIAL ACCOUNT	1,889	2,377	704	1,188	2,254	3,644
Foreign direct investment (FDI)	1,198	773	260	496	956	1,192
Other investments	691	1,604	444	692	1,298	2,452
Medium and long-term loans, net	628	1,221	155	610	994	1,524
Other[2)]	63	383	289	81	304	928
NBS Reserves, net[3)], (increase,-)	-587	-349	-202	-483	-937	-1,627
MEMORANDUM ITEMS						
			in % of GDP			
Exports of goods and services	19.9	22.2	5.2	11.8	18.4	26.0
Imports of goods and services	-42.3	-51.7	-9.0	-21.0	-34.3	-48.9
Balance of goods and services	-23.5	-30.3	-3.6	-9.4	-16.0	-23.0
Current account	-9.0	-13.1	-1.6	-2.7	-5.2	-8.6
GDP in euros[4)]	16,853	18,039	19,510	19,510	19,510	19,510

The current account improved mainly owing to a shift of imports from Q1 2005 to Q4 2004.

A record capital inflow in 2005.

Source: Table P-4 in Analytical Appendix.
1) Original US dollars monthly data are converted to euros using monthly averages of official daily NBS mid rates.
2) Short-term trade credits, Unpaid imports of oil and gas, Short-term loans, Other assets and liabilities, Gross reserves of commercial banks.
3) Excluding IMF.
4) GDP converted into euros using annual average of official daily NBS mid rates.

The net inflow of current transfers was somewhat lower than in the previous quarter, but the year as a whole ended with an inflow slightly higher than in 2004. The NBS foreign currency purchases from exchange offices were relatively low, possibly because of the unexpected strengthening of the dinar exchange rate in December, whose prolonged duration was not expected by exchange offices, with reason. In view of the relatively high foreign currency purchases from exchange offices in January and February of the current year (for the second consecutive year), it is also

possible that there has been a change in the seasonality of the flow: toward the year-end, there is a draw down in deposits of foreign currency purchased from exchange offices and their accumulation in enterprises, in line with the accumulation of seasonal wages, and during Q1 enterprises sell them in order to repay dinar loans in nominal terms. It should be mentioned that in the past foreign currency purchased from exchange offices was not normally sold in the first quarter of the year, probably because it was used for repayments of foreign currency loans in the informal sector and abroad.

Q4 saw record foreign borrowing, with accelerated bank borrowing.

A major turnaround in flows of goods in 2005 had an unexpected counterbalance in an increased capital influx – with a total capital inflow of 3.6 bn euros (1.4 bn euros in Q4) against 2.4 billion euros in 2004 (1.1 in Q4 2004), which was further strengthened in Q4 due to a seasonal leap in short-term borrowing. With a qualified acceptance regarding the figures, the leap in the inflows is reflected primarily in medium-term and long-term borrowing (around 530 mn euros in Q4 and 1.5 bn euros for the year as a whole), with the largest increase in borrowing being that of the private non-bank sector. Q4 saw a particularly high jump in short-term borrowing (270 mn euros), by banks in particular. This borrowing was probably of a seasonal character and the debts can be expected to be repaid in the period ahead. Foreign direct investment also recorded a large increase (1.2 bn euros in 2005, against 773 mn euros in 2004), but dipped in Q4 when the recorded inflow amounted to a mere 232 mn euros.[1]

But almost half the capital inflows were reserved.

The improved trade balance and stronger capital influxes produced a record accumulation of gross and net foreign currency reserves of the NBS, which were increased for the year as a whole by 1.6 bn euros, of which 690 mn euros in Q4 2005 alone (NBS reserves are capital influxes caused primarily by lack of liquidity in the country, i.e. high interest rates, but not necessarily by lack of foreign exchange). For this reason, two processes are taking place: a stronger capital influx despite a significant improvement in the trade balance and, consequently, a dramatic increase in foreign currency reserves in the country. The increase in foreign currency reserves is also attributable to the fact that the NBS raised the reserve requirement for banks' borrowing on several occasions in the course of the year, until it finally reached 38% in October 2005. Banks deposit these reserves with the NBS and they are included in the gross NBS reserves.

Table T-13. Serbia: Quarterly Trade Balance, 2003-2005

	2003	2004					2005				
	total	Q1	Q2	Q3	Q4	total	Q1	Q2	Q3	Q4	total
						in millions of euros					
Exports	2,442	498	640	781	912	2,832	753	909	916	1,089	3,666
Imports	6,589	1,778	2,048	1,997	2,801	8,623	1,534	2,131	2,311	2,557	8,533
Deficit	4,147	1,279	1,407	1,216	1,889	5,792	781	1,221	1,395	1,468	4,867
						y-o-y growth, in %					
Exports change	11.7	-14.1	4.1	22.3	50.0	15.9	51.0	42.0	17.3	19.4	29.5
Imports change	11.3	15.4	25.8	27.0	51.4	30.9	-13.7	4.1	15.7	-8.7	-1.0
PERIODS SHIFTED ONE MONTH BACK[1)]											
						in millions of euros					
Exports	2,448	464	620	731	888	2,702	761	890	910	997	3,558
Imports	6,444	1,717	2,105	1,995	2,264	8,081	2,092	2,061	2,229	2,532	8,915
Deficit	3,996	1,254	1,485	1,264	1,377	5,379	1,332	1,171	1,319	1,535	5,357
						y-o-y growth, in %					
Exports change	12.5	-17.3	3.2	18.7	32.3	10.4	64.0	43.5	24.5	12.3	31.7
Imports change	14.6	16.5	24.0	30.4	29.9	25.4	21.8	-2.1	11.8	11.8	10.3

The trade balance is considerably better in the calendar year…

…than when we shift the year one month back.

Source: SBS.

1) Figures in the lower half of the table are actual figures in the period "shifted" by one month: annual data covers the period December-November (instead of January-December), the first quarter covers the period December-February (instead of January-March), the second quarter the period March-May (instead of April-June), the third quarter the period June-August (instead of July-September), and the fourth quarter the period September-November (instead of October-December).

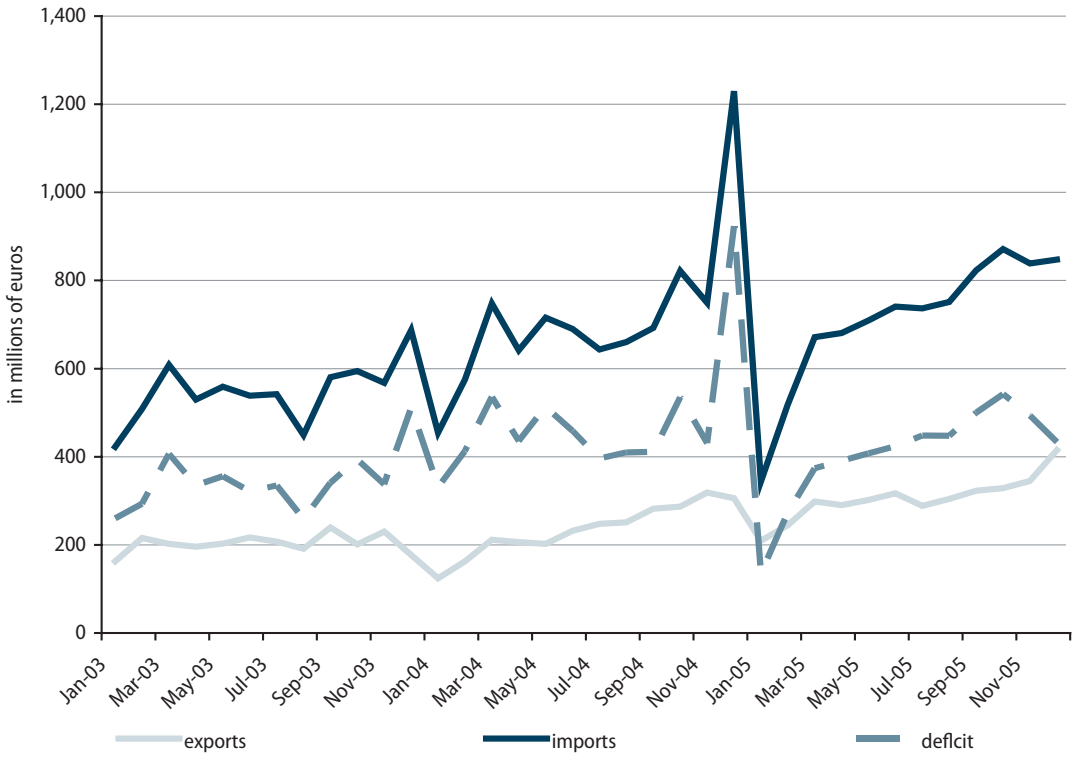
1 We believe that the NBS's BOP statistics tend to overstate total inflows, but still cannot pin down the amount or cause.

Foreign trade

The changes in calendar 2005 do not reflect the underlying trends in foreign trade flows, due to the abovementioned effect of the VAT introduction. For that reason, it is necessary to observe changes in a "shifted" year, i.e. in the period December-November 2005 relative to the same period one year before. In this period exports grew about three times faster than imports in comparison with the same period of the previous year, which enabled a year-on-year decline in the trade deficit. Presently, annual imports are 2.5 times higher than exports; hence it is necessary for exports to grow faster than imports in 2006 at least by that factor. Bearing in mind that imports growth has stabilized at around 10%, it is clear that exports have to maintain exceptionally high growth rates (over 25%) in 2006 too.

Exports continue to grow fast.

Graph T-6. Serbia: Merchandise Exports, Imports & Trade Deficit, 2003-2005



Source: SBS.

A deficit was recorded in eight out of ten sectors…

In 2005, out of ten foreign trade sectors, Serbia recorded deficits in trade in goods in eight, and the negative balance was the highest in trade in machinery and energy (Table T-14). The deficit for equipment, however, was considerably down relative to 2004, as the result of a drop in imports in 2005 (advance imports took place in late 2004) rather than of a recovery in equipment exports. Two sectors generated around 70% of the deficit: machinery and transport equipment (a deficit of 1.8 bn euros) and mineral fuels and lubricants (1.5 bn euros), with the largest annual drop in the deficit (536 mn euros) being recorded in the sector of machinery and transport equipment. In only one sector – food and live animals – the surplus increased (from 12 mn to 152 mn euros). In terms of a relative cut in the deficit, two sectors can be singled out: the first is various finished goods (including, among other sections: clothing, footwear, furniture), which recorded a drop in the deficit by 66% and the second, products classified by material (this includes propulsive sections in metallurgy and rubber manufacture), in which the deficit was reduced by 40%.

Table T-14: Merchandise Trade Balance by SITC Sections, 2004-2005

	2004			2005		
	balance	balance change		balance	balance change	
	in millions of euros		in %	in millions of euros		in %
Total	-5,792	-1,645	-39.7	-4,867	925	16.0
Food and live animals	12	-16	-57.8	152	140	1,196.2
Beverages and tobacco	-85	4	4.5	-49	36	42.1
Crude materials except fuels	-110	-37	-50.2	-218	-107	-97.5
Mineral fuels and lubricants	-1,238	-338	-37.5	-1,503	-266	-21.5
Animal and vegetable fats	35	34	4,694.3	18	-18	-50.2
Chemical products	-824	-152	-22.6	-784	41	4.9
Products grouped by materials	-745	17	2.3	-462	282	37.9
Machinery and transport equipment	-2,408	-969	-67.3	-1,872	536	22.2
Miscellaneous manufactured goods	-414	-190	-84.4	-139	275	66.4
Merchandise and transactions n.e.s.	-15	-	-	-8	6	43.4

Source: SBS.

…but it declined in seven of them.

Box 1: What is the true pace of imports?

Underlying imports increased 6.5% in the year…

To analyze the underlying behavior of imports we observe the period December 2004 – November 2005 relative to the same period one year before. In December 2004, imports were advanced in order to avoid paying the VAT from the beginning of 2005, which created a high base for comparison in 2004 and a low base in the first months of 2005. The thus time-bound imports, in the period December 2004 – November 2005, showed a rise by 10.3% relative to December 2003-November 2004 (Table T-17). The second effect which blurs the assessment of the underlying pace of imports was the rise in energy prices in 2005 – this factor autonomously increased the value of imports, regardless of the real pace of demand. Assuming that there had been no energy price increases, import growth over the same period would have amounted to 6.5%.[1]

…and they are accelerating, but hard to say how much .

Over the shorter period – June-November 2005 – also "cleansed" from the VAT effects and more suitable for assessing the economic situation, the year-on-year rise in imports amounted to around 12%, while after the elimination of the energy price impact, the rise in imports in this period was slightly more than 8%. Accordingly, the comparison between the import rates in the longer and shorter periods shows that an upward trend in imports has been formed at an annual rate of around 10%, with a slight acceleration in the second half of 2005. Stabilization of oil prices could slow down this pace by around two percentage points.

Similarly, in the first quarter of 2006, due to a drop in imports at the beginning of 2005, the import growth rate could be found within a range from 40% to 50% (if the seasonal behavior in the first quarter is as it was in the more stable 2003 and 2004 – a fall in imports relative to the last quarter of the previous year by around 5%).

1 The impact of energy prices on import performance was eliminated in the following manner: the value of imports was calculated by multiplying imported current quantities and prices (per unit) from the base year.

Table T-15. Serbia: Merchandise Exports Growth, 2004-2005

	2004	2005							
	y-o-y growth	exports	y-o-y growth				growth contribution			
In %	July-Dec	share	Jan-June	Q3	Q4	Jan-Dec	Jan-June	Q3	Q4	Jan-Dec
Total goods	**35.8**	**100.0**	**45.9**	**17.3**	**19.4**	**29.5**	**100.0**	**100.0**	**100.0**	**100.0**
Bulky exports	254.0	25.4	151.0	-13.7	-4.6	39.2	57.9	-21.1	-6.8	31.4
Iron and steel	231.1	13.5	109.3	-14.8	4.6	33.8	26.3	-13.2	3.2	15.0
Non ferrous metals	73.2	8.0	87.2	76.2	67.3	78.0	11.8	23.4	20.2	15.5
Sugar and sugar products	3,412.0	3.8	2,658.1	-93.0	-64.2	5.9	19.8	-31.2	-30.2	0.9
Core exports	23.0	49.9	34.3	34.0	42.3	36.6	37.1	94.6	95.5	58.8
Clothes	-9.8	5.4	73.8	65.6	52.1	64.9	7.1	16.0	10.9	9.3
Cereals and cereal produce	86.2	4.1	91.0	100.0	59.3	80.2	4.9	15.1	11.4	8.0
Footwear	-12.4	2.7	91.4	53.4	56.0	68.6	3.9	7.8	5.3	4.8
Oil and oil products	73.3	2.8	63.6	14.2	146.3	64.3	3.1	2.4	11.9	4.8
Rubber products	20.4	4.5	20.1	34.4	16.8	22.6	2.5	8.1	3.5	3.6
Organic chemicals	102.7	2.7	33.6	19.5	29.2	27.8	1.8	3.5	4.2	2.6
Fruits and vegetables	0.7	5.8	8.9	14.5	4.3	9.4	1.3	6.8	1.3	2.2
Machinery specialized for particular industries	1.1	2.2	53.0	75.4	136.5	81.6	2.1	6.3	9.3	4.3
Miscellaneous manufactured articles, n.e.s.	44.4	4.8	18.9	22.7	19.0	20.0	2.3	6.6	4.6	3.5
Manufactures of metals, n.e.s.	36.5	3.4	12.4	31.4	28.8	22.8	1.0	6.2	5.5	2.8
Paper, paperboard and articles of paper pulp	59.9	2.1	36.6	26.1	50.8	37.0	1.7	3.3	4.1	2.5
Plastics in primary forms	111.3	3.0	46.2	-5.4	14.1	21.5	3.2	-1.0	2.3	2.3
Medicinal and pharmaceutical products	-3.3	2.3	15.4	29.3	90.4	41.7	0.8	3.0	9.2	2.9
General industrial machinery and equipment	-8.8	2.1	11.8	79.7	72.3	41.9	0.7	7.1	5.6	2.7
Electrical machinery, apparatus and appliances	2.6	2.1	13.7	31.4	66.7	33.7	0.7	3.4	6.4	2.3
Other	-7.2	24.7	7.0	18.2	7.9	10.0	5.0	26.5	11.3	9.8
o/w: new exports	3.8	9.5	9.9	28.8	41.9	23.5	2.5	15.6	18.3	8.0

Source: SBS.

Bulky exports growth held back by sugar…

…but core products are growing fast…

...and new product groups are picking up.

An increasing number of products contribute to the favorable picture of exports .

Sugar affects the poor performance of *Bulky Exports*, but the export base continued to widen. Despite the high growth in nonferrous metal exports (by 67.3%) and a recovery of iron exports (a rise by 4.6%), low sugar exports (a year-on-year drop of 64.2% in the fourth quarter), still vitally contribute to the poor performance of *Bulky Exports* (Table T-15). Had sugar exports in the last quarter of 2005 reached the level of Q4 2004, the year-on-year growth rate for total exports in this period would have been higher by around 25%. A turnaround is expected in the first quarter of 2006, as well as a positive contribution of sugar exports, since exports were modest at the beginning of the last year, and a slight revival in the current sugar exports can be observed.[2]

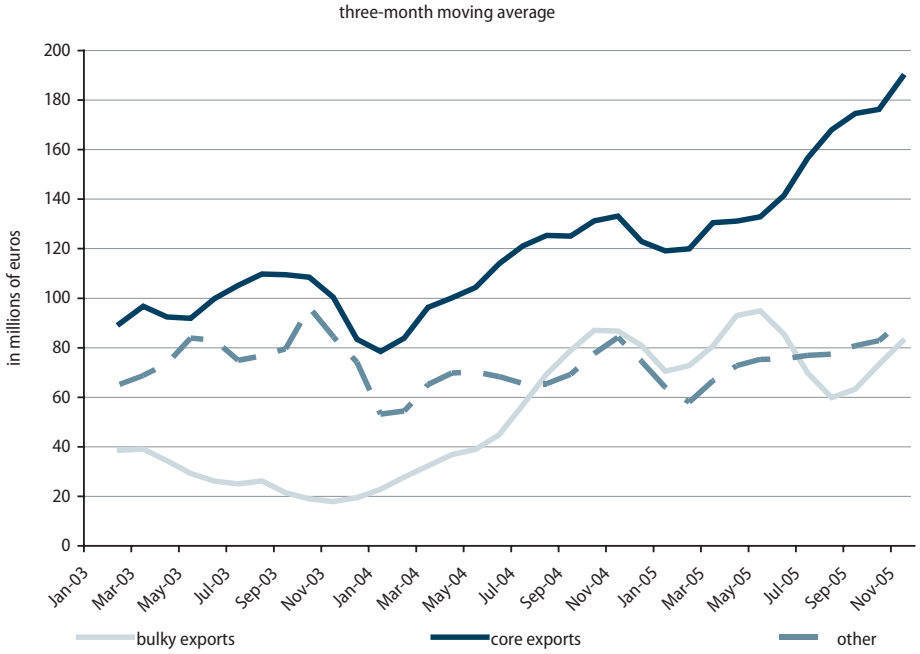
If *Bulky Exports* are excluded, the year-on-year export growth in Q4 continued to go up at the high rate recorded in Q3 (29%). Table T-15 shows that the leading exporters in the fourth quarter were from the *Core* group (growth by 42.3%). The *Core* group is expanding (generating half of the total exports) on a monthly basis, i.e. the number of sectors whose shares in exports and contributions to export growth are higher than 2% is on the rise.[3] Relative to Q3, the *Core* group was enlarged in Q4 2005 by three sections: medical and pharmaceutical products, general industrial machinery and equipment, and electrical machinery and appliances. A common characteristic of these sections is that, due to the continuous fast export growth in the second half of 2005, they have become significant exporters – their cumulative contribution to export growth in Q4 amounted to as much as some 20%. From among the members of the *Core* group, fast export growth continued in the already proven sections: food, textiles, chemical and engineering industries. Half of the sections in the *Core* group have additionally accelerated growth (machinery specialized for particular industries and oil and petroleum products the most), while the rest of the sections also recorded double-digit rates of year-on-year quarterly growth (exception being the section of vegetables and fruit, which had a single-digit growth rate).

2 After a slowdown in summer months, sugar exports revived in the last two months of 2005 (13-14 mn euros per month), which is still considerably (by 20-odd mn euros) lower than the monthly export peaks in the previous two years. Such movements are normal, since the three-month sugar production campaigns begin in early fall and therefore exports rise toward the end of the year.

3 *Table T-3* shows three sub-groups within the *Core* group in order to underline the broadening of the *Core* through the inclusion of new sections from the first half of the year (the first sub-group) to the last quarter of 2005 (the third sub-group). *Core* includes all the sections whose shares in exports and contributions to export growth are higher than 2% at an *annual* level. Current (and not reliable) progress was registered in the group *New Exports,* in which export growth and contributions to it were observed only in the last *quarter.*

Graph T-7: Serbia: Merchandise Exports Growth, 2003-2005

***Bulky** exports remain below their May peak, but **core** exports are accelerating almost exponentially.*



Source: SBS.

Dynamic changes in the composition of exports have been also affirmed by the expansion of the group *New Exports* since, in comparison with Q3, another four sections gave their contributions to exports growth of at least 1.5%: power-generation machinery and equipment, road vehicles, other plastic products, essential oils, perfumes and other preparations (Table T-16).[4] *New Exports* now include segments of the metal industry (ores, scrap metal), traditional labor-intensive activities (manufacture of furniture and textiles), non-metallic minerals (cement), the chemical industry (plastics and cosmetics), as well as the sections that export equipment and durable consumer goods (power-generating machinery, road vehicles). The share of the *New Exports* group in total exports is still not high (around 10%, as in Q3), but their increased contribution to the export boom in Q4 is evident. If furniture exports continue to grow, this section can be expected to join the *Core* group soon.

Table T-16. Serbia: New Exports in Third Quarter 2005

Exports of 8 new groups of products strongly accelerate in Q3 and Q4, contributing 18.3% to total growth in Q4.

	2004	2005				
	y-o-y growth	exports	y-o-y growth			contribution to growth
In %	July-Dec	share	Jan-June	Q3	Q4	Q4	Jan-Dec
Total goods	35.8	100.0	45.9	17.3	19.4	100.0	100.0
New exports	3.8	9.5	9.9	28.8	41.9	18.3	8.0
Non-metal mineral products	-10.0	1.7	-3.0	18.0	43.9	3.2	0.9
Mineral ores and metal wastes	28.0	1.1	2.5	46.8	53.2	2.9	1.1
Furniture, and parts thereof	8.2	1.8	29.5	22.5	29.9	2.5	1.7
Manufacture of textile yarns and textiles	2.5	1.2	18.4	30.6	25.5	1.5	1.0
Road vehicles	4.6	1.3	-11.2	13.3	39.5	2.6	0.4
Operative machinery and equipment	-17.2	1.0	4.2	47.8	55.9	2.4	1.0
Etheric oils and cosmetics	19.9	0.5	29.3	58.3	92.6	1.6	0.7
Other plastics	32.2	0.9	35.0	38.2	39.7	1.6	1.1

Source: SBS.

4 Table T-4 shows *New Exports*, like *Core*, in two groups of sections – the second sub-group was added on account of its performance in the last observed quarter. The structure of *New Exports* has been changed also due to the fact that three sections have qualified for the *Core* group. *New Exports* include sections whose contribution to export growth in Q4 was higher than 1.5%. The sections categorized as *Bulky Exports, Core* and *New Exports* together account for around 40% of the total number of sections and for 85% of the value of total merchandise exports. This data confirms: first, that the coverage of export sectors in our analysis is satisfactory and, second, that export growth is present across the economy.

Exports to developed countries are on the rise, but capital goods still go predominantly to less developed ones.

The composition of exports according to economic use in 2005 remained unchanged relative to 2004 (unfavorable): intermediate products accounted for around one half of the exports, and capital goods for just 10%. On a brighter note, the export growth to developed countries was higher (36%) than the export growth to the developing countries (22%), thus increasing the share of developed countries in exports to 56%. The fastest growing exports to the developed countries were those of production goods, while in the case of the developing countries the fastest growing were exports of instruments of labor. In relative terms, exports of instruments of labor are predominant only when it comes to developing countries, which means that products of a higher level of finalization and more sophisticated goods are in strong demand primarily on less demanding markets.

Energy and intermediate goods drive total import growth.

The increase in imports is driven by energy and intermediate goods, although a slight rise in imports of consumer goods is also noticeable. In the structure of the estimated core annual import growth rate (around 10%) in the period December 2004 – November 2005, the greatest contribution to the growth of total imports was that of imports of energy and intermediate goods (whose relative contributions to total import growth stand roughly at the same level), while imports of capital and consumer goods essentially stagnated (Table T-17). Over the period June-November, too, the most propulsive were imports of energy and intermediate goods, with revival being observed (year-on-year growth of more than 3%) of imports of consumer goods (durable and non-durable). After initial disturbance caused by the VAT introduction in Q1 2005, the lasting effects of this systemic shock are reflected in the deceleration of import growth (and not in a fall in imports). The year-on-year growth in consumer goods imports was higher in the period June-November than in the "shifted" 12-month period, December – November, while this was not the case of imports of capital goods. The drop in imports of investment goods was more permanent, and they did not recover in the second half of the year, either - a consequence of the reduction in "over invoicing" in 2005,[5] as well as of their exceptionally high level in 2004. As to consumer goods imports, the reason for their decline is the increase in their prices due to the VAT change (the avoidance of sales tax was more prevalent in the past). In the last several months, however, people seem to have adapted and accepted the higher prices, so consumer goods imports are recovering.

Table T-17. Serbia: Merchandise Imports by Economic Use, 2004-2005

	2004	2005							
	y-o-y growth	exports	y-o-y growth					contribution to growth	
In %	July-Dec	share	Q3	Q4	Jan-Dec	June-Nov	Dec-04 - Nov-05	June-Nov	Dec-04 - Nov-05
Total	**40.2**	**100.0**	**15.7**	**-8.7**	**-1.0**	**11.8**	**10.3**	**100.0**	**100.0**
Energy	66.3	19.3	65.7	4.1	24.6	36.4	30.8	47.8	47.2
Intermediate goods	35.5	35.8	12.6	-0.8	6.4	15.0	16.0	43.9	51.7
Capital goods	51.2	24.1	3.1	-24.0	-17.5	0.6	1.5	1.3	4.0
Durable consumer goods	25.5	4.0	4.3	-17.7	-13.2	3.8	0.9	1.4	0.4
Non durable consumer goods	24.3	14.5	4.3	-5.4	-7.2	3.0	-0.7	4.0	-1.0
Other	-3.9	2.5	6.0	4.9	-7.5	9.5	-8.0	1.5	-2.2

Source: SBS.

Growth in imports of energy, intermediate goods and, to an extent, consumer goods.

Oil prices still vitally affect imports.

High energy prices are preventing a fall in the value of imports; had the prices at which oil and gas were imported remained unchanged relative to 2004, 150 mn euros would have been saved in Q4 of last year. For 2005 in entirety, this effect amounted to around 400 mn euros.[6] A year-on-year drop in imports in Q4 2005 was not recorded only in imports of energy, which is surprising, taking into account the huge decline (around 40%) in imported tons of oil, petroleum products and gas. The imports of two metallurgic branches – mineral ores and scrap iron and steel went

5 The interest of importers to over invoice the goods they are brining into the country with a view to keeping capital abroad has abated after the VAT introduction, since following the introduction of the VAT, tax refunds are made only after a certain period, which immobilizes resources and constitutes a cost.

6 The major importance of energy prices is illustrated by the fact that values and quantities of imports in the course of 2005 had different paths: imports of oil and petroleum products in tons were 5.3% lower than in 2004, while the value of imports was higher by 35.1%; as regards gas, imports in tons were 12.1% lower, while in euro terms they were 17.7% higher.

Box 2: Regional trade

The gradual liberalization of trade in the region…

The South-east European countries (besides Serbia-Montenegro, the group includes Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Macedonia, and Romania) signed a Memorandum of Understanding on Trade Liberalization and Facilitation back in June 2001, but the network of bilateral agreements was concluded as late as 2004. On 1 February 2004, Serbia-Montenegro had concluded agreements with all the countries in the region and ratified them by the end of 2004, after which their implementation commenced. What are the first effects of the bilateral agreements?

Table T-18. Serbia: External Trade with Countries in the Region, 2004-2005

	2003			2004			2005						
	balance	exports share	imports share	balance	exports share	imports share	exports	imports	balance	exports share	imports share	exports growth, y-o-y	imports growth, y-o-y
	in millions of euros	in %		in millions of euros	in %		in millions of euros			in %			
Total	-4,200	100.0	100.0	-5,792	100.0	100.0	3,667	8,533	-4,867	100.0	100.0	29.5	-1.0
Bosnia and Herzegovina	220	15.1	2.3	316	17.8	2.2	604	236	368	16.5	2.8	19.8	24.9
Croatia	-41	2.8	1.6	-44	4.2	1.9	160	208	-48	4.4	2.4	33.9	27.0
Macedonia	174	12.0	1.8	76	7.3	1.5	211	136	75	5.8	1.6	2.2	3.6
Romania	-57	2.6	1.8	-64	3.5	1.9	105	221	-117	2.9	2.6	6.4	36.7
Bulgaria	-71	2.0	1.8	-129	1.7	2.1	76	165	-90	2.1	1.9	54.1	-7.0
Total countries in the region	225	34.4	9.3	155	34.5	9.6	1,156	967	190	31.5	11.3	18.2	17.4

Source: SBS.

Trade with five countries in the region[1] accounts for around 17% of total trade (Table T-18). In 2005, the growth of exports to Croatia and Bulgaria was above average. The share of the region in imports has gone up to a certain degree, since imports from Romania, Bosnia-Herzegovina and Croatia grew rapidly.

…has led to its stable growth and a 17% share in total trade.

Relative to 2004, the importance of the region as an export destination for Serbia has declined – exports to neighboring countries grew at a slower pace than total exports. This was in part a consequence of the fact that exports to those countries increased by more than 20% in 2003, while at the same time exports to the EU dropped by 1.6%. The pace of exports to the EU in the previous couple of years was rather uneven – a drop in one year was followed by a dynamic recovery in the next, while exports to SEE have been growing steadily every year. This is the result of the changes in relations between this country and the EU and SEE. Namely, in 2004 the rapprochement and elimination of administrative barriers in trade with the EU resulted in a pronounced jump of exports to that area.[2] On the other hand, the continuous but gradual liberalization in SEE led to a more moderate and stable growth in trade with this region. In the three-year period, these differences faded away since exports to the EU and the countries of the region had roughly the same relative growth compared with 2002, which testifies to an even geographic expansion of Serbia's exports over the medium term.

Serbia's trade balance with region is positive.

Serbia's overall trade balance with the countries in the region was positive in 2004 and 2005; the surplus increased from 155 mn to 190 mn euros and was generated by trade with Bosnia-Herzegovina and Macedonia. In 2005, the deficit with Croatia and Romania rose and with Bulgaria it declined.

The following conclusions can be drawn:

- the SEE region has more significance for Serbia's exports than imports;
- although the value of trade has gone up, no growth trend regarding the share of regional trade in total trade has been recorded over the previous several years;
- implementation of liberalization agreements in 2005 led to an increase in the surplus with less developed countries in the region and, for the most part, to the widening of the deficit with more developed countries in the region;
- countries in the region can be a significant export market, mainly for products that are not marketable in developed countries (e.g. from the group *capital goods*);
- the prospects of the Free Trade Zone are uncertain since Romania and Bulgaria will probably become EU member states in 2007;
- development of competition and regional cooperation constitutes preparation of the countries for the single EU market and that is one of important objectives of establishing a free trade zone in SEE.

1 The Serbian Bureau of Statistics does not publish data on trade with Albania and Moldova, members of the Zone, due to the negligible volume.

2 In 2003, exports of certain significant products (e.g. clothing and footwear) to the EU were almost non-existent due to the complex administrative procedures for exporting in the period of adjustment of new relations between Serbia and Montenegro. A gradual recovery began in 2003, while in 2004 relations with the EU were significantly improved owing to the European Partnership and the accepted "two-track" approach for Serbia and Montenegro.

6. Fiscal Flows and Policy

A fiscal consolidation and relative lowering of the size of government marked 2005, although an in-depth analysis brings out that the fiscal outcome, both in Q4 and the year as a whole, was not as successful as unrefined official data appeared to show. The revenue consisted partly of increasing government liabilities towards the public on account of unpaid VAT refunds and VAT credits (VAT liabilities). When this inflow is excluded, the fiscal balance is at best unchanged relative to the previous year. Total revenue grew slightly faster than inflation and dropped as a share in GDP (by two percentage points), in particular if government VAT liabilities are excluded. This was the result of mediocre performance of the VAT performance and a number of tax reduction measures taken in 2004 and 2005. In taking these measures, the government was laboring under the false illusion that the VAT performance had been very strong. With respect to fiscal expenditure, it can be credibly maintained that its growth has been contained, while its GDP share reduction for the second year running constitutes a particular success. Still, we judge with caution since FREN was not in a position to eliminate all the inconsistencies in the presentation of accounts, which, as a rule, are biased toward a lower increase in expenditure.

The balance of fiscal operations in 2005 was not really improved relative to 2004.

The consolidated fiscal operations balance according to the official presentation was increased to 31.7 bn in 2005, and almost half of that surplus was generated in Q4 of the year. FREN, however, estimates that the government's VAT liabilities amount to at least 16 bn dinars (see footnotes 13 and 14 in Table P-5, Analytical Appendix). If this debt is excluded, then last year's balance was quite similar to the 2004 balance. The picture is blurred by other inconsistencies in the classification of the balance sheet items. Namely, in the process of identifying and reshuffling items with the features of arrears clearance – moving them from expenditures into financing (below the line) - corrections of data on previous periods in all likelihood have not been made consistently and published in the PFB. This basically creates an impression that the above the line expenditures are going down faster than they really are.

Focusing on the liquidity effect, the outcome was similar to 2004…

According to FREN's analytical definition, the fiscal outcome in 2005 was very similar to the one in 2004 (a deficit of 5 bn dinars in 2005 relative to 7 billion in 2004). FREN's definition of the balance (IVc in Table T-19) measures the liquidity effect of government's operations on Serbia's economy. It is also a considerably more reliable measure of developments on the balance sheet from year to year since the official definition easily slips into inconsistencies in the treatment of items. FREN's definition of expenditure, hence, includes all the operations which are not of a purely financing nature - those which reflect/implement fiscal policy. This definition includes in addition to the expenditures covered by the official definition – current expenditures and investment (Section II of Table T-19, that is, P-5, Analytical Appendix) – also the repayment of debts and arrears cumulated in the past and government loans to enterprises and households (section III in the table, for more details see Box 1 for arguments and an explanation of the fiscal balance definitions). It should be taken into account that FREN's definition of the balance includes revenues on account of VAT liabilities, in the amount of around 16 bn dinars. Since this revenue cannot be counted on in 2006, it is important to note that, after its exclusion, the 2005 analytical deficit amounts to around 1% of GDP.

…but focusing on sustainable revenues and expenditure it has worsened…

…because part of the high VAT collections resulted from increased government tax liabilities to the public…

Accelerated growth of tax collection in Q4 was fully achieved – thanks to the accelerated growth in government VAT liabilities. Thus consolidated, public revenue in 2005 went up 2% in real terms relative to last year on a purely cash basis (Table T-20), but when the receipts are reduced by the amount of the increased government VAT liabilities, real growth is almost unchanged in the entire year, while in Q4, in the case of the VAT – it is negative. Apart from the VAT, the personal income tax and the corporate income tax also recorded positive real growth in the year (7.1%), and non-tax and capital revenue (8.4 and 12.4% respectively, in real terms); other revenue categories saw a real drop, predominantly due to cuts in tax rates.

Table T-19. Serbia: General Government Consolidated Accounts[1], 2003-2005
Nominal amounts in billions of dinars

	2003	2004	2005		
	total	total	Q1 - Q3	Q4 (estimate)	total
I PUBLIC REVENUES	472.3	589.4	491.0	210.2	701.2
o/w: Public revenues excluding VAT liabilities to enterprises and offsets with SDF[2),3)]	472.3	580.6	477.4	202.4	679.8
Current revenues, o/w:					
Personal and corporate income taxes	82.2	83.9	74.6	30.0	104.6
Net revenues excluding VAT liabilities to enterprises[2)]	126.0	159.1	143.8	56.2	199.9
Excises	58.1	69.1	51.2	20.0	71.3
II PUBLIC EXPENDITURES	-500.6	-572.0	-474.2	-195.3	-669.6
1. Current revenues, o/w:					
Wages and salaries	-116.1	-138.0	-118.6	-47.5	-166.2
Purchases of goods and services	-72.3	-78.3	-62.7	-29.6	-92.3
Subsidies and social transfers[3)]	-269.4	-280.8	-242.4	-94.8	-337.3
Capital expenditures[4)]	-21.9	-37.0	-22.3	-10.7	-33.0
III "OLD" DEBT REPAYMENT AND BUDGET CREDITS	-31.7	-25.2	-28.7	-7.9	-36.6
IVa CONSOLIDATED BALANCE (I+II), MoF definition[5)]	-28.3	17.5	16.8	14.9	31.7
IVb OVERALL BALANCE (IVa+III.3.), IMF definition, MoF data	-37.4	15.7	13.3	13.4	26.7
IVc ANALYTICAL BALANCE (I+II+III), FREN's definition[5)]	-60.0	-7.7	-12.0	7.0	-5.0
V FINANCING (FRENs definition)	45.5	23.9	25.3	2.1	28.7
MEMORANDUM ITEMS					
Government net position in banking system, change:					
- based on recorded fiscal flows (IVc+V)	-14.5	16.2	13.3	9.1	23.7
- based on commercial banks' financial reports (NBS data)	7.9	-7.0	26.7	11.4	38.1
Enterprises' claims on VAT (FRENS's estimate)[6)]	...	...	10.0	6.0	16.0

Source: Table P-5 in Analytical Appendix.
1) See footnote 1 in Table P-5. in Analytical Appendix.
2) See footnote 2 in Table P-5. in Analytical Appendix.
3) See footnote 3 in Table P-5. in Analytical Appendix.
4) See footnote 5 in Table P-5. in Analytical Appendix.
5) See footnote 7 in Table P-5. in Analytical Appendix.
6) See footnote 13 in Table P-5. in Analytical Appendix.
Notes: See footnotes in Table P-5. in Analytical Appendix.

…and from the elimination of a tax collection lag on imports.

Real growth of the VAT revenue on a cash basis is primarily a consequence of the change in the structure of tax debts and the time lag in tax collection. Two types of time shifts in payments explain it. First, the VAT on imported goods is collected at the point of importation, while the sales tax was collected when imported goods were sold. It means that, in Q1 2005, not only tax on imports from the previous periods was collected, but also the VAT on current imports, which beyond doubt significantly contributed to the higher year-on-year growth of inflows in Q1. FREN does not have exact figures on the size of this effect (or data on the VAT collected from imports), but it may safely be assumed that the effect disappeared in the subsequent quarters. Second, while in the past enterprises used to owe the government for sales tax, in 2005 these roles were reversed: the government started to owe refunds and tax credits for the VAT to enterprises, in even higher (and increasing) amounts than those of enterprises' arrears to the government. The cash flow includes collected sales tax arrears from last year, and does not exclude receipts from the rising government debt. According to unofficial information, in mid-year the government debt stabilized at around 10 bn dinars, but then leapt by another 6 bn (FREN's estimate) in Q4 alone, to reach at least 16 bn dinars at the year-end.[1]

1 In the first quarter of 2006, repayments were accelerated, but it is not clear whether they will be recorded in this or in the previous year. We are currently contacting the Ministry of Finance with respect to this issue and asked them to provide us with more detailed data in order to be able to carry out a more precise analysis.

Table T-20. Serbia: General Government Consolidated Accounts [1], 2003-2005

	y-o-y real growth, in %			in % of GDP		
	2003	2004	2005	2003	2004	2005
I PUBLIC REVENUES	4.0	13.4	2.1	43.1	45.0	43.3
o/w: Public revenues excluding government VAT liabilities and offsets with SDF [2),3)]	...	11.7	0.5	43.1	44.3	42.0
1. Current revenues, o/w:	…	13.2	2.0	42.7	44.5	42.8
Tax revenues	-1.0	12.3	1.5	39.9	41.3	39.5
Personal and corporate income taxes	6.7	-7.3	7.1	7.5	6.4	6.5
Value added tax and retail sales tax	2.2	14.7	16.5	11.5	12.1	13.3
o/w: Net revenues excluding VAT liabilities to enterprises [2)]	...	14.7	7.9	11.5	12.1	12.4
Excises	10.9	8.0	-11.4	5.3	5.3	4.4
Customs duties	6.7	5.2	-2.5	2.7	2.6	2.4
Social contributions	4.7	24.4	-0.4	10.6	12.1	11.4
o/w: contributions excluding offsets with SDF [3)]	...	*17.5*	*2.4*	10.6	11.5	11.1
Other taxable income	-50.9	27.8	-41.6	2.3	2.7	1.5
Non-taxable income	171.6	26.0	8.4	2.8	3.3	3.3
2. Capital revenues	…	25.3	12.4	0.4	0.5	0.5
II PUBLIC EXPENDITURES	2.9	3.8	0.5	-45.7	-43.7	-41.4
1. Current expenditures						
Wages and salaries	9.8	8.0	3.3	-10.6	-10.5	-10.3
Purchases of goods and services	-7.4	-1.6	1.1	-6.6	-6.0	-5.7
Interest payment	15.7	102.8	-14.3	-1.0	-1.9	-1.5
Subsidies and social transfers [4)]	-28.7	-5.3	3.1	-24.6	-21.4	-20.8
o/w: pensions [4)]	*1.6*	*7.9*	*5.7*	-11.6	-11.5	-11.5
Other current expenditures	-17.9	21.9	5.8	-0.9	-1.0	-1.0
2. Capital expenditures [5)]	20.0	53.4	-23.5	-2.0	-2.8	-2.0
III "OLD" DEBT REPAYMENT AND GOVERNMENT NET LENDING	…	-27.9	24.9	-2.9	-1.9	-2.3
1. Debt repayment - FFCDs and LRS	…	-9.2	-0.5	-1.7	-1.4	-1.4
2. Pensions [4)]	…	9.9	86.7	-0.3	-0.3	-0.6
3. Budget credits, net [6)]	…	-82.2	138.2	-0.8	-0.1	-0.3
IVa CONSOLIDATED BALANCE (I+II), MoF definition [7)]	…	…	…	-2.6	1.3	2.0
IVb OVERALL BALANCE (IVa+III.3.), IMF definition, MoF data	…	…	…	-3.4	1.2	1.7
IVc ANALYTICAL BALANCE (I+II+III), FREN's definition [7)]	…	…	…	-5.5	-0.6	-0.3

Source: Table P-5 in Analytical Appendix.
1) See footnote 1 in Table P-5. in Analytical Appendix.
2) See footnote 2 in Table P-5. in Analytical Appendix.
3) See footnote 3 in Table P-5. in Analytical Appendix.
4) See footnote 4 in Table P-5. in Analytical Appendix.
5) See footnote 5 in Table P-5. in Analytical Appendix.
6) See footnote 6 in Table P-5. in Analytical Appendix.
7) See footnote 7 in Table P-5. in Analytical Appendix.
Notes: See footnotes in Table P-5. in Analytical Appendix.

Real growth of public revenues was contained...

...as was that of government expenditure...

...but debt repayment grew faster than GDP.

In fact, sustainable and underlying VAT collection in Q4 2005 declined in real terms.

The question arises as to what the underlying, cleansed from extraordinary effects, VAT performance has been. After excluding the rise in government debt, the VAT revenue had a real growth of 7.9% for the year as a whole, while in Q4 it dropped by about 3% year-on-year (Table T-20). As a period for analysis, Q4 is more indicative than the year as a whole for two reasons: (a) it is known that the effects of increased tax coverage diminish over time, compared to the period immediately after the VAT introduction, and (b) in the previous quarters the concurrent taxation of last year's and this year's imports was in effect. Nevertheless, the year-on-year growth rate in Q4 was also impacted by two extraordinary factors: a) an exceptionally high turnover in Q4 2004, just before the VAT introduction, and b) the time-wise proximity of the broadening of the tax base achieved with compulsory cash registers – also in Q4 2004. Another possible explanation is that the tax burden has been effectively reduced with the introduction of the VAT. With caution as precise information is not available, it would appear that the slowdown of the VAT collection on an accrual basis is nonetheless disquieting. FREN is currently in the process of requesting more detailed data from the Ministry of Finance, which should enable a more confident assessment of the situation.

Contributions for mandatory social insurance – the second largest fiscal revenue (with a share in total revenue of around 26%), on the other hand, had an unrealistically low growth in 2005 relative to 2004. The picture is somewhat changed if the offsets that we are aware of are excluded from the analysis. These offsets were carried out between some enterprises and the Serbian

Pension and Disability Insurance Fund through the Serbian Development Fund (SDF) over these two years. When these offsets are excluded from 2004 and 2005, contributions show a higher real growth, but still lag behind other indicators of collection of dues related to wages and personal income (see, e.g. *Spotlight On* 1). It may therefore be assumed that the poor performance of contributions reflects difficulties in precise monitoring of this category, rather than underlying trends. It is possible that contributions include other offsets, in addition to those which we have established, or that there are exemptions about which we have not been informed.

Revenue from the corporate income tax is skyrocketing, indubitably reflecting a rise in profits reporting.

The taxes on personal income and corporate income had a real growth of 7.1% in 2005 relative to 2004 (Table T-20), which was slightly decelerated in Q4 (4.5% relative to Q4 2004). Unfortunately, the PFB does not present these two tax instruments separately, hence we are not able to identify the reason for the growth deceleration in Q4. IMF estimates, however, suggest that in the year as a whole, the corporate income tax, which accounts for a mere 10% of this category – grew at a very high rate of around 22% in real terms annually, while the performance of the group of taxes on personal income, which also comprises lump-sum taxes paid by small businessmen and liberal professions that were reduced in the previous period – was relatively low (2.9% in real terms). The high growth of the corporate income tax is all the more impressive in light of the fact that its rate was reduced in mid-2004 from 14% to 10% nominally. There is no doubt that the performance of this tax reflects increased reporting of corporate income and profit in addition to actual growth. The increased reporting of profits was the result of a whole range of factors, among them being: an increase in the differential between the profit tax and all other rates in the country, a significantly increased probability that a bank loan can be taken out if the presented income is good, and reduced anxiety about adverse consequences if profits are reported.

Non-tax and capital revenues rose significantly in real terms in Q4, and for the year as a whole their performance was solid (8.4% and 12.4% respectively) relative to 2004. The category of non-tax revenue is very heterogeneous – comprising various fees and charges in whose movements no particular regularity exists, but such real growth is certainly encouraging.

Collection declined mostly with respect to taxes whose rates were cut.

Other tax revenue made the largest contribution to a decline in tax revenue, with a real drop of 31.6% in Q4 and 41.6% in 2005, relative to the same period last year (Table T-20), because the wage bill tax and the financial transaction tax were eliminated (in mid-2004 and early 2005, respectively). The first measure was adopted as part of delivering on the government's campaign promises, while the second measure was a final touch in the longstanding policy of reducing the financial transaction tax, which was a serious impediment to the development of the financial sector. The **excise** revenue contributed to the drop in fiscal revenue both in Q4 (real growth – 13.9%) and in 2005 as a whole (real growth – 11.4%), relative to the relevant period in the previous year. Such movements are a result of two reductions in the nominal amounts of excises on petroleum products: in May and in August – by three dinars each time, while an increase of one dinar slightly mitigated their decline in Q4. Cuts in excises were a result of the effort to slow down hikes in petroleum product prices on the market, though based on the mistaken belief that buoyant fiscal receipts from the VAT made that possible. In comparison with the same period of the previous year, **customs revenue** dropped considerably in Q4 (real growth – 10.8%), because the extraordinarily high imports in Q4 2004 extraordinarily increased the base for comparison. Still, their performance, in line with – first negative, and then weak - import growth (see Box 1), was barely discernible in the course of the entire year.

Privatization proceeds in 2005 overtook even those in 2003, but not all seem to be registered yet…

Registration of privatization proceeds is still very unreliable, and for the time being we have only data registered through the Serbian budget (increased by 10%, because under the law that amount is set aside for the Restitution Fund and the Pension Fund), amounting to 21.7 bn dinars for all of 2005 (Table P-5, Analytical Appendix), compared to 51 billion estimated by the IMF. The relevant figures in 2004 amounted to 23 billion and 7.2 billion, which leads to the conclusion that the IMF makes estimates on the accrual basis (when liabilities of the buyers are generated), and the state on the cash basis (when the liabilities are met and when they passed through the budget).

…resulting in a big discrepancy between fiscal and bank records on fiscal operations.

We believe that higher actual privatization proceeds than those in the fiscal accounts constitute the main reason for a rise in consolidated general government net deposits in the banking system. These, when computed on the basis of available information on fiscal operations (22.4 bn dinars), are very different from the situation reflected in consolidated general government accounts in the banking sector (a rise in deposits of 38.1 bn dinars, see Table T-19, that is, P-5, Analytical Appendix). That difference is considerably higher than in previous years and cannot be explained only by possible mistakes in the fiscal accounts; rather the explanation has to be sought in their insufficient coverage. Information in IMF reports points to the probability that the bulk of that difference is explained by privatization proceeds, because they are not included in the published fiscal accounts.

Real expenditure grew slower than GDP for the second year in a row.

As for consolidated public expenditure, it can be said, though with stronger reservations than in the case of revenue, that in Q4 it had a real year-on-year growth of 0.7% and of around 0.5% for the year as a whole, relative to 2004[2] (Table T-20). It is possible that a slightly faster growth in Q4 was a reflection of the compensation for extremely restrictive spending in Q3 – and, hopefully, not of a general acceleration of the trend. The fall in the share of expenditure in GDP for the second year in a row is a particular success, bearing in mind that actual expenditure in 2004 was underestimated by at least 1% of GDP: because part of the costs in Q1 2004 were financed and presented as part of the 2003 expenditure.[3] Total expenditure was reduced (by two percentage points of GDP), even after including the increased clearance of government arrears to households (items in Section III of Table T-20), almost entirely due to the reduction in subsidies to the economy and social transfers. Unfortunately, we are still not able to present these two items separately, due to the suspicion that there are significant inconsistencies in their treatment, which disappear – when these items are combined in the presentation. Spending which is directly financed out of the central government budget (around 60% of total public expenditure) was particularly restrictive; excluding transfers to other levels of government or debt repayment, this spending, according to the data in the PFB fell in real terms by 3.4% in 2005 relative to the entire year 2004, and, in particular, relative to Q4.

If the figures for 2005 and 2004 are comparable, all the presented categories of expenditure, with the exception of pensions and "other expenditure," grew more slowly than GDP and their respective shares in GDP were reduced. The largest savings were made in social transfers and subsidies and in capital expenditure, but the fastest drop was in interest expenses. The data on movements in individual categories, nevertheless, has to be accepted cautiously: for example, the figure on capital investment surged in 2004, and plunged in 2005; we believe that this reflects inconsistencies in statistical coverage rather than of real movements.[4] If this is so, then the level of capital expenditure in 2004, and consequently its fall in 2005, was overestimated. Since the Ministry of Finance and the IMF made a particular effort in the course of 2005 to harmonize their statistics, fewer difficulties should be expected in estimating movements in 2006.

Local budgets...

In addition to the central budget, the local governments and the Pension and Disability Insurance Fund of the Self-Employed also contributed to the cut in public spending and the generation of a surplus at the level of consolidated general government. The spending of local governments was, in all probability, overestimated in 2004 as well, which, if true, has contributed to overstating

2 The relationship between item values in IMF reports in Ministry of Finance data vary, so a conclusion begs to be made that their treatment from year to year is not consistent in either of these two sources. On the whole, the Ministry's figures for 2004 are not very different from those presented by the IMF – sometimes they are higher although they should always be lower (as is the case with 2003 and 2005) because the IMF's coverage is wider. These dilemmas can be resolved only based on access to detailed data, which FREN does not have.

3 Since Parliament was dissolved in late 2003, the budget for 2004 could not be passed. Under the law, budget expenses in the first quarter of 2004 in such a case had to be statutorily restricted to the 2003 level. Aware of the fact that it would be a serious constraint in the execution of indexed expenditures such as pensions, the outgoing Ministry of Finance found a way to finance part of the 2004 expenses out of the 2003 budget. We do not know the amounts, but a sudden leap in the item "budget loans", which in 2002 amounted to 0.6 bn and in 2003 to nine bn dinars, is indubitably related to this financing.

4 The problem is probably created by costs financed out of foreign project loans (FLIPs – see footnote 17 in Table P-5, Analytical Appendix). The IMF includes these costs in its capital expenditure item, and the Ministry does not - in principle. Total capital expenditure, however, in 2004 (and only in 2004) is almost the same in the official reports of the Ministry as the amount presented by the IMF, while in other years the difference between them practically matches the amount of FLIPs, that is, is by that amount lower in the reports of the Ministry.

...have surpluses too, but their expenditures are growing faster than central government expenditure.

the reduction in costs in 2005. The Ministry of Finance, and the IMF for that matter, basically do not have data on the spending of local governments before 2005.5 A standard assumption in official analyses is that the local budgets were balanced, i.e. that expenses were roughly at the same level as revenues. That assumption is not corroborated by the data on the movements of local governments' net positions in the banking system (see Table T-21), which shows an increase in net deposits (a surplus) of 6.6 bn dinars in 2004. That, in turn, means that the official data on total expenditure in 2004 (from the Memorandum on the Budget and Economic Policy for 2006 with Projections to 2009, and in Table T-19, that is, P-5, Analytical Appendix), and the rate of the expenditure cut in 2005 – were overestimated. Bearing in mind that, relative to total revenues in the previous year, the expenditures of local budgets slightly declined in real terms, it is reasonable to assume that they were actually unchanged relative to the actual expenditures in the years before, or that they went up. In any event, both the fiscal and monetary data suggests that local governments generated a surplus of around two bn dinars in 2005.

Table T-21. Serbia: Government Position in the Banking Sector, 2003-2005.

	2003	2004				2005			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
				in billions of dinars, stocks					
Total	-14.9	-15.3	-4.4	-8.5	-8.0	-28.2	-24.0	-34.7	-46.1
Republics and State Union									
Total	-8.4	-2.5	7.6	4.1	5.1	-9.2	-3.7	-12.2	-30.8
Dinar position	3.9	5.9	7.3	5.5	4.6	-2.7	-5.5	-12.1	-24.0
Fx position	-12.3	-8.4	0.3	-1.4	0.6	-6.5	1.8	0.0	-6.8
Municipalities									
Total	-6.5	-12.8	-12.0	-12.6	-13.1	-18.9	-20.3	-22.5	-15.3
NBS	-1.3	-3.8	-3.2	-3.5	-5.1	-10.4	-8.3	-10.1	-5.9
Commercial Banks	-5.2	-9.0	-8.8	-9.0	-8.0	-8.6	-12.0	-12.5	-9.4
				in billions of dinars, cumulative from the beginning of the year					
Total	-7.9	-0.3	10.5	6.5	7.0	-20.2	-16.0	-26.7	-38.1
Republics and State Union									
Total	-6.4	5.9	16.0	12.5	13.5	-14.4	-8.8	-17.3	-35.9
Dinar position	-3.5	2.1	3.4	1.6	0.7	-7.3	-10.0	-16.7	-28.5
Fx position	-2.9	3.9	12.6	10.9	12.9	-7.1	1.2	-0.6	-7.4
Municipalities									
Total	-1.5	-6.2	-5.5	-6.1	-6.6	-5.8	-7.3	-9.5	-2.2
NBS	-1.2	-2.5	-1.9	-2.2	-3.8	-5.3	-3.2	-5.0	-0.8
Commercial Banks	-0.3	-3.7	-3.6	-3.8	-2.8	-0.6	-4.0	-4.5	-1.4

Source: NBS.

The health sector increased its material costs significantly.

Expenditures for purchases of goods and services in the observed period grew slightly faster than inflation (0.4%). The savings which the central and local governments made on the purchases of goods and services (a real drop in 2005 relative to 2004 amounts to 8.5% for the central and 7.8% for the local budgets) were offset by other levels of government, first and foremost, the Health Insurance Fund, where this category of expenditure recorded a real growth of 24.3% over the observed period.[6]

Containment of expenditures for employees was achieved at a high price.

A great and, in all likelihood, expensive and hastily implemented effort to reduce the number of employees in the public administration and public enterprises, under strong pressure from the IMF, marked 2005. The government's objective was to shed 10% of labor, and according to the Ministry of Finance, this objective was achieved for the most part. It should be mentioned that the IMF reported that the two billion dinars earmarked for severance payments in education

5 It should be mentioned here that the lack of data on December spending at the local level in 2005, as well as on mandatory social insurance organization, makes the analysis of fiscal spending more difficult.

6 In the Health Insurance Fund (RZZO), the expenditure for purchases of goods and services includes material costs of medical providers. Purchases of goods and services in the RZZO account for 45.8% of total expenditure for purchases of goods and services, namely for 6.3% of total public expenditure.

were most probably spent on wages.[7] On the whole, numerous *repeated examples* indicate that many employees left at a price which was higher for the government than if they had remained at their jobs until the mandatory retirement age. The costs of the downsizing were mostly financed out of the resources of public enterprises themselves and the Transition Fund. They are included in the costs of social protection, and they will burden the future pension fund as well, with pension expenditure for the early retired.

Data on the movements of expenditures for employees in 2005, in which, according to our information, from among the costs of labor shedding only severance payments in the health sector are included (2 bn dinars), shows a real growth of 3.3% relative to the same period of the previous year (Table T-20) and slightly less in Q4. In the central budget data, expenditure for total wages did not grow in real terms, but since there are compelling indications that in the education sector wages grew strongly, their financing out of the allocation for severance payments probably was not included in this total figure. Since no major real wage growth occurred at the other levels of government, it turns out that the greatest contribution to the wage growth came from the local level. In order to make the required savings on expenditures for employees, Serbia has to find a way to control wage growth at the local level. Certain steps in that direction have already been taken. The Law on the 2006 budget puts a cap on wage growth for employees at the local level of government at the level of inflation.

Expenditures for social protection, including the Transition Fund, rose fast and subsidies declined.

Expenditures for social protection, as the largest and the most inelastic item of public finances have a crucial impact on public spending and they grew, measured together with subsidies, by 3.1% in real terms.[8] The data shows that subsidies were significantly reduced and expenditures for social protection increased, although it is difficult to determine exactly by how much. Our data on these expenditures in Table T-19 (that is, P-5, Analytical Appendix) are lower than the official data, since we were more consistent in classification than the official statistics – we have classified all known expenditures for clearance of arrears to pensioners as debt repayment, not as social expenditures. Expenditures for current pensions constitute the largest item in social protection and they rose by 5.7% in real terms, maintaining a relatively unchanged share in GDP in the course of 2005 – for the third subsequent year[9] (Table T-20). On the other hand, clearance of arrears to pensioners was almost doubled (real growth of 86.7%), due to the repayment of the first tranche of the debt (4 bn in December), which was incurred after the reduction of the pension arrears (in Table P-5, Analytical Appendix, and Table T-20, this expenditure is presented as a separate item in Section III).

The clearance of pension arrears was also fairly costly.

In order to have the first tranche of the pension arrears clearance accepted under the arrangement with the IMF, the government assumed a number of obligations, the so-called "compensatory measures", which it had to adopt and implement before the completion of the last, sixth review under the arrangement. The fact that those measures were defined as prior actions, i.e. as measures without whose unconditional implementation the review could not be completed, suggests that they were all implemented, most probably in the course of January this year, and they include:

- adopting a decree to increase fuel excises by at least 1 dinar;
- reducing subsidies for housing loans and farmers in the amount of 1.5 bn dinars;
- reducing the budgetary reserve and expenditures for goods and services by 1.6 bn dinars;
- collecting tax arrears from NIS in the amount of 1.5 bn dinars
- eliminating tax exemptions for imports of capital goods in the amount of 1 bn dinars.

Such an agreement illustrates the fact that the IMF insists on a fiscal framework which can be

7 Similarly, unofficial RZS data on employment in the public administration that is available to us does not reflect the mentioned downsizing, which could mean that layoffs in some sectors were offset by new employment in other sectors.

8 The PFB presents subsidies and social transfers separately, but their movements and comparisons with the IMF data strongly suggest that a change has occurred in the classifications according to which the decline in subsidies and the rise in social transfers are overstated. We chose to present them together as it seemed like a safer option.

9 As of 2006, pensions will be indexed twice a year (instead of quarterly) with gradual changes in the indexation formula, which will reduce the weight of wage growth and increase the weight of the cost of living. Eventually, pensions should be indexed only to the cost of living.

financed in a non-inflationary manner, as well as on a minimum credibility of the sustainability of such a framework over in the medium term. The contents of fiscal policies, however, are determined by the one who, in the negotiations between the IMF and the government, attaches more importance to them. With a clear vision and reliable information, any government can manage this process.

Box 1: Definitions of the fiscal balance and their purposes

IMF's GFS allows more then one definition of the fiscal balance.

A considerable part of fiscal analysis in a country such as ours consists of efforts to properly group the recorded fiscal operations in the course of their classification, according to their common characteristics. In doing so, the choice of essential characteristics changes depending on the needs of the analysis. The IMF methodology *Government Finance Statistics 2001* (GFS 2001) makes recommendations aimed at facilitating the analysis and achieving international comparability of the presentation, and takes the view that each specific situation is different; hence the analyst has to decide on his/her own what the main purpose of the analysis is and how to achieve it. The key concept is the *fiscal balance*, i.e. the balance of fiscal operations which have been selected as indicative transactions according to a specific criterion, and shown together "above the line". Other fiscal operations, that finance the net balance of the operations "above the line" are placed "below the line" and called financing.

In July 2005, the Ministry of Finance adopted amendments to the Law on the Budget System (Organic Budget Law) which provide several definitions of a fiscal balance (consistent with GFS 2001). The 2006 budget was prepared in conformity with these amendments, and this created quite some confusion in the public. The following fiscal balance definitions were used in that exercise (their names in the Law are shown in bold):

The MoF's definition differes from…

• **Consolidated surplus/deficit**[1] (*cash surplus/deficit* under GFS 2001) – Table T-19 and P-5, Analytical Appendix, line IVa – is the first measure of the fiscal outcome which the Ministry of Finance presents, that describes the net effect of the financing of the general government functions. It constitutes the difference between consolidated public revenues and receipts from the sale of non-financial assets, and consolidated public expenditure and expenses for the acquisition of non-financial assets. In its reports on Serbia, the IMF does not present that balance at all.

Overall fiscal balance (overall fiscal balance under GFS 2001) – The consolidated surplus/deficit is adjusted for the government's "net lending" which is recorded in the item of the PFB "expenses for acquisition of financial assets."2 The term used for these financial transactions under the old GFS (of 1986), which the IMF still uses in its reports, is lending minus repayment (or net lending) - the net acquisition of financial assets for policy purposes. This refers exclusively to loans granted with a view to implementing government policies (students' loans, support to the development of certain economic sectors or regions of the country, etc.). Hence, the overall balance describes all government financial transactions in support of concrete policies, rather than changing the level and structure of the government's financial wealth. The IMF does not present either of these two balances in its analyses. Instead, it presents adjusted overall fiscal balance:

…the IMF's definition.

• Under the GFS, privatization proceeds are formally treated as negative „net lending" i.e. as revenue "above the line", therefore the Ministry of Finance also treats them in the same manner. The IMF, however, recommends, and this recommendation is absolutely applied in transition countries since privatization proceeds are usually temporarily very high, to nevertheless account for privatization proceeds „below the line", for analytic needs. The IMF in its reports on Serbia actually presents them in this manner – *Overall balance* excluding privatization proceeds, and this is the convention accepted in the presentation of the balance IVb in Tables T–19 and P-5, Analytical Appendix.

Also, the IMF's coverage of transactions included in the reports is broader.

So, if we compare the fiscal data of the Ministry of Finance and of the IMF, the comparable balance is the overall fiscal balance (excluding privatization proceeds) of the Ministry of Finance with one balance presented by the IMF in its documents on Serbia – *overall balance*. It should be stressed, however, that there are also differences in the **coverage of transactions** between the IMF's presentation of fiscal accounts and the accounts the Ministry of Finance has so far combined in its

1 In the Budget Law, specifically, it is the ***budget deficit/surplus*** which follows the same logic as described below.
2 Account 621

presentation. The IMF takes into account own revenue of the budget beneficiaries and the matching expenditure of these budget beneficiaries. It includes own revenue in non-tax revenue on the revenue side, while on the expenditure side, the expenditures financed out of own revenue are classified in accordance with their economic purpose. The Ministry of Finance does not consolidate this revenue and expenditure. Further, the IMF includes the capital expenditures financed out of project loans, granted mostly by IFIs (FLIPs – Foreign loan financed investment projects), into capital expenditure (consequently, they are included in total public expenditure) and in foreign financing. As a rule, the Ministry of Finance does not include them in capital expenditure, but this may have been done in certain figures (See footnote 16 in Table P-5, Analytical Appendix).

We use the definition from IMF's earlier reports…

FREN is of the opinion that for *QM*'s analytic purposes, whose focus is on short-term macroeconomic developments, the definition of the fiscal balance which the IMF used for Serbia before 2004 is particularly useful. It includes, in addition to all the transactions included in the ***overall fiscal balance*** *(excluding privatization proceeds), also* ***clearance of arrears*** (line IVc in Tables T-19 and P-5, Analytical Appendix)**.** We use this definition as **FREN's definition**.

FREN's definition of the fiscal balance – we call it the "analytical balance" (line IVc in tables T19 and T20), measures the effect of government operations on the economy with respect to liquidity – because the objective of short-term fiscal policy is to contribute to price stabilization and economic growth in coordination with monetary policy. In that sense, a question arises as to which of the government's outlays and revenues result in boosting/restraining overall demand – i.e. expenditure in the economy. We want to present them "above the line," because a balance of such operations has a restrictive (if it is positive) or an expansionary (if it is negative) effect on demand (consequently also on economic growth and inflation).

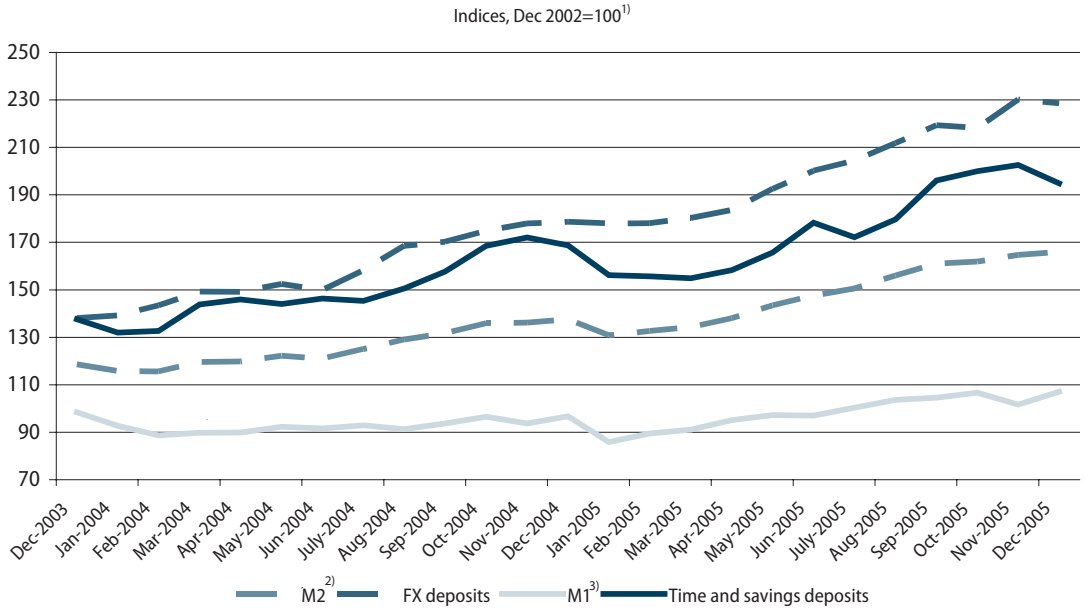
…that measures the overall effect on the economy's liquidity.

The clearance of arrears, such as repayment of FFCDs and pension arrears, is essentially different from debt repayment such as, for instance, the purchase of T-bills, because it affects household's consumption demand function. The uncertainty surrounding the collection of such claims in the past, and the fact that the government did not assume these liabilities in the process of deficit financing –absorbing voluntary private savings – mean that their collection affects the household's perception of his/her own wealth. This, in turn, means that such payments have a positive wealth effect in the receipient's consumption function. It is true that the wealth effect was produced to a certain extent even at the point when the government just announced the commitment to clear these arrears, and that it then affected a whole range of household spending decisions in the medium and long run. Nevertheless, in a country where policies are as uncertain as in Serbia, there is little doubt that the full wealth effect is only felt upon the actual repayment of the debt. Moreover, as households are still highly credit rationed, the spending in consequence to the wealth effect can only be fully implemented, after the actual payment is effected.

7. Monetary Flows and Policy

Credit expansion was stronger in Q4 of 2005 than in the preceding three, mainly because of growth of enterprise demand for loans. The National Bank of Serbia (NBS) equalized the reserve requirements on domestic and foreign fx sources at 38%, raising the effective rates by three percentage points. Owing to the unabated demand for credit, the increased reserve requirement on banks' foreign borrowing in Q4 increased foreign borrowing of the banks that are primary financed from foreign sources of funding - by more than in the first three quarters of 2005 together. The high demand for dinar liquidity led to a further increase in foreign currency reserves, and defeated NBS efforts to sterilize dinars in the system.

Graph T-8. Serbia: Money and Component Aggregates, Real Stocks, 2003-2005



Source: Table P-6. in Analytical Appendix.
1) Stocks deflated with RPI index.
2) 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. Enterprises also include non-profit and other non-government economic entities.
3) M1 includes: currency outside banks and demand deposits of households and enterprises. Enterprises also include non-profit and other non-government economic entities.

Monetary growth, driven by fx deposits was rapid and stable...

...but credit to enterprises accelerated in Q4.

The final quarter of 2005 saw no significant changes in money trends. The growth rate of (M2[1]) slowed down slightly, from 42.6% in Q3 to 41.9% in the last. Essentially it remained at the same level attained after the 10 percentage point acceleration over Q1 of the year. Viewed in real terms, annual monetary growth in 2005 remained at 20.6%, as in the previous two quarters, accelerating from the 16.0% recorded at end 2004. Where loans to the non-government sector are concerned, Q4 was characterized by a surge spearheaded by the growth of credit to enterprises to 57.3% from the approximately 50% annual growth recorded in the previous two quarters (Table T-22). Nonetheless, in real terms credit growth is stable, running at an annual rate similar to that recorded last year.

1 The definition of M2 under the IMF methodology refers to M3 in the accepted methodology in Serbia and includes: cash in circulation, demand deposits, dinar time deposits and fx deposits.

Table T-22. Serbia: Monetary Survey, Selected Indicators, 2003-2005

	2003	2004	2005			
	Dec	Dec	Mar	Jun	Sep	Dec
			y-o-y, in %			
M2 [1]	27.9	31.9	31.8	42.5	42.6	41.9
Credit to the non-government sector[2]	33.8	51.6	54.8	51.5	50.0	57.3
Households	78.8	125.0	115.7	105.2	97.3	93.8
Enterprises[3]	27.4	37.1	42.1	38.6	36.8	45.5
			real y-o-y, in %			
M2 [1]	18.6	16.0	12.3	22.0	22.3	20.6
Credit to the non-government sector[2]	24.1	33.3	31.9	29.7	28.8	33.7
Households	65.9	97.8	83.7	75.6	69.3	64.7
Enterprises[3]	18.2	20.5	21.0	18.7	17.4	23.7
			cumulative, in % of opening M2[4]			
M2[1]	27.9	31.9	2.5	15.9	30.9	41.9
M2 dinar[5]	7.3	8.9	-0.8	4.4	10.5	14.3
Foreign deposits (households and enterprises)	14.3	12.6	2.5	9.2	16.1	22.2
Valuation adjustment[6]	6.2	10.4	0.8	2.3	4.3	5.4
Net foreign assets (NFA), fx increase	12.5	-11.7	0.7	5.4	13.5	15.5
Valuation adjustment[6]	7.8	8.5	0.7	1.8	3.5	4.2
Net domestic assets (NDA)	7.5	35.2	1.2	8.7	13.8	22.2
Credit to the non-government sector[2]	22.9	36.6	8.4	16.3	28.8	46.7
Net credit to government[7]	-2.7	5.5	-4.4	-2.7	-5.3	-11.0
o/w: NBS and Commercial banks capital and reserves	22.6	-9.6	-2.7	-6.6	-9.0	-12.4
			cumulative, in % of GDP[8]			
Net credit to government[7]	-0.6	1.1	-1.1	-0.6	-1.2	-2.3
o/w: dinar credits	-0.3	0.1	-0.5	-0.7	-1.1	-1.8
Credit to the non-government sector[2]	4.0	7.1	2.0	3.7	6.3	9.7

Source: Table P-6. in Analytical Appendix.
1) See footnote 2 in Graph T-8.
2) Credits to the non-government sector: credits to households and enterprises (including cities and municipalities, non-profit and other non-government entities).
3) Enterprises also include non-profit and other non-government economic entities.
4) "Opening M2" refers to the stock of M2 from the beginning of stated year (i.e. end of previous year).
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) Valuation adjustments refers 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).
8) Estimated centered GDP on an annual basis.

Credit growth exceeds that of money both in rate...

...and absolute terms.

Money growth was driven by the expansion of credit and the record accumulation of foreign exchange reserves.

Measured in percentages of opening M2, the 41.9% money growth concluding with Q4 of 2005 was the result of credit expansion by 46.7% of opening M2, and an increase in net foreign assets amounting to 15.5% of opening M2[2] (Table T-22). The increase in M2 would, therefore, have been significantly higher if the effects of credit expansion had not been partially neutralized by an increase in government deposits of 11.0% of opening M2, and if part of the credit growth had not been financed from increases in banks' capital by 12.4% of opening M2. The credit growth, particularly pronounced in Q4, was mainly financed from banks' borrowing abroad. However, the net accumulation of reserves in the system of 15.5% of opening M2, i.e. the fact that the NBS reserved an amount much higher than the increase in debt of the whole banking system, indicates that other capital inflows also had an impact on increasing liquidity. The increase in NBS reserves in 2005 reached 1.9 bn euros in Q4, while the foreign liabilities of the banking system increased 1.1 mn euros (Table T-23). By way of contrast, banks last year borrowed about 450 mn euros more than the accumulated NBS reserves, and the net foreign assets increase in the banking system was negative.

2 To recall, the total money in the system (M2) equals the sum of net foreign assets and net domestic assets.

Table T-23. Serbia: Monetary Survey, 2003-2005

The financial system balance is still growing fast

	2003	2004	2005			
	Dec	Dec	Mar	Jun	Sep	Dec
STOCK						
	in millions of dinars, end of period					
Net foreign assets (NFA)	150,952	143,045	147,520	166,237	198,041	206,794
o/w: NBS gross reserves	193,700	244,837	272,654	302,596	358,226	420,808
o/w: commercial bank foreign liabilities	-23,613	-81,300	-95,127	-111,774	-126,076	-181,110
Net domestic assets (NDA)	93,914	180,037	183,792	208,058	224,717	251,747
Net credit to government[1]	-8,415	5,115	-9,236	-3,669	-12,169	-30,794
Net dinar credit	3,896	4,557	-2,704	-5,459	-12,134	-23,956
Net fx credit	-12,311	558	-6,532	1,790	-35	-6,838
Credit to the non-government sector[2]	173,687	263,292	290,513	316,028	356,294	414,260
Other items, net	-71,358	-88,370	-97,485	-104,301	-119,408	-131,718
M2[3]	244,866	323,082	331,312	374,295	422,758	458,541
M2 dinar[4]	124,886	146,584	144,128	160,766	180,445	192,888
Fx deposits (households and economy)	119,980	176,498	187,184	213,529	242,313	265,653
MEMORANDUM ITEMS						
Currency outside banks / Dinar deposits (households and economy) (%)	52.5	44.5	37.6	35.7	35.5	38.5
Fx deposits (households and economy) / M2 (%)	49.0	54.6	56.5	57.0	57.3	57.9
Velocity (GDP[5] / M2)	4.5	3.9	4.0	3.8	3.5	3.4
M2 / GDP[5]	0.2	0.3	0.2	0.3	0.3	0.3
Credits to the non-government sector / GDP[5]	0.2	0.2	0.2	0.2	0.2	0.3

NBS gross reserves and banks' foreign borrowing reached new records

FLOW						
	in millions of euros, cumulative from the beginning of the year[6]					
NBS gross reserves	598.8	229.2	299.3	591.0	1,164.7	1,857.1
Foreign liabilities of commercial banks	-75.6	-672.0	-156.0	-332.7	-470.9	-1,100.6
Fx deposits (households and enterpriises[7])	446.2	452.9	100.2	370.4	651.6	897.8
o/w: households fx deposits	274.0	365.0	145.4	323.3	534.7	837.8
Government - fx deposits	-64.1	154.2	-99.4	9.5	-55.0	-114.7

Source: Table P-6. in Analytical Appendix.
1) See footnote 7 in Table T-22. 2) See footnote 2 in Table T-22. 3) See footnote 2 in Graph T-8. 4) See footnote 5 in Table T-22. 5) See footnote 8 in Table T-22. 6) Ex. December 2003 figure refers to the change in the stock (in euros) for time period December 2002-December 2003. 7) See footnote 3 in Table T-22.

Sterilization with government deposits gains in importance.

Throughout 2005, the process of creating monetary growth was spurred by inflows from abroad. It would seem, however, that the increase in foreign exchange deposits has become endogenous, i.e. a product of monetary multiplication itself. While the share of these deposits in total M2 from early 2003 to early 2005 grew gradually from 44%, it stood at a surprisingly stable 57% over the whole of 2005, in spite of factors such as changes in the structure of deposits or the payment of frozen foreign currency deposits (FFCDs). The increase in government deposits in Q4 was twice that in Q3 (an increase of 5.6 percentage points of opening M2, compared with 2.6 percentage points of opening M2 in Q3). For the most part, these deposits consist of dinar assets, which rose by 3.7 percentage points of opening M2 in Q4. Government foreign currency deposits also increased in Q4. It is noteworthy that the NBS, for the first time since late 2001, approved a foreign exchange credit to the government to the amount of 180 mn dinars.

Box 1: Changes in reserve requirements tighten business conditions

In Q4, the NBS finally completed the gradual equalization of the regulatory position of different bank financing sources. The reserve requirement on foreign currency savings was reduced from 41% in September to 38% in November. Concurrently, the reserve ratio on other bank foreign exchange deposits and foreign borrowing, including foreign currency-indexed dinar deposits, was raised from 29% in September to 38% in November. The effective rate in Q4 thereby increased from 28% to 31%.

Table T-24 shows in chronological order the measures taken by the central monetary authorities to direct the growth of liquidity.

Reserves requirement rate on different fx funding sources was equalized at end 2005...

Table T-24. Banks' Reserve Requirements with NBS[1)]

	In effect as of:									
	07/2003	04/2004	07/2004	12/2004	05/2005	07/2005	08/2005	09/2005	10/2005	11/2005
Rate on (in %):										
DINAR DENOMINATED BASE	**18**		**21**	**21**	**20**	**20**			**18**	**18**
FX DENOMINATED BASE	**18**		**21**	**21**	**26**	**29**			**35**	**38**
NEW FX SAVINGS DEPOSITS[2)]	**50[3)]**	**47**				**45**	**43**	**41**		**38**
Key regulation changes:				Introduction of required reserves on foreign borrowing	Separation of the dinar denominated from the fx denominated base				The 35% ratio applies also to fx indexed dinar deposits	The 38% ratio applies to new fx savings deposits

Source: NBS.
1) Reserve requirements on fx savings were regulated by a special NBS decision in December 2005.
2) New fx savings of households are those deposited after 30 June 2001.
3) Application of the 50% rate started in 2001.
Notes:
Under current regulations, reserve requirements include:
- dinar-denominated base: dinar deposits (including government), dinar credits (including government), securities, and other dinar-denominated liabilities;
- fx-denominated base: fx deposits (including government), fx-indexed dinar deposits, fx credits (including government), securities, other fx liabilities, and other fx funds received from abroad for bank services performed for and on behalf of third parties.
Excluded from the dinar/fx-denominated bases are: liabilities to the NBS; up to December 2005 – liabilities arising from household fx savings deposited after 30 June 2001; amounts arising from the settlement of debt for FFCDs; and those arising from the rescheduling of debt to Paris and London Club creditors. The amounts of long-term housing mortgage credits insured with the National Corporation for Insurance of Housing Loans are deducted from the required reserves base.

...and its application broadened to include leasing funds.

A new development in NBS monetary policy is the introduction of reserve requirements for financial leasing organizations, pursuant to the Law on Financial Leasing. Under a December NBS decision to this effect, which comes into force in January 2006, such organizations will be required to hold reserves in special bank accounts and to calculate 10% on loans and other lending and additional payments from abroad. The NBS is thus continuing its efforts to curb foreign borrowing since leasing organizations, which are owned by banks, are borrowing more and more foreign funds, whereby a proportion of credit activity has migrated into leasing.

Credit expansion continues unabated...

Q4 gave a major contribution to the expansion of credit in 2005, despite the central bank's efforts to tighten business conditions for banks by equalizing reserve requirements at higher levels. The reserve ratio on foreign currency savings was lowered from 41% to 38%, while the ratio on banks' foreign borrowing was increased in the same period from 29% to 38% (Box 1). In the last three months, loans to enterprises and households surged by a huge 631 mn euros (Table T-25), which was about 40% of the total increase in 2005 of 1.5 bn euros. The acceleration was seasonal (as well as year-on-year) and due to an acceleration in credit to enterprises rather than to households. In terms of euros, the 2005 credit increase was about 50% up on 2004 (Graph T-9 in Box 2). But when the rise in the real dinar value of credit is considered, it accelerates in the quarter rather than over the year. In real dinars, the increase of credit to the non-government sector in 2005 was the same as in 2004. The NBS measures (increasing effective reserve requirements - Box 1) had no significant impact on banks' interest rates, with the possible exception of those with primarily foreign sources of funding, because the net effect was relatively mild. According to unofficial reports, banks with dominantly foreign financing raised rates by an average 1-2 percentage points on credit to enterprises, and by slightly more on credit to households. A further increase of the NBS reserve ratios could have a significant effect on raising interest rates and, thereby, finally on the demand for loans.

...financed by banks' accelerated borrowing abroad.

The seasonally high level of credit granted was financed predominantly with foreign capital whose inflow had to cover the now seriously increased required reserves rate. For this reason, banks acquired an additional 630 mn euros of foreign funding in Q4 alone, more than in the preceding three together. The total *credit potential*[3] of banks was increased by 2.6 bn euros in 2005, of which 1.1 bn euros in Q4 alone. In the first nine months cumulatively, bank sources increased 1.5 bn euros (Table T-25).

In the structure of money, foreign exchange deposits continue to grow steadily.

Household foreign exchange deposits increased by an additional 303 mn euros, even though the effects of the 2005 FFCD payments had almost completely worn out. The deposits rose by 838 mn euros annually (Table T-25) and totaled 2.2 bn euros at the end of the year (Table P-6, Analytical Appendix). If our assumption on the endogenous generation of foreign currency deposits is correct, domestic banks that do not rely on foreign financing have profited from the increase of deposits produced by the credit activity of banks with foreign financing, and from the reduction of the reserve ratio on these deposits.

Table T-25. Serbia: Funding, Credit and Investment Activity, Flows, 2003-2005

In Q4:

banks' borrowing reached new records,

lending to enterprises accelerated,

the increase in required reserves and deposits is twice that in Q3.

	2003	2004	2005			
	Dec	Dec	Mar	Jun	Sep	Dec
	in millions of euros, cumulative from the beginning of the year					
Funding (increase in liabilities, -)	**268**	**-1,066**	**-303**	**-912**	**-1,508**	**-2,633**
Households deposits	-284	-328	-142	-345	-564	-872
o/w: household savings	-274	-365	-145	-323	-535	-838
Enterprise deposits[1]	-234	-130	86	-105	-284	-355
o/w: dinar deposits	-71	-43	41	-60	-168	-297
Foreign liabilities	-76	-672	-156	-333	-471	-1,101
Capital and reserves	862	64	-91	-130	-188	-305
Gross foreign reserves (decline in assets, -)	**16**	**-47**	**-96**	**-20**	**-47**	**-41**
Credits and Investment	**698**	**877**	**317**	**637**	**1,092**	**1,662**
Enterprises[1]	288	371	236	332	504	886
Long term	263	160	23	99	129	374
Short term	25	211	213	233	374	513
Households	156	388	54	190	405	653
Long term	120	362	52	187	387	601
Short term	36	27	2	2	18	52
Repo transactions[2]	9	-14	21	194	215	179
Government, net[3]	245	132	6	-79	-31	-56
MEMORANDUM ITEMS						
Required reserves and deposits	122	193	51	267	472	951
Other net claims on NBS[4]	-33	12	-67	-33	-26	46
Other items[5]	-1,071	31	97	61	17	14
Eflective required reserves(u %)[6]	28	25	25	27	28	31

Source: Table P-7. in Analytical Appendix.
1) See footnote 3 in Table T-22.
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.
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 than the growth of credits. Government include: State Union Serbia and Montenegro, Republic of Serbia 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 is the share of the required reserves and deposits in total deposits (households and enterprises) or, starting with December 2004, in the sum of total deposits and banks' foreign liabilities.

3 As used here, *credit potential* includes all available sources for granting loans to clients – foreign currency and dinar deposits (domestic sources), banks' foreign obligations (in foreign currency and including non-residents' accounts), and capital and reserves.

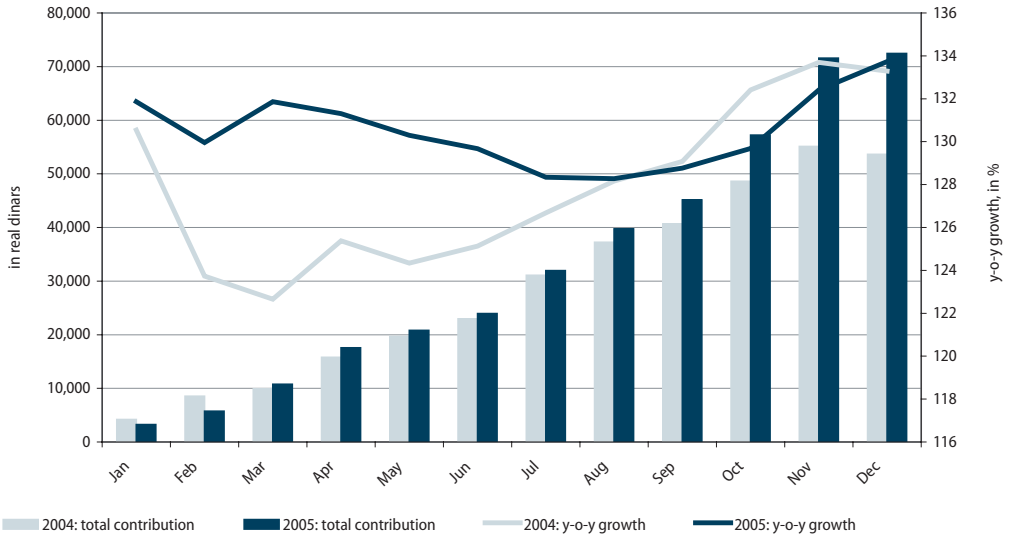
Box 2: Credit to non-government sector

In real terms, credit to the non-government sector in 2005 was similar to 2004 up to Q4...

The real value of credit to the non-government sector in 2004 and 2005 is shown in Graph T-9. The left scale gives the value of the increase denominated in dinars from December 2002, and the right shows the annual growth rate. It is noteworthy that, up to September 2005, the absolute real increase in credit was almost identical to flows in 2004. In Q4, however, it accelerated rapidly (especially in November and December). The y-o-y rate in 2005 fell mildly due to the stability of the absolute increase but, as the result of the accelerated increase in Q4, the growth rate also picked up pace and caught up with last year's.

Graph T-9. Serbia: Credit to Enterprises[1] and Households: 2004 vs. 2005 total in real dinars [2]: cumulative from the beginning of the year and y-o-y growth

...when the increase of credit to the non-government sector accelerated...



Source: Table P-6, Analytical Appendix.
1) See footnote 3 in Table T-22.
2) Dec. 2002=100.

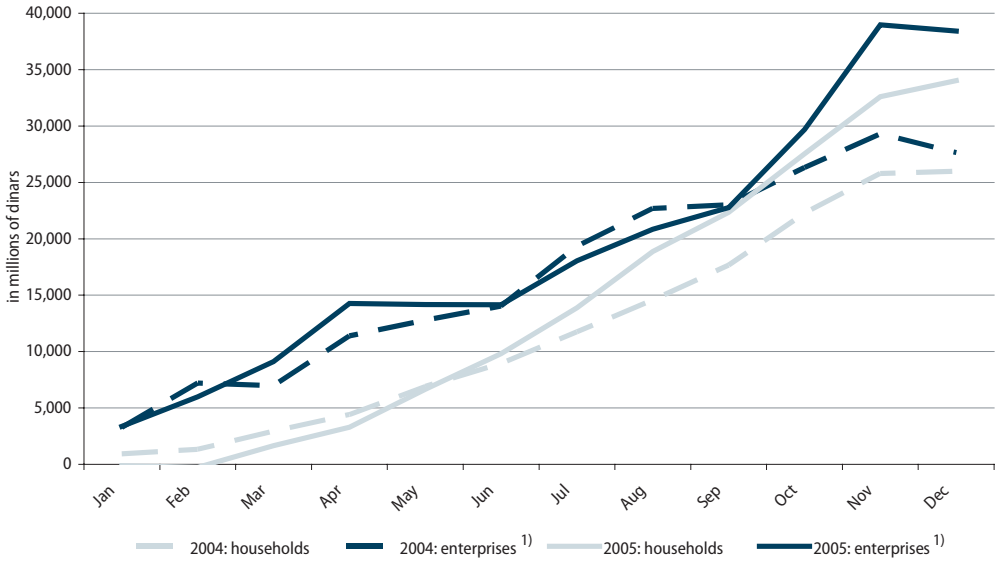
...with growth of credit to enterprises dominant...

The largest proportion of credit in 2005 went to enterprises (886 mn euros). Indeed, these borrowed an additional 383 mn in Q4 alone. Long-term credit accounted for most of the Q4 increase (224 mn euros or two-thirds of the total debt of enterprises). Short-term credit stagnated, particularly in December (the increase of short-term credit to enterprises in December 2005 is at the same level as in November 2005), Table T-25. We assume that this apparent development is deceptive and that there was no dramatic jump in long-term credit (with short-term credit stagnating), and that what is really involved is a major rescheduling of some debts. Consequently, we consider that short-term loans led the real new lending.

...and stable growth credit to households.

The growth rate of credit to households was stable in 2005, and from the mid-year its real increase was at a higher level than in 2004 (Graph T-10). Most of this credit was in the form of loans with a repayment period of over one year (Table T-25). In Q4, households took an additional 248 mn in loans, of which 215 mn were long-term (as was also the case in Q3). In the previous issue of *QM* we said the abolition of deferred payments checks had led to a growth of credit. Data for Q4 supports this view: December, when the checks were finally retired (1 December 2005), gave the smallest contribution to total credit to households increase (Graph T-10).

Graph T-10. Serbia: Credit to Enterprises[1] and Households: 2004 vs. 2005
Cumulative from the beginning of the year in real dinars [2]



Source: Table P-6 in Analytical Appendix.
1) See footnote 3 in Table T-22.
2) Dec. 2002=100.

The increase of credit to non-government in real dinars in 2005 is above that 2004.

The growth of reserve money in Q4 was in line with seasonal influences.

Reserve money (H) increased rapidly in Q4 of 2005 (by 14 bn dinars, after increasing only 3.2 bn in the previous three quarters, Table T-26). This was in accordance with the seasonal pattern. At annual level, its increase was 22.4% of opening H, which is nominally double but in real terms approximately the same as in the preceding year. What is notable where structure is concerned is the seasonally expected increase of cash in circulation from 2.8% to 11% of opening H in Q4, and of banks' excess reserves. Nonetheless, owing to the wider use of payment cards and the increase of enterprises' dinar deposits, the ratio of cash in circulation and total dinar deposits in the system remained quite stable (at the level of 38%), both between the quarters and at the year-end (Table T-23).

Dinar sterilization is slowing down.

The increased liquidity was achieved through NBS foreign exchange operations, similar to those in previous quarters, and their decreased sterilization. In Q4 too, the NBS continued net purchases of foreign currency at a relatively stable rate of about 200 mn euros per quarter (Table T-27). Following the raising of reserve requirements on foreign borrowing and the seasonal strengthening of demand for liquidity, however, October saw a sharp drop in demand for repo transactions (which decreased by 3.7 bn dinars, see Table P-7, Analytical Appendix). The resultant increase in liquidity more than offset the effects of the increased sterlization of government deposits and, in response, the NBS hiked interest rates on repo transactions (see article on financial markets). This produced only partial results as there was no significant recovery of these operations. In addition, in Q4 the NBS raised the interest rate on banks' excess liquid funds from the 2.9% applied up to October to 6% starting in November. This reduced the opportunity costs of the cost of holding banks' excess liquidity in accounts (as shown in Table T-25 and, by months, in Table P-7, Analytical Appendix) by increasing the excess reserve item. The excess reserves recorded at the year-end were the result also of the payment of 4 bn dinars in pension arrears.

Table T-26. Serbia: NBS - Foreign Exchange Purchases and Dinar Sterilization, 2003-2005[1)]

In Q4:

	2003	2004	2005			
	Dec	Dec	Mar	Jun	Sep	Dec
FLOW						
			in millions of dinars, cumulative from the beginning of the year			
Foreign assets, net[2)]	**11,427**	**18,286**	**10,454**	**29,092**	**48,044**	**64,583**
Foreign assets, net (in euros)	*175*	*250*	*130*	*358*	*584*	*776*
Net domestic assets (NDA)	**-10,754**	**-11,313**	**-21,723**	**-34,570**	**-44,819**	**-47,331**
Government, dinar credits	-1,669	2,376	-192	-4,791	-5,414	-6,725
Government, dinar deposits	-9,204	-13,763	-12,527	-8,466	-14,783	-18,588
o/w: municipalities	*-1,221*	*-3,789*	*-5,259*	*-3,213*	*-4,966*	*-825*
Repo transactions[3)]	-674	471	-1,454	-15,855	-18,052	-15,076
Other items, net[4)]	793	-397	-7,550	-5,458	-6,570	-6,942
Reserve money (H)	**673**	**6,973**	**-11,269**	**-5,478**	**3,225**	**17,252**
o/w: currency in circulation	-740	2,186	-5,797	-2,849	2,118	8,480
o/w: excess liquidity	-3,333	46	-5,195	-3,531	-2,613	3,680

decrease in demand for repos,

INCREASE						
			cumulative, in % of opening H[5)]			
Foreign assets, net[2)]	**24.7**	**44.0**	**15.4**	**42.9**	**71.6**	**94.9**
Net domestic assets (NDA)	**-23.7**	**-34.0**	**-30.1**	**-50.0**	**-67.4**	**-72.4**
Government, dinar deposits	-13.3	-19.7	-16.3	-11.0	-19.2	-24.1
Repo transactions[3)]	-1.0	0.7	-1.9	-20.6	-23.5	-19.6
Other items, net[4)]	-9.5	-15.0	-11.9	-18.4	-24.8	-28.7
Reserve money (H)	**1.0**	**10.0**	**-14.6**	**-7.1**	**4.2**	**22.4**
o/w: currency in circulation	-1.1	3.1	-7.5	-3.7	2.8	11.0
o/w: excess liquidity	-4.8	0.1	-6.7	-4.6	-3.4	4.8

expansion of currency in circulation and excess reserves.

MEMORANDUM ITEMS						
Gross fx reserves (flow, cum. from the begin. of the year, in euros)	598.8	229.2	299.3	591.0	1,164.7	1,857.1
Gross fx reserves (in % of opening H in euros)	80.9	73.1	36.1	75.0	147.3	228.6
Reserve money (growth rate, y-o-y, in %)	1.0	10.0	14.3	14.8	25.0	22.4
Currency in circulation (growth rate, y-o-y, in %)	-1.7	5.1	3.6	4.9	11.4	18.8

Source: Table P-8. in Analytical Appendix.
1) Government include: State Union Serbia and Montenegro, Republic of Serbia and cities and municipalities.
2) Fx government deposits are excluded from net fx reserves.
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 at the beginning of stated year (i.e. end of previous year).

Box 3: Structure of Serbia's and NBS Foreign Currency Reserves

NBS foreign liabilities include fx deposits of government and commercial banks...

Table T-27 shows the structure of the country's foreign currency reserves and the net NBS reserves, and their increase over the past two years. The net foreign assets (NFA) of Serbia consist of the NFA of commercial banks and NFA of the NBS. In contrast to the structure of commercial banks' NFA, which is the difference between their gross reserves and their liabilities on foreign borrowing, the structure of the NFA of the NBS is more complex. The gross reserves of the NBS include monetary gold, special drawing rights, foreign exchange-denominated cash holdings and deposits. For their part, foreign exchange liabilities certainly consist of liabilities toward foreign residents such as the IMF and short-term liabilities toward other states. But NBS foreign exchange liabilities also include the deposits of banks and government, that are domestic residents. Since these are not foreign liabilities, they are not excluded from NFA. Hence, if we wish to determine the amount of real reserves the NBS has at hand, it is necessary to define the term net own reserves from which such liabilities are excluded (Table T-27). NBS net own reserves are interesting also in analytic terms since issuance of dinars is based solely on their increase.

...but the NBS net own reserves also grew.

Rising of the required reserves rate on banks' foreign borrowing1 in Q4 of 2005 produced a massive increase of the banking system's deposits with the NBS – from 437 mn to 898 mn euros in a year. Another effect of this policy was a record accumulation of NBS gross reserves, which reached 1.9 bn euros over the year. But when all the liabilities (the deposits and other liabilities, including IMF credits, cited above) are excluded, the NBS net reserves in Q4 show no major differences relative to

1 See Box 1.

the previous three quarters: the net reserves increased by 193 mn euros (from 584 mn to 776 mn in 2005), while the increase was slightly higher in the previous quarters.

The quarterly growth of NBS net own reserves accelerated from 100 mn euros in 2004 to over 200 mn in 2005.

Table T-27. Serbia: Foreign Exchange Reserves, Stock and Flow 2003-2005

	2003	2004				2005			
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
					stock, in millions of euros				
Net foreign assets (NFA) of Serbia	2,210	1,908	1,617	1,747	1,791	1,820	2,008	2,338	2,419
Commercial banks, net	377	204	-70	-167	-342	-594	-695	-860	-1,484
Gross foreign reserves	722	659	528	677	675	579	655	628	635
Foreign liabilities	-346	-455	-598	-844	-1,018	-1,174	-1,350	-1,489	-2,118
NBS, net	1,833	1,704	1,688	1,914	2,133	2,414	2,704	3,199	3,902
Gross foreign reserves	2,835	2,693	2,759	2,895	3,065	3,364	3,656	4,229	4,922
Foreign liabilities	-1,002	-989	-1,071	-981	-932	-950	-952	-1,031	-1,019
IMF	-730	-711	-793	-727	-698	-676	-657	-760	-737
Other liabilities	-272	-278	-278	-254	-234	-274	-295	-271	-282
MEMORANDUM ITEMS									
1. NBS, net - structure	1,833	1,704	1,688	1,914	2,133	2,414	2,704	3,199	3,902
1.1 Commercial banks deposits	635	684	685	765	825	878	1,083	1,262	1,723
1.2 Government deposits	265	221	97	129	125	223	79	170	220
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	**933**	**799**	**905**	**1,020**	**1,183**	**1,313**	**1,541**	**1,767**	**1,960**
					in millions of euros, cumulative from the beginning of the year				
Net foreign assets (NFA) of Serbia	389	-302	-592	-462	-419	30	218	548	628
Commercial banks, net	-59	-172	-447	-543	-719	-252	-353	-518	-1,141
Gross foreign reserves	16	-63	-195	-45	-47	-96	-20	-47	-41
Foreign liabilities	-76	-109	-252	-498	-672	-156	-333	-471	-1,101
NBS, net	449	-129	-145	81	300	281	571	1,066	1,769
Gross foreign reserves	599	-143	-77	59	229	299	591	1,165	1,857
Foreign liabilities	-150	13	-69	22	71	-18	-20	-99	-88
IMF	-187	19	-62	4	33	22	40	-63	-39
Other liabilities	37	-6	-6	18	38	-40	-61	-36	-48
MEMORANDUM ITEMS									
1. NBS, net - structure	449	-129	-145	81	300	281	571	1,066	1,769
1.1 Commercial banks deposits	109	50	51	130	190	54	259	437	898
1.2 Government deposits	165	-44	-168	-136	-140	98	-46	45	95
1.3 **NBS own reserves** (1.3 = 1 - 1.1 - 1.2)	**175**	**-135**	**-28**	**86**	**250**	**130**	**358**	**584**	**776**

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 banks' fx deposits (reserve requirements funds and other fx deposits).

Trends

8. Financial Markets

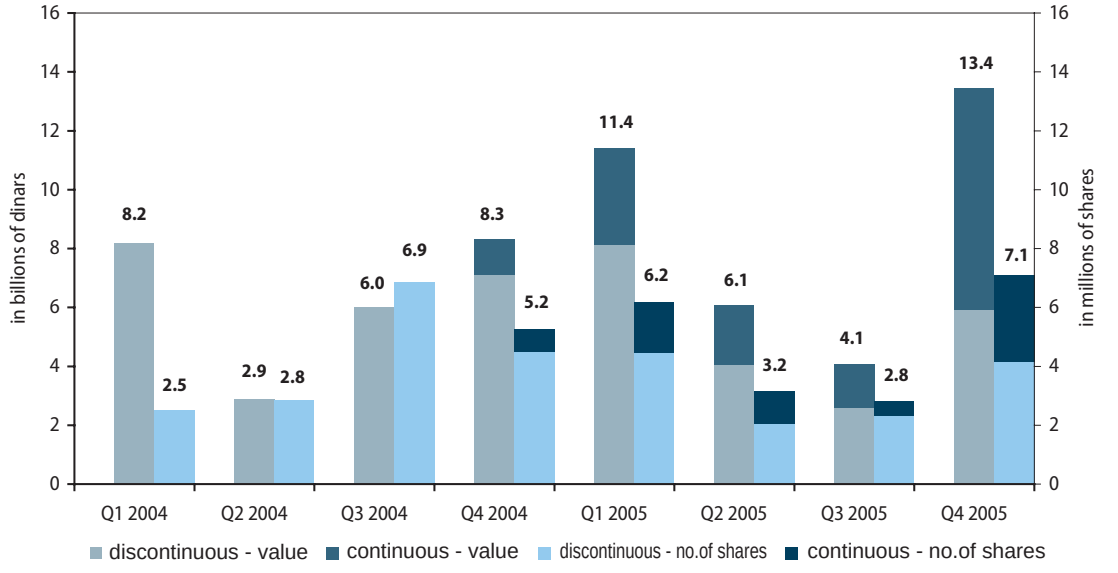
Equity market growth in Q4 of 2005 exceeded the value reported in the same quarter of 2004 according to aggregate data. The main contributing factors were intensified trading in newly listed stocks of AIK Banka, Centrobanka, Ruma Fabrika Kože, Srbolek, and Hemofarm, and growing discontinuous trading. Even with these effects excluded, the stock market still showed moderate growth. While over the entire year yields on FFCD bonds decreased, they increased in the beginning of Q4. Rapid growth was recorded in nominal yields on repo transactions, and the yields on different maturities converged. Yields on treasury bills decreased, and the demand was very low.

Stock trading picked up significantly in Q4.

The expectation expressed in the preceding issue of *QM* that the trading volume in the equity market (both in dinars and in the number of stocks sold) would reach, and even exceed, the level reported at the end of 2004, proved correct. Following the downward trend in Q2 and Q3, trading in the equity market picked up in Q4. Soon after October, it was apparent that the overall trading value would reach, and even go beyond, 10 bn dinars, or five bn sold stocks (Graph T-11). In terms of value, this was an increase of almost 230% on the trading turnover reported in Q3, or a 152% increase in the number of sold stocks.

Graph T-11. Stock Trading Volume, Value and Structure, 2004–2005

In Q4 trade volume and tradede value reached the level reported in Q1.



Source: www.belex.co.yu

As of Q3 of 2004, an upward trend was reported in the continuous trading segment, which surged in Q4 of 2005. From Q3 to Q4 alone, the overall trading volume in dinars increased from 1.5 bn to 7.5 bn dinars in this segment (or by approximately 400%), and rose from 0.5 mn to 2.9 million stocks sold.

This continuous trading boom helped to stop the emptying of the stock market and launched a reverse process that resulted in considerable growth. This was endorsed by the fact that the overall trading value in Q4 2005 exceeded the level reported in Q4 2004 by some 61% (or 37% measured by the number of sold stocks); relative to Q1 2005, it increased by some 18% (or 15% in terms of the number of sold stocks).

Newly listed bank stocks accounted for much of the increase in trading.

Newly listed stocks on the Belgrade Stock Exchange as of October (Čačanska Banka, Centrobanka, AIK Banka, Srbolek, Panonska Banka, ZorkaPharm, Radijator, FAD, and Mlekara Pančevo) significantly contributed to the upturn of the market. In October alone, the stocks traded in

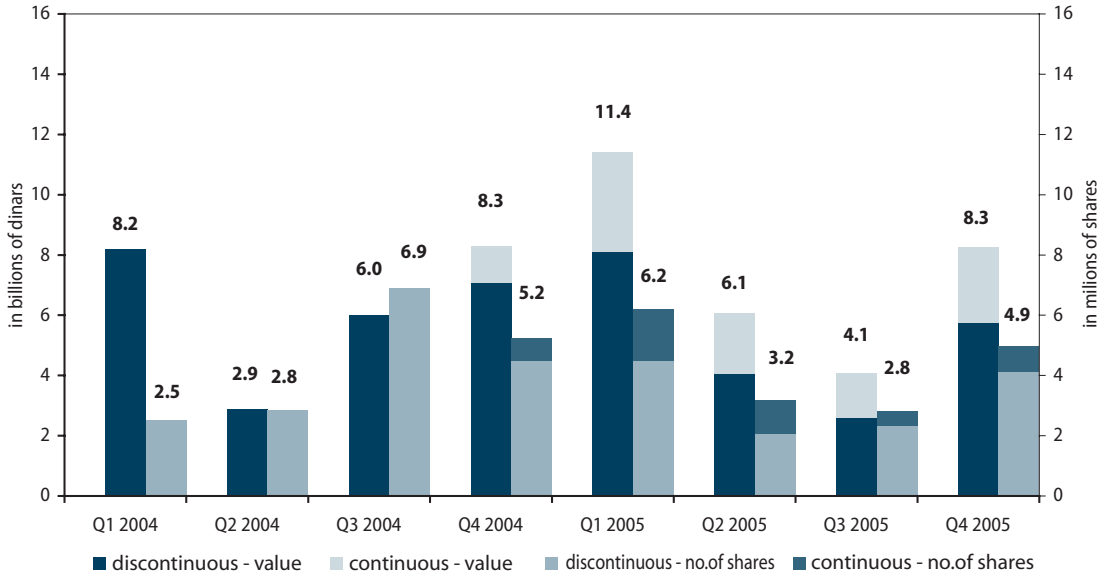
the free market on the Stock Exchange reached a turnover of 3.1 bn dinars, or 9.15% over the level in September. The highest trading volume was reported with stocks of AIK Banka, Centrobanka, Zepter Banka, Ruma Fabrika Kože, and Hemofarm, which accounted for some 34% of the overall trading. There was also intensified trading in the discontinuous segment, primarily through auction trading in stocks of AIK Banka, Zepter Banka, PP Sombor, Beteks, Knjaz Miloš, Dunav Osiguranje, Ratar Pančevo, and Palić THU Subotica.

Even if the effects of the expanding take over market are disregarded, the growth is significant.

The high trading volumes, particularly with stocks of AIK Banka, Centrobanka, Zepter Banka, Ruma Fabrika Kože, Srbolek, and Hemofarm, raised doubts as to whether the positive data on the increased trading volume and value on the Belgrade Stock Exchange is an indication of a substantial trend, or if this was only a temporary picture caused by the revived *take over market*.[1] Namely, there is a belief in the market that it was the intensified trading in these stocks that actually led to the process. *QM* therefore analyzed the *reported stock trading value and volume* excluding the stocks of these companies (Graph T-12). In terms of the *reported trading value*, it was in Q4 2005 that the turnover for the first time reached the level recorded at the end of 2004 (8.3 bn dinars), an increase of 69.4% relative to Q3. On the other hand, the fact that the Q4 trading value included continuously traded stocks of 34 companies should not be disregarded, while there were seven such companies in Q4 2004, and 21 at the end of Q1 2005. For the first time since Q3 2004, the discontinuous trading segment picked up again in Q4 2005. Measured by the number of sold stocks, the trading volume in the equity market rose even with the cited companies excluded: from 2.9 mn in Q3 to 4.9 mn stocks sold in Q4.

Graph T-12. Stock Trading Volume, Value and Structure, 2004–2005[1)]

Stock trading value, even excluding banks, reached the level reported at the end of 2004.



Source: www.belex.co.yu.
1) Analyzed excluding AIKB, CEBA, ZEPT, RUMA, SRBL, and HMFR.

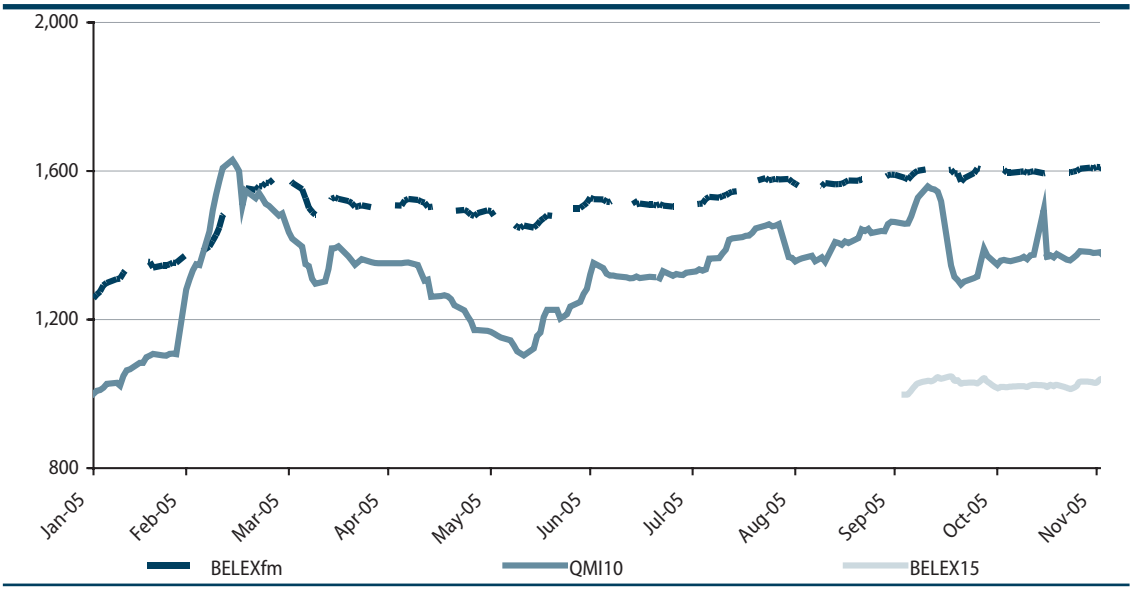
Consequently, even though the stock market boom was largely caused by trading of stocks of AIK Banka, Centrobanka, Zepter Banka, Ruma Fabrika Kože, Srbolek, and Hemofarm, it may be concluded that the specific *take over market*, while being apparently the key factor, was not the only factor of growth. Even if the trading in these stocks is disregarded, there was a siginificant growth in the stock market relative to Q3 which, however, failed to reach the record figures reported in Q1.

1 The take over market may be described as a mechanism of establishing corporate control where the market serves for going private and the acquisition of companies, rather than for going public in order to acquire additional capital. In this way, the purchased majority shareholdings allow the ownership of stocks to be sufficiently concentrated in the hands of one entity or a group of related entities causing such stocks to be withdrawn from the stock exchange.

The upward trend is reflected both in the official indices and in the experimental QMI10 index.

The upward trend is also moderately reflected in the movements of both official Belgrade Stock Exchange indices (BELEXfm and BELEX15), and the experimental QMI10 index. The general BELEXfm trend in 2005 is characterized by moderate growth combined with only slight variations (Graph T-13). On the last day of November, the index recorded its all-time high of with 1611 index points.[2]

Graph T-13. Composite Belgrade Stock Exchange BELEXfm, BELEX15 and the Experimental QMI10 Indices



Source: www.belex.co.yu

On October 24th BELEXfm index reached 1606 points – its historical maximum.

The experimental QMI10 index shows significant variations (Graph T-13). It recorded its 2005 all-time high on 15 March, with 1616 index points. The effect of newly listed bank stocks on the QMI10 movements may be identified in local peaks only a few days after the new stocks were listed (Graph T-13).

Variations in the continuous trading segment are reflected in the QMI10 movements.

It is noteworthy that the experimental nature of the index makes it possible to examine which index structure is most appropriate for the Belgrade Stock Exchange market.[3] This is why Graph T-13 shows the comparative movements of all three indices, with the percentage of stocks included in the index basket now limited to 20% in computing QMI10. It is obvious that BELEX15 and especially QMI10, reflecting the continuous segment movements, are more volatile than BELEXfm, which also includes the discontinuous trading. In view of the strengths and weaknesses of the three current indices, we believe that that an appropriate index to follow the stock price movements in the Belgrade Stock Exchange market should take into account the following: (a) that the index basket should be composed of the most traded stocks, i.e. those recording the highest volume; and (b) although the index is weighted by market capitalization, it is apparent that limiting the effect of major issuers to 20% still poses a problem, as there are two to three issuers whose aggregate effect is almost 50% or more (as is the case with almost all the three indices). For this reason, a mechanism needs to be implemented to restrict the bias created by the prevailing proportion of the biggest issuers, especially Hemofarm and Energoprojekt Holding, as well as Centrobanka and Srbolek[4]. The issues will be addressed in coming *QM*s by implementing appropriate solutions through modifications, i.e. QMI10 sub-types.

Yields on fixed income securities rose in Q4 irrespective of their maturity or currency. The yield curves for FFCD bonds deformed and became inverted. Rapidly changing time structure and

2 The BELEXfm latest all-time high was reported on 3 March 2006 - 1680 index points.
3 Although all the three indices are market capitalization weighted, the BELEXfm index basket comprises stocks of all issuers in the free stock exchange market (both with continuous and discontinuous trading). On the other hand, the BELEX15 and QMI10 index baskets contain only continuoulsy traded stocks. While BELEX15 applies Rule 80 to include stocks in its index basket, the experimental QM index, QMI10, takes into account the stocks of 10 companies with the highest annual yield available in the continuous market.
4 This refers to the aggregate prevailing effect where the aggregate weight of two or three issuers exceeds 50%, as happened with all the three indices to date.

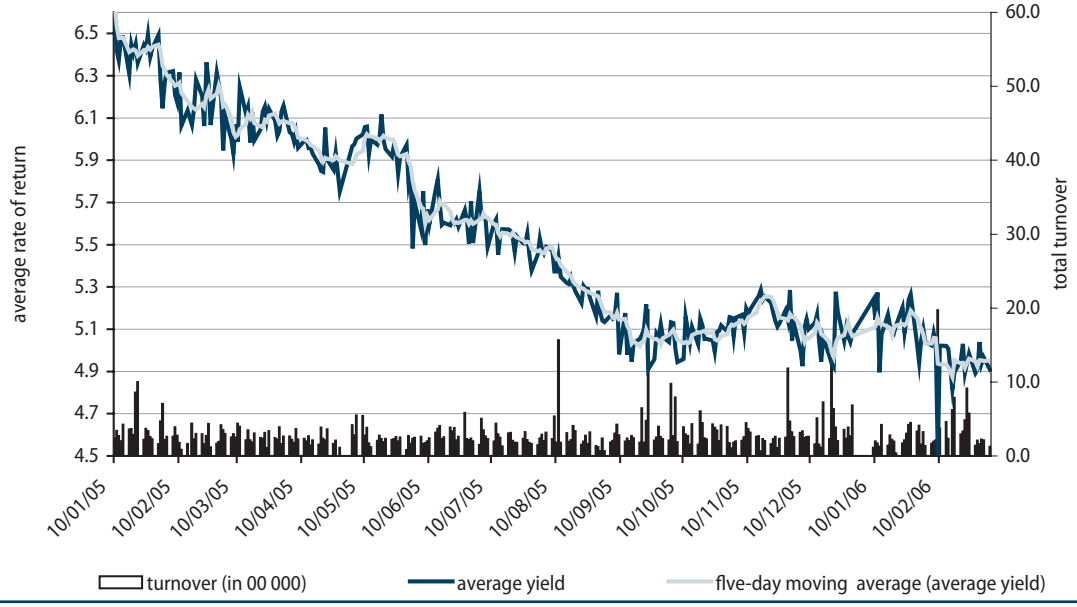
yields may be explained by effects resulting from several causes.

Bond yields are increasing in Q4 with the yield curve itself being inverted.

Yields on FFCD bonds showed a discontinuation of the long-lasting declining trend, and they rose in the period from late October to mid-November. This was probably caused by the growing bank demand for liquidity, due to the increased reserve requirement in October (and again in December). For this reason banks enhanced the supply and dumped the prices of these securities. If the whole of 2005 is observed, there is a long-term downward trend attached to FFCD yields (Graph T-14). There were a number of reasons for such developments. The first was the result of funds which became available within a very short period due to the reduced reserve requirement applicable to currency savings (from 45% in August to 38% in December) bringing in the issue of how these funds should be invested. The term structure of these sources does not favor the creation of loans. It is likely that this was the reason for banks to partly direct available funds to investments in FFCD bonds. The growing demand predominantly focused on short- and long-term bonds. This in turn caused their prices to rise and their yields to decline. The second reason resulted from considerable amounts of capital coming into the country. This generated additional demand for these instruments. Finally, there was also Serbia's improved credit rating (Standard&Poor's, for example, upgraded Serbia's rating from B+ to BB- in July).

Graph 14: Average Yield on FFCD Bonds

In 2005 yields on FFCD bonds showed a long-term downward trend.



Source: www.belex.co.yu

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.

Declining demand for short-term dinar bills.

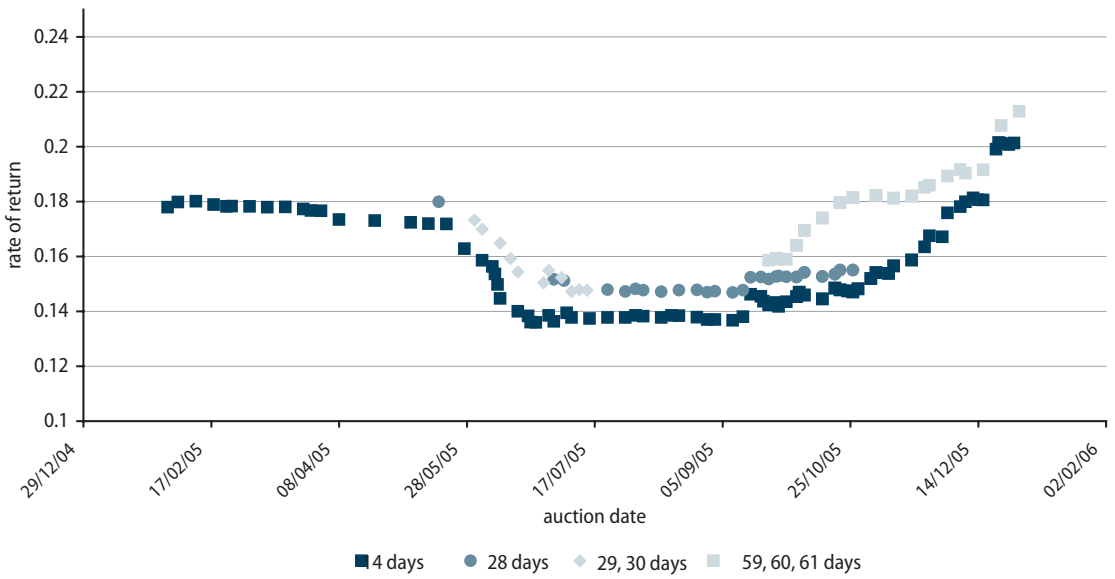
Despite the growing interest rate in the dinar zone, the demand for short-term dinar bills was lower than the supply. The likely explanation for this development is the discrepancy between the expected inflation and current short-term interest rates. This demand, high as it was in the first six months, probably migrated to the FFCD bond market. Hence the modest realization rates of repo auctions, particularly in December, ranging around 30%, and often going below 10%. The low realization rate of offered amounts did not basically respond to the rapidly growing nominal yield reported from mid-November to late December (from 15.66% to over 20% with two-week, or from 18.14% to 21.3% with two-month repos). An additional argument is that in late October the NBS ceased offering instruments of maturity ranging from 14 to 60 days (Graph T-15).

Maturity-related segmentation of yields in Q4 is less evident.

In the previous issue of *QM,* a clearly identifiable maturity-related segmentation was noted with yields where, while having a common trend, yields observed by maturity also followed trends specific to the maturity. Such segmentation was now less evident, as within the overall growth in late December, two-week and two-month yields converged. No other maturities were offered (Graph T-15).

Graph T-15. Repo Yields, November 2004 - December 2005 (by maturity)

Two-week and two-month repo yields rose significantly in Q4.



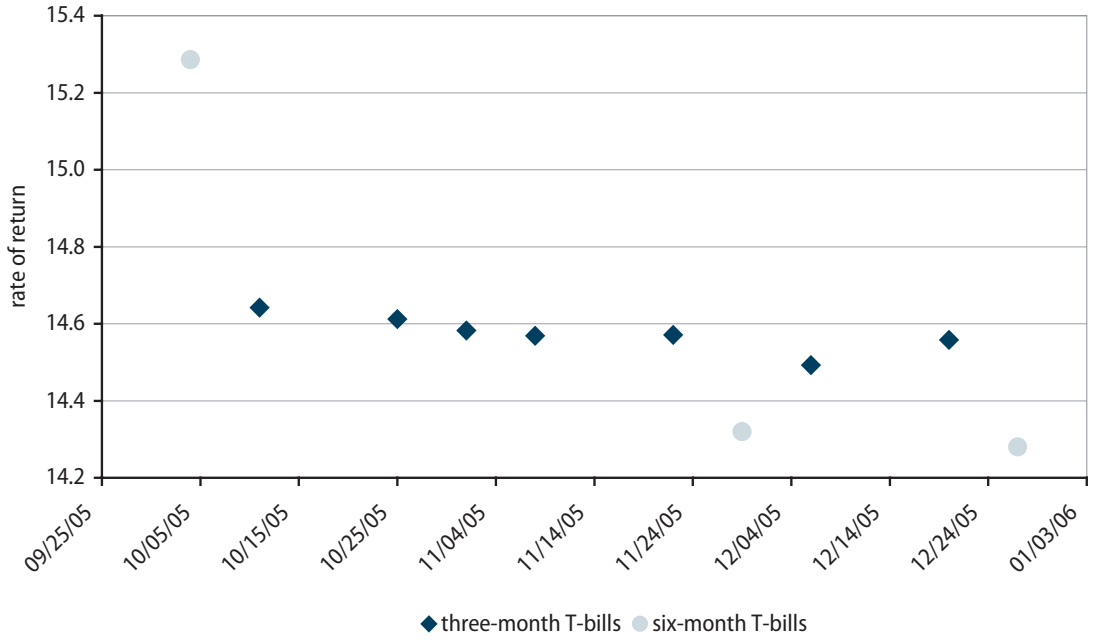
Source: NBS and Ministry of Finance of the Republic of Serbia.

The yield on treasury bills remains low.

The treasury bill market remained outside this pattern and the yield rate continued to be low. The three-month T-bill offered on 20 December recorded a 14.56% yield rate and only 27.46% of the amount offered was taken. The six-month T-bill offered on 27 December had a yield rate of 14.28% p.a., but only 6.6% of the amount offered was taken (Graph T-16). The demand apparently migrated from the market of dinar instruments to the FFCD market.

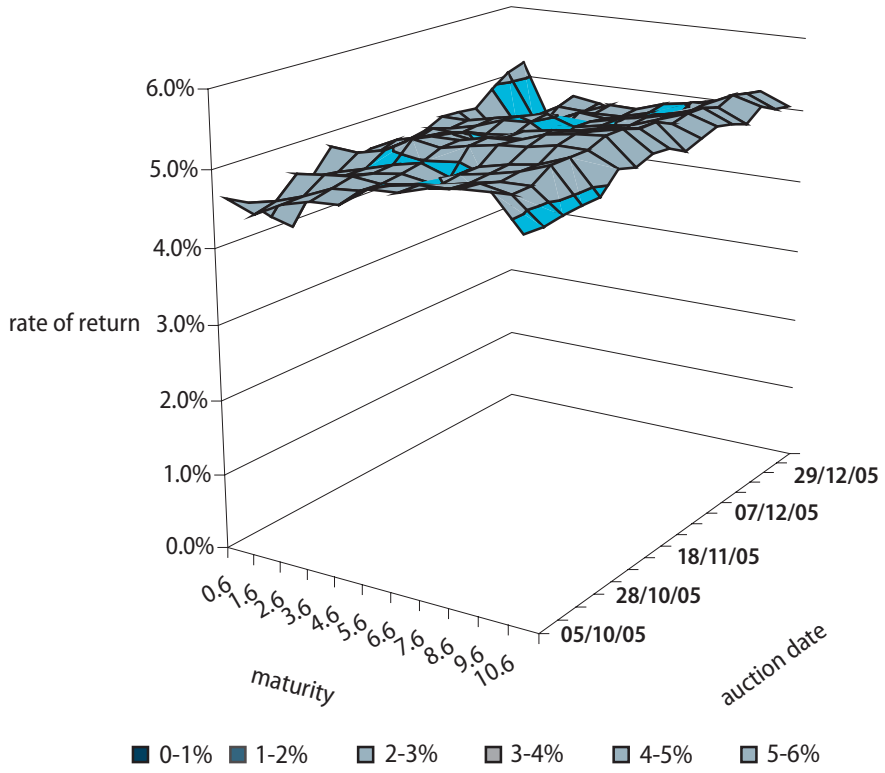
Graph T-16. Yields in T-Bill Market

Yields in T-bill market are declining, and so is the turnover.



Source: NBS and Ministry of Finance of the Republic of Serbia.

Graph T-17. FFCD Yield Curve, 3 October – 29 December 2005



Source: www.belex.co.yu

The yields on FFCD bonds of all maturities increased to over 5% in December.

The demand migrated from short-term to long-term FFCD bonds.

The bond trading on the Belgrade Stock Exchange reflected an inverted yield curve in early October, with A2006 generating higher yields than A2007. This can be seen as evidence of demand migrating from the market of short-term dinar instruments to the euro- denominated bond market. Supply and demand were deeply imbalanced in this area, too: the active amount of sell orders was substantially exceeded by the active amount of buy orders (as much as 24.5 times in the second half of October). This resulted in the surging price and falling yield of the A2006 bond. The operation of the interest rate parity in this market reduces the supply of short-term bonds, which is limited. In November, therefore, the demand pressure shifted from shorter maturities to bonds of longer maturities. In general, the demand for A2006-A2010 bonds remained much higher than the supply until the end of December, while the inverse was reported with A2011-A2016 bonds. In spite of the extensive variations, it can hardly be concluded that the volume of transactions significantly rose in this period (as it was supply controlled). However, in December the level of yield rates increased irrespective of maturity. The average A2006 yield rate, for example, stood at 4.5% p.a. in October (and never exceeded 4.7%); November saw similar figures, while in late December all values were above 5%, with the highest yield rate of 5.46% reported on 30 December. Similar movements also occurred with other bonds (Graph T-17).

Foreign investor participation in the stock market rose again in early November.

Graph T-18 illustrates the foreign investor participation in the Serbian financial markets.[5] It is interesting to note that the foreign investor participation in the stock market (FIS curve) and T-bill market (FIT curve) followed a very similar path. On the other hand, it is obvious that they were almost perfectly negatively correlated with the foreign investor participation in the bond market (FIB curve). In 2005 the foreign investor participation in the stock market (FIS curve) reached its highest point in early May – 67%, and in mid-February – 63%, as opposed to the

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

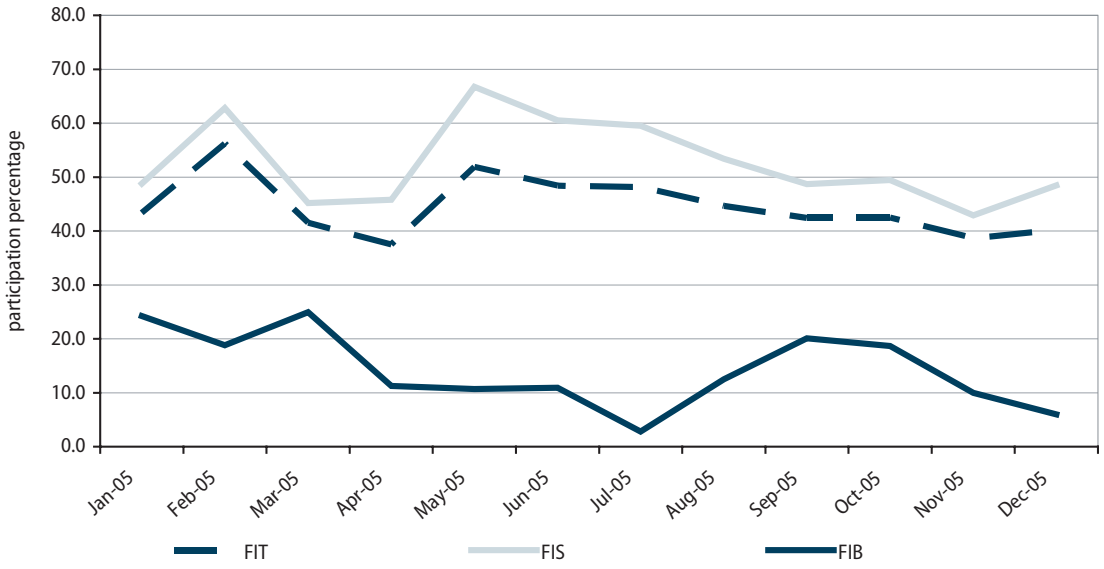
lowest level of 43% reported in November. The values, however, started rising in early December and again exceeded 66%. The stabilizing yield curve on the bond market made this segment less attractive which resulted in the downward trend of the foreign investor participation (FIB curve) as of September 2005 (Graph T-18), and its highly volatile movements in Q4.

In January 2006 stock trading decreased by nearly 40% relative to December 2005.

The January lethargy affected the Belgrade Stock Exchange too. The volume of free market stock trading stood at 3.3 bn dinars in January, or 37.72% below the level reported in December. The decreased value resulted from the limited number of (no more than 17) trading days. The highest trading values both in January and February were reported with AIK Banks stocks (over 30% of overall trading). The participation of foreign investors accounted for 51.02% and was approximately at the level reported in the previous month (52.96%).

Graph T-18. Foreign Investor Participation in 2005

Foreign investor participation in the stock market continued to reflect a falling trend in Q4 2005 .



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.

SPOTLIGHT ON:

Registered Employment and Wages – Statistical Data and Trends 2000-2005

Katarina Stanić[1]

The high growth of wages reported since 2001 has puzzled analysis – and its obvious lack of proportion relative to productivity growth has lately attracted more attention. Our careful analysis of the adequacy of measurement methodology reveals that while being high, the growth is indeed overstated. As the *QM* will be regularly monitoring wages from next issue, this issue features a more detailed analysis of how employment and wages are observed in Serbia.

1. Introduction

The rise in wages and salaries over the past few years has become a very topical and controversial issue. It was difficult to explain the high growth rates and, consequently, questions were raised as to whether the growth was really as high as reported or the statistics had somehow become "confused" by the shift to the gross wage system.[a)]

a) Gross wage is a relatively new term in Serbia (used as of 2001) and consists of the net wage (take-home pay) plus taxes and social security contributions. The gross wage is not equal to the employer's total labor costs as he pays his share of the social security contributions before the gross wage is calculated.

In the first two years of the reform, a real growth of net wages in 2002 of over 40% relative to 2001 was reported. Growth continued in the following years though it tended to slow down (net real wages rose by nearly 14% in 2003, by approximately 10% in 2004, and by 6.6% in 2005). This highlighted the disproportion to the growth of productivity and the negative effects of aggregate demand it causes. The adequacy of the measuring methodology, however, was not examined. In addition, there are ramifications of the growth reported, as pensions and other social benefits are partly indexed to wages.

The objective of this paper is to examine what the wage data published monthly by the Serbian Bureau of Statistics (SBS) actually shows, and to investigate the view that the wage growth has been overstated. As the SBS treats wages and employment together, i.e. the data on both is generated by the same report, the (registered) employment series is shown in addition to the wage data.

The basic conclusion of this analysis is that the growth of wages in the observed period was indeed high, largely as the result of the growing formalization and fiscal adjustment of the economy, but that it was – too – overstated. Wages are mainly observed in a subset of enterprises that does not properly reflect the Serbian economy as it is dominated by enterprises in the public and socially-owned sectors (which have been partly privatized over time), and with few private companies included. Wages paid by small businesses (stores, handicraft services, agencies, etc.) are not monitored at all. This subset (the so-called RAD-1 sample) has shrunk significantly over the years, probably because it includes enterprises that have undergone privatization, cut the number of people they employ while still increasing their productivity. The average wage growth is, therefore, largely affected by the reduced employment within the sample and the increased productivity, which was not characteristic of the economy as a whole. These assumptions are backed up by the fiscal data on wage tax.

1 Bearing Point, Macroeconomic Reform and Central Bank Steghteninig

2. Definitions and Methodology

The *registered* number of employees and wages refers to the formal economy, i.e. people who have employment contracts and on whose wages taxes and contributions are paid. The employed in the "gray zone" and their earnings, as well as any extra money paid to those formally employed above the officially reported wage, may not be subsumed under the definition of "registered", and are the subject of specific statistical research (standard of living survey, labor survey, household consumption survey, etc.)

The SBS is the source of data on the registered number of employees and their wages. The two aggregates are jointly observed, primarily because they ensue from the same statistical research.

The monthly average wage data are generated from monthly reports provided by enterprises – the so-called *Monthly Report on the Employed and Wages (RAD-1).* At of the end of each month,[b)] enterprises send back completed SBS forms specifying the aggregate wages they paid in that month, the number of employees based on their "personnel records", i.e. those formally employed by the company irrespective of whether they received their pay or not, and the number of employees who actually received their wages that month. The official monthly average wage data at the level of the republic (excluding Kosovo) is computed by dividing the aggregate paid wages derived from monthly RAD-1 reports with the total number of formally employed (as shown by the personnel records) in companies which submit reports regardless of whether the employees actually received their pay that month.[c)]

b) Latest by the 7th day of each month for the previous month.

c) Details of the Employment and Wage Research Methodology, SBS, Belgrade, 2005.

The RAD-1 form is not distributed to all enterprises and institutions. It is actually a subset of the number of the employed in all enterprises, institutions, cooperatives and organizations entered into the Single Classification Register.[2] At present, enterprises that submit completed forms, or are sent forms[3] employ slightly over one million people (Table L1-1, column 7).

Every six months, questionnaires on the number of employees and their wages are addressed to all legal entities in the form of the *Semi-annual Report on the Employed and Wages RAD-1/P.* These give the state on 31 March and 30 September (Table L1-1, Column 10). In addition to the data included in the monthly form, this one seeks more details such as gender, qualifications, and the number of employees categorized by the amount of their wages. The semi-annual forms are distributed to all enterprises and institutions entered in the Register (the methodology cites full capture as the aim[d)]). But it appears that these contain feedback only 100,000 employees more than are encompassed in the monthly sample (Table L1-1, Column 10).[4]

d) It should be noted that "full capture" is not understood to include people employed by natural persons.

2 The Single Classification Register or Register of Companies and Institutions is a typical administrative register used to record units as they are constituted in the sources of administration (Miladin Kovačević, "Statistical System in the Context of Transition and Convergence with the EU", Serbia and Montenegro on the Road to the EU (collected papers), European Movement in Serbia, Belgrade 2003. The register provides a framework for selecting samples for different statistical research. The described methodology (2005) does not make it quite clear which companies receive the monthly form (they employ 70% people recorded in the Register) – it is said that the criterion for selecting a unit is the size of the organization (in terms of the number of employees), and that the units are selected descending from "the larger to the smaller". The methodology further explains that the RAD-1 monthly research used to be applied to some 13,500 units accounting for approximately 75% of the employed, but the data capture was rationalized as of January 2005, and now includes some 8,500 reporting units, or 72% of the aggregate number of employees in companies, institutions, cooperatives and organizations (Details of the Employment and Wage Research Methodology, SBS, Belgrade, 2005). It is not clear, however, how this significantly reduced number of reporting units led to the number of employees in the sample falling from 75% to no more than 72%.

3 Distribution and return of the forms is apparently used as a synonym as no information is available as to the percentage of enterprises that regularly respond with completed forms. Under the Law on Statistical Research, RS Official Gazette, Nos. 83/92, 53/93, 67/93, and 48/94, companies are required to provide the requested information:"Enterprises, institutions, government and other agencies, other natural and artifical persons are required, within the given period and without charge, to fill in accurate information on any events specified as the subject of statistical research under this Law to the Bureau and or its authorized officer, and to make such information available for verification". The sanction for failing to comply was apparently determined as far back as 1994 and envisaged a fine of "10,000 new dinars", and is clearly not being enforced. According to the SBS, enterprises that fail to send back completed forms are reminded to do so by phone, and the responses are ultimately collected.

4 The assumption is that the statistical report ZP12 – The Employed by Wage Amount and Qualification is generated from the RAD-1 semi-annual research, as it is published twice a year and provides data on the qualifications of the employed and the number of employees by wage amount, and these are the questions distributed every six months.

Table L1-1. Serbia: Number of Employees, 2000-2005

	RAD-15						RAD-1			RAD-1/P		FREN - estimate	
	Total No. of employees and entrepreneurs	Employees in legal entities	Total	No. of entrepreneurs	No. of employees within entrepreneurs	Total No. of employees	No. of employees (official data)	No. of employees that received their wages	No. of employees that didn't receive their wages	Total	No. of employees that received their wages	Total	Total No. of employees
	1 (=2+3)	2	3	4	5	6 (=2+5)	7	8	9	10	11	12	
2000	2,097	1,786	311	170	141	1,927	..	..	..	..	..	2,187	2,017
2001	2,102	1,752	349	182	167	1,919	1,420	1,203	233	..	..	2,191	2,009
2002	2,067	1,677	390	190	200	1,876	1,334	1,150	184	1,459	199	2,156	1,966
2003	2,041	1,612	430	200	230	1,842	1,268	1,068	200	1,384	224	2,132	1,932
2004	2,050	1,580	471	209	262	1,841	1,201	1,022	179	1,314	200	2,140	1,931
2005	2,069	1,547	522	229	292	1,839	1,099	937	162	..	..	2,153	1,924
2001													
III	2,109	1,768	341	181	160	1,928	1,436	1,215	221	..	..	..	..
IX	2,098	1,740	358	184	174	1,914	1,410	..	..	..	..	..	..
2002													
III	2,087	1,709	378	186	192	1,901	1,361	1,167	194	1,486	206	..	..
IX	2,046	1,645	401	195	206	1,851	1,308	1,133	176	1,431	192	..	..
2003													
III	2,046	1,628	418	198	220	1,848	1,283	1,068	215	1,400	238	..	..
IX	2,036	1,595	441	202	239	1,834	1,251	1,056	195	1,367	210	..	..
2004													
III	2,065	1,601	464	208	255	1,856	1,213	1,028	186	1,327	200	..	..
IX	2,037	1,560	477	210	267	1,827	1,190	1,005	184	1,300	200	..	..
2005													
III	2,070	1,557	513	228	285	1,842	1,125	960	165	1,288	191	..	..
IX	2,067	1,536	531	230	300	1,836	1,087	958	129	..	..	..	..

Notes by column:
The total number of employed (workers) and small businessmen (Column 2 + Column 3) includes those employed by artificial persons (enterprises, organizations, institutions), small businesses (including store owners, self-employed professionals, etc.), and those employed by small businesses (natural persons). Employees of the Ministry of Defense of Serbia-Montenegro, and the Serbian Ministry of Internal Affairs are not included.
SOURCE: Six-monthly Report on the Employed and Wages RAD-1/P; Additional Survey to the Six-monthly RAD-1 Report; Six-monthly Report on Small Businesses and Their Employees RAD-15.
(2) Employees of artificial persons (companies, organizations, institutions). Estimated taking into account the monthly RAD-1 reports and the Additional Survey to the Semi-annual RAD-1 Report. The survey results are not published, and this is obviously the reason for the discrepancy between Columns 2 and 10.
SOURCE: Semi-annual Report on the Employed and Wages RAD-1/P (Column 10), and the Additional Survey to the Semi-annual RAD-1 Report.
3) Owners of small businesses and self-employed persons (so-called natural persons) and their employees (Column 4 + Column 5). 4) Owners of small businesses. 5) Employees of small businesses (so-called natural persons).
SOURCE: Semi-annual Report on Small Businesses and their Employees RAD-15.
6) Total employed – both by artificial and natural persons (Column 2 + Column 5).
SOURCE: Monthly Report on the Employed and Wages RAD-1; Additional Survey to the Semi-annual RAD-1 Report; Semi-annual Report on Small Businesses and their Employees RAD-15.
(7), (8), and (9) Data relating to RAD-1 monthly reports.
(10) and (11) Data relating to semi-annual RAD-1-P reports (assumption).
SOURCE: Statistical Report ZP-12 - The Employed by Wage Amount and Qualification.
(12) and (13) Estimated total number of employees (including small businesses), and the number of formally employed workers in Serbia. Both figures include persons employed in the Ministry of Internal Affairs and the military (90,000 in the period 2001-2004, and 85,000 in 2005).

As the returned forms are incomplete, the six-monthly research is supported by additional information obtained from two more sources. The first is the *Additional Survey to the Semi-annual RAD-1 Report*, which was introduced after it was noticed that numerous small companies were failing to submit their six-monthly reports.[e)] The survey makes it possible to estimate the number of employees in companies and other organizations employing fewer than 50 people, which either are not included in the regular semi-annual reporting (RAD-1), or failed to submit their reports. The estimates are derived from a stratified random sample of 350-400 units.[5] The second source is the *Semi-annual Report on Small Businesses and their Employees RAD-15*.[6] This report

e) The survey has been conducted since March 1997 as it was noted that the private sector was not sufficiently captured by the standard statistical research into employment based on the reports submitted by companies.

5 The number of companies used as the framework (i.e. population) in selecting the survey sample, as developed from financial statements for 2003, is 48,000 companies, institutions and other organizations employing 217,777 people at the time. These were companies with less than 50 employees that filed their financial statements (meaning that they are active), but failed to submit RAD-1 reports. The stratification is made by territory (Serbia and Vojvodina), by industry (grouped in three classes), and by size of the company (the employed used as the criterion – 5 groups), which results in a total of 30 strata. It is not clear, however, whether there are any problems with companies failing to report and how they are solved, but it appears that the SBS manages to obtain the information on the number of employees.
6 A small businessman is a natural person who sets up a business and is employed in that business in order to earn a living. In order to do so, he registers a particular type of business (service shop, office, bureau, repairs shop, agency, studio, boarding house, pharmacy, medical practice, etc.). This category also includes foreign representative offices.

covers the segment of the economy not entered in the Register (small businesses, self-employed artists, lawyers, etc.). It is produced by the Health Insurance Fund on the basis of its records of actively insured persons, and also gives the situations on 31 March and 30 September (Table L1-1, column 3).

The total number of employees in a particular year is obtained by adding data from three sources: Semi-annual RAD-1/P Report; Additional Survey to the Semi-annual Report; and Semi-annual Report on Small Businesses and their Employees RAD-15 (Table L1-1, Column 1). Notably, none of these sources includes the units of the Ministry of Internal Affairs, the Ministry of Defense and the armed forces of Serbia and Montenegro, as explicitly noted in the SBS methodology.[f)] Employment in these institutions was estimated at approximately 85,000 in 2005, which put total employment in Serbia at 2,153 mn or 1,924 mn.[7] If the number of employees derived in this way is compared to the unofficial information of the Tax Office for 2004,[8] the difference is less than one thousand employees. Even this minor difference can be atributed to persons working at the country's diplomatic and other missions abroad, who also are not registered by the SBS. The SBS research can therefore be said to cover formal employment in Serbia with a great deal of accuracy.

f) The reason for the exclusion of these institutions presumably dates from the past when such information was considered to be confidential.

3. Registered Employment and Wage Trends, 2001–2005

As reported by the official statistics, the registered number of employees in the 2001-2005 period did not significantly decrease (by less than 3% or some 50,000) although a sharper decline might have been expected due to the launching in 2001 of the process of privatization and company restructuring. There are several reasons for this. First, registered employment had already dropped from the late 1980s to the launching of the reform – by some 15% (from 2.478 mn in 1989 to some 2.1 mn in 2000). Although an even more dramatic decrease might have been expected in this period (in view of the adverse effects on the economy of the international economic sanctions), it is apparent that only some redundant employees left the socially-owned sector, while many more were laid off with pay during the most difficult time and then came back to their enterprises.

Cutting of jobs in the socially owned sector continued after 2000. In parallel, however, the number of people working in small businesses rose. Since 2005 employment in this sector of the economy has been over half a million[9]. The development and/or formalization of the sector, therefore, made up for the job losses in the socially owned sector (Table L1-1, Column 2, 3).

Finally, job loss on a larger scale is yet to be expected in view of the announced restructuring of major public and socially owned enterprises, and downsizing of the government administration. It remains to be seen whether this will cause the overall employment to decline, or if only the structure of employment will again undergo a change.

Wages reported by the statistics rose in real terms throughout the period, particularly in the first two years, as well as later on although with a tendency to slow down. During all this time, warnings were reiterated that wages were rising more rapidly than productivity.[g)]

g) E.g. in many issues of MAT (then MAP); Economic Review (various issues); Gorana Krstić: "Labor Markets in Serbia and Montenegro", analysis for WB Country Economic Memorandum, etc.

The statistical data on wages relates only to the *registered (formal) wages*. To perceive the wage monitoring problem more clearly and reliably, we introduce the following notation:

$$W = Wr + Wt$$

The actual aggregate wages paid in the economy (W) consist of the registered portion (Wr), (paid to the current account) which is reported by the employer to the tax authorities and on which contributions are paid, and the additional portion paid in cash (Wt).

7 The Ministry of Internal Affairs has approximately 45,000 employees; the armed forces (in Serbia only) employed more than 45,000 people, but after major cuts in 2005 (5000-6000), now employ about 40,000 people.
8 The data received by the Tax Office through PPP forms has not been officially published yet.
9 At the same time, in the 2000-2005 period employment did not decline significantly, and the registered unemployment rose from 722,000 in 2000 to 992,000 in 2005. This points to formalization in terms of the participation in the formal labor market – from some 2.8 mn formally active employees (excluding farmers) in 2000 to over 3 mn in 2005.

Statistics observes only registered wages (*Wr*), and arrive at the estimated average registered wage by monitoring the RAD-1 subset which may be called the "traditional sector" (Wr^i). The statistics recognize no registered or formal wages paid by the remaining substantial part of the private sector and by individuals, which may be dubbed the "new sector" (Wr^j). Consequently, the SBS registers only the subset Wr^i (as a matter of simplification, we assume that RSO registered actual and precise data on wages for subset i), while the fiscal data relates to the aggregate wages *Wr*.

$$W = (Wr^i + Wr^j) + (Wt^i + Wt^j)$$

The additional portion *Wt* mostly involves the "new sector," as the practice of extra cash payments is not normal in the traditional (socially-owned and government) sector, which makes $Wt^i \to 0$. There is no data available on the portion Wt^j and it is not a subject of this analysis.

If observed in terms of these "sectors", then the real wage in the "traditional sector" is $W^i = Wr^i$, and $W^j = Wr^j + Wt^j = \rho W^j + (1-\rho)W^j$, in the "new sector" where ρ is the portion of registered wages within the total, actual, wages.

The SBS calculates the average wage as the estimated average registered wage in Serbia ($\hat{w}_r$), observing sector *i* of the economy: $\hat{w}_r = \overline{w}_r^{\,i} = \frac{W_r^{\,i}}{n^i} = \frac{\sum_{i=1}^{nip} w_{rip}}{n^i{}_p + n^i{}_0} = p \cdot \overline{w}_{rp}^{\,i}$

where $\overline{w}_r^{\,i}$ is the average wage for the RAD-1 subset; Wr^i denotes aggregate wages for the RAD-1 subset (equal to the sum of paid wages); n^i is the total number of the formally employed for the RAD-1 subset where of n^i_p denotes the employed in the RAD-1 subset receiving wages, and n^i_o the employed in the RAD-1 subset not receiving wages and *p* is the share of employees in the "traditional sector" *i* receiving wages $p = \frac{n_p^{\,i}}{n_p^{\,i} + n_0^{\,i}}$; finally, $\overline{w}_{rp}^{\,i}$ is the actually paid average wage for the RAD-1 subset defined as a $\overline{w}_{rp}^{\,i} = \frac{W_r^{\,i}}{n^i{}_p} = \frac{\sum_{i=1}^{nip} w_{rip}}{n^i{}_p}$

for which we have assumed that precisely represents actually paid wage in the sector *i*.

In that case, actual paid registered wage in the economy is

$$\overline{w}_{rp} = \overline{w}_{rp}^{\,i} \cdot \frac{n_p^{\,i}}{n_p} + \overline{w}_{rp}^{\,j} \cdot \frac{n_p^{\,j}}{n_p}$$

where n_p is the number of employed in the economy receiving wages, and n_p^j number of employed in the "new sector" receiving wages. Accordingly, the statistically observed average registered wage and true average registered wage stood in the following proportion:

$$\frac{\hat{w}_r}{\overline{w}_{rp}} = \frac{p \cdot \overline{w}_{rp}^{\,i}}{\overline{w}_{rp}^{\,i} \cdot \frac{n_p^{\,i}}{n_p} + \overline{w}_{rp}^{\,j} \cdot \frac{n_p^{\,j}}{n_p}} = p \cdot \frac{\overline{w}_{rp}^{\,i}}{\mu_p^{\,i} \cdot \overline{w}_{rp}^{\,i} + \mu_p^{\,j} \cdot \overline{w}_{rp}^{\,j}}$$

where μ_p^i is the share of employed receiving wages in the sector *i* in the total number of paid-out employees, and μ_p^j - share of employed receiving wages in the sector *j* in the total number of paid-out employees in the economy.

Table L1-2 shows the average registered wage movements as reported by the statistics ($\overline{w}_r^{\,i}$) which reflects the estimated average registered wage trend ($\hat{w}_r$). The table also includes actually paid wages which are not published in the SBS regular reports and publications. In the first two years of reforms, the statistics reported the real growth of net wages by over 40% in 2002 relative to 2001. The real wage growth continued in the following years, although it tended to slow down (net wages rose by nearly 14% in 2003, by approximately 10% in 2004, and by 6.6% in 2005).

Table L1-2. Serbia: Wages, 2001-2005

	Official wages (SBS data) - $\overline{W_{ri}}$						Paid wages - $\overline{W_{rip}}$					
	Gross wages			Net wages			Gross wages			Net wages		
	dinars	nominal	real	dinars	nominal	real	dinars	nominal	real	dinars	nominal	real
2001	8,739	229.6	118.8	5,375	225.0	116.4	..	..	..	..	..	..
2002 (I-V)	11,799	173.7	133.4	8,187	193.1	148.3	13,782	161.5	124.0	9,564	188.9	145.1
2002	13,260	151.7	130.1	9,208	171.3	146.9	15,419	..	..	10,705	..	..
2003	16,612	125.3	114.0	11,500	124.9	113.6	19,724	127.9	116.3	13,654	127.5	116.0
2004	20,555	123.7	111.1	14,108	122.7	110.1	24,156	122.5	110.3	16,579	121.4	109.3
2005	25,514	124.1	106.8	17,478	123.9	106.6	29,287	121.2	104.3	20,022	120.8	103.9

Source: SBS Monthly Report RAD-1.
Note: Since June 2001, the SBS started officially monitoring gross wages, and since January 2002 net wages have been observed taking into account the extended taxable base.

For the most part, the exceptionally high wage growth over the first two years may basically be attributed to the fiscal reform in June 2001, i.e. easing of the fiscal burden on wages and the shift to gross wages. There has been a considerable alleviation of the fiscal burden since June 2001 – in nominal terms, from over 100% to approximately 71% (in net amounts), with the taxable base extended to include meals, vacation bonuses, and field allowances. However, the reduction was effectively lower, some 12 percentage points, but still remains significant.[10]

The extended base due to the switch to the gross wage system led to the statistical increase of wages, with no essential increase in labor costs. For example, inclusion of the meal allowance alone – at the time equal to 25% of the average net wage in the real sector – caused this substantial statistical wage growth. In addition, the reduction of the fiscal burden was obviously taken advantage of to raise wages. This means that the net wage statistical growth of over 30% did not effectively constitute an increase in labor costs for employers,[h)] who still spent the same amount on their employees. For the most part, the statistical increase in net wages was a purely accounting category, and to a lesser extent (approximately 5%) it meant government money going into the pockets of workers. It is clear that employers (most of the companies were socially and state-owned at the time) used the burden reduction to increase wages and, therefore, the "real wage growth resulted from the one-off reduction of the fiscal burden on wages".[i)] This is best shown by comparing the first five months of 2002 with the respective period of the previous year – the real 48% net wage growth may largely be explained by the statistical effect (at least 30%)[j)]. In fact, discussing the wage growth relative to 2001 is not appropriate since there is no comparison.

h) Only the meal allowance was taken into account here in terms of the extended base. With the vacation bonus and field allowances included, the base extension percentage would be even higher.
i) Economic Review, October 2001

j) The comparison involves the first five months of 2002 to the same period of the previous year when the gross wage system had not yet been introduced.

Moreover, as of June 2001, the minimum base for eight qualification categories rose considerably, increasing 85% in nominal terms from 21 May 2001 to 1 June 2002. The wage growth also resulted from the fiscal adjustment that make possible an increase in, and regular payment of, wages of budget beneficiaries (in particular, the health and education sectors). The increase is clearly shown in fiscal accounts – the share of payroll rose from 9% in 2001 to over 10% of GDP[k)].

k) The figure, of course, partly "includes" the increase in the number of employees in the public sector.

In conclusion, one way or another, the high statistical wage growth in 2001 and 2002 largely reflects the fiscal adjustment effected in this period.

High real wage growth, however, continued in the following years. And while wages indeed rose in real terms, it is possible that the methodology used overstated their growth. The size of the sample or the subset used to monitor wages is more than sufficient; its nature, however, may be a problem.

10 If the average meal allowance equal to 25% of the average net wage is included, until June 2001 the actual fiscal burden on the average net wage in Serbia was 82.74% (not 103.43%) which practically resulted in the effective burden reduction by over 10 percentage points – from some 83% to approximately 71%. The burden reduction was much more effective for those paid higher wages. For example, for employees with wages equal to two average wages in Serbia, the burden reduction was approximately 20% (from some 92% to 71% of the net amount); with the wage equal to three average wages, the burden was reduced from 95.6 to 71%, etc. The reverse happened in low-wage industries where the meal allowance even reached half of the net wage. This segment of the economy was additionally burdened by the fiscal reform, in particular, taking into account the increase applicable to 8 minimum bases.

As noted above, the wage amounts and trends are monitored in companies and institutions using only a monthly RAD-1 sample. These currently account for some 65% of the employed (i.e. those receiving wages, excluding small businesses, i.e. the owners themselves).[l)] The methodology described clearly shows that wages are not monitored in the specific and rapidly growing "new" segment of the economy, i.e. those paid to employees in small businesses such as catering, handicrafts and shops (but also agencies, foreign representative offices, etc.). Moreover, wages are not followed in terms of companies screened by the additional survey – small enterprises employing up to 50 people who are active, but fail to submit RAD-1 reports.[11] These are mainly privately owned companies. This means that the monthly RAD-1 report may be biased in favor of companies which were mostly socially and state-owned at the beginning of the reform period.

l) At the beginning of the observed period in 2001, the sample included 74% of the employed.

This belief is upheld by comparison of the data from the RAD-1 sample and companies' financial statements. Incidentally, the total number of employed reported in these two sources is roughly the same. Government institutions and agencies do not file financial statements. On the other hand, the monthly RAD-1 sample does not include all companies that file financial statements. Hence the major discrepancy between the number of employees in the private sector monitored within the sample and the number of employees in private companies that file financial statements, which further confirms the assumption that the sample monitors just a small portion of private companies (Table L1-3).[m)] This group includes either better performing companies or those which, for one reason or another, choose to register a larger part of wages, as in all years the average wage paid by private companies within the sample was considerably above the figures reported in the financial statements (except in 2004 which is not comparable).

m) Moreover, the described methodology does not clearly explain what happens with companies employing more than 50 people which fail to submit their regular RAD-1 reports.

Table L1-3. Serbia: Employees and Wages by Ownership, 2001-2005

	Sample (RAD-1)				Financial report			
	private ownership	mixed ownership	other	total	private ownership	mixed ownership	other	total
				no. of employees (in 000)				
2001[1)]	32	339	996	1,367	235	469	643	1,347
2002	33	311	950	1,295	263	429	601	1,293
2003	68	367	798	1,233	334	404	479	1,217
2004	91	344	733	1,168	408	372	404	1,183
				average net wage				
2001[1)]	7,239	6,606	7,144	7,017	4,939	7,264	7,140	6,799
2002	9,421	8,491	9,917	9,237	7,344	10,803	10,181	9,810
2003	11,790	10,815	13,366	11,537	9,539	13,160	12,707	11,988
2004	13,887	13,294	14,469	14,150	13,320	19,378	17,571	16,673
				average gross wage				
2001[1)]	10,374	9,485	10,274	10,087	7,234	10,502	10,288	9,830
2002	13,592	12,245	13,602	13,298	10,620	15,364	14,506	13,999
2003	16,958	15,642	17,049	16,665	13,746	18,682	18,211	17,143
2004	20,095	19,387	21,210	20,617	18,056	25,770	24,227	22,585

Source: SBS and Solvency Center.
1) The data from the RAD-1 sample for 2001 is the June-December average.
Notes:
- The number of employees in the RAD-1 sample shown in the table (disaggregated by ownership) is slightly below the figure contained in Table 1. The reason is a different and informal SBS source in this table. The difference disappears in 2005 (not shown in Table 4 as no comparable data from financial statements has yet become available).
- The data from financial statements for 2004 is not comparable, since as of that year the wage position includes the portion relating to contributions payable employers and payments under contracts for temporary, part-time and other work performed.

11 Additional Survey to the Semi-annual RAD-1 Report solely serves as a data source for registered employees, and it provides no information as to the amount of wages paid by these companies. The questionnaire actually contains a section relating to the wages; however, it either remains uncompleted or the data obtained is not processed.

Furthermore, if the RAD-1 sample itself is observed, it is evident that the number of employees significantly decreased – at end-2005 it was 26% below the figure reported in early 2001 (Table L1-4, Column 5). The percentage of employed in the public sector within the overall sample rose from some 37% in 2001 to nearly 55% in 2005, meaning that the wages presented in the official statistics are impacted to a major extent by the movements in wages of the public sector.

This suggests that the wage growth may have been somewhat overstated due to the reduced employment, i.e. an above-average increase in productivity within the sample. The falling number of employees in the sample had a considerable effect on the increase of the average gross wage. The aggregate wages within the sample rose more moderately, and in 2005 they even fell in real terms. This would not be disputable if the employment drop within the sample corresponded to such a drop in the economy as a whole. Then the conclusion might be that the average wage growth in Serbia resulted from the reduced employment, i.e. increased productivity. In the observed period, however, the registered number of employees in Serbia did not decrease to any considerable extent (Table L1-4, columns 5 and 7).

Table L1-4. Serbia: Wages and Employees (RAD-1), Indices, 2002-2005

	Average monthly gross wage		Gross wages (sample)		Employees in sample	Employees in sample that didn't receive their wage	Total employees[1)]
	nominal	real	nominal	real			
	1	2	3	4	5	6	7
2002 I-V	173.7	133.4	165.0	126.8	95.0	84.4	99.1
2002	151.7	130.1	143.3	122.9	93.9	79.1	97.7
2003	125.3	114.0	119.1	108.3	95.1	108.4	98.2
2004	123.7	111.1	117.1	105.2	94.7	89.5	100.0
2005	124.1	106.8	114.1	98.2	91.5	90.5	99.9
Dec 05/Jan 01	529.4	238.5	392.0	176.3	74.0	49.2	94.7

Source: SBS, Monthly RAD-1 Report.
1) Employees, total (excluding the self-employed, i.e. small businesses).

The view that the wage growth was somewhat overstated is supported by the fiscal data. In all the observed years, the expected growth of aggregate wages taking into account the statistical data (the product of the number of employees multiplied by the average wage) was actually a few percentage points above the growth of aggregate wages that can be derived from wage taxes (Table L1-5).[12] Moreover, if GDP per employee is used as the indicator of labor productivity, the conclusion is that taxable registered wages (*Wr*) did not grow more rapidly than productivity.[n)] The percentage of aggregate taxable wages in GDP actually fell over the years.

n) It would be more accurate to take the GDP per employee excluding agriculture, but this makes the computation somewhat more complicated. We would also add that papers discussing this issue have so far used the GDP per employee.

Table L1-5. Serbia: Different Flow of Wages , 2001-2005

	Gross wages based on official data[1)]				Gross wages based on personal tax data			
	in 000 dinars	nominal	real	in % of GDP	in 000 dinars	nominal	real	in % of GDP
2001	201,262,666	228.7	118.3	28.4	..	..	..	..
2002	298,477,296	148.3	127.2	32.5	333,124,507	166.4	142.7	36.2
2003	367,111,910	123.0	111.9	33.5	391,657,571	117.6	107.0	35.8
2004	454,125,726	123.7	111.0	34.9	462,905,007	118.2	106.1	35.6
2005	560,368,368	123.4	106.2	35.0	564,699,486	122.0	105.0	35.3

Source: SBS and Ministry of Finance of Republic of Serbia.
1) Aggregate gross wages are a hypothetical figure obtained as the product of the reported number of employees according to the SBS (Table L1-1, column 6) and the average gross wage (Table L1-2, column 1).
2) Aggregate gross wages are derived from the aggregate taxes on wages, which accounts for 14% of the gross wage. The amount was not computed for 2001 as the gross wage was not used as the taxable base (this was instead the gross wage reduced by the guaranteed wage). This figure is higher than the hypothetical aggregate gross wages (column 2) as the statistics do not register employees of the Ministry of Internal Affairs and the armed forces.

12 It should again be noted that this involves the registered employment data, and the differences should not be confused with the problem of employees paid in cash, extra payments in addition to registered wages, or unregistered employment. Although the SBS and Tax Office are not connected, it is reasonable to assume that employers would not report any illegally paid wages.

It is interesting that the hypothetical aggregate wages (derived from statistical data), which were below the aggregate wages derived from taxes at the beginning of the observed period, have now reached a level close to the aggregate wages derived from taxes (Table L1-5). The difference between the two sources, which is explained by the fact that the statistically unobserved employees (Ministry of Internal Affairs, and the military) are not included in the aggregate wages derived from statistics, has now narrowed substantially. This points to the overstated official wage data over the years.[13].

The overstated growth, and hence the level of wages, is clearly revealed in Table L1-6). If the average wage is reconstructed taking into account the wage taxes, and compared with the official statistics, we see that in 2002 the official average wage $\overline{w}_r^{\,i}$ was understated, but as the wage growth was overstated over time, the average wage level has also become overstated since 2004.

Table L1-6. Serbia: Wages and Employees - comparison of "Traditional Sector" and „New Sector", 2002-2005

	Total wages, official data - W_r and $\overline{W}_r$ [1]			"Traditional sector "(RAD-1) - W_{ri} and $\overline{W}_{ri}$ [2]			"New sector" (out of reach of RAD-1) - W_{rj} [3]		
	in 000 dinars	nominal	real	in 000 dinars	nominal	real	in 000 dinars	nominal	real
				gross wages					
2002	333,124,507	..	..	212,318,417	..	..	120,806,090	..	..
2003	391,657,571	117.6	107.0	252,773,573	119.1	108.3	138,883,998	115.0	104.6
2004	462,905,007	118.2	106.1	296,117,263	117.1	105.2	166,787,744	120.1	107.8
2005	564,699,486	122.0	105.0	337,869,702	114.1	98.2	226,829,783	136.0	117.0
				average monthly gross wage					
2002	14,122	..	..	13,263	..	..	15,934	..	..
2003	16,897	119.7	108.9	16,612	125.2	114	17,441	109.5	99.6
2004	19,976	118.2	106.1	20,555	123.7	111.1	19,024	109.1	97.9
2005	24,465	122.5	105.4	25,631	124.7	107.3	22,912	120.4	103.6
				employees					
	in 000 dinar	index		in 000 dinar	index		in 000 dinar	index	
2002	1,966	..		1,334	..		632	..	
2003	1,932	98.3		1,268	95.1		664	105.0	
2004	1,931	100.0		1,201	94.7		731	110.1	
2005	1,924	99.6		1,099	91.5		825	112.9	

Source: Ministry of Finance of Republic of Serbia and SBS, Monthly RAD-1 Report.
1) Aggregate registered wages (Wr) were derived from wage taxes.
2) "Traditional" sector (RAD-1), Wri – source: SBS RAD-1 Report.
3) "New" sector (not captured by RAD-1), Wrj was derived as the difference between the aggregate registered wages and the aggregate wages reported in RAD-1 (Wr - Wri).

It is also illustrative for this analysis that in 2005 a significant real growth of aggregate registered (gross) wages (Wr^j) occurred in the segment of the economy not captured by the sample (Table L1-6). Wage tax revenues in 2005, when the highest wage overstatement might have been expected due to the substantial employment drop within the sample (including those not receiving wages), stood close to the expected level (with a nominal growth of 22% instead of 23.4%). The increase in tax revenues may also be explained by the the introduction of the VAT in January 2005.[p)] The VAT narrowed down the possibilities of cash payments which used to be typical in private businesses not captured by the sample.[14] This means that the real purchasing power of employees in this sector (and hence the demand) may not have grown after all.

p) Taking into account the relation Wr_j-ρW_r the registered wage growth in the "new" sector may solely be the result of the ρ *growth (the portion of registered wages within the overall wages), while the aggregate wages W_j may be constant (or even falling).*

If we go back to the notation ($W^j=Wr^j+Wt^j=\rho W^j+(1-\rho)W^j$) introduced at the beginning of the section on wages, where ρ is the portion of registered wages within the aggregate wages, then $\Delta Wr^j=\Delta(W^j-Wt^j)=\rho\Delta W^j$ meaning that Wr^j may grow even with the constant W^j provided that ρ grows.

13 The overstated level is here understood to apply to the average wage and those not receiving it and, therefore, also to the cases where the aggregate wages are divided by the formally employed irrespective of whether they received their pay or not. The same would happen if we discussed the average wage only relating to those who receive it (Table 3, Paid Wages); the result would still be that the statistics overstated the wage relative to the actually paid wage derived from taxes.
14 The companies captured by the sample should not be those where any massive informally paid labor exists or existed (the practice of socially and state-owned companies was never to pay any additional cash to employees or to have unregistered employees).

Potentially, a reason for overstatement of the pace of wage growth may be the computation of the average by dividing the aggregate wages by the number of the formally employed instead of by the number of paid employees. Of course, even if wages were paid to all these employees, dismissal of the lowest-paid workers would cause the average wage to rise. Having in mind, however, that some employees receive no wages at all, their absence from the average wage computation creates the impression of the above-average wage growth.[r)]

r) MAP (12/01).

Surprisingly, reduction of employment within the sample was not primarily affected by the dismissal of those not receiving wages. The number of some 200,000 people who regularly did not receive their pay started to fall more clearly only in 2005, and stood at over 100,000 at the year-end (Table L1-1, Column 9). This may be explained by the fact that stronger companies were privatized first. The privatization and restructuring of weaker companies started only in 2005, and a substantial number of those not receiving wages slipped out of the sample. By coincidence, this did not lead to any major overstatement of wage growth in 2005 because of a parallel process of wage formalization.

4. Conclusion

Observing and analyzing employment and wage data in Serbia is almost entirely dependant on reports submitted by enterprises to the SBS. The process, however, is hampered by the fact that not all enterprises submit their reports regularly or on time, and that a substantial part of the economy is privately owned, including companies privatized in recent years. This leaves a significant number of employees beyond the reach of official statistical analysis.

The number of formally employed did not fall substantially in the observed period (2001-2005), but their structure changed. Many of those who lost their jobs in socially owned companies moved to the sector mainly consisting of small businesses and shops. No detailed data on this segment of economy, however, is available yet.

The wage growth in the preceding period was indeed high, but to a certain extent overstated. The SBS observes wages on a sample of enterprises that is not sufficiently representative: the public and socially-owned sectors are dominant in the sample, while private companies are scarcely represented, and the wages paid by small businesses, handicraft services, agencies, etc. are not monitored at all. The sample shrank substantially over the years, as it mainly included socially and state-owned enterprises, some of which were privatized and cut their employment figures (and most likely increased their productivity). The registered average wage growth, therefore, largely resulted from the reduced employment within the sample, i.e. the increased productivity of companies it includes, which was not characteristic of the economy as a whole, at least not to an equal extent. The assumption that wage growth was overstated is borne out by the fiscal data on wage tax.

An additional problem was that wages might have been overstated due to the dismissal of workers who were not receiving their pay. Though this could have realistically been expected, it was not pronounced in the preceding period (firing of irregularly paid employees started only in 2005). Obviously, however, the statistics will produce a distorted picture of wage growth when workers who at present are not receiving pay or are receiving it irregularly are fired.

In spite of the slant in the RAD form subset, the real picture is not completely distorted as the processes in the non-captured segment of economy, though driven by different factors, produced similar results. In the segment of the economy with unreported wages (small, mostly private enterprises and the employed in small businesses), the average wage clearly rose more in 2005 than in the previous years, most likely because the labor costs were channeled into formal flows.

On the other hand, though there cannot be a difference of more than a few hundred dinars with regard to the average wage in Serbia, regardless of the cited methodological problems, it must be underlined that the inaccuracy of the official statistics could have broader implications since pensions and other social benefits are partly indexed to wages.

Investment in Serbia

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According to the official figures, Serbia's relatively high economic growth over recent years was accompanied by an exceptionally low level of investment, raising concerns as to the sustainability of the growth. The latest statistical data for 2004, captured with an improved methodology, and our independent estimate show that investment was in fact 60% higher than indicated, mainly because the earlier data had disregarded the activity of private companies.

1. Introduction

Without much pomp, the official data on investment in Serbia in 2004 was made public in late 2005. The figures definitely confirmed that the share of investment in GDP had actually been much higher than the disturbingly low level reported by statistics for a number of years (Table L2-2). The 78% nominal growth of investment relative to 2003 shows that light was finally shed on some economic developments formerly screened from the view of official institutions, and that their value before 2004 was considerably above the reported figures. A series of questions arises: Were there any grounds for the belief that investments were at an alarmingly low level? What effects will this development have on Serbia's overall economic policies? How much time will have to pass before the ingrained picture of the state of the national economy changes?

This paper presents the statistical data, identifies the methodological problems that led to the undervaluing of estimates in the past, and FREN's estimates of investments in the 2003-2005 period. The latter are largely based on an unpublished CEVES study, "Serbia's Economy: The Stylized Facts." We also summarize the methodological premises used in the presented estimates.

A series of objective circumstances made it virtually impossible to measure the real level of investment in Serbia with the official methodology applied until 2004. In a nutshell, the statistical methods were not suited to the ferment of an economy in transition. For this reason, CEVES developed an independent methodology for estimating investments in order to arrive at their real levels in 2003 and 2004, and to produce an early estimate for 2005.

The Serbian Bureau of Statistics (SBS) conducted its first survey using the improved methodology in 2004. The results reported largely agreed with the CEVES independent estimate (Table L2-1). This confirmed that the CEVES methodology was reliable, and that the series it developed was valid for analysis. The sole discrepancy that emerged was in the private residential construction sector, in which the SBS applied the old methodology.

1 The authors conducted a comprehensive study of investments in Serbia as part of the CEVES project "Serbia's Economy: The Stylized Facts." They wish to acknowledge the great assistance received from Bojka Stevanovski and thank Kori Udovički for her useful comments.

Table L2-1. Serbia: Investment in 2004, CEVES/SBS Comparison (Unpublished Research)

	CEVES		SBS		CEVES/SBS
	investments value (in bill. of dinars)	share in total inv. (%)	investments value (in bill. of dinars)	share in total inv. (%)	
Total	324.9	100.0	280.5	100.0	1.16
Construction	154.5	47.6	118.6	42.3	1.30
Equipment	149.2	45.9	145.7	51.9	1.02
Other	21.1	6.5	16.2	5.8	1.30
Non-private owned sector	148.9	45.8	152.9	54.5	0.97
Construction	65.5	20.2	67.7	24.1	0.97
Equipment	75.0	23.1	75.2	26.8	1.00
Other	8.5	2.6	10.1	3.6	0.85
Private owned sector	175.9	54.2	127.5	45.5	1.38
Construction	**89.0**	**27.4**	**50.9**	**18.1**	**1.75**
Equipment	73.1	22.5	70.5	25.1	1.04
Other	5.5	1.7	6.2	2.2	0.89

Sources: CEVES, SBS.

Since the table is a compilati of several independent methodoligies, there sums of sub-categories do not add up. Aggregate data (i.e. totals) are more precise.

2. Remarks on Official Methodology

The SBS observes the socially owned and private sectors separately. The first problem identified by CEVES was the inadequate monitoring of the private sector, whose output had been largely understated up to 2004. The estimate was done with the old model, which assumes that residential construction is predominant and investment by private companies extremely low (Table L2-2). Enterprises that had been privatized generally remained on the records of the government sector, and most of their investments were registered. The Serbian "new economy," which consists of companies that emerged in the 1990s and whose growth generally accelerated after the 2000 watershed, remained beyond the scope of official statistics.

In doing the 2004 estimate, the SBS made a major effort to tackle the problem. It developed a sample of private companies to which it sent questionnaires and used the feedback to estimate the value of private sector investments (including the value of private residential construction). The results thus obtained were quite different, showing that private sector investments accounted for 45% of overall investments in 2004 (Table L2-2), a much higher figure than reported in previous years (26% in 2003, and no more than 16% in 2002).

Another problem is the accuracy of the data the SBS receives. The socially owned sector is monitored through the INV-01 report, which has a high capture rate. In the business climate that prevailed in Serbia for years, however, reporting performance "on the edge of profitability" was deemed economically desirable; hence reporting any major investments would have been inconsistent with that behavior. The accelerated application of market economy principles coupled with the strong development of the banking sector, reduced income tax, and the shift to new accounting standards was therefore expected to result in remarkable changes in 2004.[2]

When the SBS reported that investments in Serbia valued 280 bn dinars in 2004, or 78% up on 2003 in nominal terms, any lingering doubts that they had been undervalued up to 2004 were dispersed (Table L2-2).

2 To study these developments, CEVES set up a sample consisting of some 100 companies for which the SBS had records of reported investments both in 2003 and 2004. The values reported by these companies for both years were observed. The sample showed a nominal growth of the reported investments of as much as 53.6%.

Table L2-2. Serbia: Fixed Asset Investment, Official Data, 2002-2004

	2002	2003	2004
Total (in bill. of dinars)	122.9	157.7	280.5
Share in GDP (in %)	13.4	14.4	21.4
	share in total investments (in %)		
Non-private owned sector	83.7	73.6	54.5
Private owned sector	16.3	26.4	45.5

Source: SBS

3. CEVES Investment Estimate Methodology

The CEVES research is based on independent, robust methods of measuring the level of investments in Serbia. Three methodologically independent models were applied:

1. Measuring the value of investment by **technical analysis** based on the separately estimated investment in construction, equipment, and other investment;
2. Measuring the value of investment by **institutional analysis** to separately estimate the government, socially owned, and private sectors; and
3. Measuring the value of investment based on corporate **financial statements** using data provided by the Solvency Center, and the government investment reports of the Ministry of Finance.

Applying these models, CEVES estimated the value of investment in 2003 and 2004. With all three models applied for 2003, and the first two for 2004, the resulting value of investment was approximately equal. FREN used the same method (though with some limitations as all the necessary data are not yet available) for its preliminary estimate of investment in 2005 (Table L2-3). Details of the three models are:

3.1.Technical Analysis

In accordance with technical structure, the investments consist of three major blocks:

a) Investment in construction;
b) Investment in equipment;
c) Other investment.

a) Investment in construction was estimated in consultation with leading experts in Serbia's construction industry, and using three independent approaches: (1) Analysis of cement consumption in Serbia and Croatia; (2) Estimated share of labor in the construction costs; and (3) Independent analyses of the segments of the construction industry (civil engineering, nonresidential, and residential). Special attention was devoted to estimating investments in construction as they, as a rule, account for approximately 50% of total investment.

The estimate based on cement consumption turned out to be the most reliable. The cement consumption data for Serbia and Croatia (chosen as the country most appropriate for comparison) and the known value of construction investment in Croatia were used to measure the value of investment in Serbia. The analysis allowed for the difference between the cost of construction and price per square meter of space in residential and industrial buildings, and per kilometer of roads in Serbia and Croatia. The price differences were then weighted by the share of each segment in total construction. The value generated in this way was confirmed by the two other estimates: based on the labor share, and analysis of the segments of the construction industry.

b) Where *investment in equipment* and the relevant estimates are concerned, the following indicators were used: imports of equipment according to importers' declarations, and the index of capital goods production in Serbia. The standard ratio of domestic to imported equipment was also taken into account. Since there is a variety of import classifications that provide widely differing measurements of equipment imports, CEVES opted for the most conservative.[a)] The analysis included the problem of overstated invoices for imported equipment, and the effect of the import surge in December 2004 prior to the introduction of the VAT (both effects were described in detail in the first issue of *QM*). The estimated "surplus" of imported equipment at end-2004 was shifted to 2005 as its investment cycle actually in that year.

a) In 2003, for example, depending on different classifications, the value of imported capital goods ranged between 739 mn and 2028 mn euros.

c) *Other investment* was estimated in line with their standard share in overall investment in Serbia and countries in the region. For 2004, the analysis included the structure of investment as shown in the reports submitted to the SBS. Since they account for no more than 8%, the rougher approximations used in estimating this component could not have any significant effect on the overall figure.

3.2 Institutional Analysis

In terms of investors, the investments are divided into:

a) Investment by the socially owned sector, including the central and local governments, and by state-owned, public, socially owned and mixed enterprises, and cooperatives;

b) Investment by the private sector, including private companies, small businesses, and private residential construction.

The institutional analysis consists of separate analyses by type of investors. The data used included the fiscal accounts on government investment, and the investment reported by enterprises in the social sector from the detailed SBS database.

To estimate the *private sector,* CEVES used the following data: 1) The value of investment by the companies in the new SBS sample for 2004. By cross-referencing the data with the results of the technical analysis, this value was extrapolated to arrive at the total investment of private companies. 2) Private residential construction was estimated on the basis of the SBS data on newly built apartments, and the average market price of one square meter of newly built apartments (reduced by the cost of the building land). The statistics on newly built apartments are published annually on the basis of data from SBS regional centers and reports submitted by municipal agencies. This annual report proved to be the most reliable of all the statistical reports dealing with the construction industry. It should be stressed that, though this component actually showed the widest difference between the CEVES and SBS results, CEVES used the official data for this component too. 3) Investment by small private businesses (the lowest component) was derived on the basis of its standard share in total investment, and the result was verified with a simple model based on the total number of such businesses and their average investment.

3.3 Estimate Based on Financial Statements

The estimate based on financial statements included analysis of data obtained from the Solvency Center relating to corporate investment, and from the Ministry of Finance in respect of government investment. Based on the difference in fixed assets reported by enterprises at the end of 2002 and 2003, an approximate estimate was made for the value of investment in 2003. The result was surprisingly close to the estimates generated by the technical and institutional analyses. This was another independent route to confirm the relevance and reliability of the CEVES analysis. Unfortunately, a similar process could not be used for 2004 because of the changes in accounting standards, which made the value of fixed assets in 2004 and 2003 incomparable.

4. Assessment of Serbian Investments, 2003 – 2005

FREN accepts in entirety the results of the CEVES analysis for 2003. Where 2004 is concerned, it concurs with the SBS figures with regard to equipment and other investment, and with the CEVES results in the area of construction investment. The difference in the estimate based on the model developed by CEVES and the SBS estimate for 2004 has been reduced to 16% and, as already noted, almost entirely relates to private residential construction (Table L2-1). There are also minor discrepancies in the equipment and other investment segments. The first indicators show that CEVES has most likely overstated the value in the segment of *other investment*, while the SBS understated the value of private residential construction. Total investment in Serbia would then range between 315 and 320 bn dinars. On the basis of the CEVES methodology, FREN also produced a preliminary estimate for 2005. A three-year series of the value of investment was thus formed. The results are summarized in Table L2-3.

Table L2-3. Serbia: Fixed Asset Investment, FREN Estimate, 2003-2005

	2003	2004	2005
Total (in bill. of dinars)	250.4	318.7	364.9
		in %	
Share in GDP[1)]	21.2	22.7	21.1
Real growth	…	15.1	-1.4
		share in total investments (in %)	
Construction	50.1	48.5	50.7
Equipment	41.9	45.7	43.4
Other	8.0	5.8	5.8

Source: FREN, CEVES.
1) Relates to the GDP estimate by CEVES, which is approximately 8% above the official figure.

Investment in 2003 were considerably in excess of the official figure. Their value reached approximately 250 mn dinars, or 21% of GDP. To recall, the official value, which caused much public concern, stood at just over 14% of GDP. In 2004, the nominal growth of investments was 27.3%, the real growth reached a relatively high 15.1% and the percentage in GDP rose to 22.7%.

It is still too early to come out with a reliable estimate of the 2005 investment based on the CEVES methodology since the data published so far is insufficient for analysis using all three methodologies. For the time being, only the technical analysis of investment method, based on reported indices, can be relied on. The production of cement index and the growth index for the aggregate value of construction were used to estimate the real growth in the value of investment in construction. With respect to investment in equipment, we used the data on imported equipment (classification according to importers' declarations) increased by the December 2004 imports "surplus," and the capital goods output index. As far as the relevance of this "abridged" estimate is concerned, we are encouraged by the fact that the technical analysis proved to be highly reliable in estimating the 2003 and 2004 investment.

The growth percentages in the different segments of investment will be subject to minor changes as additional data becomes available. We can already say with certainty, however, that the growth of investment lagged behind GDP growth, and their real value most likely declined mildly relative to 2004. Nonetheless, the share of investment in GDP ranged around a satisfactory 21%, which is close to the figure reported in 2003.

5. Understanding the Higher Level of Investment in Serbia

Professional circles and the general public failed to give the new SBS data on the 2004 investment the attention it deserves, even though it radically changed the picture of Serbia's economy and pointed to what should be the priorities of economic policy. The share of investment in GDP ranging from 10% - 14.4% shown by the statistics for the 2001-2003 period was exceptionally low by international standards. The fact that the economy grew in spite of such low investment rates was ascribed to the recovery of output productivity factors in a still politically dysfunctional country just emerging from international isolation. Economists, however, warned that such a low investment level could not but result in constantly declining economic growth and, because of the country's high debt, result in serious balance of payments problems.[b)] Looking at Serbia's macroeconomic indicators, international institutions and investors saw a country careening down a completely untenable course. Another discouraging element was that the statistics showed that investment in real terms had until 2003 remained below what they had been in 2000, even though they had clearly been financed from inflationary seigniorage in that year.

b) The unsustainable ratio of the size of investment to economic growth has been a frequently discussed topic in professional circles, e.g. in a number of MAT issues, as well as in the article "Savings as a Requirement of Serbia's Economic Recovery", Economic Annals, April 2004.

The extent to which Serbia's macroeconomic structure stood out from the "normal" may be seen in Table L2-4, which is almost in entirety borrowed from the CEVES study. The table compares the key macroeconomic aggregates related to national savings in Serbia and a number of South East European countries.

The average figures include two periods: 1998-2000, when the compared countries were in a stage of transition closer to the point in which Serbia is now; and 2002-2004. In the case of Serbia, in addition to the data prepared for this paper (averages shown in Table L2-4), we also included the IMF data for Serbia-Montenegro, and the CEVES study estimates. The IMF data are given instead of the official statistics as the IMF adjusts investment and other problems in the official statistics as best it can,[c)] while still basing its computations on official sources. Our estimates differ from the CEVES data due to the assumed ratio of actual to reported foreign trade trends. For the time being, we are using the data on reported trends.

c) The System of National Accounts (RS SNA) contains serious methodological flaws in computing government and household consumption and savings. The IMF does not use this data, but derives savings in the same way we would have done if we had opted to adjust the official data. Moreover, the IMF makes upward adjustments to the official investment data; this means it was aware investment could not have been that low, and that the possibilities of making quick adjustments as applied by the IMF are limited. The table contains the IMF figures from documents published in July 2005, before the new statistical results were made public. The presence of Montenegro in the IMF data does not substantially change the picture.

Table L2-4. Selected Countries in the Region: Macroeconomic Structural Indicators, 1998-2004

	GDP real growth	Gross investments[1)]	CA deficit	Trade deficit[2)]	Gross national savings[3)]
			1998-2000 average		
Bosnia and Herzegovina	9.2	20.6	-21.9	-35.5	8.1
Bulgaria	3.9	18.1	-3.7	-5.0	12.8
Croatia[4)]	1.9	24.8	-5.4	-5.2	19.5
Hungary	4.8	29.8	-5.9	-2.8	23.8
Macedonia	4.1	16.4	-3.5	-14.8	19.1
Romania	-1.3	17.8	-4.9	-8.4	13.5
			2002-2004 average		
Bosnia and Herzegovina	5.0	20.2	-18.9	-32.7	1.3
Bulgaria	5.0	21.7	-7.4	-9.0	14.2
Croatia	4.4	33.5	-6.3	-8.4	27.1
Hungary	3.5	24.9	-8.3	-3.3	16.7
Macedonia	2.2	17.2	-6.7	-20.0	13.9
Romania[5)]	5.0	23.7	-4.7	-5.3	18.9
Serbia and Montenegro (IMF)	4.6	16.6	-9.8	-26.6	6.0
Serbia (CEVES)[6)]	5.3	23.5	-5.6	-18.3	17.9
Serbia (FREN)[6)]	5.3	23.5	-10.3	-25.0	13.3

Source: Except for the last row, the data and comments were taken from the study "Serbia's Economy: The Stylized Facts," Table 1, based on the IMF reports for the respective countries and the CEVES estimates. The FREN estimates in the last row were obtained from the study and SBS data.

1) The earliest comparable data: Bosnia – 2000; Bulgaria and Macedonia – 1999.

2) The earliest comparable trade deficit data: Hungary and Bulgaria – 1999; Croatia – 2000.

3) The earliest comparable national savings data: Bosnia – 2000; Bulgaria and Macedonia – 1999.

4) Note in the IMF document: Domestic savings and investment statistics and staff projections are hampered by the large errors term in the national accounts estimates, particularly before 2002.

5) Average 2002 and 2003.

6) Average 2003 and 2004.

The IMF estimate of total investment in Serbia (including the rising inventories, which were exceptionally high in 2004) of approximately 16.6% of GDP is about two-thirds (officially approximately one-half) of the figure that can be considered normal for the region, i.e. about 22%, and is considerably below the investment in any of the observed countries. The revised average, 21.9%, tallies perfectly with the regional standards. It should be noted, however, that the standard with which it is compared is not high either – the rates in East Europe are much lower than, for example, those in East Asia, its main rival.

The data in Table L2-4 has been selected as crucial for estimating the national savings rates shown in the last column. Where these savings are concerned, the data for Serbia deviated even more from the earlier figures (6% for Serbia-Montenegro against about 16% for other countries in the region), but remained at an exceptionally low 11.7% even after the revision of investment. The national savings rate continues to be lower than any other in the region, with the sole exception of Bosnia-Herzegovina.[d)]

d) We cannot help feeling that the data for Bosnia and Herzegovina, in addition to actual trends, also reflect problems in their statistical research

We believe that the low national savings even after the adjusted investment reflects problems in estimating the real trends. In this case, as discussed in previous *QM* issues, the problem lies in the fact that enterprises overstate their import and understate their export invoices, which in turn leads to overrating of the trade deficit. The CEVES study estimates the error at approximately 1 bn euros. If this is factored in, the national savings rate increases to 17.9% of GDP, which is then in synch with the regional figures. This will be addressed in one of the coming *QM* issues, when we hope to be able to be more precise about how much the trade deficit has been overstated.

The good news is not only that investment is higher than it appeared earlier, but also that their structure is radically different – with the private sector having a much larger share. Our estimates indicate that this sector now accounts for over 50% of total investment, while the official data for 2003 placed it at no more than 26%. This reveals the systematic bias toward the *traditional economy* while the importance of the *new economy* remains understated because of statistical capture problems. The investment of the traditional sector may have been higher in 2000 than in the years after that,[e)] but there can be no doubt that the *new economy* is a major player on Serbia's economic scene, its most vigorous segment, and that it cannot be disregarded. The SBS investment estimate for 2004 with the dramatic difference in the structure of investors constitutes official recognition of the *new economy* as a segment that influences the creation of general trends in Serbia's economy.

e) The estimates of investment in the traditional sector before 2001 are biased, as they failed to take into account the disinvestment suffered by many systems, such as EPS. In 2000 EPS failed to provide even for annual repairs, and its production capacity fell by some 10% (equal to a medium-sized power plant) relative to the early 1990s.

Finally, the revised investment data significantly reduces the urgency and justifiability of any major increase in government investments, particularly as we believe that the official data still undervalues the government's share in total investment. First, a proportion of the subsidies to the economy are in fact subsidies to public enterprises that are now being put into investments, not wages. Second, investments financed from donations or even international project credits are most likely improperly registered. Serbia does need to build and rehabilitate its infrastructure, but not at the price of jeopardizing the hard-won achievements it has made in macroeconomic stabilization.

6. Conclusion

The value and structure of investment over the past three years show that Serbia's economy is on an increasingly steadfast course. The forces currently affecting economic developments, with occasional meandering by the economic policy, have for the most part already positioned themselves and are committed to investment as the motive power of further growth. There is less and less room for dramatic shocks like those in the past, and an indirect benefit of this will be easier monitoring of real economic trends.

Those who argued that Serbia recorded major growth with a low level of investment claimed that, when GDP slides below an all-time low, it is possible to invigorate a stagnant economy with short-term funding, better organization and, often, ownership changes. If this view appeared until now to be based on the data on overall investment, following the major corrections to the official estimates, which were also confirmed by independent analyses, quite a different conclusion would have to be drawn. After being at a standstill for decades, the Serbian economy could only have been, and was, jump-started by hefty investing.

Performance of the Serbian Oil Company (NIS): How Wide is the Gap Between the Actual and the Possible?

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Contrary to the mistaken impression created by the relatively low (compared to other countries in the region) petroleum product retail prices, Serbia[2] pays around 300 mn euros more for its fuel consumption than is necessary for a sustainable supply of these products. We obtain this approximte figure company NIS' performance against three different benchmarks. In the forthcoming privatization of NIS, these resources should not be handed on a platter to the new owner. Instead, they must be redirected into the budget, bringing Serbia's petroleum taxes to levels comparable with comparable country practice.

1. Introduction

Retail prices of petroleum products in Serbia have lagged behind the movements in world-market prices for quite some time now and are among the lowest in the region. Nonetheless, Serbia pays far more for its fuel consumption than countries whose production and supplies are more efficiently organized. The excess costs are due mainly to NIS producing a smaller quantity of products from a given quantity of oil than it should be. But there are also other inefficiencies.

Expensive production of petroleum products is protected by a government decree[3] dating from 2001 that bans petroleum product imports (the Decree, in further text). The objective of the ban at the time was to prevent the then massive tax evasion at the state frontier. Since that time, and with only a few exceptions, petroleum product needs have been met by refining domestic and imported crude in the country. The collection of all levies on the consumption of petroleum products was shifted to the refinery gate, whereby their real inflow into the budget was increased tenfold. Clearly, this made a major contribution to the fiscal adjustment achieved in 2001 and the following years. In our opinion, however, it is time to consider the harm done to the country by the consequent protection of the refineries.

After Serbia imports and refines crude oil, the prices of petroleum products at the refinery gate are much higher than in comparable countries in the region, whose production costs already stand well above those of the world's most efficient suppliers. Instead of through higher prices – these are administratively controlled – the difference is manifested in the lower collection of fiscal revenue. Excise taxes in Serbia remain lower than in the region and, even more so, than in the developed world. Furthermore, royalties on the extraction of Serbia's petroleum are not paid – and domestic petroleum covers about a fifth of the country's consumption needs. For ideological reasons, proper royalties were never paid in former Yugoslavia and the system has been slow to change, so today NIS is allowed to keep all the proceeds from the exorbitant oil prices it could/should charge – they go to NIS employees.

The difference between the actual and potential performance of NIS, which we measure here, may be interpreted, or is of interest, in a number of ways:

• If the profit that NIS is making is the same or lower than the profit made by the benchmark oil company, the difference constitutes a measure of NIS's inefficiency - the "loss" that Serbia

1 The authors whish to thank Marina Vojvodičan for her research assistance, and Duško Vasiljević and Duška Anastasijević for their comments.

2 In this context, references to "Serbia" imply, strictly speaking, "Serbia outside NIS", that is, the economy and individuals who are not employed in NIS and do not enjoy any benefits from NIS (gains, salaries, or non-market overpayment of supplies).

3 Decree on Special Conditions and Manner of Importing Crude Oil and Petroleum Products, Official Gazette of Republic of Serbia, 37/2003, 90/2003, 56/2005.

suffers because of the mismanagement of a public resource. We believe this is currently the case, and this is why we shall generally refer to the difference dealt with in this text as to a **"loss",** i.e. the measure of NIS's **inefficiency**.

• This measure shows the size of the extra-profits that NIS's current market position can secure to the future owner of the company. Technically, we have no proof that the difference we are measuring is entirely lost to Serbia's society. It could be, for example, that it in fact results entirely in NIS's increased (partly hidden) profits, and that NIS benefits its employees or a part of society with them.[b)] Even though we do not believe that NIS makes much profits, we want to stress that measuring this difference would be of interest because: it measures the extra-profits that NIS's new owner will make if the company is privatized without the Decree being revoked, and the tax rates changed. Of course, if the difference currently does cover NIS's inefficiency, the new owner would first have to bring the company to the benchmark standards of efficiency, and only then start making the full profits.[4] We, in fact, have no doubt that a reasonably organized and financed owner could begin realizing some of these profits within a very short time, and the full amount in about three years.

b) To a certain extent, this actually happened in 2003 when around 100 mn euros of NIS profits was transferred to the Serbian budget as a sort of quasi-dividends.

• Finally, the calculation is interesting because it provides a measure of earnings which can be generated by changing technology [c)], and of the **investment,** which could be justified in a given time frame, to bring NIS to the level of the mentioned benchmarks of efficient business operations.

c) The term "technology" in this introduction and the following section is used in the broader sense in which it is employed in economic theory, i.e. to denote a functional relationship between the dimensions of input and output in the plane in which the production of an entity is presented.

To conclude, although technically not all of the difference we are measuring may be a "loss", we will, for the sake of simplicity and to express our conviction, use the term **"loss"** throughout the text.

We set three possible benchmarks of efficiency against which we estimate the "loss", and each implies a different approach to the estimate. In section 3, we ask (a) how big is the "loss" compared to the country's importing its full consumption of petroleum products?; and (b) how big is the "loss" compared to NIS refining and procuring oil with the same efficiency (the refinery price) as companies in the region?. In section 4 we ask (c) how big is the "loss" compared to a situation in which NIS brought key characteristics of its oil refining process to the better (regional) standards of operation. Methods a) and b) compare products prices with the benchmarks, method c) focuses on the parameters of the refining technology.

The use of several approaches increases the credibility of the analysis, which inevitably relies on concepts whose exact empirical value is difficult to establish. Particularly useful is the fact that the first two approaches are completely independent from the third.

In the following sections, we deal first with methodological and practical/empirical assumptions, and discuss the dilemmas that arise related to these assumptions. We then briefly present the findings of all three approaches in estimating the "loss" (i.e. the inefficiency of NIS, and potential windfall profits for the future owner). An annex providing more detailed information about the behavior of the prices used in the analysis, the structure of petroleum product retail prices, as well as analytical concepts used in the present analysis, may be found on FREN's website www.fren.org.yu\publikacije.

The analysis confirms beyond doubt that the present market and tax structures in the oil sector, in particular the Decree and low excises, protect the highly inefficient government management of NIS and that Serbia pays a very high price for this: not less than 292 mn and easily as much as 353 mn euros per year. The estimate is explained below.

2. Some Methodological and Practical Assumptions for the Analysis

We first briefly present the current exercise in terms of the tools of economic theory. If, as we believe, NIS's higher refinery price adequately reflects its obsolete technology, then in principle, we

4 It is also possible that NIS is generating profits, but that it is not reinvesting them into the welfare of "Serbia outside NIS" but only into the welfare of NIS employees and management. In that case, Serbia as a whole is not losing, but "Serbia outside NIS" is. Such benefits would become an immediate windfall to the new owner.

are comparing NIS's technology, represented as a point in a hyperplane of resources and outputs, with other, more efficient technologies (points in that plane), which we use as benchmarks. The "loss" that we estimate is the difference between the positions of these points, reduced to one dimension, expressed in terms of value. Clearly, expressing the "loss" in a single, value, dimension, assumes constant relative prices among all the goods in the hyperplane. The first two methods of estimation, the ones using output price comparisons, bring this difference down to an input dimension. That is, they measure possible savings of inputs for given outputs.[d)] The third method is combined – for certain improvements of characteristics we have measured a possible increase in output for a given set of inputs, while for others, a possible reduction in inputs for a given set of outputs.[5] Strictly speaking, these approaches are not exactly comparable, but there is little doubt there is little to gain by insisting on greater precision of the estimation procedure.

d) In theory, these two calculations will produce the same result if we are dealing with marginal changes in efficiency and if the production has a zero profit.

The size of the "loss" we are estimating, in addition to technological and organizational factors, also depends on the movements in the prices of oil and petroleum products on the market. As the calculations below will clearly demonstrate, the world-market price of crude (i.e. the very closely linked prices of petroleum products) crucially determines the value of the "loss" we are observing. Bearing in mind that petroleum product prices are closely connected with the oil price, and that other inputs in the process of producing petroleum products are almost negligible, then the "loss" can also be perceived as a lost quantity of crude oil or petroleum products.

If we perceive the "loss" that is being estimated as a measure of NIS's inefficiency, it should be stressed that none of the methods used estimates NIS's entire inefficiency. The method of comparing refinery prices measures the inefficiency of the stages of the petroleum product supplying process up to the refinery gates: crude procurement, transport of imported, and extraction of domestic crude oil, and in its refining. The inefficiencies in distribution and in NIS's pursuance of non-core activities have not been covered. The third method analyzing the characteristics of the refining process is even narrower – estimating only the inefficiency in refining.

NIS's extraction of its own oil poses a separate problem. Domestic oil is extracted by the Naftagas company, which is part of NIS and thus state owned, and refineries pay to Naftagas US$22 for a barrel of crude. The world-market price of oil of comparable quality (Ural) was around US$55 per barrel in February, while its average price in 2005 was US$50 per barrel. In the first approximation, the difference between these two prices constitutes a subsidy from Naftagas to other parts of NIS (refineries), which enables the system as a whole to post profits despite retail prices that do not cover actual costs, i.e. costs valued at international prices.

In order to model this problem in our analysis, we assume, first, that the recognized price of domestic oil exactly covers the costs of its extraction (which is probably close to the truth).[e)] If the full world-market price of oil was recognized in NIS for domestic oil, the differential between that price and the one set today would constitute the profits of Naftagas, and would reduce the profits (generate losses) of refineries. Naftagas should pay that profit, or at least a good part of it, to the government as royalty for using a natural resource. The reduced profit/additional "loss" in the refineries would reveal the true measure of their inefficiency. Since Serbia is not making the royalties it should be making due to the hike in the value of oil in its territory, the difference between the value of domestic oil at world-market prices and its value at domestic prices should be perceived as a subsidy of society/government to NIS. NIS uses this subsidy to cover the losses it would incur in refineries at the present, low retail prices. Therefore, the subsidy has to be treated as part of the total "loss" we are estimating. The issue is further elaborated in the Annex posted on FREN's website.

e) This does not mean that these costs are justified—that is, there is little doubt that there are huge inefficiencies in the exploitation of Serbia's reserves as well. Estimating these inefficiencies requires an independent technological/ reserves assessment that Serbia's government should procure from an independent, international, provider.

The practical and realistic quantification of the "loss" discussed here poses special challenges, among which some stand out. The first is that information on the prices of regional supplies is very difficult to obtain, and we therefore have to rely on very few observations. Relative prices sharply and frequently vary in the oil industry – more than in other industries – hence their

5 An alternative model that boils down to the same thing may be based on the assumption that Naftagas exports oil and makes the described profit, and that refineries import oil at world-market prices.

observation in an atypical (disequilibrium) moment may mislead the analysis. Therefore, we tried to make sure we observe representative relationships among prices in our analysis and provide arguments to that effect in the Annex to this text (on FREN's website).

The second problem is that the quality of a majority of NIS petroleum products is not up for comparison with those imported from international markets or produced elsewhere in the region. JUS standards to which NIS should conform are far less demanding in terms of purity and quality than the standards in force in the European Union (EU2005), yet in certain cases, NIS' does not even comply with JUS. A better petroleum product evidently means that its value is higher and that the costs of its production are higher. Furthermore, it should be taken into account that products of a poorer quality inflict greater environmental damage, i.e. entail implicit costs which do not have a market price, but do have a very real price. We cannot solve this problem - this simply means that our estimate undervalues the actual "loss" by the difference between the values (market and environmental) of petroleum products of higher and lower quality.[6]

The last practical problem in this kind of analysis – it refers to the third method of estimation of the "loss" – may be the reliability of engineering assessments of what is technologically achievable and what the economic effects of the relevant measures could be. We therefore make sure we only focus on the most robust parameter changes in NIS's technology, parameters that any serious expert would agree with, but this means that we obtain only a lower bound of possible efficiency gains.

3. Estimating the "Loss" Based on Price Comparisons

3. 1 Comparison with the price of imported petroleum products

The benchmark for comparison in this approach is the price of petroleum products on the international market plus the costs of transport to Serbia. It is the lowest benchmark with which the oil industry in any country can be compared. The supply costs if oil is processed locally ought to be lower because, as a rule, supplying petroleum products from local refineries has strategic and logistic advantages. After the initial investment in fixed costs for developing the supply logistics to and from refineries, their maintenance is much cheaper than transport of the products from the same distance (if the distances are great enough). As we are about to see, this is not so in the case of NIS. It is important to stress that we are not discussing here the question of whether Serbia needs refineries. To answer this question, additional factors would have to be taken into consideration: the costs of closing down the refineries and the costs of expanding the capacity of the existing transport routes to enable imports and delivery into Serbia of massive quantities of petroleum products.

Table L3-1 presents a comparison between NIS's refinery prices of gasoline and diesel with prices on the European market to which the transport costs from the Adriatic to Belgrade have been added. We observe CIF Mediterranean prices (December 2005), as a standard of delivery in the Mediterranean. We opted for Mediterranean and not the regional prices for two reasons: (a) we are not in a position to secure reliable information on regional prices in long-term supply agreements – they tend to be lower than the quotations used in this text; (b) it is hard to predict how exactly would the regional terms of supply change if the entire Serbian market was to suddenly become supplied from the region.

6 The difference between NIS' and Europe's environmental standards means that serious costs of environmental cleanup in the future will have to be incurred. Since there is absolutely no doubt that NIS's future buyer will require the government to assume full liabilities in this regard, such costs do not diminish the buyer's potential extra-profits.

Table L3-1. "Loss" in Serbia's Petroleum Product Consumption - Benchmark: Imports from International Market, December 2005

I Wholesale prices of crude and petroleum products	MB-95	D-2	Euro-diesel
		in euros per litre	
1. Serbia (NIS)	0.39	0.43	0.49
2. Imports	0.33	0.40	0.41
Platts CIF Mediterran[1)]	0.30	0.37	0.38
Transport costs (max)[2)]	0.03	0.03	0.03
		in euros	
3. Price difference (1-2)	0.06	0.03	0.08

II "Loss" in price difference (6=3*4/5)	gasoline	diesel[3)]
		in mn tones
4. Consumption per annum in 2005	1.1	1.30
		in litres per kg
5. Density	0.75	0.85
		in mn euros
6. "Loss" in price difference (6=3*4/5)	88.0	68.8

III Total "Loss"	
	in mn euros
7. "Loss" in price difference	157
8. "Loss" in subsidies on extracted domestic oil	135
9. Total "Loss"	**292**
	in % of GDP
9. Total "Loss"	**1.46**

Source: Decree on Petroleum Product Prices, Official Gazette of Republic of Serbia 5/2006, NIS, Reuters, FREN.
1) Prices Platts CIF Mediteran.
2) Transportation costs, Rijeka-Belgrade.
3) Price difference D-2 and Euro-diesel are weighted with consumption estimates, D-2: 70%, and Euro-diesel: 30%.

The "loss" reflected *in the price differential* of 157 mn euros, (Table L3-1) is obtained when the difference between import prices and NIS prices is multiplied by annual consumption of diesel and gasoline in Serbia. Import prices are obtained after adding maximum transport costs of 0.03 euros per liter, and the cost of transportation from Rijeka to Belgrade to the Mediterranean prices. This "loss" could be tentatively taken as the lowest possible estimate of Serbia's direct "loss" due to the ban on imports of petroleum products.

The *total "loss"*, i.e. the right measure of NIS's inefficiency, is much higher. Mediterranean refineries pay the world-market price of crude oil, which means that NIS saves on the cheaper domestic oil. Hence, we have to add to the NIS refinery price the implicit subsidy NIS receives through the undervaluation of domestic oil. The second method to see this is to assume that NIS imports petroleum products at world-market prices to supply Serbia. Therefore, Naftagas can export all of its production and thus earn this differential between the domestic and world prices. In both cases, the "loss" for the indirect subsidy is the same – 135 mn euros. Thus increased, the *total "loss"* reaches 292 mn euros (1.46% of GDP).

3. 2 Comparison with prices of refineries in the region

In this approach, the benchmark for comparison is the *efficiency of better companies in the region*. This benchmark is slightly higher than the previous one, but not very high, since the regional efficiency benchmarks for the oil industry are not among the highest in the world. In this evaluation, we estimate the "loss" relative to a situation that would certainly be feasible with appropriate, not particularly demanding, management of the company, bearing in mind the comparability of the location, wages, quality of oil which is refined, and the size of the market served by the operations.

In the first part of Table L3-2, we compare NIS's refinery prices of gasoline and diesel with average wholesale prices in Croatia (INA) and Hungary (MOL) and observe that they are up to 31% higher in Serbia than in these comparable refineries. [7]

The question arises as to how indicative these prices are, i.e. whether they are a good indicator of average costs plus normal profits of these companies. We obtained information on regional prices – in the cited and other companies – through direct repeated communication with the companies concerned and from published price lists. In this case, the presented prices are export prices (MOL), and prices in domestic wholesale trade (INA).[f)] As stated in the Annex, we believe that we observed these prices in a period in which the world-market petroleum product prices were in equilibrium with regard to crude prices, and that NIS's prices were in a "typical" proportion to them.

f) Data on other refineries in the region available to us do not cover the same set of petroleum products of comparable quality and are therefore not presented. The presented refineries are comparable with others in the region.

Table L3-2. "Loss" in Serbia's Petroleum Product Consumption - Benchmark: Regional Companies, March 2005

I Wholesale prices of crude and petroleum products	MB-98	BMB 95	Euro-Diesel	D-2
		euros per litre		
1. Serbia (NIS)	0.51	0.41	0.51	0.45
2. Region:				
Croatia (INA)	0.37	0.38	0.44	0,43[1)]
Hungary (MOL)	0.35	0.31	0.41	…
3. Average difference:	0.15	0.07	0.09	0.02
Serbia and Croatia	0.14	0.03	0.07	0.02
Serbia and Hungary	0.16	0.10	0.10	...

II "Loss" in price difference (6=3*4/5)	gasoline	diesel[2)]
	in mn tonnes	
4. Annual consumption in Serbia, 2005	1.1	1.3
	in litres per kg	
5. Density	0.75	0.85
	in mn euros	
6. "Loss" in price difference (6=3*4/5)	158	60

III Total "Loss"	
	in mn euros
7. "Loss" in price difference	218
8. "Loss" in subsidies on extracted domestic oil	135
9. Total "Loss"	**353**
	in % of GDP
9. Total "Loss"	**1.77**

Source: Decree on Petroleum Product Prices, Official Gazette of Republic of Serbia 5/2006, NIS, Reuters, FREN.
1) There is significant difference in compared product quality.
2) Price difference D-2 and Euro-diesel are weighted with consumption estimates, D-2: 70%, and Euro-diesel: 30%.

Furthermore, the "*loss*" *reflected in the price differential* of 218 mn euros (Table L3-2) is obtained when the difference between average prices in the region and NIS prices are multiplied by annual consumptions of diesel and gasoline in Serbia.

In order to obtain the *total* "*loss*", i.e. the right measure of NIS's inefficiency against the overall regional benchmark, this result needs to be adjusted by the implicite subsidy in the differentce between the price set for domestic oil and the world-market price.

7 A strict methodology would require the inclusion of a whole range of petroleum products which are derived from the refining process. The majority of these derivatives are produced in negligible quantities. In the case of heavy oil, its consumption is, of course, very significant, but since prices are freely set on the regional market, including in Serbia, it is acceptable to assume that there are no major differences between their prices now and under free market circumstances. Furthermore, heavy oil is an undesired residue of the refining process and its price therefore varies even more sharply than that of crude and the lighter petroleum products.

It needs to be noted that--if the prices observed harbor a profit component of the same size in NIS and the benchmarks--the thus obtained "loss" estimates the exact efficiency differential between the two. If NIS's profits are lower than in the benchmarks, then NIS's actual inefficiency is larger than our estimate. If the profit is higher, then its inefficiency is smaller but the windfall profit that a new owner would immediately realize would be that much larger.[g] The profitability ratios presented in Table L3-3 suggest that the profit component in the observed prices is much lower in NIS than in the benchmarks, but it cannot be ascertained because NIS' accounting procedures are not fully comparable to those used internationally.

g) The structure of the retail price, including these components, is analyzed in more detail in the Annex to this text, which can be found at www.fren.org.yu.

Table L3-3. Profitability of Oil Industries in the Region[1)]

	MOL	LUKOIL	OMV	NIS
Return on (in %):				
equity (ROE)	28.5	20.4	19.0	6.4
assets (ROA)	12.8	14.3	…	1.4
fixed assets (ROfA)	…	…	22.0	3.4
capital employed (ROCE)	22.2	23.9	16.0	4.1
average capital employed (ROACE)	…	…	…	4.4

Source: Annual reports: MOL, LUKOIL, OMV, and Solvency Center of Serbia.
1) Annual reports for 2004.

In relation to the conclusion of the regional price comparisons, a note of caution should be made. Since INA and MOL also exploit domestic oil, and since the governments of their countries are also significantly involved in company management, we cannot rule out the possibility that INA or MOL are also being subsidized with regard to their own oil production. If they are, we can safely assume that their subsidy is not higher than that of NIS. If their subsidy is lower than or equal to that of NIS, then the actual total "*loss*" estimated with this method is somewhere between the *"loss" reflected in the price differential,* 218 mn euros, and the total estimated *"loss"* of 353 mn euros.

4. "Loss" Estimate Based on Possible Technology Parameters Improvement

Numerous factors affect the efficiency of a complex system such as NIS. In this section we will quantify a set of savings, which can be achieved by improving the parameters of the refining process itself. This approach covers a smaller set of inefficiencies than the previous ones – just those in refining, and not those in procurement and imports of crude oil. However, we have set higher refining efficiency benchmarks than the benchmark which is implicit in the comparison with regional prices: in this estimate, we use the best characteristics accomplished in the region as performance benchmarks.

Our analysis is restricted only to key factors that affect the efficiency of refining. NIS refineries would be efficient if they:

1. improved product range
2. reduced crude losses in refining
3. improved capacity utilization
4. optimized use of human resources
5. increased quality of the products

As mentioned earlier, we cannot estimate the potential gain in improving the quality of products, so this parameter has to be left aside. Table L3-4 summarizes the findings about possible gains from improving parameters 1-4: they amount to 311.1 mn euros per year. The greatest improvement would come from improving the product range (203 mn euros), which requires

long overdue investment in new technology. Downsizing, despite the fact that NIS is heavily overstaffed, would bring the least savings - 9.2 mn euros.

Table L3-4. Summary of Gains from Refining Parameter Improvement

	in mn euros
Improved product range	203
Reduction of losses in crude	78
Increased capacity utilization	21
Cutting labour costs	9
Total	**311**
	in % of GDP
Total	**2**

Source: Tables L3-5, L3-6 and Graph L3-1.

4.1 Product Range Improvement

By product range we call the structure of petroleum products obtained in the refining of crude oil – it could also be called the structure of the refining fraction. Petroleum products are classified into "light" and "heavy" petroleum fractions, of which only the light are profitable. Light petroleum fractions include LPG (liquefied petroleum gas), gasoline, kerosene/jet fuel, diesel fuel and heating oils. Heavy petroleum fractions are bitumen, tar and heavy oil. The product range depends on the quality of oil which is refined and on the refining technology. Crude oils also vary in quality and are roughly classified into "light" and "heavy" variants, depending on the ratio between light and heavy petroleum products which can be produced out of them. Light oils are more expensive because they yield a better ratio. In our region, the relatively heavy Russian oil (Ural) is mostly refined, while domestic oil is light in terms of quality.

The key to refinery efficiency is in the product range that their technology brings. Owing to their outdated technology, the product range of NIS refineries is considerably lower than the product range of refineries in the region for any quality of crude. From a barrel (158.9 liters) of crude NIS obtains slightly more than 63% of light fractions (Table L3-5). This percentage in the refineries of the countries in the region ranges between 75% and 85%.

Table L3-5 shows the potential change in NIS's revenue if it streamlined its refining technology. We have calculated average prices of light and heavy petroleum products by using weighted averages of the prices of light and heavy petroleum products on the domestic market, while using as weights the annual consumption of each derivative.

Table L3-5. NIS: Gains from Improved Product Range

	product range			average price	revenue increase	processed crude	revenue increase total	total gain
	NIS	benchmark	difference					
	in % of input			in euros per tones		in mn tones	in mn euros	in mn euros
Light derivatives	63	80	17	572.2	99.3	4.1	407.1	...
Heavy derivatives	29	12	-17	293.3	-49.9	4.1	-204.4	**202.6**
Losses	8	8	0	...	...	...	...	...

Source: NIS, FREN.

We proceed from the assumption that improved refining would raise the share of light fractions in the product range to 80% from the present 63%. This means that with the same input, NIS could produce 600 mn liters more of profitable light derivatives and increase its revenue by around 200 mn euros a year.

4.2 Reducing Losses in Crude

The loss in crude during the refining process can be discussed in the context of the product range. This simply means that the refining of 100 units yields less than 100 comparable units of product. We observe them separately, however, as we believe that they are impacted to a large extent not only by technological factors, but also by the human factor. Losses in production are incurred primarily because of the energy consumption of the refining process itself, but can also be the result of bad management, including theft. The losses in crude in regional refineries range from 4% to 7.5% of refined oil, while NIS charges its clients around 8%. If these losses were reduced and brought to an efficient level of 4%, between 66mn and 77 mn euros would be saved, depending on the assumed product range that the crude would deliver (Table L3-6).

Table L3-6. NIS: Gains from Reduction of Crude Losses (from 8% to 4%)

	light derivatives	heavy derivatives	savings per tone of crude	total crude	total savings
	in %		in euros per tone	in mn tones	in mn euros
NIS product range	61.00	31.00	16.10	4.10	**66.02**
Benchmark product range	82.35	14.00	19.02	4.10	**77.99**

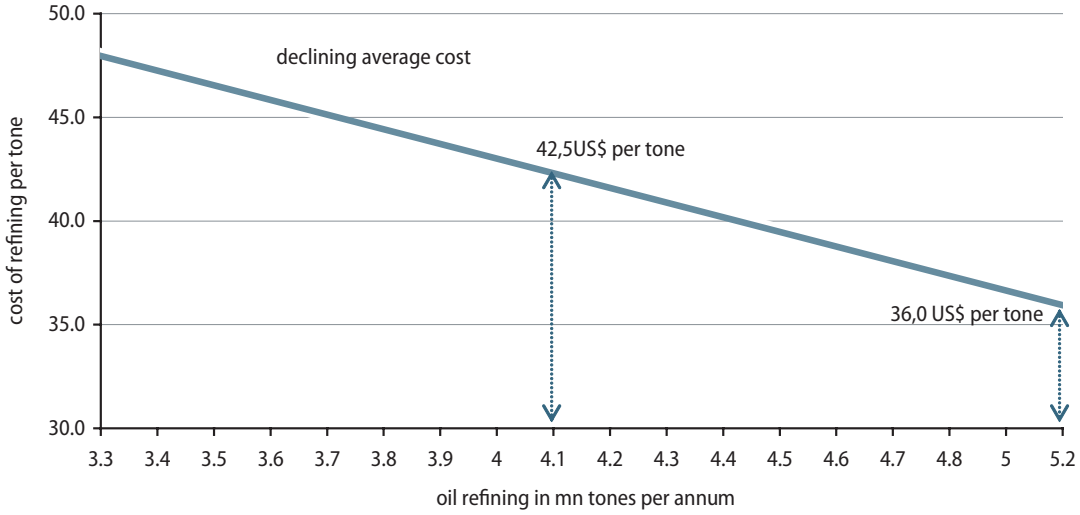
Source: Decree on Petroleum Product Prices, Official Gazette of Republic of Serbia 5/2006, Rompetrol.

4.3 Raising Capacity Utilization

Despite the fact that its installed capacity is higher, NIS refines oil primarily for the domestic market. The refining capacity is 6.3 mn metric tons of crude oil a year, while domestic needs are 4.1 mn metric tons of crude oil (Graph L3-1). To be sure, NIS does not export petroleum products because it does not meet international quality standards and because its oil refining is too expensive. The degree of utilization of NIS's refining capacity amounts to a mere 65%, which is far from optimal. An increase in capacity utilization reduces the average fixed cost per unit of refined input, and also reduces the average total cost.

If the quality of petroleum products supplied by NIS was improved, and provided that NIS' variable costs of production were lower than international prices, NIS could market its products in the region (Bosnia-Herzegovina, Macedonia) and beyond, which would enable higher and more optimal utilization of the existing capacity, provide an opportunity for increased earnings and –bearing in mind that the largest cost of refinery production is in the fixed cost of construction, maintenance and overhaul of the refining capacities--significantly reduce average refining costs. Assuming variable costs at a competitive level, with an increase in refining from the present 4.1 mn metric tons to 5.2 mn metric tons of oil, average refining costs would go down by around 20%, and amount to US$35 per ton instead of the present $42.4 (Graph L3-1). This means that higher capacity utilization would bring savings to the domestic consumption of petroleum products of about US$28 mn a year. Of course, the total gain for the country would be higher since it would include the export profit, but this is not part of the question we are asking in this analysis.

Graph L3-1. Refinery Decreasing Costs to Scale



Source: FREN – estimates from unofficial engineers' sources.

4.4 Cutting Labor Costs

NIS has between five and 10 times more employees than it needs. It employs 1000 people per 1000 metric tons of refined oil, while in the reference refineries this ratio is between 100 and 200 employees. Since the cost of labor in Serbia is considerably lower than in Europe, total labor costs per refined metric ton of oil are still within the standards of European refineries. Nevertheless, it would be logical for NIS to make use of this comparative advantage of lower labor costs. Refineries worldwide are outsourcing non-core activities, which is not the case with NIS. Hence, we are discussing retrenchment of only 50%, or from 1000 to 500 employees per 1000 metric tons of refined oil a year. In NIS, labor costs per ton of oil amount to about US$5.8, and following downsizing, this would fall to US$3 per metric ton. At an annual level this would save US$11.5 million.

5. Conclusion

The three methods applied in the estimation of Serbia's "loss" in petroleum product consumption have yielded compatible results--ranging from 264 mn to 353 mn euros (Table L3-7). The entire estimate is conservative because, in the case of the higher figures (291mn and 353 mn euros), it refers only to the stages of supplying the market to the refinery gate, and not to the distribution and non-core activities of NIS. The lowest estimate (264 mn euros) refers to an even narrower concept – inefficiency in oil refining. Though rather implausible, there is also a possibility that the figure of 353 mn euros is an overestimate if the companies used as benchmarks undervalue their own oil relative to world prices. In any event, it can be argued with a high degree of confidence that the entire "loss" is higher than 300 mn euros a year.

Table L3-7. Summary of "Loss" Estimations

	in mn euros	in % of GDP
Benchmarks:		
Petroleum product imports	291.8	1.46
Regional companies	353.1	1.77
Refinery efficiency improvements	311.1	1.50
Average estimated "loss"	318.7	1.6

Source: Tables L3-1, L3-3 and L3-4.

We believe that this "loss" is in fact a conservative estimate of the inefficiency of NIS's activity related to oil, i.e. of the true "loss" of Serbia's economy in its supplying with petroleum products. But sufficiently detailed data that would fully corroborate this belief was not available to us. Therefore, we cannot rule out the possibility that a part of the "loss" we are estimating here is not a "loss"," but is returned to Serbia through higher profitability, i.e. investments by NIS.

It is more important to properly see the estimated "loss" in the context of the upcoming privatization of NIS. It would represent the extra-profit a new owner could make in the present market structure and tax burden, after investing to raise the efficiency of NIS to the level of the regional benchmarks we used in this analysis.

In this context, our analysis gives an estimate of the room which the new owner would have for financing required investments aimed at making a leap to the mentioned level of efficiency. With an investment cycle of five years (in reality, the useful life of fixed refining installations is much longer), annual savings amounting to 300 mn euros at a 10% return rate leave room for an initial investment in the amount of 1140 mn euros. Independent consultancy estimates of NIS's investment needs do not exceed 500 mn euros, while the rest, in the present regulatory framework, would constitute a net profit.

Hence, it is both possible and necessary to alter the regulatory and tax frameworks when NIS is privatized – or before – so that the entire future potential extra-profit becomes fiscal revenue. Transferring part of the savings to consumers would not be justified as retail prices are already among the lowest in the region. First, with the rescinding of the Decree, NIS would be exposed to competition that would ensure the needed market standards and discipline in the functioning of the petroleum product market. Second, with the introduction of royalties for the exploitation of oil, the distribution of profit from oil extraction between the owner of the resource – the government, and the concessionaire – the new owner of NIS, would be secured. The royalty, should at least collect the larger portion of the differential between the value of domestic oil production at the current non-market-based price and its value at world prices. Third, excises on petroleum products should be gradually increased to the level that prevails in the region. A fair share of that increased fiscal collection should be allocated to the rehabilitation and reduction of the environmental damage NIS caused in the past.

ANALYTICAL APPENDIX

Table P-1. Serbia: Retail Price Index (RPI), 2001-2006

	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]				
2001	76.8	194.3	140.6	132.3	127.4	133.1	135.0	175.3
2002	93.2	121.4	114.8	109.4	113.8	98.8	114.1	133.0
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
				quarterly indices[2]				
2003								
I quarter	101.4	114.6	101.8	100.4	104.6	99.1	100.5	105.8
II quarter	103.1	114.0	103.7	101.9	118.0	99.0	101.2	108.8
III quarter	105.0	110.4	105.6	104.4	90.1	101.1	106.9	109.0
IV quarter	107.0	108.2	107.8	106.6	93.6	106.0	107.8	111.1
2004								
I quarter	109.1	107.6	101.8	101.0	105.1	101.6	100.4	103.9
II quarter	111.9	108.5	105.1	105.1	125.6	104.6	103.8	105.3
III quarter	116.1	110.6	109.2	109.4	105.7	110.7	109.3	108.5
IV quarter	120.1	112.3	113.7	112.8	108.1	113.9	113.2	116.1
2005								
I quarter	127.5	116.9	105.1	103.8	115.0	104.7	109.6	106.6
II quarter	131.2	117.2	108.0	107.0	147.8	107.1	104.6	110.7
III quarter	135.9	117.1	111.8	110.7	119.2	110.1	111.2	115.3
IV quarter	141.6	117.8	117.7	115.4	136.1	115.9	114.0	124.1
				monthly indices				
2004								
January	108.3	107.4	100.4	100.3	103.9	100.3	100.1	100.7
February	109.3	107.7	101.4	100.6	104.0	100.9	100.3	103.4
March	109.7	107.8	101.8	101.0	105.1	101.6	100.4	103.9
April	110.6	107.9	102.6	102.0	106.7	102.6	101.0	104.4
May	111.7	108.4	103.7	103.3	120.4	103.4	101.9	104.6
June	113.3	109.3	105.1	105.1	125.6	104.6	103.8	105.3
July	114.9	110.1	106.6	107.0	104.8	106.1	108.0	105.7
August	115.7	110.2	107.3	106.9	102.1	107.6	107.0	108.3
September	117.6	111.4	109.2	109.4	105.7	110.7	109.3	108.5
October	118.2	111.4	109.7	110.0	105.0	112.1	109.6	108.8
November	119.6	111.8	111.0	111.7	107.6	113.2	111.8	109.1
December	122.6	113.7	113.7	112.8	108.1	113.9	113.2	116.1
2005								
January	125.9	116.3	102.7	100.9	103.1	102.1	100.2	107.8
February	127.8	116.9	104.2	102.7	108.1	103.1	102.1	108.5
March	128.8	117.4	105.1	103.8	115.0	104.7	109.6	106.6
April	129.8	117.4	105.9	104.7	125.6	105.5	103.1	109.3
May	131.3	117.5	107.1	106.2	143.5	106.2	104.0	109.7
June	132.4	116.8	108.0	107.0	147.8	107.1	104.6	110.7
July	135.0	117.5	110.1	109.3	133.0	107.6	109.2	112.6
August	135.6	117.2	110.6	109.3	126.0	108.3	109.2	114.3
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

Source: SBS.
1) As mentioned in footnote 1 in Table T-2: ratio of given period and December of previous year.
2) Twelve-month averages for annual data, i.e. three-month averages for quarterly data.

Table P-2. Serbia: Selected Price Indices, 2001-2006

	RPI		industrial producers' price index		consumer price index	
	Dec 2002=100	y-o-y index	Dec 2002=100	y-o-y index	Dec 2002=100	y-o-y index
			annual indices[1)]			
2001	76.8	194.3	87.1	187.3	79.1	195.1
2002	93.2	121.4	96.4	110.7	94.5	119.5
2003	104.1	111.7	102.1	105.9	103.8	109.9
2004	114.3	109.8	111.8	109.5	115.2	111.0
2005	134.0	117.3	127.2	113.7	133.8	116.1
			quarterly indices[1)]			
2003						
I quarter	101.4	114.6	100.3	107.6	100.8	112.1
II quarter	103.1	114.0	100.9	108.1	102.9	112.1
III quarter	105.0	110.4	103.0	103.7	104.3	108.0
IV quarter	107.0	108.2	104.2	104.3	107.2	107.7
2004						
I quarter	109.1	107.6	106.7	106.4	109.5	108.5
II quarter	111.9	108.5	110.5	109.5	113.4	110.2
III quarter	116.1	110.6	113.6	110.3	117.1	112.3
IV quarter	120.1	112.3	116.6	111.9	121.0	112.9
2005						
I quarter	127.5	116.9	119.8	112.3	126.9	116.0
II quarter	131.2	117.2	123.3	111.6	132.0	116.4
III quarter	135.9	117.1	129.7	114.2	135.2	115.5
IV quarter	141.6	117.8	136.0	116.7	141.1	116.6
			monthly indices			
2004						
January	108.3	107.4	105.42	105.2	108.8	108.4
February	109.3	107.7	106.79	106.6	109.5	108.5
March	109.7	107.8	107.96	107.5	110.1	108.7
April	110.6	107.9	109.26	108.2	111.6	109.3
May	111.7	108.4	110.68	109.9	113.3	110.6
June	113.3	109.3	111.56	110.5	115.3	110.8
July	114.9	110.1	112.79	109.7	116.1	111.5
August	115.7	110.2	113.13	109.8	116.5	112.1
September	117.6	111.4	114.94	111.3	118.6	113.1
October	118.2	111.4	115.97	112.0	119.8	112.7
November	119.6	111.8	116.32	111.4	120.9	112.8
December	122.6	113.7	117.37	112.1	122.4	113.1
2005						
January	125.9	116.3	118.19	112.1	125.1	115.0
February	127.8	116.9	120.43	112.8	127.0	115.9
March	128.8	117.4	120.92	112.0	128.7	116.9
April	129.8	117.4	122.00	111.7	130.0	116.4
May	131.3	117.5	123.10	111.2	132.6	117.0
June	132.4	116.8	124.93	112.0	133.5	115.8
July	135.0	117.5	128.07	113.5	134.7	116.0
August	135.6	117.2	128.85	113.9	134.8	115.7
September	137.1	116.5	132.20	115.0	136.1	114.7
October	139.4	117.9	134.89	116.3	139.2	116.2
November	141.1	118.0	136.23	117.1	141.0	116.6
December	144.2	117.7	136.79	116.5	143.2	117.0
2006						
January	144.9	115.1	137.39	116.3	144.3	115.3
February	146.9	115.0	-	-	145.7	114.8

Source: SBS.

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

Table P-3. Serbia: Euro/Dinar Exchange Rate, 2001-2006

	nominal				real				
	exchange rate (FX)[1]	base index (Dec 2002=100)	y-o-y index	cumulative index[2]	real FX[3] (Dec 2002=100)	y-o-y index	cumulative index[2]	EURO/USD rate	CPI in Euro area[4] (Dec 2002=100)
					annual exchange rate[5]				
2001	59.4929	96.6	116.5	100.4	122.2	61.2	72.7	0.8920	97.0
2002	60.6763	98.6	102.0	102.8	104.8	85.7	91.5	0.9397	99.1
2003	64.9743	105.6	107.1	110.5	102.4	97.8	104.4	1.1241	101.0
2004	72.6215	118.0	111.8	115.6	106.3	103.8	103.9	1.2392	103.0
2005	82.9188	134.7	114.2	109.3	105.8	99.5	94.9	1.2433	105.3
					quarterly exchange rate[5]				
2003									
I quarter	62.8849	102.2	104.7	103.7	101.1	93.4	102.7	1.0717	100.3
II quarter	64.6679	105.1	106.9	105.6	102.9	95.5	102.7	1.1295	100.9
III quarter	65.1449	105.8	107.1	106.6	101.9	98.9	102.4	1.1130	101.1
IV quarter	67.1996	109.2	109.6	110.5	103.7	103.2	104.4	1.1846	101.6
2004									
I quarter	69.2361	112.5	110.1	102.3	105.1	103.9	101.0	1.2382	101.9
II quarter	70.8080	115.0	109.5	105.3	106.0	103.0	101.5	1.2084	103.1
III quarter	73.4267	119.3	112.7	109.4	106.1	104.1	101.7	1.2113	103.2
IV quarter	77.0150	125.1	114.6	115.6	108.2	104.3	103.9	1.2993	103.9
2005									
I quarter	80.2421	130.4	115.9	102.7	106.4	101.2	98.1	1.3145	104.0
II quarter	81.8942	133.0	115.7	105.0	106.7	100.7	98.3	1.2606	105.2
III quarter	83.8302	136.2	114.2	107.5	105.8	99.8	97.8	1.2199	105.6
IV quarter	85.7085	139.2	111.3	109.3	104.5	96.6	94.9	1.1898	106.2
					monthly exchange rate				
2004									
January	68.7405	111.7	110.9	101.1	104.8	105.1	100.4	1.2445	101.6
February	69.4133	112.8	110.4	102.1	105.0	104.1	100.6	1.2429	101.8
March	69.5546	113.0	109.0	102.3	105.5	102.7	101.0	1.2274	102.4
April	70.0771	113.8	109.2	103.1	105.8	103.0	101.4	1.2010	102.8
May	70.7521	114.9	109.1	104.0	106.2	103.0	101.7	1.2040	103.2
June	71.5949	116.3	110.2	105.3	106.0	103.2	101.5	1.2200	103.3
July	72.6567	118.0	112.4	106.8	105.8	104.3	101.4	1.2122	103.1
August	73.2559	119.0	112.4	107.7	106.2	104.2	101.8	1.2031	103.2
September	74.3674	120.8	113.3	109.4	106.2	103.7	101.7	1.2186	103.4
October	75.6250	122.9	114.0	111.2	107.8	104.6	103.3	1.2542	103.8
November	76.8000	124.8	114.2	112.9	108.2	104.4	103.6	1.3009	103.7
December	78.6200	127.7	115.6	115.6	108.5	103.9	103.9	1.3442	104.1
2005									
January	79.8494	129.7	116.2	101.6	106.8	101.9	98.4	1.3287	103.6
February	80.1272	130.2	115.4	101.9	105.9	100.8	97.6	1.3076	103.9
March	80.7498	131.2	116.1	102.7	106.5	101.0	98.1	1.3074	104.5
April	81.3236	132.1	116.0	103.4	106.8	100.9	98.5	1.2955	105.0
May	81.8419	133.0	115.7	104.1	106.6	100.3	98.2	1.2715	105.3
June	82.5172	134.1	115.3	105.0	106.7	100.7	98.3	1.2180	105.3
July	82.9982	134.8	114.2	105.6	105.1	99.3	96.9	1.2040	105.3
August	83.9965	136.5	114.7	106.8	106.2	100.0	97.9	1.2294	105.5
September	84.4958	137.3	113.6	107.5	106.2	100.0	97.8	1.2265	106.0
October	85.1413	138.3	112.6	108.3	105.4	97.8	97.2	1.2026	106.3
November	86.0770	139.8	112.1	109.5	105.1	97.1	96.9	1.1809	106.1
December	85.9073	139.6	109.3	109.3	102.9	94.9	94.9	1.1861	106.3
2006									
January	87.1203	141.5	109.1	101.4	103.5	96.9	100.5	1.2122	105.9
February	87.5160	142.2	109.2	101.9	-	-	-	1.1960	-

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

1) As mentioned in footnote 1 in Table T-5: Month average, official daily NBS mid rate.

2) As mentioned in footnote 1 in Table T-2: Cumulative index- ratio of given period and December of previous year.

3) As mentioned in footnote 5 in Table T-5: Real fx calculation include Euro area inflation.

4) "*Harmonized indices of consumer prices*".

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

Table P-4. Serbia: Balance of Payments, 2003-2005[1)]

	2003	2004				2005					
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Okt	Nov	Dec
						cumulative, in millions of euros					
CURRENT ACCOUNT	**-1,515**	**-529**	**-1,022**	**-1,223**	**-2,356**	**-317**	**-530**	**-1,022**	*-1,309*	*-1,507*	**-1,679**
GOODS AND SERVICES	**-3,781**	**-1,144**	**-2,455**	**-3,557**	**-5,315**	**-731**	**-1,811**	**-3,087**	*-3,601*	*-4,061*	**-4,474**
Goods	-3,968	-1,224	-2,556	-3,708	-5,470	-709	-1,837	-3,121	*-3,629*	*-4,088*	-4,488
Exports, f.o.b.[2)]	2,447	504	1,142	1,929	2,832	770	1,702	2,655	*2,991*	*3,344*	3,765
Imports, f.o.b.	-6,415	-1,728	-3,698	-5,637	-8,302	-1,479	-3,538	-5,776	*-6,620*	*-7,432*	-8,253
Exports/Imports (%)	*38*	*29*	*31*	*34*	*34*	*52*	*48*	*46*	*45*	*45*	*46*
Services	187	80	101	152	155	-22	26	34	*28*	*27*	15
Receipts	906	275	534	853	1,171	250	591	943	*1,054*	*1,167*	1,304
Expenditures	-719	-196	-433	-701	-1,016	-272	-565	-909	*-1,026*	*-1,140*	-1,289
Balance of goods and services	-3,781	-1,144	-2,455	-3,557	-5,315	-731	-1,811	-3,087	*-3,601*	*-4,061*	-4,474
Exports of goods and services	3,353	779	1,676	2,782	4,003	1,019	2,293	3,598	*4,044*	*4,511*	5,069
Imports of goods and services	-7,134	-1,923	-4,131	-6,338	-9,319	-1,751	-4,104	-6,685	*-7,645*	*-8,572*	-9,543
Income, net	-180	-34	-67	-86	-172	-57	-130	-187	*-207*	*-216*	-245
Earnings	61	17	30	42	64	12	32	53	*60*	*67*	80
Payments	-241	-51	-97	-128	-235	-70	-163	-239	*-268*	*-283*	-328
Current transfers	2,020	572	1,325	2,161	2,728	439	1,329	2,104	*2,300*	*2,558*	2,771
Private remittances, net	332	106	258	343	340	40	177	239	*238*	*298*	298
Inflow	690	187	384	572	796	184	423	682	*767*	*856*	953
Outflow	-358	-81	-126	-229	-456	-144	-246	-443	*-559*	*-674*	-824
F/X accounts of non-residents	308	152	277	505	568	39	166	398	*417*	*426*	576
F/X purchases, net	1,106	269	691	1,140	1,592	320	884	1,329	*1,478*	*1,590*	1,631
Other[3)]	274	45	100	174	228	40	102	138	*167*	*243*	265
Official grants	425	77	174	258	403	33	82	148	*199*	*212*	269
ERRORS AND OMISSIONS	**214**	**72**	**72**	**32**	**327**	**-185**	**-174**	**-295**	*-196*	*-177*	**-339**
CAPITAL AND FINANCIAL ACCOUNT	**1,889**	**350**	**815**	**1,254**	**2,377**	**704**	**1,188**	**2,254**	*2,550*	*2,903*	**3,644**
Financial account	1,889	350	815	1,254	2,377	704	1,188	2,254	*2,550*	*2,903*	3,644
Foreign direct investment (FDI)	1,198	173	262	470	773	260	496	956	*993*	*1,075*	1,192
Other investment	691	177	554	784	1,604	444	692	1,298	*1,557*	*1,828*	2,452
Medium/long-term loans	628	144	345	643	1,221	155	610	994	*1,080*	*1,179*	1,524
Government	206	24	39	104	229	15	44	105	*114*	*136*	177
Commercial banks	106	35	152	247	417	68	209	292	*333*	*371*	545
Other	317	85	155	292	574	72	357	597	*634*	*672*	802
Short-term loans	4	31	63	78	164	136	16	92	*177*	*258*	396
Short-term banks' liabilities	0	26	43	55	136	90	34	37	*117*	*183*	307
Other assets and liabilities	62	-20	-26	101	187	76	35	141	*188*	*259*	432
Commercial banks F/X reserves (increase,-)	-3	21	172	-38	33	77	30	71	*113*	*132*	100
NBS Reserves, net[4)], (increase,-)	**-587**	**108**	**135**	**-63**	**-349**	**-202**	**-483**	**-937**	*-1,045*	*-1,218*	**-1,627**
IMF disbursements	246	0	121	121	192	0	0	151	*151*	*151*	151
IMF amortization[5)]	0	-33	-73	-128	-188	-46	-93	-134	*-126*	*-118*	-118
MEMORANDUM ITEMS											
Commercial banks foreign liabilites	414	213	471	807	1,121	198	410	727	*867*	*980*	1,429
						in % of GDP					
Exports of goods and services	19.9	4.3	9.3	15.4	22.2	5.2	11.8	18.4	*20.7*	*23.1*	26.0
Imports of goods and services	-42.3	-10.7	-22.9	-35.1	-51.7	-9.0	-21.0	-34.3	*-39.2*	*-43.9*	-48.9
Balance of goods and services	-23.5	-6.8	-14.2	-20.6	-30.3	-3.6	-9.4	-16.0	*-18.6*	*-21.0*	-23.0
Current account	-9.0	-2.9	-5.7	-6.8	-13.1	-1.6	-2.7	-5.2	*-6.7*	*-7.7*	-8.6
GDP in euros[6)]	16,853	18,039	18,039	18,039	18,039	19,510	19,510	19,510	19,510	19,510	19,510

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 Montenegro and Kosovo.

4) Excluding IMF.

5) Principal repayments.

6) As mentioned in footnote 4 in Table T-12: GDP converted into euros using annual average of monthly rates.

Table P-5. Serbia: General Government Consolidated Accounts[1], 2003-2005 in billions of dinars

	2003	2004	2005		
	total	total	Q1 - Q3	Q4 (estimate)	total
I PUBLIC REVENUES	**472.3**	**589.4**	**491.0**	**210.2**	**701.2**
o/w: Public revenues excluding government VAT liabilities and offsets with SDF[2),3)]	472.3	580.6	477.4	202.4	679.8
1. Current revenues, o/w:	467.9	583.4	485.5	207.8	693.3
Tax revenues	437.2	540.8	453.2	186.3	639.5
Personal and corporate income taxes	82.2	83.9	74.6	30.0	104.6
Value added tax and retail sales tax	126.0	159.1	153.8	62.2	215.9
o/w: Net revenues excluding VAT liabilities to enterprises [2)]	*126.0*	*159.1*	*143.8*	*56.2*	*199.9*
Excises	58.1	69.1	51.2	20.0	71.3
Customs duties	29.6	34.3	26.7	12.3	39.0
Social contributions	116.1	159.0	129.5	55.1	184.6
o/w: contributions excluding offsets with SDF [3)]	*116.1*	*150.22*	*125.90*	*53.23*	*179.13*
Other taxes	25.2	35.5	17.3	6.8	24.1
Non-tax revenues	30.7	42.6	32.3	21.5	53.8
2. Capital revenues	4.4	6.1	5.5	2.4	7.9
II PUBLIC EXPENDITURES	**-500.6**	**-572.0**	**-474.2**	**-195.3**	**-669.6**
1. Current expenditures	-478.7	-535.0	-452.0	-184.6	-636.6
Wages and salaries	-116.1	-138.0	-118.6	-47.5	-166.2
Purchases of goods and services	-72.3	-78.3	-62.7	-29.6	-92.3
Interest payment	-11.0	-24.6	-16.9	-7.7	-24.5
Subsidies and social transfers[4)]	-269.4	-280.8	-242.4	-94.8	-337.3
o/w: pensions [4)]	*-127.2*	*-151.1*	*-134.6*	*-51.5*	*-186.1*
Other current expenditures	-9.9	-13.3	-11.3	-5.0	-16.4
2. Capital expenditures[5)]	-21.9	-37.0	-22.3	-10.7	-33.0
III "OLD" DEBT REPAYMENT AND GOVERNMENT NET LENDING	**-31.7**	**-25.2**	**-28.7**	**-7.9**	**-36.6**
1. Debt repayment - FFCDs and LRS	-18.9	-18.9	-21.1	-0.8	-21.9
2. Pensions[4)]	-3.7	-4.5	-4.2	-5.6	-9.8
3. Budget credits, net[6)]	-9.1	-1.8	-3.4	-1.5	-4.9
IVa CONSOLIDATED BALANCE (I+II), MoF definition[7)]	**-28.3**	**17.5**	**16.8**	**14.9**	**31.7**
IVb OVERALL BALANCE (IVa+III.3.), IMF definition, MoF data	**-37.4**	**15.7**	**13.3**	**13.4**	**26.7**
IVc ANALYTICAL BALANCE (I+II+III), FREN's definition[7)]	**-60.0**	**-7.7**	**-12.0**	**7.0**	**-5.0**
V FINANCING (FREN's definition)	**45.5**	**23.9**	**25.3**	**2.1**	**28.7**
Grants[8)]	1.9	0.9			1.3
Privatization receipts[9)]	32.9	14.2	24.0	-2.3	21.7
Domestic financing[10)]	2.0	5.9	3.9	1.1	5.0
Foreign financing[11)]	9.4	7.4	3.4	3.3	6.7
Expenditures for principal repayment to domestic and foreign creditors[12)]	-0.7	-4.5	-6.0	0.0	-6.0
MEMORANDUM ITEMS					
Government net position in banking system, change:					
- based on recorded fiscal flows (IVc+V)	-14.5	16.2	13.3	9.1	23.7
- based on commercial banks' financial reports (NBS data)	7.9	-7.0	26.7	11.4	38.1
Enterprises' claims on VAT (FRENS's estimate)[13)]	...	...	10.0	6.0	16.0
Offsets with SDF[14)]	...	8.8	3.63	1.84	5.5
IVc Total fiscal result, IMF data[15)]	-29.3	8.0	...	...	25.4
Investment projects (FLIPs), IMF data[16)]	-5.6	-8.3	...	...	6.1

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.

1) Includes all levels of government (the central, provincial and municipal) and their budget beneficiaries, but not public enterprises.

2) VAT revenue excluding government VAT liabilities given in Memorandum items (see footnote 13).

3) Contributions revenue reduced by the item "Offsets with SDF" in the Memorandum items (see footnote 14).

4) Section II presents data on pension expenditure from the PFB adjusted for items from III.2: repayment of the "old debt" in 2003 and 2004 and

arrears (4 bn dinars) paid in December 2005. The amount of the pension debt repayment from the PFB on which we do not have information as to what it refers to, remained in Section II.
5) 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).
6) 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. 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.
7) See the methodological discussion in Box 1.
8) Information from IMF CR 06/58. There is no data on grants in the PFB.
9) Estimate based on the reported republic's privatization proceeds, increased by 10% on 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.
10) 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 banks' balance sheets (NBS data)" in Memorandum items.
11) Foreign financing in the budget of the Republic has been increased by 30% (an allowance for unknown local financing).
12) Expenses for debt amortization from the PFB, which are not included in Section III.
13) 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.
14) 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.
15)Line item "Overall balance, excluding project loans", Table 8. Serbia: General Government Fiscal Operations, 2003–06, IMF Country Report No. 06/58, February 2006, page 37.
16) 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.
Notes:
In the last issue of *QM* a mistake occurred in the data on the 2004 expenditures. Namely, total public expenditure included expenses for FFCD repayments, while in 2003 and in the first three quarters of 2005 these expenses were correctly excluded.
Real growth was computed by applying the average 12-month RPI for each year (2003, 2004 and 2005). The obtained real growth rates would be slightly lower if deflation had been done quarterly, because inflation was higher in the later months in which real flows are usually higher.

Table P-6. Serbia: Monetary Survey, 2003-2005

	2003	2004				2005					
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Oct	Nov	Dec
	in millions of dinars, end of period[1]										
Net Foreign Assets (NFA)	**150,952**	**133,174**	**116,740**	**131,048**	**143,045**	**147,520**	**166,237**	**198,041**	*193,254*	*195,239*	**206,794**
Net Foreign Assets (NFA) (in euros)	***2,210***	***1,908***	***1,617***	***1,747***	***1,791***	***1,820***	***2,008***	***2,338***	***2,260***	***2,260***	***2,419***
Assets	243,044	233,980	237,218	267,905	298,778	319,616	356,821	411,422	*415,384*	*434,959*	475,063
Assets (in euros)	*3,558*	*3,352*	*3,287*	*3,572*	*3,740*	*3,943*	*4,311*	*4,857*	*4,857*	*5,036*	*5,556*
NBS	193,700	187,951	199,126	217,108	244,837	272,654	302,596	358,226	*365,758*	*384,850*	420,808
NBS (in euros)	*2,835*	*2,693*	*2,759*	*2,895*	*3,065*	*3,364*	*3,656*	*4,229*	*4,277*	*4,456*	*4,922*
Commercial banks	49,344	46,029	38,092	50,797	53,941	46,962	54,225	53,196	*49,626*	*50,109*	54,255
Commercial banks (in euros)	*722*	*659*	*528*	*677*	*675*	*579*	*655*	*628*	*580*	*580*	*635*
Liabilities (-)	-92,092	-100,806	-120,478	-136,857	-155,733	-172,096	-190,584	-213,381	*-222,130*	*-239,720*	-268,269
Liabilities (-) (in euros)	*-1,348*	*-1,444*	*-1,669*	*-1,825*	*-1,949*	*-2,123*	*-2,302*	*-2,519*	*-2,597*	*-2,775*	*-3,138*
NBS	-68,479	-69,036	-77,311	-73,559	-74,433	-76,969	-78,810	-87,305	*-87,045*	*-88,162*	-87,159
NBS (in euros)	*-1,002*	*-989*	*-1,071*	*-981*	*-932*	*-950*	*-952*	*-1,031*	*-1,018*	*-1,021*	*-1,019*
Commercial banks	-23,613	-31,770	-43,167	-63,298	-81,300	-95,127	-111,774	-126,076	*-135,085*	*-151,558*	-181,110
Commercial banks (in euros)	*-346*	*-455*	*-598*	*-844*	*-1,018*	*-1,174*	*-1,350*	*-1,489*	*-1,579*	*-1,755*	*-2,118*
Net Domestic Assets (NDA)	**93,914**	**118,135**	**145,905**	**165,486**	**180,037**	**183,792**	**208,058**	**224,717**	*238,841*	*250,000*	**251,747**
Domestic credits	165,272	185,197	216,211	241,591	268,407	281,277	312,359	344,125	*359,463*	*378,140*	383,466
Net credits to government[2]	-8,415	-2,498	7,554	4,130	5,115	-9,236	-3,669	-12,169	*-19,690*	*-25,952*	-30,794
Credits	31,379	32,972	32,898	34,662	42,915	44,388	39,207	41,172	*40,116*	*36,218*	36,810
Dinar credits	21,726	22,021	22,341	22,980	28,991	29,304	24,352	22,379	*21,391*	*19,302*	19,534
NBS	19,051	18,904	18,840	18,646	21,427	21,235	16,636	16,013	*15,613*	*15,013*	14,702
Commercial banks	2,675	3,117	3,501	4,334	7,564	8,069	7,716	6,366	*5,778*	*4,289*	4,832
Fx credits	9,653	10,951	10,557	11,682	13,924	15,084	14,855	18,793	*18,725*	*16,916*	17,276
Fx credits (in euros)	*141*	*157*	*146*	*156*	*174*	*186*	*179*	*222*	*219*	*196*	*202*
NBS	0	0	0	0	0	0	0	0	*0*	*0*	180
NBS (in euros)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*
Commercial banks	9,653	10,951	10,557	11,682	13,924	15,084	14,855	18,793	*18,725*	*16,916*	17,096
Commercial banks (in euros)	*141*	*157*	*146*	*156*	*174*	*186*	*179*	*222*	*219*	*196*	*200*
Deposits (-)	-39,794	-35,470	-25,344	-30,532	-37,800	-53,624	-42,876	-53,341	*-59,806*	*-62,170*	-67,604
Dinar deposits	-17,830	-16,073	-15,091	-17,459	-24,434	-32,008	-29,811	-34,513	*-41,543*	*-40,742*	-43,490
NBS	-12,992	-13,769	-13,076	-15,803	-22,966	-30,234	-28,219	-32,783	*-39,712*	*-38,830*	-40,729
Commercial banks	-4,838	-2,304	-2,015	-1,656	-1,468	-1,774	-1,592	-1,730	*-1,831*	*-1,912*	-2,761
Fx deposits	-21,964	-19,397	-10,253	-13,073	-13,366	-21,616	-13,065	-18,828	*-18,263*	*-21,428*	-24,114
Fx deposits (in euros)	*-322*	*-278*	*-142*	*-174*	*-167*	*-267*	*-158*	*-222*	*-214*	*-248*	*-282*
NBS	-18,108	-15,402	-7,025	-9,708	-9,989	-18,088	-6,571	-14,392	*-13,045*	*-13,630*	-18,789
NBS (in euros)	*-265*	*-221*	*-97*	*-129*	*-125*	*-223*	*-79*	*-170*	*-153*	*-158*	*-220*
Commercial banks	-3,856	-3,995	-3,228	-3,365	-3,377	-3,528	-6,494	-4,436	*-5,218*	*-7,798*	-5,325
Commercial banks (in euros)	*-56*	*-57*	*-45*	*-45*	*-42*	*-44*	*-78*	*-52*	*-61*	*-90*	*-62*
Credit to the non-government sector	173,687	187,695	208,657	237,461	263,292	290,513	316,028	356,294	*379,153*	*404,092*	414,260
Households	28,643	32,383	40,248	52,059	64,441	69,844	82,569	102,707	*111,654*	*120,176*	124,897
Enterprises[3]	145,044	155,312	168,409	185,402	198,851	220,669	233,459	253,587	*267,499*	*283,916*	289,363
Other items net[4]	-71,358	-67,062	-70,306	-76,105	-88,370	-97,485	-104,301	-119,408	*-120,622*	*-128,140*	-131,718
o/w Capital and Reserves	-95,373	-93,974	-102,040	-108,170	-118,891	-127,754	-140,174	-147,854	*-149,277*	*-149,654*	-159,042
NBS	-2,770	-2,767	-2,986	-2,985	-15,738	-15,735	-22,565	-22,562	*-22,561*	*-22,560*	-22,571
Commercial banks	-92,603	-91,207	-99,054	-105,185	-103,153	-112,019	-117,609	-125,292	*-126,716*	*-127,094*	-136,471
Broad money M2[5]	**244,866**	**251,309**	**262,645**	**296,534**	**323,082**	**331,312**	**374,295**	**422,758**	*432,095*	*445,239*	**458,541**
Dinar denominated M2[6]	124,886	119,341	125,700	135,146	146,584	144,128	160,766	180,445	*187,075*	*183,452*	192,888
M1	99,544	92,382	97,365	103,453	111,235	110,049	120,456	134,514	*139,443*	*134,610*	144,886
Currency outside banks	42,979	38,004	40,347	42,463	45,165	39,368	42,316	47,283	*45,474*	*44,271*	53,645
Demand deposits (households and economy)	56,565	54,378	57,018	60,990	66,070	70,681	78,140	87,231	*93,969*	*90,339*	91,241
Time and savings deposits (households and economy)	25,342	26,959	28,335	31,693	35,349	34,079	40,310	45,931	*47,632*	*48,842*	48,002
Fx deposits (households and economy)	119,980	131,968	136,945	161,388	176,498	187,184	213,529	242,313	*245,020*	*261,787*	265,653
Fx deposits (households and economy) (in euros)	*1,756*	*1,891*	*1,897*	*2,152*	*2,209*	*2,309*	*2,580*	*2,861*	*2,865*	*3,031*	*3,107*
o/w: households[7]	69,738	76,985	84,568	94,472	110,714	124,107	141,477	162,667	*169,521*	*180,450*	190,123
o/w: households[7] (in euros)	*1,021*	*1,103*	*1,172*	*1,260*	*1,386*	*1,531*	*1,709*	*1,921*	*1,982*	*2,089*	*2,224*

Source: FREN, NBS: Statistical bulletin.

1) Unless otherwise indicated.

2) Government include: State Union Serbia and Montenegro, Republic of Serbia, while municipalities are treated as non-government sector.

3) As mentioned in footnote 3 in Table T-22: Enterprises also include non-profit and other non-government economic entities.

4) Includes: Other assets; Capital and reserves; Other liabilities; and Interbank, net.

5) As mentioned in footnote 2 in Graph T-8: 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. Enterprises also include non-profit and other non-government economic entities.

6) As mentioned in footnote 5 in Table T-22: 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.

7) Household savings.

Table P-7. Serbia: Commercial Banks Balance Sheet, 2003-2005

	2003	2004				2005					
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Oct	Nov	Dec
	in millions dinars, end of period[1]										
Net foreign reserves	**25,731**	**14,259**	**-5,075**	**-12,501**	**-27,359**	**-48,165**	**-57,549**	**-72,880**	*-85,459*	*-101,449*	**-126,855**
Net foreign reserves (in euros)	***377***	***204***	***-70***	***-167***	***-342***	***-594***	***-695***	***-860***	***-999***	***-1,175***	***-1,484***
Gross foreign reserves	49,344	46,029	38,092	50,797	53,941	46,962	54,225	53,196	*49,626*	*50,109*	54,255
Gross foreign reserves (in euros)	*722*	*659*	*528*	*677*	*675*	*579*	*655*	*628*	*580*	*580*	*635*
Gross reserve liabilities (-)	-23,613	-31,770	-43,167	-63,298	-81,300	-95,127	-111,774	-126,076	*-135,085*	*-151,558*	-181,110
Gross reserve liabilities (in euros) (-)	*-346*	*-455*	*-598*	*-844*	*-1,018*	*-1,174*	*-1,350*	*-1,489*	*-1,579*	*-1,755*	*-2,118*
Net Domestic Assets (NDA)	**-25,731**	**-14,259**	**5,075**	**12,501**	**27,359**	**48,165**	**57,549**	**72,880**	*85,459*	*101,449*	**126,855**
Domestic credits	47,584	52,999	74,841	81,600	105,455	126,889	144,130	170,160	*187,927*	*208,930*	235,271
Net claims on government[2]	-1,583	-1,195	26	1,951	8,657	9,287	2,453	6,520	*5,108*	*-401*	4,484
Claims	13,731	15,184	15,215	17,399	22,756	24,262	23,743	26,578	*26,192*	*23,047*	24,085
Dinar credits	4,078	4,233	4,658	5,717	8,832	9,178	8,888	7,785	*7,467*	*6,131*	6,989
Fx credits	9,653	10,951	10,557	11,682	13,924	15,084	14,855	18,793	*18,725*	*16,916*	17,096
Fx credits (in euros)	*141*	*157*	*146*	*156*	*174*	*186*	*179*	*222*	*219*	*196*	*200*
Liabilities (-)	-15,314	-16,379	-15,189	-15,448	-14,099	-14,975	-21,290	-20,058	*-21,084*	*-23,448*	-19,601
Dinar deposits	-11,372	-12,291	-11,902	-12,040	-10,700	-11,413	-14,766	-15,581	*-15,831*	*-15,611*	-14,237
Fx deposits	-3,942	-4,088	-3,287	-3,408	-3,399	-3,562	-6,524	-4,477	*-5,253*	*-7,837*	-5,364
Fx deposits (in euros)	*-58*	*-59*	*-46*	*-45*	*-43*	*-44*	*-79*	*-53*	*-61*	*-91*	*-63*
Net claims on NBS	70,374	66,649	76,109	83,059	97,570	99,401	136,504	159,417	*166,925*	*182,465*	204,922
Claims	74,224	70,360	79,331	84,880	99,325	101,154	137,023	160,153	*167,477*	*182,973*	205,607
Cash	4,097	3,451	3,419	3,463	4,281	3,812	4,430	4,822	*6,923*	*5,749*	7,060
Required reserves	16,241	13,321	15,067	18,738	20,953	20,676	21,855	24,673	*25,704*	*24,024*	26,046
Excess reserves	6,720	2,732	3,452	-471	6,569	1,766	2,790	3,349	*3,461*	*-1,381*	7,294
Deposits (-)	44,936	48,628	51,743	58,459	66,013	71,694	90,317	107,501	*115,223*	*136,104*	148,312
o/w: dinar deposits	193	78	57	81	156	95	140	120	*116*	*102*	130
NBS bills/repo[3]	2,230	2,228	5,650	4,691	1,509	3,206	17,631	19,808	*16,166*	*18,477*	16,895
Liabilities (-)	-3,850	-3,711	-3,222	-1,821	-1,755	-1,753	-519	-736	*-552*	*-508*	-685
Net claims on the rest of the economy	-21,207	-12,455	-1,294	-3,410	-772	18,201	5,173	4,223	*15,894*	*26,866*	25,865
Claims	172,040	186,336	207,257	235,836	261,826	289,156	314,487	354,522	*377,122*	*401,904*	411,807
Households	28,439	32,182	40,048	51,858	64,283	69,616	82,293	102,435	*111,385*	*119,906*	124,618
Long -term claims	17,070	19,367	25,692	36,997	48,848	53,801	66,112	84,542	*92,379*	*99,846*	103,683
Short -term claims	11,369	12,815	14,356	14,861	15,435	15,815	16,181	17,893	*19,006*	*20,060*	20,935
Enterprises[4]	143,601	154,154	167,209	183,978	197,543	219,540	232,194	252,087	*265,737*	*281,998*	287,189
Long -term claims	63,772	64,692	72,144	78,405	87,347	90,442	98,695	103,549	*109,317*	*118,442*	125,430
Short -term claims	79,829	89,462	95,065	105,573	110,196	129,098	133,499	148,538	*156,420*	*163,556*	161,759
Liabilities (-)	-193,247	-198,791	-208,551	-239,246	-262,598	-270,955	-309,314	-350,299	*-361,228*	*-375,038*	-385,942
Dinar deposits	-73,998	-67,484	-72,208	-78,691	-87,019	-84,696	-96,879	-109,002	*-117,415*	*-114,722*	-121,469
Households	-13,411	-14,200	-13,116	-13,215	-12,737	-12,634	-14,970	-16,028	*-16,753*	*-15,826*	-16,553
Enterprises[4]	-60,587	-53,284	-59,092	-65,476	-74,282	-72,062	-81,909	-92,974	*-100,662*	*-98,896*	-104,916
Fx deposits	-119,249	-131,307	-136,343	-160,555	-175,579	-186,259	-212,435	-241,297	*-243,813*	*-260,316*	-264,473
Households[5]	-69,738	-76,985	-84,568	-94,472	-110,714	-124,107	-141,477	-162,667	*-169,521*	*-180,450*	-190,123
Households (in euros)	*-1,021*	*-1,103*	*-1,172*	*-1,260*	*-1,386*	*-1,531*	*-1,709*	*-1,921*	*-1,982*	*-2,089*	*-2,224*
Enterprises[4]	-49,511	-54,322	-51,775	-66,083	-64,865	-62,152	-70,958	-78,630	*-74,292*	*-79,866*	-74,350
Enterprises[4] (in euros)	*-725*	*-778*	*-717*	*-881*	*-812*	*-767*	*-857*	*-928*	*-869*	*-925*	*-870*
Other items, net[6]	**-73,315**	**-67,258**	**-69,766**	**-69,099**	**-78,096**	**-78,724**	**-86,581**	**-97,280**	*-102,468*	*-107,481*	**-108,416**
o/w: capital and reserves	-92,603	-91,207	-99,054	-105,185	-103,153	-112,019	-117,609	-125,292	*-126,716*	*-127,094*	-136,471

Source: FREN and NBS: Statistical Bulletin.

1) Unless otherwise indicated.

2) Government include: State Union Serbia and Montenegro, Republic of Serbia and municipalities.

3) As mentioned in footnote 2 in Table T-25: 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) As mentioned in footnote 3 in Table T-22: Enterprises also include non-profit and other non-government economic entities.

5) Household savings.

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

Table P-8. Serbia: National Bank of Serbia Balance Sheet, 2003-2005

	2003	2004				2005					
	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Oct	Nov	Dec
	in millions dinars, end of period[1]										
Foreign assets, net	**81,859**	**71,146**	**72,342**	**86,174**	**104,530**	**124,514**	**134,123**	**164,055**	*164,210*	*161,193*	**186,342**
Foreign assets, net (in euros)	***1,198***	***1,019***	***1,002***	***1,149***	***1,308***	***1,536***	***1,620***	***1,937***	***1,920***	***1,866***	***2,179***
Gross foreign reserves	193,700	187,951	199,126	217,108	244,837	272,654	302,596	358,226	*365,758*	*384,850*	420,808
Gross foreign reserves (in euros)	*2,835*	*2,693*	*2,759*	*2,895*	*3,065*	*3,364*	*3,656*	*4,229*	*4,277*	*4,456*	*4,922*
Gross reserve liabilities (-)	-111,841	-116,805	-126,784	-130,934	-140,307	-148,140	-168,473	-194,171	*-201,548*	*-223,657*	-234,466
Gross reserve liabilities (in euros) (-)	*-1,637*	*-1,673*	*-1,757*	*-1,746*	*-1,756*	*-1,828*	*-2,035*	*-2,292*	*-2,357*	*-2,589*	*-2,742*
o/w: fx deposits of commercial banks	-43,362	-47,769	-49,473	-57,375	-65,874	-71,171	-89,663	-106,866	*-114,503*	*-135,495*	-147,307
o/w: fx deposits of commercial banks (in euros)	*-635*	*-684*	*-685*	*-765*	*-825*	*-878*	*-1,083*	*-1,262*	*-1,339*	*-1,569*	*-1,723*
Net Domestic Assets (NDA)	**-11,863**	**-13,646**	**-10,074**	**-22,039**	**-27,561**	**-58,814**	**-62,632**	**-83,861**	*-82,580*	*-88,452*	**-92,121**
Domestic credits	-10,843	-10,991	-5,349	-11,982	-13,944	-39,936	-41,262	-59,163	*-60,722*	*-63,564*	-64,886
Net claims on government[2]	-13,362	-14,068	-4,457	-10,409	-16,630	-37,448	-26,469	-41,230	*-47,060*	*-47,928*	-50,563
Claims	19,051	18,904	18,840	18,646	21,427	21,235	16,636	16,013	*15,613*	*15,013*	14,882
o/w: dinar credits	19,051	18,904	18,840	18,646	21,427	21,235	16,636	16,013	*15,613*	*15,013*	14,702
Deposits (-)	-32,413	-32,972	-23,297	-29,055	-38,057	-58,683	-43,105	-57,243	*-62,673*	*-62,941*	-65,445
Dinar deposits	-14,305	-17,570	-16,272	-19,347	-28,068	-40,595	-36,534	-42,851	*-49,628*	*-49,311*	-46,656
o/w: municipalities	*-1,313*	*-3,801*	*-3,196*	*-3,544*	*-5,102*	*-10,361*	*-8,315*	*-10,068*	*-9,916*	*-10,481*	*-5,927*
Fx deposits	-18,108	-15,402	-7,025	-9,708	-9,989	-18,088	-6,571	-14,392	*-13,045*	*-13,630*	-18,789
Fx deposits (in euros)	*-265*	*-221*	*-97*	*-129*	*-125*	*-223*	*-79*	*-170*	*-153*	*-158*	*-220*
Net claims on banks	2,337	2,899	-1,073	-1,751	2,554	-2,672	-15,080	-18,045	*-13,734*	*-15,703*	-14,248
Claims	5,490	5,329	4,692	3,561	4,594	3,644	2,671	2,907	*2,809*	*2,891*	2,666
o/w: other dinar credits	3,774	3,507	2,801	1,608	3,007	1,576	371	505	*364*	*352*	396
o/w: Fx credits	1,716	1,822	1,891	1,953	1,587	2,068	2,300	2,402	*2,445*	*2,539*	2,270
o/w: Fx credits (in euros)	*25*	*26*	*26*	*26*	*20*	*26*	*28*	*28*	*29*	*29*	*27*
Liabilities (-)	-3,153	-2,430	-5,765	-5,312	-2,040	-6,316	-17,751	-20,952	*-16,543*	*-18,594*	-16,914
o/w: NBS bills	-2,223	-2,378	-5,720	-5,224	-1,752	0	0	-4,070	*-2,335*	*-2,969*	-2,419
o/w: repo transactions	0	0	0	0	0	-3,206	-17,607	-15,734	*-13,810*	*-15,460*	-14,409
Net claims on the rest of the economy	182	178	181	178	132	184	287	112	*72*	*67*	-75
Claims	244	243	243	242	198	248	369	353	*342*	*346*	296
Dinar and fx credits	244	243	243	242	198	248	369	353	*342*	*346*	296
Liabilities (-)	-62	-65	-62	-64	-66	-64	-82	-241	*-270*	*-279*	-371
Dinar deposits	-62	-65	-62	-64	-66	-64	-82	-241	*-270*	*-279*	-371
Other items, net[3]	-1,020	-2,655	-4,725	-10,057	-13,617	-18,878	-21,370	-24,698	*-21,858*	*-24,888*	-27,235
Reserve money (H)	**69,996**	**57,501**	**62,268**	**64,135**	**76,969**	**65,700**	**71,491**	**80,194**	*81,630*	*72,741*	**94,221**
Currency in circulation	42,979	38,004	40,347	42,463	45,165	39,368	42,316	47,283	*45,474*	*44,271*	53,645
Commercial banks' reserves	27,017	19,497	21,921	21,672	31,804	26,332	29,175	32,911	*36,156*	*28,470*	40,576
Required reserves allocated	16,212	13,321	15,067	18,738	20,953	20,676	21,855	24,673	*25,704*	*24,024*	26,045
Excess reserves	10,805	6,176	6,854	2,934	10,851	5,656	7,320	8,238	*10,452*	*4,446*	14,531
Overnight deposits	5,695	2,280	2,039	734	5,076	2,825	3,004	3,394	*2,750*	*300*	4,759
Giro account and cash	5,110	3,896	4,815	2,200	5,775	2,831	4,316	4,844	*7,702*	*4,146*	9,772

Source: FREN, NBS: Statistical bulletin.

1) Unless otherwise indicated.

2) Government include: State Union Serbia and Montenegro, Republic of Serbia and municipalities.

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