

Competitiveness
of the Serbian
Economy

2006



Republika Srbija
MINISTARSTVO FINANSIJA

Competitiveness of the Serbian Economy 2006:
Growth Diagnostics

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Published by:
Jefferson Institute
Stevana Sremca 4
11 000 Belgrade
Serbia

Printed by:
Grafodrom

ISBN 86-905973-6-0

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Competitiveness of the Serbian Economy 2006: Growth Diagnostics

The study *Competitiveness of the Serbian Economy 2006* seeks to identify the key obstacle to sustainable growth of the Serbian economy. Identifying the key obstacle for growth does not mean that solving this problem will solve all the problems of growth in Serbia. Policy making to maximize sustainable growth is inherently a sequence of individual steps. This project's analysis aims to guide policy makers to the next best step for Serbia.

Through careful application of Growth Diagnostics, we conclude that the next steps to achieve sustainable growth in Serbia should be devoted to strengthening property rights. If entrepreneurs are able to enforce contracts, and feel that their property is secured from by judicial certainty and not corruption, investors will have greater incentives to invest their resources in more productive use of their property. In many ways, the state itself will be the greatest beneficiary of enhanced property rights, as the state is by far the single largest minority shareholder in Serbia.

Competitiveness 2006 utilizes the methodology of Growth Diagnostics, developed by American economists Dani Rodrik, Ricardo Hausman, and Andres Velasco. Growth Diagnostics seeks to identify the key bottlenecks to growth in a particular country at a particular time, through a comprehensive evaluation of market and institutional variables. Application of the Growth Diagnostics model makes it possible to systematically establish in which areas—low corporate returns, low appropriability, or the high costs of finance—are the obstacles that most impede growth.

In Serbia, since the end of 2000, there were many attempts to solve the question of sluggish economic growth as a theoretical and practical matter. Often, these exercises generated long lists of issues for reform across many sectors, but without identification of any prioritization or sequencing. Considering that each obstacle has a relatively autonomous causal force (each influences growth to some extent), such attempts led the government towards a growth strategy that was based on a frontal attack on all obstacles simultaneously.

The consequence was confusion in economic policy and the absence of a clear strategy for growth. Economic analysts and politicians could not agree on the main causes of slow growth, so the government's effort was directed each month to yet another problem without a clear indication of whether the previous problem was solved. A good example of this kind of thinking resulted in the 2005 document named *The National Strategy of Serbia for the Accession of Serbia and Montenegro to the European Union*. This is a lengthy text of over 200 pages simply lists the problems and areas where reform is necessary in the process of EU integration, without trying to ascertain a relationship among the problems and to single out the most important ones.

The model of growth diagnostics proposes that some bottlenecks to growth are more significant than others. That approach is founded on the conviction that the government has at its disposal limited time, resources, and capacity to engage the problems that confront it. These scarce resources of governance should be invested in the policy areas that will yield the maximum return to sustainable growth. (More on the theoretical foundations of the model can be found in chapter 3.)

* * *

The study is divided into three parts and seven chapters. The first part identifies the current state of affairs in Serbia's business environment. **Chapter 1** presents an analysis of Serbia's foreign trade in the period 2001-2005. It contains basic data on Serbia's foreign trade exchange. It analyzes data on the foreign trade deficit and the structure of Serbia's imports and exports. The second part of the chapter is comprised of econometric analysis of the determinants of Serbia's imports and exports, analysis of Serbia's participation in world markets, and analysis of Serbia's comparative advantages, as well as a summary of the qualitative characteristics of Serbia's foreign trade exchange. Based on the finding that Serbia exports products that are labor-intensive and that few are based on

advanced technologies, the chapter reaches the conclusion that the Serbian economy not only does not export enough, but still does not show signs of modernization.

Chapter 2 analyzes the microeconomic bases of competitiveness in the Serbian economy. The analysis focuses on sectors and products that play a leading role in Serbia's exports, especially emphasizing those that have the capability to penetrate international markets and contribute to the economic growth of the country. The results obtained in this chapter are derived from the application of indexes of market performance and analysis of national exports' performance. The first index estimates multidimensional export performance, and the other measures the export performance of the national economy in the sense of the structure of its production, dynamics of international market growth, and the course of growth of leading exports of (other) national economies.

The second part of the study establishes the diagnosis of Serbia's economy. **Chapter 3** introduces the model of Growth Diagnostics on a theoretical level. It analyzes the fundamental goals and limits of a market economy and deals with first order conditions and implications of the general equilibrium. It proposes criteria for choosing the sequence of reforms. It analyzes several combinations of economic policies.

The next two chapters represent an introduction to chapter 6, which applies the model of Growth Diagnostics. **Chapter 4** is concerned with analysis of economic policies and the institutional context in which the Serbian economy operates. It establishes that GDP growth is uneven and that there is insufficient investment in the Serbian economy. It analyzes in more detail the efficiency of the judicial system, corporate governance, the business environment, development of the private sector, and the state of the labor market after 2000. **Chapter 5** sheds light on economic policy and market institutions from a subjective standpoint. This chapter presents the results of surveys that confirm the positions of entrepreneurs vis-à-vis different factors that, directly or indirectly, influence the competitiveness of Serbia's economy. The chapter exclusively uses data from questionnaires that the World Economic Forum used for ranking Serbia on a worldwide list for assessing competitiveness in the study *The Global Competitiveness Report 2005-2006*. These observations are important because they reveal the motivations of entrepreneurs in Serbia to engage in export, and the number of entrepreneurs who think that lower prices matter more than product quality on international markets. The chapter analyzes the attitudes of firm managers with regard to GDP growth,

the government's economic policies, the business environment, the labor market, the financial market, foreign competition, infrastructure, education, research and development, and environment.

Chapter 6 applies the model of Growth Diagnostics to the Serbian economy. The data and analysis found in chapters 1-5 represent the basis for analysis in this chapter. The conclusion reached is that the bottleneck that, in the short run, restrains growth and greater competitiveness in the Serbian economy, can be identified in the area of government failures and in the area of micro-risks, such as the weak protection of property rights and corruption. The chapter concludes that the key bottleneck to growth in Serbia today is the protection of property rights. While a campaign to enhance property rights will not yield a perfect environment for growth in Serbia, breaking this bottleneck will yield significant return on growth. Moreover, a great number of these policy measures can be designed and implemented very quickly.

The third part of the study consists of one case study. **Chapter 7** significantly expands existing knowledge about the effects of the privatization program that Serbia has carried out since 2001. The research attempts to answer the question whether the model of direct sales, mandated by the 2001 privatization act, has led to the expected restructuring of enterprises, by focusing on their pre and post privatization competitiveness on the international market. It analyzes the results of surveys of the organizational and financial restructuring of 80 enterprises privatized over the period 2002-2003. The chapter is divided into two parts. The first part looks into results obtained on the basis of questionnaires that identify changes in both the areas of corporate governance and the method of production in privatized enterprises. It concludes that privatized enterprises find themselves at the junction between defensive and innovative restructuring. For this part, poor protection of property rights are identified as the major obstacle to restructuring. The second part presents the results of financial analysis and points to the degree of financial consolidation of enterprises. The analysis identifies high production costs and weak financial management as the major bottlenecks for financial consolidation.

1. The Analysis of Foreign Trade and Competitiveness

It contains basic data on Serbia's foreign trade exchange. It analyzes data on the foreign trade deficit and the structure of Serbia's imports and exports. The second part of the chapter is comprised of econometric analysis of the determinants of Serbia's imports and exports, analysis of Serbia's participation in world markets, and analysis of Serbia's comparative advantages, as well as a summary of the qualitative characteristics of Serbia's foreign trade exchange.

1. The Foreign Trade Balance of Serbia

Serbia faces a very high trade deficit that reached the level of one-quarter of gross domestic product in 2005. It is also the main determinant of the high current account deficit as one of the major problems of the Serbian economy, and which increased from 3.3% of the GDP in 2001 to a little less than 9% of GDP in 2005. However, it should be noted that both values are absolute amounts and relatively but significantly improved compared to 2004.¹ Moreover, the reduction in the trade deficit in 2005 was the main factor behind the reduction in the current account deficit.

The share of foreign trade exchange (import and export of goods and services) has a growing share in GDP, growing from 65% in 2001 to around 75% in 2005. The longest part of this period was characterized by much faster growth of imports compared to exports, as well as by an accelerated growth rate of imports of goods and services, which was a very unfavorable tendency. However, such a trend was interrupted in 2005: compared to the previous year, as measured by current dollars, exports of goods and services grew by 21%, while imports stagnated, that is, grew by only 1%.

What is especially interesting is that the growth of export value has a crucial influence from the increase in the exports of the processing industry,² despite the decline in activity experienced by the processing industry in the same period.³ In fact, almost all of the activities which achieved production growth also recorded an increase in export value⁴, but many activities that experienced declines in production also exported more than the previous year. For example, the production of clothing and furs during 2005 shrank by one-fifth compared to 2004, while at the same time, these goods grew in export value (measured by current dollars) by 51%. There can be several explanations for such a discrepancy. On the one hand, it is likely that during the year in question, some activities export the stocks they produced during the previous year. But this cannot be a complete explanation for increased exports, since these stocks would certainly be exhausted after several months, while the statistics of the foreign trade shows a constant growth in export value. The most probable explanation of the discrepancy is in inadequate recording of official statistics on trends in industrial production. Namely, while foreign trade statistics register flows in commodity exchange as a whole, statistics on industrial production do not completely cover the scope of industrial production, both in terms of the structure of the sample and the number of enterprises that actually submit data on production to the statistics service.

The terms of trade⁵ also deteriorated after 2001 when the value of that indicator surpassed 100.⁶ The deterioration of the terms of trade is particularly pronounced in 2002 and 2003, while 2004 marked an improvement in the terms of trade, which remained at a similar level in 2005. During both of these years, the unit values of exports and imports were higher than in 2001. However, due to a greater increase in

¹ In 2004, the trade deficit was almost one-third, and the current account deficit around 13%, of gross domestic product.

² According to preliminary data of the Republic Bureau for Statistics (RBS), the processing industry's share of the value of commodity exports during 2005 was 94%, while the growth rate of that sector's exports during the given period, relative to 2004, amounts to 28%, measured in current dollars.

³ According to the preliminary data of the Republic Bureau for Statistics (RBS), the indicator for physical volume of the processing industry in 2005 is 0.7% lower compared to the previous year.

⁴ The exceptions are tobacco products, which had significantly reduced exports even with increased production

⁵ The terms of trade are calculated as a ratio between the unit value of the export and the unit value of the import of goods.

⁶ In 2001, the unit value of exports was higher than the unit value of imports, due to a high share of electricity, oil and other energy raw materials in commodity imports, which as a rule have a very low unit value, as well as due to a significant influx of donations in goods.

unit values for imports than exports, the terms of trade indicator shows a value less than one. In line with that, the terms of trade index in 2005 compared to 2001 was less than 100, at 87.

The trade deficit represents the most important factor behind the deficit in the current account balance. It can be noted that in all of the observed years these two indicators moved in the same direction: when the trade deficit grew, there was also a significant increase in the current account deficit, and in 2005, when the commodity exchange deficit fell, the current account deficit also declined. These two indicators also draw attention to the fact that the current account deficit is significantly lower than the trade deficit, due to a

constant achievement of a surplus in non-commodity transactions/trade surplus.

The most important part of non-commodity transactions are current transfers, income from which in 2005 reached as much as 18% of GDP. The income on the basis of current transfers is mostly made up of remittances by workers employed abroad and of purchases of foreign currency.

Also significant among non-good current transactions are the surplus from services and the influx of donations from abroad. The services surplus is to a large degree the result of earnings from traditional services, such as the transportation and construction industries, while tourism has had increasing significance in recent years. What can be observed is that the

		2001	2005 ^a
I	Current account (3+4+5+6)	-3,3%	-9%
1	Goods (1.1-1.2)	-23,4%	-23%
1.1	Export of goods FOB	15,9%	19%
1.2	Import of goods	39,3%	43%
2	Services (2.1-2.2)	3,8%	0%
2.1	Export of services	6,8%	7%
2.2	Import of services	3,0%	7%
3	Goods and services (1+2)	-19,6%	-23%
3.1	Export of goods and services (1.1.+2.1)	22,7%	26%
3.2	Import of goods and services (1.2+2.2)	42,3%	49%
4	Income	-0,2%	-1%
5	Current transfers (5.1-5.2)	11,1%	14%
5.1	Receipts	14,6%	18%
5.2	Expenses	3,5%	3%
6	Official transfers (donations)	5,5%	1%
II	Capital and financial transactions (A+B)	7,8%	18%
1	FDI, net	1,5%	6%
2	Medium-term and long-term credits, net (2.1-2.2)	2,0%	8%
2.1	Utilization	2,3%	11%
2.2	Repayment	0,3%	3%
3	Short-term credits and deposits, net	0,7%	2%
4	Other, net	6,1%	2%
5	Commercial banks, net	-2,5%	1%
III	Errors and omissions, net	0,0%	-1%
IV	Total balance (I+II+III)	4,5%	8%
V	Foreign currency reserves of the National Bank (increase -)	-4,5%	-8%
	Out of which MMF	1,2%	n.a.

Table 1. Balance of Payment of Serbia, share of gross domestic product. Source: Statistics Bulletin, National Bank of Serbia, RBS data and the estimates of the author. * estimate

demand for various business services has grown significantly, though they are often sought abroad due to a domestic market that is still insufficiently developed. Because of this, the period 2001-2005 is characterized by a real reduction of surplus value in services that was, thanks to more dynamic growth in imports of services compared to exports, significantly reduced in 2005 and amounted to USD 20 million. In the forthcoming period it will be possible to achieve sustained growth of the services surplus with a growth in the influx of traditional services, as well as with more considerable investments in tourism and a bigger supply of in the domestic market of those services that have not been sufficiently present so far.

Regarding donations, there has already been since 2002 a visible tendency towards decline, both in absolute amount and in their significance for covering the current account deficit. Also, their share in the value of gross domestic product has fallen from 5.5% in 2001 to a little over 1% in 2005. For the foreseeable future, the influx of donations will keep shrinking, so that its importance in financing the current account deficit will also decline.

The trends mentioned in connection with the current account for services and transfers point towards the necessity of sustaining positive tendencies on the part of the commodity exchange, in order to maintain the current account deficit within limits that do not endanger the external liquidity of the country.

For capital transactions, the most important items used to finance the current account deficit are foreign direct investments and borrowing from abroad. The net influx of foreign direct investment in 2005 reached around USD 1.5 billion, or 6% of GDP. Borrowing from abroad is a less desirable means of covering the current account deficit, bearing in mind that Serbia is already paying off foreign debt from the previous period,⁷ and that the value of the debt will to increase in the forthcoming years.

Bearing in mind that the Serbian economy depends on the imports of raw materials and energy raw materials, it cannot be expected that the commodity imports of Serbia can be reduced if policymakers desire a successful restructuring of the economy, industrial production growth and consistent growth of commodity exports. However, what can be expected is the reduction, perhaps even elimination, of the current account deficit, which should be achieved by a faster growth in exports of goods, surpluses on

the part of services, and an increase in the influx of export-oriented foreign direct investments.

The foreign trade balance share in the gross domestic product

For the needs of the analysis of the competitive position of Serbia's economy it is appropriate here to look back at which groups of products create surplus in the exchange and which percentage of the gross domestic product is represented by these values.

According to the 2004 results, there is only one group of products from Standard international trade classification (henceforth SITC) with which the share of the surplus in GDP value is higher than 1%: non-plated rolled steel products. Among the 47 groups of products that achieved a trade surplus in 2004, there are only two groups with a surplus share in GDP higher than 5% (sugar, and fruits and fruit products excluding juices), plus one group with a 4% share (car tires). The stated products are also the four groups of products with the highest share of exports from Serbia, so we can claim a positive finding in that the most important export products also create the highest surplus.

However, bearing in mind that only 47 groups of products have created a trade surplus that, in total, accounts for only 4.8% of GDP, it can be argued that the value of the created surplus is far too small.

⁷ At the beginning of 2006, after the writing off of the remaining part of the debt by the Paris Club of Creditors, Serbia's foreign debt amounts to around USD 14.5 billion.

2. The Dynamics and Structure of Foreign Trade Exchange

The dynamics and structure of foreign trade exchange by sector and area of activities' classification

The structure of Serbia's commodity exports is dominated by processing industry products, with a 94% share in 2005. This high proportion has been achieved mostly thanks to three areas, the metal, food and chemical industries, which produced one-half of exports of goods in 2005.

2001.		2005.	
Pr. of basic metals	18%	Pr. of basic metals	23%
Pr. of food products and beverages	15%	Pr. of food products and beverages	16%
Pr. of clothing and furs	8%	Pr. of chemicals and chemical products	11%
Pr. of rubber and plastics products	7%	Pr. of rubber and plastics products	8%
Pr. of chemicals and chemical products	7%	Pr. of other machines and devices	7%

Table 2. Share of the most important areas of the processing industry in the commodity export value.

Compared to 2001, there have not been any significant changes in the list of the most important activities, other than a small change in their order. For example, in 2005, the production of clothing, traditionally one of the most important exporting activities, ranked sixth. One noticeable tendency is the growth of the concentration in exports, that is, the growth of the share of some of the processing industry areas. For example, in 2001, the seven most important areas in commodity exports had a share of somewhat over two-thirds, while in 2005 their share increased to 71%. The proportionate growth of these sectors is, on the one hand, the result of their export, but, on the other, resulting reductions in the exports of other activities.

Such occurrences are the consequence of ongoing restructuring processes in the processing industry. Namely, it appears that the areas that have mostly been restructured (e.g., the chemical industry), or where there was a significant influx of foreign capital (e.g., steel production), or cooperation with foreign partners (e.g., the production of car tires), have recorded correlated increases in industrial production and exports. Moreover, preliminary results show

that in 2005, despite the stagnation of the general level of the industrial production, the export of the processing industry grew significantly and that the exchange balance improved precisely thanks to these activities.

It is good that restructured activities are operating successfully and contribute to the equilibration of the foreign trade balance, but this is not sufficient. There is an ongoing process of restructuring other big enterprises as well, after which it can be expected that some of them will also successfully privatize and increase exports. However, what should influence the growth of the commodity export much more - but has been missing so far - are greenfield investments. So far, investments have mostly been directed at service activities and have occurred at modest volume, such that they have not had a more prominent influence on the foreign trade balance and improvements in the commodity export structure.

The dynamics and the structure of foreign trade exchange by SITC sectors

In 2001-2005, commodity exports from Serbia, measured by current dollars, had an average annual growth of 28%. During most of this period, imports' growth rate was higher than exports' growth rate, because of which the indicator of the degree to which imports were covered by exports deteriorated from one year to the next. It is encouraging that this unfavorable trend, judging by preliminary indicators of foreign trade exchange, was broken in 2005. Namely, very high export growth and the stagnation of imports in this year meant that the average growth rate of exports during the entire period 2001-2005 was higher than the average growth rate of imports (26%). At the same time, the extent to which imports were covered by exports, having fallen from 40% in 2001 to only 33% in 2004, reached 43% in 2005.

The dynamics of export growth differed by individual groups of products

We observe that the exports grew by an above average rate were the sectors that are characterized by the primary production or a lower degree of products finalization, while exports of energy raw materials, equipment production, and consumers goods grew at a rate lower than average.

Along with these trends there is a corresponding level of cover of imports by exports. Namely, with all the sectors that have an above average growth rate of exports, this indicator improved in 2005 compared to 2001, and the converse is true, except in the case of animal and vegetable oils and fats,

		Average annual growth rate in the period 2001-2005 (in %)	The cover of imports by exports (in %)	
			2001	2005
0	Food and livestock	30%	82%	132%
1	Beverages and tobacco	44%	13%	48%
2	Raw materials, except fuel	22%	49%	42%
3	Mineral fuels and lubricants	35%	6%	8%
4	Animal and vegetable oils and fats	24%	207%	208%
5	Chemical products	39%	20%	34%
6	Products classified by materials	34%	57%	74%
7	Machines and transportation equipment	19%	27%	17%
8	Various final products	19%	112%	81%
9	Products and transactions, not mentioned elsewhere	-28%	70%	54%
	Total	28%	40%	43%

Table 3. Average annual growth rate of the exports and the cover of imports by exports in the years 2001 and 2004.

Source: Republic's Statistics Office.

where the cover of imports by exports remained at approximately the same level. What is worrying is that in 2005 there were only two sectors where the value of exports was higher than imports,⁸ while with all the others, the degree of the cover of imports by exports was at best 59%. It is important that among the five three-digit SITC groups that have more than 3% share in export value, only one (copper production) has an index of the cover of imports by exports lower than 100. It is especially vital that the most important group, the rolled non-plated steel products, which made up as much as 9.5% of total exports for 2004, have 10 times greater value of exports than imports. If we also take into account the groups which account for 2% or more of exports, there is a higher number of groups whose export earnings are lower than imports, which indirectly speaks to an insufficient degree of competitiveness, in spite of the significance they hold in overall exports. This group includes many products of the textile industry, clothes, medicines, furniture, paper and cardboard.

The variation of average annual rates of export growth of individual sectors compared to the average growth rate of the total export is connected to the change in proportions of these sectors in total exports. This means that the sectors whose export grew with above average speed have also achieved growth in their share of total exports; the converse is also true.

The most important export sectors in 2005 were products classified by materials (which made up more than one-third of total exports), food and livestock, and various final products. What represents major

changes compared to 2001 are the reduction of the participation of machines and transport equipment and various final products in commodity exports, and the increase in proportional significance of chemical products.

The trends mentioned can mostly be marked as unfavorable ones. Namely, even beside the trend of a significant increase in exports, the trade deficit is high, thus leading to the lower level of export/import ratio. The sectors that have for the most part contributed to export growth and which at the same time also record a better cover of imports by exports are predominantly resource-intensive and labor-intensive sectors where, as a rule, there are products with lower value-added and predominantly characterized by price competition in the world market. From the competitiveness point of view, such a situation is unfavorable, for in the structure of exports, there is a reduction in the proportionate share of precisely those groups of products on which it would be desirable to base the future competitiveness of Serbia: technology-intensive products, as well as consumers products sold in markets dominated by competition over quality.

The dynamics and structure of foreign trade exchange by SITC areas

The structure of exports changed somewhat in 2004 compared to 2001. The most important area in exports is not clothing, but iron and steel, while the second and third positions, during both of the years, are occupied by vegetables and fruits, and non-ferrous metals, respectively. The share of the first three areas in the value of total commodity exports in both years

⁸ As can be seen from the table, these include food and livestock, and animal and vegetable oils and fats.

		2001.				2005.			
		Export		Import		Export		Import	
		in 000 USD	% of the total export	u 000 USD	% of the total import	u 000 USD	% of the total export	u 000 USD	% of the total import
0	Food and livestock	270.504	15,7%	331.260	7,8%	779.300	17,1%	591.000	5,6%
1	Beverages and tobacco	12.663	0,7%	95.431	2,2%	54.900	1,2%	115.300	1,1%
2	Raw materials, except fuels	88.629	5,2%	179.870	4,2%	198.400	4,4%	467.600	4,4%
3	Mineral fuels and lubricants	49.948	2,9%	829.989	19,5%	167.300	3,7%	2.034.700	19,2%
4	Animal and Vegetable oils and fats	17.928	1,0%	8.671	0,2%	42.500	0,9%	20.400	0,2%
5	Chemical products	131.847	7,7%	658.705	15,5%	494.400	10,9%	1.467.600	13,9%
6	Products classified by materials	504.887	29,3%	878.189	20,6%	1.613.600	35,4%	2.179.700	20,6%
7	Machines and transportation equipment	241.049	14,0%	892.950	21,0%	480.600	10,6%	2.796.000	26,4%
8	Various final products	357.941	20,8%	320.587	7,5%	709.500	15,6%	879.800	8,3%
9	Products and transactions, not mentioned elsewhere	45.285	2,6%	65.098	1,5%	12.500	0,3%	23.000	0,2%
	Total	1.720.682	100%	4.260.750	100%	4.553.000	100%	10.575.000	100%

Table 4. Share of the sectors in imports and exports in 2001 and 2004. Source: Republic's Statistics Office.

is the same, around one-quarter, and the share of the first five areas is also unchanged, around 35%.

The change in 2005 compared to 2001 reflects the fact that shoes are not in the list any longer, while we find sugar and grains as a group not present in 2001. However, notwithstanding the change in significance of certain areas, it can be concluded that the export structure, analyzed by SITC areas during the period 2001-2005 essentially has not changed, since there is still the dominance of agricultural products, clothing, metals and several more intermediary groups of products. These ten areas with the biggest share of 2005 exports, as compared to 2001, achieved an average annual growth of 35%, which is more than at the level of the entire economy, where exports had average annual growth of 27%.

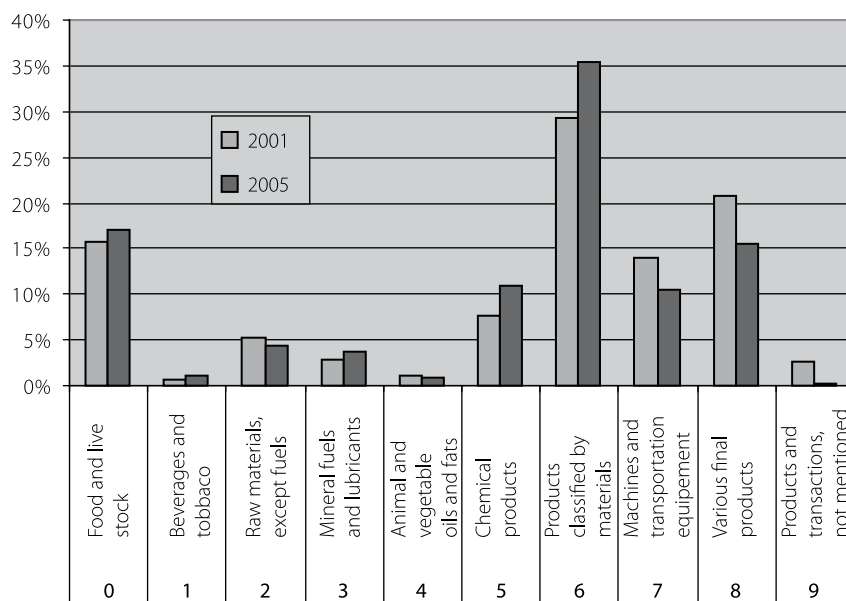
These areas, if taken aggregately, create surplus in trade, which means that the indicator of the cover of imports with export has an above average value. More precisely, in 2005, with these ten areas, 127% of import value was covered by exports (while at the level of overall commodity exchange, this indicator was considerably lower, at 43%). However, even with this, in the group of the ten most important

areas there are as many as six areas which record deterioration in the value of this indicator compared to 2001, which also means that their exports, in an absolute amount, grew more slowly than imports. Such a trend can be taken as one indication of a low level of competitiveness of the entire economy, since even among the most important areas, the dominant export groups are those whose imports grew faster than exports. The remaining four areas in 2005 that had a better cover of imports with exports than in 2001 are grains, sugar, iron and steel, and plastics.

The specialization index of exports and imports

As an indicator of the specialization of the exchange, studies usually resort to the concentration index or the Herfindahl index. If the value of the index is closer to zero, it is considered that the level of specialization is low, and if the value is closer to one, the level of specialization is high. In table 6 there are data given for Serbia, calculated on the basis of the values of exports and imports of the group of products according to the three-digit SITC.

For smaller countries there is a general rule that the value of the specialization index is higher



Graph 1. Participation of individual SITC sectors in commodity exports. Source: Republic's Statistics Office.

in exports than in imports because such countries export a limited number of products and import a large number of items. In the case of Serbia, however, this was not the case in the first two years of the observed period, and this correlation appeared after 2003. Yet, the low level of the index speaks to an unintegrated and undifferentiated character of Serbian exports, and to the lack of a clear specialization in exports. To be sure, the value of the index for exports has increased in 2003 and 2004, compared to 2001 and 2002, but it is still at a relatively low level.

3. The Analysis of the Factorial and Technological Intensity of Foreign Trade

The qualitative characteristics of Serbia's foreign trade exchange

Analysis of the factors of competitiveness of the Serbian economy is performed by segmentation of the groups of products according to 3-digit SITC codes, depending on whether they are exchanged on markets characterized by price or non-price types of competitiveness. For that purpose we used unit values of imports and exports, calculated by dividing the nominal values of imports and exports by the appropriate quantities.

2001.			2004.		
84	Clothing	10,2%	67	Iron and steel	13,6%
05	Vegetables and fruits	8,1%	68	Non-ferrous metals	8,0%
68	Non-ferrous metals	6,2%	05	Vegetables and fruits	5,8%
67	Iron and steel	5,4%	84	Clothing	5,4%
62	Raw rubber products	5,1%	89	Various final products, not-mentioned	4,8%
85	Shoes	4,1%	62	Raw rubber products	4,5%
89	Various final products, not-mentioned	3,8%	04	Grains and products	4,0%
69	Metal products, not-mentioned	3,3%	06	Sugar, sugar products and honey	3,9%
79	Other transportation means and equipment	3,3%	69	Metal products, not-mentioned	3,4%
65	Yarn, fabrics and textile products	3,2%	57	Plastics in primary forms	3,0%

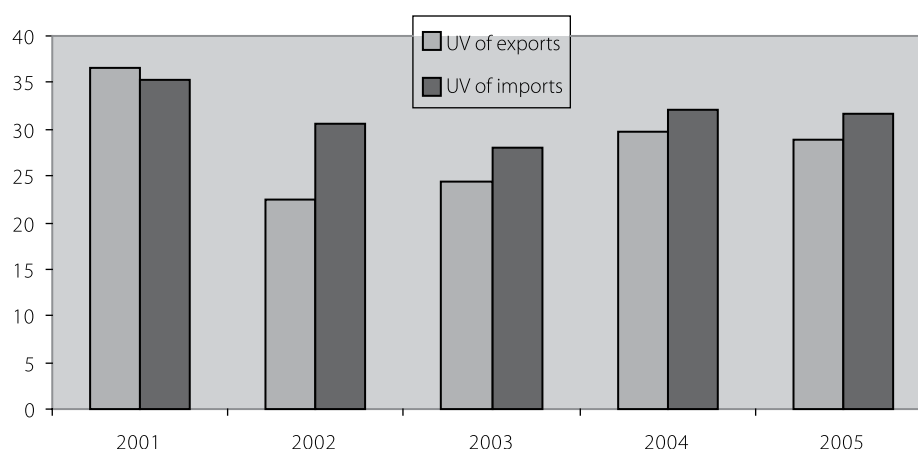
Table 5. Ten SITC areas with the highest participation in exports. Source: Republic's Statistics Office.

Year	H for export	H for import
2001	0,0189	0,0196
2002	0,0185	0,0185
2003	0,0237	0,0183
2004	0,0230	0,0164

Table 6. Herfindahl index. Period 2001-2004.

It should be mentioned that the unit values of imports and exports can point towards a qualitative dimension of competitiveness. Namely, if a country has a higher unit value of exports, it means that it manages to sell the same products as its competitors at higher prices. It signifies that there are certain non-price dimensions of competitiveness which that country has developed and which are more important than the price.

As it can be seen from graph 2, the unit values of exports are lower than the unit values of imports, which is typical both for countries in transition, as well as for the undeveloped countries. The reason is that the export structure of these countries is dominated by raw materials, labor-intensive products and other products of lower processing phases, with a smaller presence of technology-intensive products, which usually have high unit values. The exception in the case of Serbia is 2001, when the unit value of exports was higher than the unit value of imports, because that year was dominated by energy raw materials and other raw materials, which have lower unit values compared to other groups of products.

Graph 2. The unit values of the exports and imports, 2001=100)⁹ Source: Republic's Statistics Office.

⁹The unit values of exports and imports have been calculated on the basis of dinar values of the foreign trade exchanged, deflated by the retails prices index.

¹⁰The following symbols were used in continuation: Px – unit value of exports, Pm – unit value of imports, Qx – export quantity (expressed in kg), Qm – import quantity (expressed in kg).

On the basis of the data on quantities and unit values of exports and imports, it is possible to make a segmentation of the products into four groups, according to whether they are competitive in their prices and quality, or uncompetitive.¹⁰ The analysis has been performed for the groups of products according to the three-digit SITC.

The first segment consists of products where $P_x > P_m$ and $Q_x > Q_m$ apply, which means that, even though the unit values of exports are higher than in the case of imports, these products have higher export quantities than the import ones. For these products, it can be said that they compete successfully, in line with their quality. The second segment, characterized by the price competitiveness, consists of the products where $P_x < P_m$ and $Q_x > Q_m$ apply, which means that the quantities of exports are higher than the quantities of imports due to a lower unit value of exports. The third and fourth segments are characterized by the lack of competitiveness. For the products from the third segment, $P_x > P_m$ and $Q_x < Q_m$ apply, where, due to a higher unit value of the exports, import quantities exceed the export quantities.

With the products from the fourth group, despite the lower unit value of exports, import quantities are higher than export quantities, i.e., $P_x < P_m$ and $Q_x < Q_m$ apply, which tells us there are serious structural problems that must exist in that sector.

The performed analysis shows that the state of the Serbian economy's competitiveness deteriorated in 2004 compared to 2001, when the level and type of competitiveness could also be marked as unsatisfactory. Namely, it can be seen in both years

that the number of competitive groups of products (from segments II and III) is smaller than the number of uncompetitive groups (from segments III and IV). Moreover, the number of competitive groups is decreasing, as well as their share of exports. Namely, in 2004 the share of competitive groups in total exports almost equaled the share of uncompetitive groups, which grew to 45%.

If analyzed by individual segments, it is particularly worrying that the number of groups from the segment of competitiveness with quality has almost been halved, and their share of exports declined to 11% in 2004. It is precisely this segment which should hopefully dominate exports, with products from sectors 8 and 9 of SITC in its structure. However, even when we look at which products dominated in this segment in 2004, it can be noticed that these are predominantly food products and some raw materials, which are mostly products with low value added.

The second segment, with price competitiveness present, even with the reduction in the number of groups, has the same share of exports in 2004 as in 2001. Again, this group of products consists mostly of food products; then come beverages, raw materials, chemical products and metals, as well as some equipment (predominantly driving machines). The existing structure of that sector corresponds to the desirable structure, since there is a presence of raw materials and semi-products, where Serbian products compete with foreign products.

The third segment is made up of products whose export unit values are high, because of which exported quantities are smaller than imported ones. However, in this segment, we can potentially find those groups of products that theoretically can move into one of the competitive segments. Some of them could, by achieving more efficient production and optimization of transportation costs, become price competitive and

move into another segment with a relative increase in the physical volume of exports.

In the fourth segment, which is extremely uncompetitive, we notice that it comprises the largest number of groups of products and also that it has a large deficit in trade which in 2004 was even higher than the value of the overall commodity export. Even with that, this segment has a solidly high share in the exports: in 2004, it amounted to as much as one-quarter. The structure of this group of products varies a lot. There are both those products that are not present in Serbia's exports, and those products which theoretically should have a much greater significance in exports; these are primarily equipment and other final products. Thus, although the groups of products found in this sector are uncompetitive at the moment and generate the largest part of the trade deficit, it remains to be seen if the restructuring process of the Serbian economy and the influx of foreign direct investments will influence the metamorphosis of the nature of their competitiveness. Namely, the only way in which Serbia can establish an adequate structure of trade, a high level of competitiveness, and a sustainable foreign economic position is for some product from this segment, (from among those that generate higher added value) to move into segments I and II, and thereby obtain a significant share in exports.

The analysis of the factorial and technological intensity of the exchange¹¹

When we talk about the foreign trade exchange of processing industry products, depending on the technology used (high or medium) and the intensity of using certain production factors (labor, capital and resources), they can be categorized into several groups: human capital-intensive products, capital-intensive products, labor-intensive products, and resource-intensive products. Some of these groups

segment	year	Number of three-digit groups of SITC	Share in the commodity exports	Balance in millions of USD
I	2001.	20	15%	124
	2004.	11	11%	338
II	2001.	59	43%	302
	2004.	50	43%	482
III	2001.	74	23%	-990
	2004.	79	19%	-3.409
IV	2001.	98	19%	-1.888
	2004.	110	26%	-4.368

Table 7. The segmentation of the groups of products. Source: Republic's Statistics Office.

¹¹ For further description of the methodology, see Competitiveness of the Serbian Economy 2003.

can be further divided, as seen in table 8. The data are calculated for the level of a three-digit SITC.

On the basis of the calculated indicators, it can be noticed that among the export products of the processing industry, there is a domination of labor- and resource-intensive products. In addition, labor-intensive products have lost the importance they had before, and their degree of the cover of imports with exports has diminished. On the other hand, resource-intensive products have significantly increased their share of exports, while the degree of the cover of imports with exports has improved. For labor-intensive products, this is mainly the consequence of the reduction in exports of clothing; for resource-intensive products, these trends are the result of growth in the production of chemicals and metal products. Also, resource-intensive products are the only ones where the indicator of the cover of imports with exports improved more significantly in 2004 compared to 2001.¹² When we talk about human capital-intensive products, their proportion in total exports remains the same, while their degree of the cover of imports with exports deteriorates. From the competitiveness point of view, this is actually a negative indicator, because these are precisely the

products, for which production is dominated by qualified labor and for which, in the world market, there is competition over quality. Bearing in mind the dominant share of the labor- and resource-intensive technologies, the mentioned export structure of the processing industry can be evaluated as unfavorable

4. The Econometric Modeling of the Determinants of Exports and Imports in the Function of Competitiveness Analysis

In this part of the study, we have applied econometric analysis in order to examine if the chosen cluster of macroeconomic variables had any influence on export and import flows of our economy in the chosen period of time and to what extent. We limited this analysis to the period since 2001, which is characterized by the beginning of reforms in all the sectors of the economy. The starting point of observation for the time series is January 2001, and the endpoint is April 2005. This period was preceded by the liberalization of prices, foreign trade and the exchange rate, which took place in the last quarter of 2000 and were thus reflected in

	Share in exports		Cover of imports with exports	
	2001.	2004.	2001.	2004.
Human capital intensive	17,8%	17,6%	0,22	0,13
High technology	5,2%	3,7%	0,30	0,14
Labor intensive	2,5%	1,3%	0,37	0,13
Capital intensive	2,7%	2,4%	0,26	0,14
Medium technology	7,5%	10,8%	0,14	0,12
Labor intensive	4,4%	4,7%	0,19	0,09
Capital intensive	4,9%	6,1%	0,16	0,15
Resource intensive	4,0%	5,2%	0,21	0,27
Other	0,8%	0,8%	0,07	0,04
Other	5,1%	3,1%	0,52	0,16
Capital intensive	1,5%	0,7%	0,09	0,10
Labor intensive	32,7%	24,9%	1,06	0,56
Resource intensive	17,8%	26,3%	0,59	0,64
Poorly	5,3%	3,5%	0,70	0,27
Strongly	12,5%	22,9%	0,55	0,81
Human capital intensive	5,4%	15,6%	0,39	1,18
Other	7,1%	7,3%	0,79	0,49
Other	2,9%	0,8%	0,69	0,46

Table 8. Source: Republic's Statistics Office.

¹² The second group of products where the degree of covering imports with exports is better in 2004 compared to 2001 are capital products. However, besides the fact that the value of this indicator is low, it is a negligible improvement – from a level of 0.09 to 0.10.

the structure of the monitored variables. The total number of 52 observations allows us to apply the chosen econometric approach, without this reflecting more significantly on the reduction in the number degrees of freedom in the examined models.

In the dynamic modeling of a cluster of the chosen macroeconomic variables, we have applied an approach based on the vector-autoregression model (VAR).¹³ A comprehensive approach of modeling a cluster of initial variables using the VAR method enables us to evaluate long-term balancing relations, to identify a cluster of endogenous and exogenous variables, to recognize long-term and short-term influences, and to choose and evaluate the structural model. In short, the VAR approach is based on dynamic modeling of the determinants of exports and imports.

Since it was immediately after the liberalization of the exchange rate that there was a real appreciation of the rate for the dinar, first versus the German mark and then versus the euro, the National Bank of (Yugoslavia) Serbia was subject to pressures coming from the Government of the Republic of Serbia (already by the end of the third quarter of 2001) and from some experts to allow stronger depreciation of the exchange rate in order to improve competitiveness and reduce the high unemployment rate. These requests to solve problems came mainly from the real sector of economy. This sector by itself was unable to resolve these problems. The pressure kept increasing with the dynamics of restructuring the social and public sectors as the main causes of economic inefficiency, especially in those moments when the restructuring process slowed down. The high growth of the current account deficit compared to GDP, which amounted to 3.3% in 2001 and surpassed 13% in 2004, was also used as an argument against the overvaluation of the local currency and its limited influence on the increase in competitiveness of the domestic economy. The causes of growth in the current account deficit, as well as of the trade deficit

in the past period will be further analyzed in the other chapters of this study.

In order to make this part of the analysis complementary to the remainder of the study, we have opted for the econometric analysis of a cluster of variables which represent the basic elements of price and cost competitiveness.

The analysis of exports

The initial cluster of macroeconomic variables¹⁴ in the analysis of export movements consisted of: exports (ex), the real exchange rate of the dinar versus the euro (rer), real unit labor costs in industry (rulc), and the index of industrial production (iip). Initially, the initial cluster of variables also included a variable which approximated the fiscal burden on the economy, but it was excluded from the analysis, since it did not show the expected direction of the correlation with the variables we analyzed. All the data are expressed in logarithmic values and the explanations related to the definition of the used variables are given in the Annex to this part of the study.

After we chose the cluster of variables which can theoretically explain the movement of exports, we implemented the procedure of examining the VAR. All of the observed variables have previously passed the procedure of checking for non-stationariness. The four-member system of VAR equations of the first order is marked by the method of maximum credibility, the test statistics of the track, and the maximum characteristic value in order to establish how many balancing relations are created by the analyzed variables. As shown by the results of the cointegration tests presented in Table 1, the four variables create one stationary balancing relation.

The rating of the normalized cointegration vector (kv) parameters suggested the exclusion of the real unit labor costs in industry (rulc) variable from the cointegration vector. A limitation was imposed on

H0: No cv	Characteristics	Track	Critical value	Statistics of the maximum	Critical value
	Values	Statistics	5%	characteristic value	5%
0	0.514	61.271*	47.210	36.107*	27.070
1	0.342	25.163	29.680	20.937	20.970
2	0.075	4.227	15.410	3.909	14.070
3	0.006	0.318	3.760	0.318	3.760

Table 9. Johansen's cointegration test¹⁵ of the initial cluster of the variable VARs. Remark: the statistics of the track and maximum characteristic value suggest that there is one cointegration vector. Both hypotheses have been tested on 5% level of significance.

¹³ See Johansen, S. (1991).

¹⁴ The econometric analyses of the movement of the domestic exports during 1990's and later were also done in the studies by Jovicic, M. (2002) and the Jefferson Institute (2003), so that the initial cluster of the variables which we analyzed here, but in a different timeframe, is very similar to the one dealt with in the previous studies.

¹⁵ Johansen, S. (1991).

the rated cointegration vector which excluded the *rulc* variable. Its exclusion from the rated vector proved to be justified, so that in the next iteration we obtained balancing relation rates with the theoretically expected sign and size.

A unique cointegration vector [$kv=ex-0.86rer-1.88iip+3.30$]. was rated. The rated vector proved to be significant only in the equation of exports, which means that the real exchange rate and industrial production index are poorly exogenous variables compared to the rated parameters of a long-term stationary balancing relation, which allowed us to express the growth rate of exports in the form of an equilibrium correction model (ECM).

The simple least squares method was used for the rating of the structural ECM of the growth rate of exports in the period from January 2001 to April

of the exports growth rate point toward satisfactory statistical features of the rated model. The Breusch-Godfrey (BG) and Jarque-Bera (JB)¹⁶ tests confirm the lack of serial correlation, that is, of the feature of normal distribution in the residuals of the rated model. According to the rated balancing relation, we can conclude that export growth is determined by the depreciation of the real exchange rate and by the growth of industrial production. The movement of the direction of dependence in the cluster of the variables shows that the movement of industrial production is to a certain degree determined by movement of the real exchange rate, and that output and the real exchange rate represent significant explanatory variables in foreseeing future export dynamics.

In order to establish the importance of each of the analyzed variables in the explanation of the total variability of the initial VAR, we have decomposed the rated variance of the prognosis error by applying

Variable	Parameters rating	t-statistics	Level of test significance
Const.	0.04	2.47	0.02
$cv_{t-1}=(ex-0.86rer-1.88iip+3.30)_{t-1}$	-0.71	-5.93	0.00
Δex_{t-2}	-0.10	-2.08	0.04

Table 10. ECM model of the growth rate of exports. Dependent variable: $\Delta ex^t = ex^t - ex^{t-1}$, $t=1, \dots, T$.
Remark: $\bar{R}^2=0.55$; $BG(2)=3.50(0.17)$; $JB=3.91(0.14)$

2005. The rating of the parameters of adjustment of exports to the balancing relation with the real exchange rate and the industrial production is highly statistically important in the model [-0.71(0.00)]. The rating of the parameters of adjustments, if expressed in a percentage (71%), can be interpreted as the rate of monthly adjustment of exports relative to the previously achieved balancing value created with the real exchange rate and industrial production. The existence of the export growth rate with the delay of two periods in the rated model points to the importance of inertia in the movement of the exports, which goes to show that a smaller portion of exports is determined by established dynamics. We have also included an artificial variable into the model that takes a non-zero value in January 2005 in order to encompass the structural change caused by the introduction of the value added tax and the temporary slowing down of economic activity.

Standard errors in the rating of the ECM parameters of the growth rate of exports have been corrected using White's procedure in order to remove the influence of the heteroskedasticity of the residuals. The specification tests of the rated ECM

the Cholesky procedure. The application of this procedure supposes that the elements of the rated covariation matrix of the residuals are adjusted by the number degrees of freedom ($T-k$), where T is the total number of observations, while k is the number of rated parameters per each equation of the VAR. As the relative contribution of the variables to total variability depends on the sequence of introducing variables into the procedure, we have established two sequences: (1) $rer \rightarrow rulc \rightarrow iip \rightarrow ex$, and (2) $rulc \rightarrow iip \rightarrow rer \rightarrow ex$. According to the results which are represented in Table 3 it can be concluded that in the movement of exports, there is significant inertia (which is partially also confirmed by the ratings of the ECM of the growth rate of exports). According to the first sequence, the real unit labor costs in industry play a role in total variability with 24.3%. However, with a change of the sequence of the variables, the real exchange rate explains more than one-quarter of the total variability, while unit labor costs have a significantly smaller share (10.4%). The change of the sequence of the variables does not significantly change the role of industrial production, which contributes to total variability with around 20%. So, it can be concluded that production has a very stable

¹⁶ The level of significance is in parentheses beside the value of the test.

influence in explaining changes in the movement of the exports. The variance of the prognosis error is decomposed after the prognosis period of two years.

The conclusions which come out of the above analysis of export movements do not imply that the causes of uncompetitiveness of the Serbian economy are to be found only in the overvaluation of the dinar. In other words, the causes of uncompetitiveness should not be sought only in the relative, price, and cost factors of competitiveness, which were encompassed by this analysis, but also in the difficulties for domestic industry (which finds it hard to come to terms with the market conditions in the country and abroad), the undeveloped service sector, problems related to privatization and restructuring of the social and public enterprises, the disproportionate ratio between current employment and the degree of economic activity, expensive credits and limited

cointegration tests identified a unique cointegration vector created by four observed variables $kv = [im, iip, cpi, rer]$.¹⁷ However, it appeared that the rating of the real exchange rate does not have the expected sign, and thus a limitation was imposed on the rated cointegration vector in order to examine justifiability of excluding the real exchange rate from the cointegration vector. The quotient test of the credibility confirmed the justifiability of leaving the exchange rate out of the rated vector $[LR(1) = 5.51(0.01)]$.

Using the maximum credibility method in the four-member system of the VAR equations, after the imposed limitation which excluded the real exchange rate, we rated the cointegration vector $[kv = im - 0.495iip - 0.885cpi]$. The rated vector is significant in the equations we used in order to model the growth rate of imports and the growth rate of industrial

Rating of random shocks in the variables of the initial VAR	The first sequence of the variables (in %)	The second sequence of the variables (in %)
Ex	44,2	44,2
Rer	13,8	25,2
Rulc	24,3	10,4
iip	17,7	20,2
Total	100,0	100,0

Table 11. The decomposition of the variance of the prognosis error of the variable export. Remark: The variance of the prognosis error was decomposed after the period of 24 months. The VAR model of the first order in the levels of variables without limitations was rated.

access to financial sources, and other factors which are associated with a slow and insufficient institutional and structural adjustment, as will be shown by the microeconomic analysis of a representative sample of domestic businessmen.

The analysis of imports

In the econometric analysis of imports, we started from a cluster of the following variables: imports (im), index of industrial production (iip), consumer prices index (cpi) and the real exchange rate of the dinar versus the euro (rer). All of the variables were observed in a unique period: January 2001 – April 2005. The data are expressed in logarithmic values, while the explanations regarding the manner of defining the analyzed variables are to be found in the Annex.

When analyzing imports, we again applied the VAR method. Initially the VAR of the third order on a four-variable cluster was rated. The Johansen

production, by which two endogenous variable in the system of equations were identified. The simultaneous dependence of imports and industrial production created a need for rating two separate structural ECMs.

Using the method of two-degree smallest squares (2DSS) we rated the structural ECM of the import growth rate. The ratings of the models are given in Table 4. The long-term balancing relation created by imports, the index of industrial production, and consumer prices is very significant for explaining the balancing movement of imports in the analyzed period. Other parameters of the imports equation we could interpret in the following way. The observed period was characterized by a particularly high level of domestic demand, both for imported and for domestic products, which justifies a positive connection between industrial production and imports. Although short-term dynamics are not significant in the rated period, which can be explained by the fairly short time period under observation, we

¹⁷ The initial cluster of variables also included a variable we used in order to approximate the degree of openness of the domestic economy (op), but because of unsatisfactory statistical features, it was excluded from the analysis

kept the rating of the real exchange rate. The explanation of the real exchange rate presence in the model has its economic justification. Namely, as the real exchange rate is created by correcting the nominal exchange rate with relative prices, it can be expected that higher prices of imported goods compared to the prices of domestic products should cause decrease in domestic demand for imported goods compared to domestic demand for domestic products. However, this specified connection between imports and the real exchange rate, though economically justified, was not significant during the analyzed period and is the reason for the low level of significance of the real exchange rate in the model.

The 2DSS method was also used for rating the ECM of the industrial production growth rate. Rating results are shown in Table 5. The industrial production growth rate model confirmed a high dependency on imports by domestic industry, which is manifested through a presence of imports in the rated model of the industrial production growth rate. On the basis of the rated model, it can also be seen that, on the one hand, production adjusts to the balance it creates with imports and domestic prices, and on the other hand, there is a one quarter delay in adjusting production to its own dynamics. Therefore, there are no prominent short-term dependencies in the industrial production growth rate, except the adjustment to dynamics which date from the previous period.

The rated structural ECM models of the growth rate of imports and the industrial production growth rate also include an artificial variable which takes a non-zero value in January 2005 in order to model the structural change in exports, expressed through

a drastic decline in the value of imports compared to the end of the previous year.

The specification tests of the ECM models of the growth rate of imports and the industrial growth rate point toward satisfactory features of the rated models. When rating both models, we used White's correction of the standard error ratings for parameters in order to exclude the influence of heteroskedasticity of the residuals. The test of the absence of autocorrelation in the residuals in both models confirms the absence of mutual correlation, while the JB normality test confirms the supposition that the residuals are normally arranged.

Since it is very difficult to interpret the ratings of the VAR parameters, we have again chosen the method of decomposing the prognosis error variance in order to establish the contribution of the analyzed variables to the explanation of the total variability of imports. In the decomposition procedure for error variance of the rated prognosis after a period of two years, two sequences of the variables were used: (1) $iip \rightarrow rer \rightarrow cpi \rightarrow im$, and (2) $rer \rightarrow iip \rightarrow cpi \rightarrow im$. However, as the results in Table 6 show, the change in the sequence of variables did not influence more significantly their contribution to total variability. By using the influence of random shocks in the analyzed variables on the error variance of the total prognosis, it is possible to perform a ranking of the variables' significance, which moves from inertia of imports, via industrial production, to domestic prices and the real exchange rate (Table 6).

On the basis of the rated structural models, it showed that imports were caused by an excessive growth of domestic demand. Industrial production dictated one part of import growth, while the other part came from growth in the demand for imported

Variable	Parameters rating	t-statistics	Level of test significance
Const.	2.68	2.98	0.00
$Kv_{t-1}=(im-0.50iip-0.88cpi)_{t-1}$	-0.66	2.88	0.00
Δiip_t	2.19	2.00	0.05
Δrer_{t-2}	-2.31	1.58	0.11

Table 12. ECM model of the imports growth rate. Dependent variable: $\Delta im^t = im^t - im^{t-1}$, $t=1, \dots, T$.

Remark: $\bar{R}^2=0.42$; $BG(5)=1.91(0.12)$; $JB=3.23(0.20)$.

Variable	Parameters rating	t-statistics	Level of test significance
Const.	1.83	5.14	0.00
$Kv_{t-1}=(im-0.50iip-0.88cpi)_{t-1}$	0.17	3.81	0.00
Δim_t	0.12	3.23	0.00
Δiip_{t-3}	0.46	4.64	0.00

Table 13. ECM model of the industrial production growth rate. Dependent variable: $\Delta iip^t = iip^t - iip^{t-1}$, $t=1, \dots, T$.

Remark: $\bar{R}^2=0.75$; $BG(7)=1.84(0.13)$; $JB=0.24(0.89)$

consumer products, which was not covered by domestic production. As we have seen from the rated model, the real exchange rate did not take over the role of the correction factor for imports. For that reason, it was important to include in the analysis a variable that represents the approximation of the degree of liberalization of trade exchange. However, the variable we used to measure the degree of openness of domestic economy, both for the short timeframe in which we analyzed the imports, and for its character and the method of its creation, did not meet the expected suppositions in the initial system of the VAR equations. But, we have accorded a certain significance to it by separating it from the equation system and by separately analyzing its connection to imports.

The implementation of the Engle-Granger (EG) test of non-stationariness of the static regression residuals¹⁸ confirmed the hypothesis that imports and the degree of openness form a stationary linear combination. The critical value of the EG test on the 5% level of significance for the model with a constant amounts to [-3.46], thus confirming the cointegration between imports and the degree of openness.

By using the ONK method we rated a simple ECM with two variables. The rating results are shown in Table 7. The rated balancing relation in the model was replaced by the residuals from the previously rated linear regression of imports raised to the exponent of openness measured by the share of foreign trade volume in the total value of gross domestic product. The liberalization of foreign trade and the decrease in tariffs for certain imported products, along with other factors that were not covered by this analysis, influenced the increase in imports during the observed period. However, the presence of the value for imports in the rated model with a delay of four months confirms the previous result, which showed that a good part of imports adjusts to the proper dynamics from the previous period.

Rating of random shocks in the VAR variables	The first sequence of variables (in %)	The second sequence of variables (in %)
zlm	46,6	46,6
Rer	10,4	10,5
Cpi	20,1	20,1
lip	22,9	22,8
Total	100,0	100,0

Table 14. The decomposition of the error variance of the prognosis regarding variable imports. Remark: The variance of the prognosis error was decomposed after a period of 24 months. The VAR model of the third order in the levels of variables without limitations was rated.

5. The Foreign Trade Partners of Serbia

The largest share of Serbia's foreign commodity exchange is with the European Union. Namely, during 2005, the EU accounted for a 54% share in commodity exports from, and a 50% share in commodity imports to, Serbia. This emphasizes the importance of two very important export markets for Serbia - Italy and Germany - where almost one-quarter of total commodity exports from Serbia are marketed.

Next to the European Union, surrounding countries are the most important foreign trade partners of Serbia, such that their total share of Serbian exports is a little over one-third, while imports from these countries amount to around 10%. Among neighboring countries, Serbia has a constant surplus in exchange with Bosnia and Herzegovina and Macedonia.

Under the auspices of the Stability Pact, the countries from southeastern Europe have concluded bilateral free trade agreements among themselves, agreements which should lead to the creation of a Southeast Europe Free Trade Area (SEFTA). The argument for emphasizing mutual trade exchange among these countries is, on the one hand, the pacification of the region through encouraging

Variable	Ocena parametra	t-statistica	Level of test significance
Const.	0.02	1.04	0.30
$U_{t-1}=(im-1.35op-4.98)_{t-1}$	-0.20	-2.31	0.02
Δop_t	1.16	6.98	0.00
Δim_{t-4}	-0.19	3.56	0.00

Table 15. ECM model of the imports growth rate expressed in the function of openness. Dependent variable: $\Delta im^t = im^t - im^{t-1}$, $t=1, \dots, T$. Remark: $\bar{R}^2=0.67$; $BG(1)=1.19(0.27)$; $JB=1.18(0.56)$.

¹⁸ The critical value was taken over from Mackinnon, J. G. (1991).

Rank	Partner	First most important subgroup	Second most important subgroup	Total share
1	B&H	Beer 4%	Biscuits, wafers etc. 3%	7%
2	Italy	Sugar 19%	Shoes 7%	26%
3	Germany	Raspberries (frozen or thermally treated) 12%	Copper plates 4%	16%
4	Macedonia	Biscuits, wafers etc. 3%	Lignite 2%	6%
5	Slovenia	Aluminum plates 13%	Sunflower (seed or unrefined oil) 4%	16%
6	Russia	Floor covers 22%	Medicines 16%	38%
7	Croatia	Sunflower (seed or unrefined oil) 7%	Etilen 4%	11%

Table 16. The share of the two most important SITC subgroups in the exports value, per most important export markets in 2004

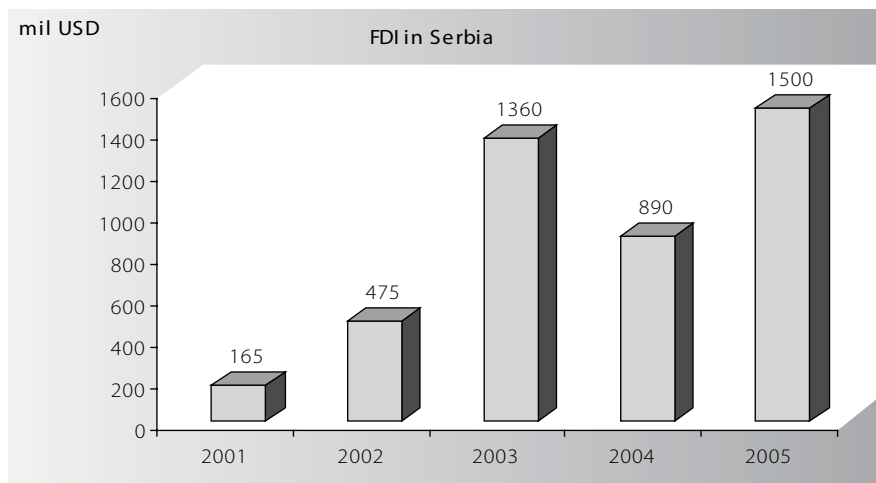
economic cooperation, and, on the other hand, such cooperation should represent some kind of preparation of these countries prior to joining the European Union.

In regard to other important foreign trade partners, such as Russia, China, the USA, and Ukraine, their significance is mainly related to their share of Serbia's imports; the value of Serbia's exports to these countries is, though growing, mostly not very high. The exception is Russia, to which 5% of the value of Serbia's commodity exports were marketed during 2005, but that share is negligible compared to the importance of imports from Russia, which amounted to as much as 16%.

If we observe concrete groups of products which are exported to some countries, it can be concluded that exports to developed countries are more concentrated. Namely, in 2004, the export of the most important subgroup of products (4 digit SITC) to specific countries in the European Union was never less than one-tenth of total export value.

The export is particularly concentrated in the case of Russia, which tells us there are a limited number of products that managed to reach that market. On the other hand, in the case of neighboring countries in transition, it can be noticed that export structure is diversified. For example, the most important group of products exported to Macedonia accounts for only a little over 3% of exports to that country.

Another striking tendency is that exports to the countries of the European Union centers to a great extent on enterprises that are directly (through ownership) or indirectly (through some kind of a cooperation agreement) linked to enterprises originating in those respective countries. Specifically, we mention the Aluminum Rolling Mill from Sevojno, which was sold to a Slovenian investor, and about loan jobs of making shoes which Serbian enterprises do for their Italian partners.



Graph 3. Foreign direct investment in the period 2001-2005.

6. Direct Investments and Competitiveness

Although quite a number of foreign investors showed interest in investing in Serbia after 2000, the influx of foreign direct investments (FDI) in 2001 was relatively modest (\$165 million), which can be explained by perceptions that the investment climate was still considered to be unfavorable at that moment. With the adoption of a whole list of new laws by the Parliament of Serbia, a legal framework for FDI was created. New laws, accelerated reforms, and intensification of the process of privatization, resulted in visible growth in FDI. With the aim of creating as attractive environment for FDI as possible, the Serbian government reduced income taxes for enterprises from 14% to 10% in September 2004.

On receiving the credit rating BB- for long-term state bonds and B for short-term credits by the American agency Standard & Poor on 18 July 2005, Serbia was able to enter the investment map of Europe and world. Since 2001, Serbia has attracted almost 4.5 billion dollars of foreign investment, and in 2005, there was a record influx of 1.5 billion dollars.

It is clear that out of the total amount of foreign investment that entered Serbia, a dominant part came via privatization, although more recently, there have been more frequent greenfield investments and acquisitions. The influx of investments will keep coming to a significant degree through privatization, but in the future, there will be a natural decline in privatization inflows and a necessary shift toward greenfield investments. That is the type of investment Serbia needs, but for such projects, it is not easy to get foreign investors interested when the country is still perceived to be facing transition problems. So far, the inflow from greenfield investments has dominantly been directed at the service sector, especially trade and banking, while the volume of investments in the processing industry has been smaller. It is expected that what foreign investors will find interesting in the coming period will be the privatization of hotels, dependent enterprises from metal industry, fields of telecommunications, energy, construction industry, as well as transport potential. It will be particularly important to provide inflows for export-oriented greenfield projects, but that will be rather difficult, because that kind of investment is most sensitive to the overall investment environment.

The experience of other countries in transition testifies to the importance of FDI directed at export-oriented sectors and shows that such investments were the main factor of improving competitiveness in each case. The Czech Republic and Hungary are examples of countries in which foreign investment was one

of the main generators of change in the structure of the economy, and they completely transformed their structure of exports compared to the beginning of the transition process, in favor of capital-intensive and technology-intensive activities.

In the case of Serbia, there are still no indicators that foreign investment has had a more significant impact on the change of export structure, but data show that it certainly has had a strong impact on growth in export value. The most obvious example is the export of steel from the only Serbian steelworks, now owned by American company US Steel. Namely, ever since the steelworks was taken over, the production and export of steel record an increasing, dynamic growth. In 2005, the iron and steel sector of the Standard International Trade Classification was identified as the most significant part of Serbia's commodity exports, amounting to 13.6%. The value of steel exports is one-third higher compared to 2004 (measured by current dollars), while the surplus of foreign trade exchange of steel products was almost 3.5 times higher than in 2004, reaching USD 210 million.

Appendix 1: The explanation of the data used in the analysis of the determinants of the exports and imports

The data were observed in the period from January 2001 to April 2005, which means that each variable consists of 52 monthly observations. The indexes were calculated relative to a permanent base where January 2002 = 100.

1. The export of goods (ex) is expressed in millions of dinars. The data on the monthly values of commodity exports were taken from the publications of the Republic Institute for Statistics of Serbia.
2. The import of goods (im) is expressed in millions of dinars. The data on the movement of imports of goods per month were also taken from the monthly publications of the Republic Institute for Statistics of Serbia.
3. The inflation growth rate (inf) represents monthly growth of consumer prices and is obtained from the regular monthly statements of the Republic Institute for Statistics of Serbia.
4. The price index of the producers of industrial products (ppi) was taken from the publications of the Republic Institute for Statistics of Serbia.
5. The de-seasoned index of industrial production (iip) is the monthly index of industrial production from which the influence of the seasonal factor was excluded through the standard procedure of rating seasons' indexes in a multiplicative model of the time series. The indexes of industrial production were taken from regular monthly statements of the Republic Institute for Statistics of Serbia.
6. Real gross wages in industry (rwb) are expressed through the ratio between gross wages in industry and the prices of producers of industrial products. In June 2001, the method of calculating average wages was changed, so that the data from the previous sample period were estimated using the method of trend interpolation. The data on average gross wages and the index of the producers in industry were taken from regular monthly reviews of the Republic Institute for Statistics of Serbia.
7. The number of employees in industry (em) represents the state of the number of employees in industry at the end of the period. The monthly data on the number of employees in industry were taken from publications of the Republic Institute for Statistics of Serbia.
8. Productivity in industry (pr) is expressed through the ratio of the variables for the de-seasoned index of industrial production (the indexes were weighted with the prices of producers in industry) and the number of employees in the industry.
9. Real unit labor costs in industry (rulc) are expressed through the ratio between real gross wages and productivity.
10. We looked at three different variables of the real exchange rate of the dinar versus euro, depending on the use of deflators (growth rate of the prices of industrial products, the inflation rate in Serbia, and the inflation rate in the euro zone). We opted for the real exchange rate (rer) expressed in the nominal medium exchange rate, which was adjusted with the ratio between the inflation level in the euro zone and domestic prices, for two reasons: (a) the real exchange rate thus created showed the highest degree of correlation with import and exports, of 89% and 83%, respectively, and (b) around 50% of foreign trade exchange takes place with the EU countries, out of which a significant part relates to countries in the euro zone. The data on exchange rates were observed at a monthly level and they were taken from the National Bank of Serbia, while the monthly data on inflation rates were taken from the Republic Institute for Statistics of Serbia and EUROSTAT.
11. The degree of openness of the domestic economy (op) is a variable created through the ratio of foreign trade commodity exchange value and gross domestic product, and represents a kind of approximation of import tariffs. The ratio between the degree of openness of the economy and the increase in tariffs is in reverse proportion. Lower tariffs increase the openness of the domestic economy, which means that, empirically, it can be expected that the reduction of tariffs would result in an increase of imports and depreciation of the real exchange rate. We introduced into the analysis a variable used for measuring the degree of openness of the domestic economy in order to measure the effects of the liberalization of the foreign trade exchange regime, a process that started in December 2000 with legal changes.¹⁹ The data on the value of gross domestic product were followed on the

quarterly level only until recently, so we disaggregated quarterly to monthly data. The variable on the basis of which we disaggregated quarterly values of gross domestic product is the index of industrial production. A better approximation of the monthly data would be obtained by using variables which created the expenditures side of gross domestic product, but our statistics do not have such data at a monthly level.

12. Fiscal revenues (fr), that is, total public revenues, consist of budget revenues and social insurance fund revenues, and are expressed in current dinars. Since these revenues encompass a wide spectrum of tax revenues, they are only a rough approximation of the level of fiscal burdening. A better approximation of the total fiscal burden on industrial producers would be obtained if the corresponding part of fiscal duties were observed per unit of physical volume of production. Data on the value of revenues from January 2001 to December 2002 were taken from the publications of the National Bank of Serbia, and for the period from January 2003 to April 2005 from the Ministry of Finance. The changes in the level of tax rates which took place during the analyzed period, that is, the abolition or the introduction of taxes, contributed to a certain degree to structural changes in that time series.

¹⁹ See G17 Institute and ISSP (2004) for the characteristics of the process of foreign trade liberalization in Serbia and Montenegro.

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2. Trade Map of Serbia

7. Introduction

This chapter seeks to identify the microeconomic bases of Serbia's competitiveness. It tries to establish which particular products and sectors of Serbia's economy are successful in penetrating foreign markets. A vast theoretical literature and several databases were consulted for the appropriate methodology. We use the methodology developed and applied by the International Trade Center (ITC) from Geneva.¹ This methodology is most suitable because it produces desirable results in listing most export performance sectors and products in the Serbian economy without requiring vast analytical resources and time-consuming methodologies, such as General Equilibrium Models. ITC is an intergovernmental organization under the auspices of its parent organizations – World Trade Organization (WTO) and United Nations (UN), the latter represented by the UN Conference on Trade and Development (UNCTAD).

One product offered by ITC is the Country Market Analysis Profile (Country Map) that explores the foreign trade profile of each national economy, including countries that are not members of the International Trade Center. Strategic market research is used to gauge the effectiveness of national and sectoral trade performance and identify priority products and markets for trade development.² A Country Map consists of six methods for assessing the foreign trade profile of a national economy. In this chapter, two of these methods will be employed.

One of the tools in the Country Map is the Trade Performance Index (TPI). The tool assesses and monitors the multidimensional export performance in the context of competitiveness of countries by highlighting the principal export sectors. The other tool is National Export Performance (NEP). As an aggregate set of indices, it assesses export performance of national economies in terms of the product

composition of exports, dynamics of international demand, and growth patterns of leading export products.

These two tools from the Country Map assess the present situation in the export performance of a national economy. They also capture dynamic changes in the trade environment for the preceding four years. However, this dynamic component is based on historical data and cannot yield more information on sectors and products that may be critical in the export structure of a particular national economy. Many theories suggest that comparative advantages of a particular country often change over time, so national economies as an aggregate matter are dynamic in their international specialization.³ Changes in comparative advantage are due to changes in natural predisposition, trade regimes, world market structures, and so on. But a methodology that could specify which sectors and products may be most critical for future exports is limited. One can only try to speculate on the analysis of future changes in demand, trade regimes, and market conditions.

These methods, but also the latest results of International Trade Center are employed in this research. This means that the Trade Performance Index is calculated for Serbia & Montenegro⁴ for 2004 based on the most recently available data from 2002, and the National Export Performance for Serbia & Montenegro is calculated for 2005 based on the most recently available data for 2003. The indices for Serbia and Montenegro will be used to analyze the results of Serbia's export record. We consider this approximation to be acceptable, bearing in mind that the economy of Serbia accounts for 92-95% of the combined economy of Serbia & Montenegro. The ITC does not have a direct source of export data for Serbia & Montenegro, because the country is not a member of the ITC, so it used "mirror statistics,"

¹ For more information about the methodology and the results for other countries, see the International Trade Center website at www.intracen.org. ITC offers many more tools and application for governmental and enterprise use.

² International Trade Center, "Country Market Analysis Profiles: User Guide," (Geneva: ITC, April 2003) 1.

³ See Stephen Redding, "The Dynamics of International Specialization," Paper no. 2287 (London: Centre for Economic Policy Research, November 1999).

⁴ Serbia is a member of the State Union of Serbia & Montenegro, which, until May of 2006, was still formally an international actor and appears in some international organizations under this name. However, Montenegro is a small economy accounting for no more than 5% of GDP of the State Union. Therefore, the data presented here refer mostly to Serbia.

which means that ITC experts drew on import data supplied by Serbia's partner countries to calculate Serbia's export data. The ITC data used in calculation of indices for Serbia and Montenegro are compared with data from official Serbian sources, and help to comment on the acceptability of the results.

8. Sectors Dominating Serbian Exports

In order to evaluate properly the sectors playing the significant part within Serbia's export structure,

and Montenegro, utilizing 2003 statistics in static indicators as well as data from the 1999-2003 period to enable dynamic analysis. According to the TPI methodology, ITC calculated the indicators and composite ranks for 13 observed sectors of the economy of Serbia and Montenegro, such as absolute change of world market share, a current index, and change index. The figures are presented in the table below.

The data contained in the first column of the table measure the degree of change of world market

SECTOR	Absolute change of the world market share		Current Index	Change Index
	% points p.a.	Rank	Rank	Rank
Fresh food	0,0014%	59	77	9
Processed food	0,0109%	24	77	14
Wood product	0,0004%	59	63	35
Textile	0,0017%	40	73	20
Chemical products	0,0021%	34	64	64
Leather products	0,0114%	20	56	28
Primary production	0,0073%	30	59	72
Non-electric power machines	0,0012%	42	43	44
Electronic components	0,0007%	48	56	81
Transportation equipment	- 0,0008%	72	44	11
Clothing	0,0045%	31	57	37
Miscellaneous manufacturing	0,0029%	43	73	80
Minerals	0,0021%	70	84	1

Table 1. Indicators of Trade Performance Index for Serbia and Montenegro (Yugoslavia, Fed. Rep.) for the 2003 and 1999-2003 periods. Source: International Trade Center (ITC), according to the figures computed on the basis of COMTRADE data base of UN Statistics Division.

the tool developed by the International Trade Center (ITC), known as the Foreign Trade Performance Index (also known as the Trade Performance Index, or TPI) is used. The index computes the degree of competitiveness and export diversification by way of comparing trade outcomes with other national economies under review.⁵ Detailed overview of trade performance index methodology is included in this chapter as appendix 1. The method represents one pattern of strategic trade analysis. An increasing number of classical trade economists have directed their quantitative analysis precisely towards micro-level theory, as exemplified by international trade theories advanced by business economists.⁶

This chapter analyzes the results computed by ITC by applying the TPI method for the period commencing in 1999 and expiring in 2003. ITC calculated these results from data referring to Serbia

share exhibited by each export sector of the Serbian economy. As may be observed, all sectors, excluding transportation equipment, increased their world market share respectively. The leather products sector reports the most significant increase, totaling 0.0114%. That sector ranked 20th in 2003 when rated according to world market share growth in comparison to the other reviewed sectors. Also, the leather products sector displayed significant export performance according to the ITC analysis based on 2002 statistics. The overall condition of export competitiveness showed significant improvement, which is confirmed by the analysis utilizing data referring to the 1999-2003 period. Only one sector reports decline in terms of world market share, which can be attributed to the fact that this analysis excluded to a great extent the preceding years when trade activities were hit hard by military operations and political sanctions. The

⁵ International Trade Center, "The Trade Performance Index," background paper (ITC: Geneva, April 2000) 3.

⁶ One example is James R. Markusen and Anthony J. Venables, "A Multi-Country Approach to Factor-Proportions Trade and Trade Costs," NBER Working Paper Series, Working Paper no. 11051 (New York: National Bureau of Economic Research, January 2005), accessed on the Internet October 15, 2005 at <http://www.nber.org/papers/w11051>.

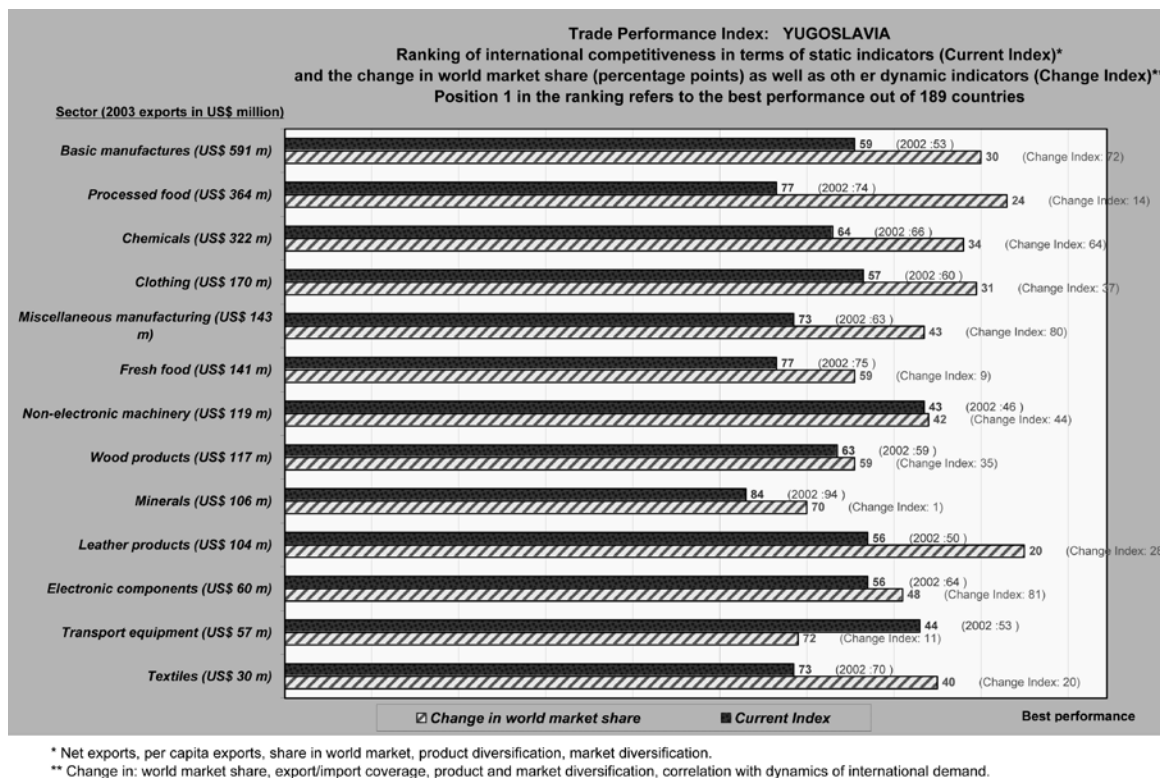


Chart 1: Results of 2003 Trade performance index for Serbia and Montenegro. Source: International Trade Center.

second leading sector in terms of export performance of Serbian economy is the food industry sector, achieving the best score according to analysis of 2002 data.

The second column rates sectors according to the Current Index as a measure of current international competitiveness and export performance of the Serbian economy. Sectors were subject to review by comparison to similar sectors of 189 other national economies worldwide. The best rated national sector for Serbia (on 2003 data) in terms of competitiveness was that of non-electric power machines, ranking 43rd in comparison to the same sector of the other 188 national economies subject to review.

The data in the third column provide sector ratings as a Change Index computed for the 1999-2003 period. These figures indicate international competitiveness and export performance of the observed sectors from a longer term perspective. On this dynamic index, the best results for international competitiveness and export performance were accomplished by the minerals sector -- which ranked 1st among the minerals sectors of 189 other countries. Such outstanding performance was driven largely by a sudden increase in aluminum exports.

Data contained in the table may be reformulated as a chart. Sectors in the following chart are arranged in descending order in terms of total export value accomplished in 2003, regardless of overall competitiveness level. The first horizontal bar shows the Current Index rating, while the second horizontal bar reflects the change of world market share, followed by the respective Change Index score displayed in parentheses.

The sector accounting for the largest share in Serbia's export structure in 2003 was basic manufacturing. It ranks only 59th among 189 countries measured by the current index. It ranks 72nd, as measured by the change index. The next best rated Serbian export sectors, in terms of international competitiveness, based on 2003 statistics and according to the ITC 2005 analysis, were the sectors of non-electric power machines, transportation equipment and leather products. The table below shows more detailed figures regarding ITC analysis of these sectors, arranged by separate indicators. Appendix 2 contains results for remaining sectors.

Change in World Market Share represents one of the indicators encompassing both indices in the TPI toolkit, and is of crucial importance in competitiveness analysis. The results referring to each analyzed sector

Indicators	YUGOSLAVIA		Non-electronic machinery		Transport equipment		Leather products	
			Value	Rank (107)**	Value	Rank (97)**	Value	Rank (84)**
General profile	G1	Value of exports (\$ 000)	119'439		56'807		103'516	
	G2	Trend of exports (99-03) p.a.	29%	19	10%	63	40%	16
	G3	Share in national export	5%		2%		4%	
	G4	Share in national import	14%		8%		3%	
	G5	Average annual change in per capita exports	13%	31	-3%	81	19%	6
	G6	Relative unit value (world average = 1)	1.5		0.7		3.1	
	G7	Average annual change in relative unit value	-2%		-10%		12%	
Position in 2003 for Current Index	P1	Value of net exports (\$ 000)	-697'719	64	-414'700	54	-51'715	64
	P2	Per capita exports (\$/inhabitant)	11.2	73	5.3	81	9.7	46
	P3	Share in world market	0.02%	58	0.01%	69	0.11%	47
	P4a	Product diversification (N° of equivalent products)	52	18	14	5	6	33
	P4b	Product spread (concentration)		24		15		30
	P5a	Market diversification (N° of equivalent markets)	12	20	11	12	2	73
	P5b	Market spread (concentration)		48		39		64
Change 1999-2003 for Change Index	C1	Sources	Relative change of world market share (% p.a.)		25.36%		12.72%	
			Competitiveness effect p.a.		4.92%		5.73%	
			Initial geographic specialisation p.a.		4.57%		3.80%	
			Initial product specialisation p.a.		4.30%		0.44%	
			Adaptation p.a.		-8.72%		2.75%	
	C2	Trend of import coverage by exports	-12%	96	-8%	78	1%	22
	C3	Matching with dynamics of world demand		64		7		61
	C4a	Change in product diversification (N° of equiv.		18		16		43
	C4b	Change in product spread (concentration)		17		15		43
	C5a	Change in market diversification (N° of equiv. markets)		75		9		64
C5b	Change in market spread (concentration)		75		9		63	
Indicators included in chart	A	Absolute change of world market share (% points p.a.)	0.0012%	42	0.0008%	72	0.0114%	20
	P	Current Index		43		44		56
	C	Change Index		44		11		28

Table 2. Trade performance index results for the best-rated sectors as per 2003 Serbian export. Source: International Trade Center.

are presented in the table on line C1, in relative terms for the period subject to review and including both the overall score of change in world market share as well as the sources of that change. We can thus ascertain whether the increase of world market share stems from growth in competitiveness of the sector in question (labeled as Competitiveness effect), or whether it can be attributed to initial geographic specialization, initial product specialization, or sector adjustment to requirements of world market demand (labeled as Adaptation). The initial geographic specialization of a country indicates the advantages enjoyed by that country, particularly its geographic location in terms of trading convenience with certain partners. Initial product specialization indicates sectors in which the country enjoys a long, relatively continuous tradition of production. A country's adaptation to the dynamics of world market demand affects its foreign trade performance, i.e., measuring the degree of readiness and willingness to adjust promptly and thoroughly to the demands of world market consumers.

The combination of these indices produces the final figure measuring world market share change. Positive numbers signal an increase in world market share, and negative numbers correspondingly signal a decrease in world market share. Decomposition of

world market share change is executed by means of applying the constant market share analysis method.⁷

For example, during the 1999-2003 period, the non-electric power machines sector accomplished a total relative increase of world market share equal to 5.07% per annum on average, almost entirely owing to the increase of competitiveness as one of its sources. Initial geographic and initial product specializations represented solid foundations for this sector, but adaptation to the dynamics of world market demand obtained negative results, thereby annulling the effects of good specialization.

Therefore, we argue that at the stage of economic development that currently includes the case of Serbia, diversification, rather than initial specialization, represents the fundamental source of export growth, in addition to development of the national economy as a whole.

For quite a while, the scientific literature supported the notion that national economy development generates greater sector diversification in terms of exports. However, more recent research⁸ shows that at a certain level of income per capita, diversification is again superseded by sectors' concentration, such that the curve of sectors' concentration in relation to

⁷ For more detailed information regarding analysis of constant market participation, see Mladen Kovačević, Međunarodna trgovina, (Belgrade, Serbia: Faculty of Economics, University of Belgrade, p. 250.)

⁸ Jean Imbs and Romain Wacziarg, "Stages of Diversification," American Economic Review (March 2003), p. 63-86.

per capita income in a given national economy has the shape of the letter U. It means that once a certain level of development has been reached, decline occurs in terms of number of sectors participating in the export of one national economy.

The ITC analysis of particular national economies determines sector specialization by means of applying a Revealed Comparative Advantage index, which uses the Balassa formula to compute the proportion of a sector's share of national export against the same sector's share of world export. Table 3 shows the 2003 figures for 13 sectors in Serbia.

According to this specialization index, all sectors exhibiting a value higher than 1 in the Revealed Comparable Advantages Index are deemed critical in terms of export. The basic manufacturing sector reports the highest value of above noted index for Serbia in the year 2003. The ITC analysis of specialization advances another step, ranking all the sectors in comparison to the same type of sectors of other national economies. Therefore, basic manufacturing sector ranked 14th in terms of specialization out of 188 national economies. If we take into account that the non-electric power machines sector, as the most competitive sector in Serbian export according to the ITC analysis of 2003 statistics, actually shows a specialization index value of less than 1, it is consistent with our contention that at the present stage of the development, diversification, rather than specialization, represents the primary source of the Serbian export growth.⁹

Data from the table above may be also illustrated as a chart.

On the basis of the ITC's Trade Performance Index for the period 1999-2003, the most competitive sectors of the Serbian economy are non-electronic machinery, transportation equipment, leather products, and also fresh food and processed food. These sectors typically encompass products of a lower processing phase, in other words, products with low value-added. This indicates a low level of overall economic development in Serbia.

Certain sectors, although distinguished in terms of exports, presently report absolute decline per world market share (for example, the transportation equipment sector). Also, ranking sectors on a list of the most competitive sectors depends in part on the current trade regime, which is expected to undergo significant amendments in the foreseeable future. Relative increases in market share, evident with many

SECTOR	Ranking	RCA
Basic manufacturing	14	3,33
Leather products	19	3,27
Chemicals	22	1,16
Processed food industry	28	3,69
Products made of wood	42	1,65
Non-electric power machines	42	0,51
Clothing	49	2,12
Miscellaneous production	50	0,71
Electronic components	61	0,27
Transport equipment	61	0,19
Textile	79	0,50
Fresh food	105	1,41
Minerals	105	0,41

Table 3. Specialization index – Serbia and Montenegro, 2003. Source: International Trade Center. Calculation based on COMTRADE UNSD.

sectors in the course of 1999-2003, also occur as a consequence of a low statistical base stemming from small-scale Serbian exports prior to the year 2000.

Acceptability of the Results

Considering that during the 1990s, Serbia and Montenegro were almost excluded from world trade and international trade organizations, data regarding their foreign trade exchange are not always accurate and reliable. A major portion of analysis conducted by the International Trade Center relies upon data provided indirectly by Serbia & Montenegro's foreign trade partners (mirror statistics).

ITC data and analysis outcomes referring to Serbia and Montenegro are utilized with the aim of reviewing the competitiveness of the economy of Serbia proper. Such approximation is reasonable because, depending on the applied parameters used, 92-95% of economic activity in Serbia and Montenegro is that of the production industry of Serbia. However, there is an outstanding issue, namely the inclusion of data on Kosovo in the analysis: since 1999, statistics for Serbia do not encompass data regarding commerce involving Kosovo, and if analysts try to come up with findings utilizing an indirect method of evaluating Serbia and Montenegro trade flows, such attempts are complicated by the fact that some trading partners can provide data for Kosovo as a region and some cannot, consequently affecting the competitiveness

⁹ Jean Imbs and Romain Wacziarg, "Stages of Diversification," *American Economic Review* (March 2003), p. 63-86.

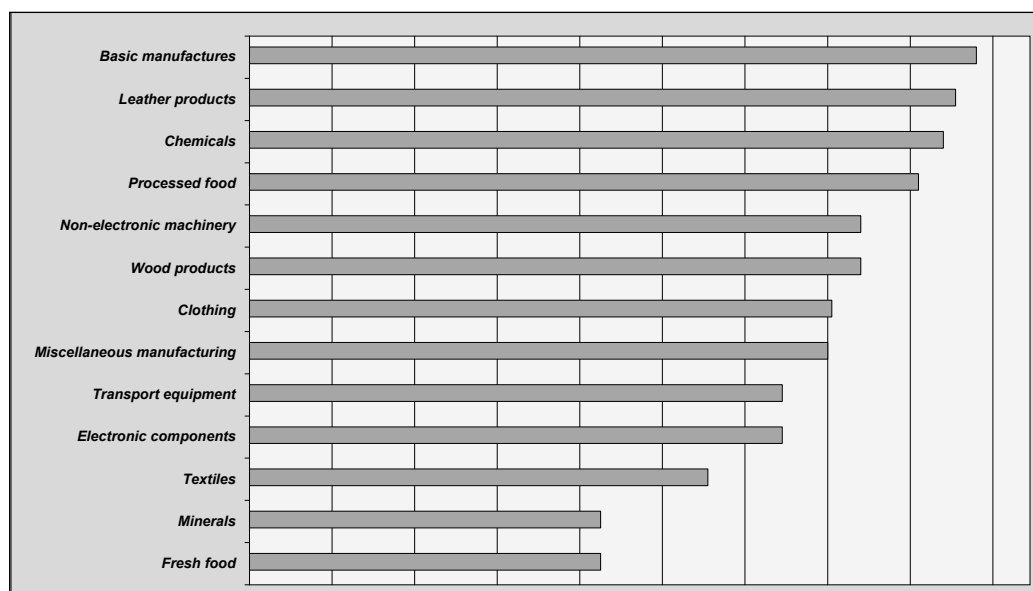


Chart 2. Specialization index for Serbia and Montenegro according to the data for the year 2003. Source: International Trade Center

Service sector	Export	Import	Balance
1. Tourist services	227	182	45
2. Traffic services	271	332	-61
2.1. Air traffic	52	27	25
2.2. Road traffic	81	66	15
2.3. Railway traffic	31	28	3
2.4. River traffic	14	14	0
2.5. Marine traffic	0	21	-21
2.6. Others	93	175	-82
3. Communication services	69	27	42
4. Investment works (Construction works contracted by investors)	97	75	22
5. Insurance	12	25	-13
6. Financial services	3	32	-29
7. Retail	96	76	20
8. Operational lease	1	35	-34
9. Copy right and license	3	40	-37
10. Business and professional services	174	231	-57
11. Personal and cultural services	40	40	0
12. Government services	15	37	-22
13. Miscellaneous services	10	14	-4
Not allotted	167	-	167
TOTAL	1.188	1.146	42

Table 4. International service exchange of Serbia for the period from January to September 2005, denominated in millions of American dollars. Source: Data supplied by National Bank of Serbia,

results for Serbia. Still, this potential source of bias does not bear significant impact and certainly is not large. The detriment rests with the fact that data regarding trading activities of Serbia with separate customs zones for Montenegro and Kosovo were not included in foreign trade analysis since they are considered and recorded in Serbian government records as internal trade statistics, although one should bear in mind that these territories effectively represent significant export markets of Serbia.

The data on Serbian exports for 1999 and 2000 have been subject to major and extraordinary factors (NATO military intervention, sanctions, popular uprisings producing a change of government) of political instability and therefore can not be considered completely representative. But, taking into account that interval indicators include the data for 2001-2002 and 2003, they are reliable enough.

Also, one should keep in mind that the analysis of a majority of national economies reviews 14 commodity sectors, while the same procedure for Serbia and Montenegro reviews only 13 sectors. The information technology and home appliances sector were exempted from the analysis. Such sectors are still in their infancy, considering the overall development of Serbian economy, and certainly are not able to achieve relevant competitiveness indicators; thus, these exclusions did not render ITC analysis outcomes unacceptable.

Some are of the opinion that the competitiveness strength of the Serbian economy rests with the

Ranking	PRODUCT		Leading markets	
	HS code	Naziv	Primary market	Secondary market
1.	7601	Raw aluminum	Italy	Greece
2.	0811	Frozen fruits and walnuts	Germany	France
3.	4011	New outer pneumatic tires	France	Great Britain
4.	1701	Sugar	Italy	Germany

Table 5. Leading export markets for best selling products (champions) of Serbian export

service industry, while the ITC analysis takes only commodity sectors into consideration. In fact, provision of services still does not represent the dominant sector in terms of generating gross domestic product in Serbia, given that the service industry achieved only a 38.6% share of GDP in 2000, as opposed to developed countries where services make up as much as 60% of GDP. But the service sector does represent a relevant employment venue in Serbia's economy: in 2000, approximately 55% of all employees in Serbia worked in service industries.¹⁰ Serbia also accomplishes significant export of services and balance of service exchange is positive. Services provided by Serbia in its capacity of a transit country are particularly highly esteemed.

It is also true that goods remain the dominant product in international trade since it accounts for approximately 80% of total export world wide. Although many organizations, such as the United Nations and the OECD, are engaged in collecting, arranging and publishing statistics on service industries, precise systems are not yet in place to facilitate the obtaining of accurate data regarding services. Statistics on international services are inferred from payment transaction records. That is the reason why many organizations omit services from their competitiveness analyses. For all these reasons, the results from the analysis of Serbia's export competitiveness, conducted by the International Trade Center, are acceptable.

9. Export Oriented Products of Serbian Economy

After determining the basic sectors that constitute the Serbian economy, the next step is to identify the products dominating Serbia's exports. For that purpose, a different ITC analytical tool will be applied, namely National Export Performance (or "NEP index," for short). The NEP index provides an overview of export performance of a national economy, broken down by products, in addition to a survey of world market demand dynamics and

growth trends intrinsic to a country's key exports. This index identifies the most successful export products of certain national economy, both from a static as well as a dynamic point of view. Briefly speaking, NEP index indicates the most successful export product of a given national economy, its position in the market (in comparison to the similar products at the world market), and degree of product diversification. (For more detailed information regarding the NEP methodology, see Attachment 1, Part B, section referring to NEP)

The 2005 NEP index for Serbia and Montenegro was calculated on the basis of the most recent data for the year 2003 and data covering the 1999-2003 period. The analysis of outcomes for Serbia and Montenegro together were utilized to facilitate analysis of Serbia's export structure, divided by products, much as was done with the TPI results and calculations. The results from the 1999-2003 period, in the context of static analysis, show that 20 most successful Serbian export items might be separated into four different categories.

1. The following items number among the so-called "star products" of Serbian export: products made of aluminum (code 7601 and 7606 of the Harmonized System), frozen fruits and walnuts (HS 0811, raspberries in first place), pneumatic tires (HS 4011), footwear (HS 6403), polymers of ethylene (HS 3901), products made of iron (flat-rolled sheets and scrap, HS 7210 and 7204), panty hose and tights (HS 6115) and female apparel (HS 6204);
2. Early development phase products in Serbian exports, such as medications (HS 3004) and parts and tools for motor vehicles (HS 8708);
3. There are no products that might be classified as „snails“;
4. Traditional products of Serbian export include: products made of iron (sheet iron, HS 7208 and 7209), sugar (HS 1701), wood (sawn/chipped, HS 4407), maize (HS 1005), copper (HS 7409), construction material (HS 3918) and men's suits (HS 6203).

¹⁰ Jelena Kozomara, "Expected Effects of WTO and EU accession on the Service Sector in Serbia and Policy Recommendations," (Belgrade, Serbia: SCEPP (Savetodavni centar za ekonomska i pravna pitanja) September 2003) p. 38.

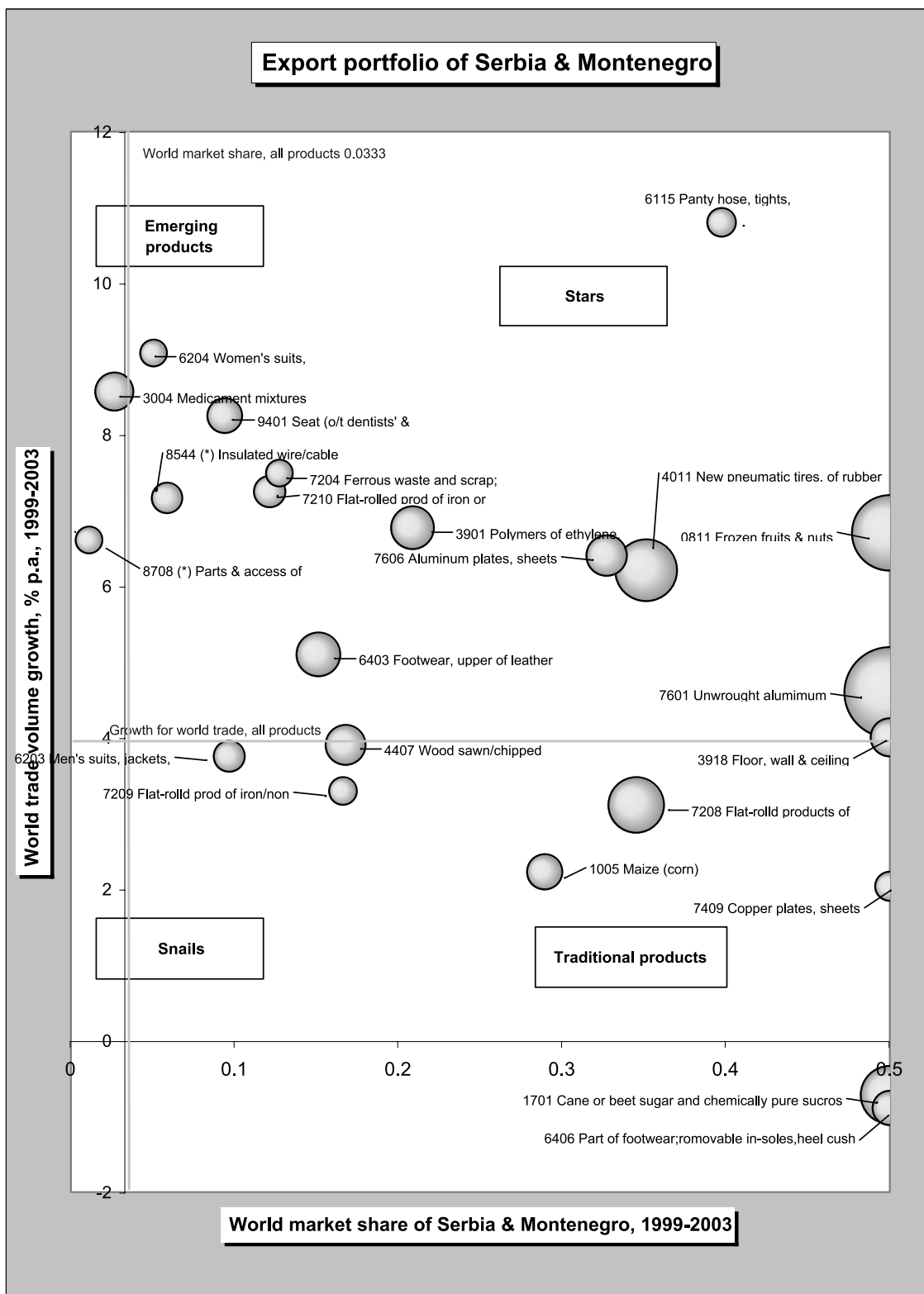
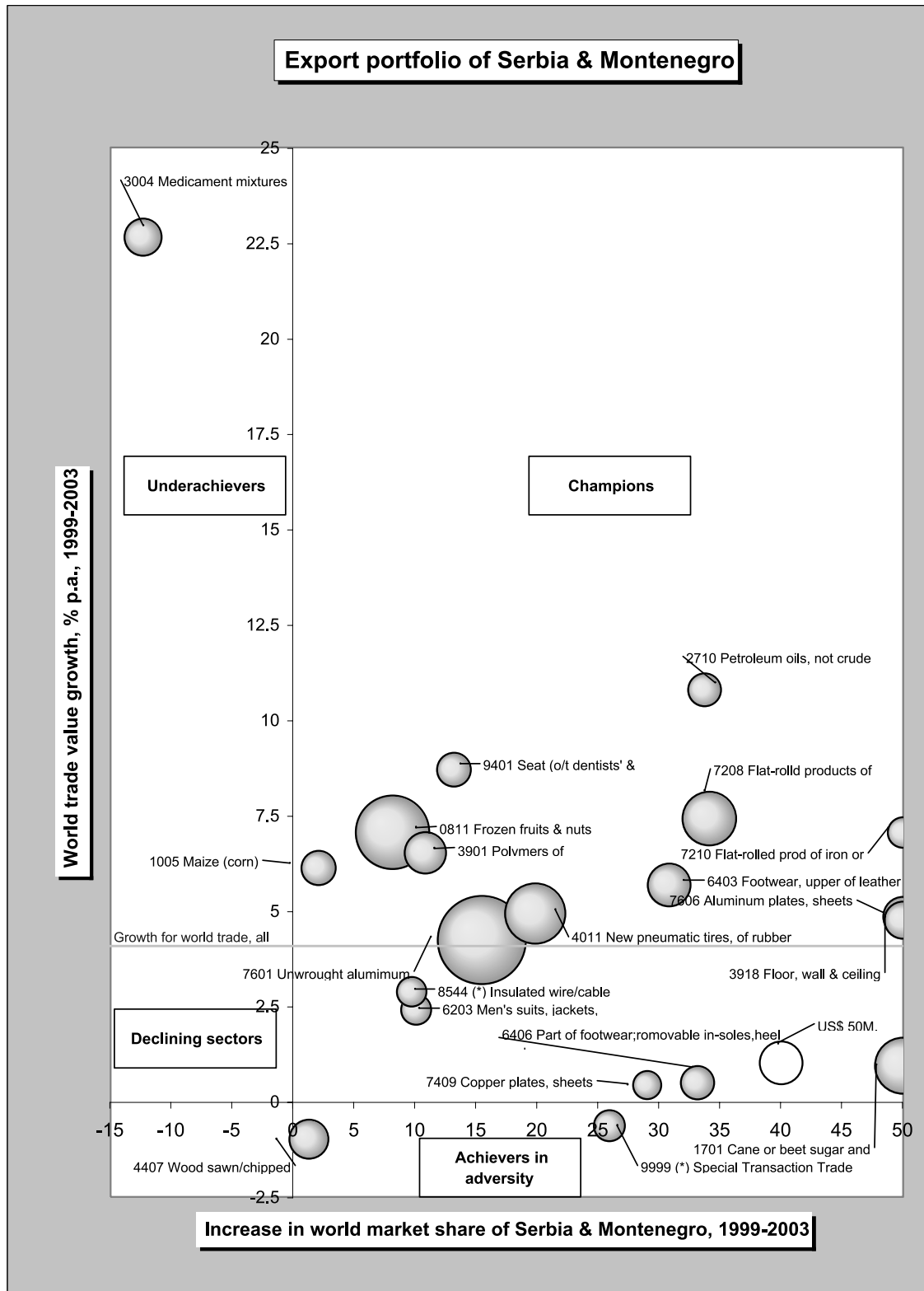


Chart 3. Static portfolio of Serbia and Montenegro for 1999-2003 period. Source: ITC calculation based on COMTRADE statistics.



Note: the area of the circles corresponds to the export value of the product group for Serbia & Montenegro. See explanatory sheet for details.
 Source: ITC calculations based on COMTRADE statistics.

Chart 4. Dynamic portfolio of Serbia and Montenegro, 1999-2003. Source: ITC calculation on the basis of COMTRADE statistics.

These products are presented in chart 3. Product groups are separated by quadrants, and lines separating them indicate the growth of world markets and world market share for each export product of Serbia and Montenegro. The relative size of little balloons representing each product corresponds to the export value of that particular product. As one might observe, the products dominating Serbian export are, in the first place, primary products of a lower processing phase and low add-on value. Together, they constitute an unfavorable export structure. In 2003, the world market share of all Serbian exports totaled a low 0.03%, which is below the economic potential of Serbia. All the products listed above create a clear picture of Serbian economic performance as divided across products and corresponding to the sectors of the TPI index (e.g. basic processing industry, leather industry, etc.). If we look at the leading markets for the placement of Serbia's "champion products," we notice that they are the member states of the European Union, primarily Germany, Italy and France.

Static results for the NEP index for Serbia and Montenegro during the 1999-2003 period are presented in the chart below.

The NEP index also has a dynamic dimension. The difference with regard to the static model concerns the application of the world market share increase of Serbia and Montenegro during the 1999-2003 period, which is represented on the horizontal axis of the dynamic model, instead of the world market share of Serbia and Montenegro during the same period that was used in the static model. We use two dimensions in this analysis: product export performance and market performance at the global level in order to classify the condition of competitiveness in the world market for a particular national economy, thereby arriving at the following matrix. All products are separated into four categories:

Just like static analysis, the results are presented in a similar chart with the exception of one dividing line in this case illustrating growth dynamics of world market share. The position of Serbian export is therefore as follows:

1. Products known as "champions" -- winners in rising markets and placed in first quadrant (upper right corner) of the reference chart -- include aluminum products (HS 7601 and 7606), fresh fruits and walnuts (HS 0811), iron products (HS 7208 and 7210), pneumatic tires (HS 4011), polymers of ethylene (HS 3901), footwear (HS 6403), maize (HS 1005) and seats (HS 9401). Foreign trade promotion activities should focus on this product group with the aim of widening the range and capacity of product offerings.

2. Lagging products might be described as losers or underperformers in growing markets. They may be found in the second quadrant (upper left side) of chart 2. They are medicaments (medications, HS 3004). Such products possess strong export potential, but they suffer constraints that have to be identified and overcome by means of foreign trade promotion.

3. Declining sectors consist of products deemed as losers in declining markets, exhibiting the worst export performance in the Serbian economy. Those products are located in third quadrant (lower left side) of chart number 2, including wood (sawn/chipped, HS 4407). Foreign trade promotion for these products is a waste of effort and resources.

4. In the fourth quadrant of chart no. 2 (lower right corner) we locate winning products in declining markets. That class encompasses sugar (HS 1701), copper (HS 7409), construction materials (HS 3918), and male suits (HS 6203). Foreign trade promotion of such products should build upon marketing strategies guided by technological innovations.

Products distinguished by virtue of exhibiting the best performance records within Serbia's export structure include rolled aluminum products, frozen fruits, products made of iron and rubber, and maize. The overall conclusion confirms that all export products of Serbia are classified in a lower processing phase, thereby suggesting that future efforts should concentrate on raising the level of products' value-added. Foreign trade promotion strategies are not sufficient to accomplish growth in value-added, thus requiring the additional application of strategies designed to increase exports and restructuring. Such policy strategies and their likely consequence for the diversification of the products will be discussed in the following sections.

The obstacles mentioned in the earlier section analyzing the Serbian economy's export sectors apply equally to the analysis of exported products.

		PRODUCTS	
		Losers	Winners
MARKETS	Rising	Losers at rising markets (products falling behind)	Winners at rising markets (champions)
	Declining	Losers at declining markets	Winners at declining markets

Matrix 1. Product and market classification according to the export performance

ECONOMY	SECTORS (TPI)		PRODUCTS (NEP)	
	Current index (static)	Change index (dynamic)	Stars (static)	Champions (dynamic)
SERBIA	Non-electric machinery (43), transportation equipment(44), leather products (56) and electronic components (56)	Minerals (1), fresh food (9) and transportation equipment (11)	Panty hose and tights, frozen fruits and walnuts, and pneumatic tires	Petroleum oil, flat-rolled products of iron and seats
SLOVENIA	Wood products (6), electronic components (11) and chemicals (14)	Transportation equipment (5), electronic components (21) and textile (25)	Parts for machines, electro-mechanical devices and home appliances	Medicaments, electricity and electro-mechanical machines
CROATIA	Non-electrical machinery(29), leather products (40) and IT and consumers' electronics (42)	Leather products (12), IT and consumers' electronics (15) and non-electronic machinery (21)	Instruments for automatic regulation, sweaters, pullovers, etc. and seats	Oil gas, seats, sweaters, pullovers.
BOSNIA AND HERZEGOVINA	Leather products (45), products made of wood (48) and clothing (67)	Fresh food (5), products made of wood (8) and processed food (9)	Footwear, unwrought aluminum	Electricity. waste and scrap iron and steel, seats
MACEDONIA	Basic processing industry (44), clothing (46) and products made of leather (50)	Transportation equipment (35), processed food (37) and leather products (51)	Non-alcohol beverages, ladies shirts and ladies apparel	Non-alcohol beverages, petroleum oil and ferrous alloy
CZECH REPUBLIC	Transportation equipment(8), wood products (8) and basic processing industry (10)	IT and consumers' electronics (4), products made of wood (14) basic processing industry (19))	TV cameras, air-conditioning and TV sets	Electricity, TV cameras, electrical equipment for illumination / signaling
HUNGARY	Clothing (8), fresh food (9) IT and consumers' electronics (11)	Textile (3), non-electrical machinery (4) IT and consumers' electronics (11) various processing industry(11)	Video recorders, television cameras and television sets	Television cameras, television sets and petroleum oil

Table 6. Sectors and products dominating the export of national economies subject to review. Source: ITC-analysis of TPI and NEP index for respective national economies

Despite limitations and weaknesses, the ITC analysis results may be accepted as valid.

The results presented above, as well as conclusions derived from ITC methods, are based on earlier data and, even more importantly, the already determined aggregate of sectors and products for every country under analysis. However, the ITC analysis is silent on the issue of introducing new products and technologies that might prove sustainable in export markets. In that sense, it is relevant to stress the irreplaceable role played by entrepreneurs. Entrepreneurs' vision and ability to see ahead might identify products that hold potential for classification in the upper right quadrant of the chart ("champions"), or are not present in the chart at all. In that context, the previously applied methodology of ITC chart may, at best, represent useful but incomplete information benefiting entrepreneurs when communicating and sharing information and knowledge in their dealings with policymakers.

Comparison between the countries

The ITC results may be used for the purpose of comparing the results of Serbia's exports with the accomplishments of other countries taken as points of reference (particularly neighboring countries and transition countries). For that purpose, the results of selected national economies are presented in table 6. The TPI index results denote the sectors dominating Serbia's export structure, and the numbers in brackets signify the rating of sectors' competitiveness at the global level. The results of the NEP index specify the particular products dominating export performance relative to the national economy. Both analytical instruments possess the static (current) and dynamic (future) versions. One should bear in mind that in the Serbian case, the sector of information technology and consumer electronics has not been included in ITC analysis, but even if it had, it would not have changed the outcome.

At first glance, it becomes apparent that more developed economies, such as those of Slovenia, the Czech Republic, Hungary and even Croatia, possess more sophisticated sectors and products which dominate their export structure, as opposed to less developed countries, namely Serbia and Montenegro, Bosnia-Herzegovina, and Macedonia, where primary products (raw and partially processed materials) dominate their respective export structure. The described export structure corresponds to the overall stage of economic development of the reviewed national economies.

Also, similar sectors often dominate the export of national economies discussed in this paper, which, when considering the example of the former Yugoslavia, confirms the notion of long-term mutual growth and similar foundations in terms of resources. But, the competitiveness level of sector in question corresponds to the general development level of the national economy, illustrated by the example of Slovenian sector of electronic parts taking 11th place out of 189 reviewed countries, while the same sector of Serbian economy ranks 56th. Situation is similar in regards to the sector of wood products when comparing Slovenia with Bosnia and Herzegovina, etc. But the problem underlying sectors dominating Serbian export is that their international competitiveness level is rather low (ranking 43rd and lower, worldwide).

With regard to table 6, it can also be observed how competitiveness affects appeals for direct foreign investment. Hungary exhibits a very favorable structure of export sectors. Sectors showing the best performance in Hungary's export structure include IT and consumer electronics, non-electronic machinery, and electronic components. Hungary's export is dominated by one technologically very intensive sector, namely IT and consumer electronics. This state of affairs stems in large part from investments by several transnational companies, effectively assisting Hungary to achieve better technological competitiveness. Regarding Serbia, one might notice the metal sector ranking first globally where future expectations are concerned, due to enormous investments in this sector on part of large multi-national companies.

10. Trade Regime and Future Exports

The ability of a national economy to export is, as classical theories of international trade suggest, the result of its comparative advantage and abundance in natural resources. This is what many analysts have in mind when they research the competitiveness of a particular national economy. But sometimes the export of one national economy can also be a product of a specific trade regime that exists between this national economy and other national economies. This means that not only the market environment (firm competition and comparative advantage) determines trade flows, but also trade policy between and among states.

A trade regime is a system that defines the conditions under which goods and services are exchanged between national economies. Trade regimes are defined by the application (or reduction,

or removal) of trade barriers, and depend on the trade policy that a given national economy adopts and maintains. National trade policy can be protectionist or liberal, depending on the intensity of application of trade barriers. Today, many trade policies are discriminatory meaning that some national economies have more favorable treatment in trade than others.

Many national economies today are members of regions with formal trade integration, which means that regional member states have preferential trade arrangements for members compared to states outside the region of integration. This enables countries to export products which are not absolutely competitive in world markets. This is known as the effect of trade diversion of regional trade integration. From a global point of view, this effect is negative. However, viewed from the perspective of an individual national economy, this means more exports, more employment and generally more economic prosperity.

Apart from trade regimes defined by bilateral trade agreements and regional trade regimes, there is also the multilateral trade regime known as the General Agreement on Tariffs and Trade (GATT), today administered by the World Trade Organization (WTO). One of the basic principles of this multilateral trade system is the rule of non-discrimination among fellow members of the WTO. But this rule does not apply to regional trade integrations as a big exception.

This means that within a favorable trade regime, a country can export some products that would not otherwise have a comparative advantage, which suggests that regional trade integration is closed in nature. Small national economies do not usually have the leverage and resources to create trade regimes, and typically have to accept what is offered to them. This refers to bilateral, regional, and especially multilateral trade regimes. But these small and undeveloped countries have to try to find ways to make the trade regime work for their development. They have to find ways to increase gains from international trade.¹¹

In all regimes, developing countries usually receive unilateral benefits and more favorable treatment than other national economies. In bilateral relations, there is often a generalized system of preferences (GSP) structured by a larger, more developed nation; in regional terms, there are sometimes regional development funds; and multilateral trade regimes sometimes recognize

Special and Differential treatment for developing countries and extremely permissive (liberal) trade regimes for Least Developed Countries (LDCs).

Today's Serbia is a small and underdeveloped country with only a few primary products as its most important exports. It does not have regulated trade relations with its major trading partners. The European Union (EU) is a major trading partner of Serbia, but there is no bilateral trade agreement between these two trading entities. The EU has unilaterally adopted Autonomy Trade Measures for Western Balkan countries, meaning that Serbia can export most products except specific types of beef, fish, and textiles into the EU market under a very liberal regime. Even the exports of textiles and sugar have been further liberalized. But these are only unilateral measures extended to Serbia by the EU. Serbian exports still face many difficulties in the EU market writ large. Even if customs duties were low, many so-called non-tariff barriers remain which curtail Serbian exports to EU market. The trade agreement with Russia is also very favorable, but it has not yet been ratified.

There have been some steps taken to create a free trade zone in Southeast Europe, the first major trade integration initiative for this region in which Serbia will take part. But this regional trade regime will influence only trade with those former Yugoslav republics that are Serbia's traditional partners. Any future trade regime that Serbia might create must be aligned with the EU Joint Trade Policy so long as Serbia seeks EU membership and market access.

Serbia is not yet a full member of the WTO, but it started an accession process in 2005, separately from Montenegro. The problem is that all new acceding national economies are requested to make more and more concessions (so-called "WTO plus obligations"), so Serbian negotiators should be very careful when negotiating trade concessions with the WTO. These concessions should seek a favorable trade regime for Serbia to spur economic development.

It is difficult to pick out the sectors and products that should drive Serbia's future exports. Selecting export products means that policymakers are consciously providing incentives for firms to specialize in the production and export of those products as the bases of participation in the world economy. A basic competitive advantage and the relevant trade regime determine the prospects for export. But both preconditions can change over time. Even the basic competitive advantages for one country can change over time, which is why some

¹¹ Dani Rodrik, "How to Make the Trade Regime Work for Development," Working Paper, Harvard University, February 2004

authors¹² argue that over time sectors and products which are competitive in exports of one country tend to change. One approach is that evolution of international specialization over time can be viewed from several angles. The first angle is to identify whether national economies increasingly specialize in certain sectors.

The second angle is to observe how a country's extent of specialization in individual sectors changes over time. Third, analysts can model the influence of this specialization on world production and trade. The fourth angle is to analyze whether the patterns of specialization are determined by technological progress or by factor accumulation. Under this approach, analysis is intended to uncover the dynamics of trade patterns of national economies.

Also, analysis has to take note of change in dominant export products and sectors wrought not only by natural trading processes but also by government intervention in foreign trade in the form of foreign trade policy. Many analyses try to include the trade regime as one factor in their explanation of trading outcomes.¹³ Usually we observe trade proportion in a multi-country model while focusing on only a few foreign trade policy effects. But trade regimes are, in one sense, products of foreign trade policies of many countries and aspects of these policies can affect every partner country. So they all have to be included in the analysis that observe relative inducement and trade cost for many countries in a matrix.¹⁴ This approach is more in line with microeconomic applications.

There are also some other regimes that are necessary for export growth. For example, there are some indications that Serbia has advantages in development of software products. However, the as-yet-undefined intellectual property protection regime in Serbia is an obstacle for production and export in this sector.

The creation of a favorable trade regime in the future is very important for export performance. The next section discusses these export intervention policies. We have to keep all these facts in mind when we consider the prospects for the Serbian exports, and especially if we would like to determine which sectors and even products could play a major role in Serbia's future exports.

11. Policies of Export-Promotion

Many national economy policymakers and experts today view export as the most important source of economic growth. Two types of export policies — export-promotion policies and export restructuring policies — can be distinguished.

Export-promotion policies include all government policies that tend to improve exports under the present structure. This means that with export-promotion policies, governments hope to increase the export of already exported goods. All these policies can be marketing-oriented or finance-oriented. Marketing-oriented export-promotion policies include all actions that use marketing tools in order to promote exports. These marketing tools tend to promote the country's exports as a general matter, or specific export products through different promotional activities (exhibitions, commercials on TV, etc.). For this purpose, countries establish national export promotion agencies. Finance-oriented export promotion activities include credit lines for the export of equipment and other large value export products. For this latter purpose, countries tend to establish export credit agencies.

However, many countries have adopted policies that aim to alter the product structure of future exports. These policies have been dubbed export-restructuring policies, but they are usually referred to as industrial policies. Newly industrialized countries have used these policies to initiate the development of certain sectors. Nowadays industrial policies are not so popular because of the tendency to promote the concept of a free market economy with little government intervention.¹⁵

Some authors¹⁶ suggest new types of industrial policies that maximize the potential to contribute to economic growth, and minimize waste and rent-seeking. These new types of industrial policies rely on collaboration between governments and the private sector. Governments usually do not have sufficient information "to pick winners" among firms, sectors, or products for promotion purposes, so they need the assistance of private entrepreneurs who know the business. As poor countries get richer, their export structure tends to diversify (across more sectors or products), rather than specialize in particular sectors or products. The new sectors that

¹² For example, Stephen Redding, "The Dynamics of International Specialization," Paper No. 2287, Centre for Economic Policy Research (London, November 1999.)

¹³ Marco Faguzza, "Export Performance and Its Determinants: Supply and Demand Constraints," Policy Issues in International Trade and Commodities, Study Series No. 26 (Geneva: UNCTAD, United Nations, 2004) 12

¹⁴ See: James R. Markusen and Anthony J. Venables, "A Multi-Country Approach to Factor-Proportions Trade and Trade Costs," NBER Working Paper No. 11051 (New York: National Bureau of Economic Research, January 2005).

¹⁵ Katherine Marton, "Recent Industrial Policies in Developing Countries and Economies in Transition: Trends and Impact," UNIDO, 29 September 1995, Doc. No. ID/WG.542/22(SPEC.).

¹⁶ Dani Rodrik, "Industrial Policy for the Twenty-First Century," Working Paper, Harvard University, Cambridge, Massachusetts, September 2004.

emerge are immediately shaped by their potential competitiveness.

Practically all industrial policies have to have high-level political support. Collaboration between the government and private sector can be achieved through coordination or deliberation councils which are private-public bodies. These industrial policies have to be viewed by public as growth policies and not the policies that stimulate growth of already privileged sectors of the economy.

For an industrial policy to be successful, it must observe the following principles. The main purpose of industrial policy is to diversify the economy and generate new areas of comparative advantage. In each industrial policy, clear benchmarks should be established as criteria for success. In addition, a built-in termination clause should be envisaged. The support provided by the policy should target new activities in sectors, not entire sectors. Activities that are subsidized must have a potential for spillover effects on other activities in the economy. It is very important to have adequate bodies to carry out these policies. The agencies that deal with promotion must have adequate channels of communication with private sector. Throughout the process of discovery of adequate sectors for industrial policy, mistakes will occur. This is part and parcel "of good industrial policy."¹⁷

It is difficult to determine which products will be introduced by industrial policy. That is why government should finance the initial process of determination of these new export products. When they are determined and proven successful, the government should seek to involve private investors. Industrial policy can apply many tools to create incentives for product development, like subsidizing production, research, financing higher risk deals, etc. Even the establishment of export processing zones can be viewed as an element of industrial policy. But with this policy, government clearly favors one sector over another.

Sometimes in this age of globalization and promotion of market principles, many think that there is no place for industrial policy. The view is that regional and multilateral trade regulations prohibit industrial policy application. Dani Rodrik is of the opinion that in the multilateral trade regime framework of WTO rules, there is room for industrial policy for a limited number of sectors for a limited

time. In his mind, industrial policy is effectively a process of economic self-discovery.¹⁸

12. Conclusions

The ITC methodology that we applied to identify the most vibrant export-performing sectors and products of the Serbian economy has shown that the most important sectors of the Serbian economy are the basic manufacturing sector (metallurgy), the leather industry, processed foods, and the chemical industry. For Serbia, a fundamental obstacle to establishing global competitiveness over the long term is that these primary export sectors are dominated by primary products with low value-added.

The Serbian government should strive to boost export levels and solve the problem of large and permanent trade deficits. But the government should also pursue export-restructuring policies. These policies should encourage new products in Serbia's traditional export sectors of Serbia with an emphasis on higher value-added. These policies also can stimulate the introduction of completely new sectors for export performing, such as software or other technologically more advanced products. Government research ahead of investment, and not tycoons or pressure groups, should designate which of these new sectors should be a target of industrial policy.

The actions of the Serbian government concerning industrial policy matters must be coordinated with a view to EU membership and future specialization in the EU Common market trade regime, and in accordance with WTO membership, which is currently under negotiation. In these EU and WTO accession negotiations, appropriate conditions of accession should be achieved in order for this policy to be applied.

¹⁷ Ibid, page 37.

¹⁸ Ibid, page 38.

Appendix 1: ITC Methodology

For determining which sectors of the Serbian Economy and which specific products play an important role in export competitiveness of Serbia we have decided to use the methodology developed and applied by the International Trade Center (ITC) from Geneva.¹⁹ ITC is an intergovernmental organization under the auspices of its parent organizations, namely the World Trade Organization (WTO) and the United Nations (UN), as represented by the UN Conference on Trade and Development (UNCTAD). One of the methodologies of ITC is a Country Market Analysis Profiles (Country Map) that explores the foreign trade profile of each national economy in the world, even those which are not members of the International Trade Center. Strategic market research is used to gauge the effectiveness of national and sectoral trade performance, and to identify priority products and markets for trade development.²⁰ The Country Map consists of six methods for assessing the foreign trade profile of the national economy. Two methods serve our purposes here.

One of the tools comprising the Country Map is the Trade Performance Index (TPI). This method assesses and monitors multidimensional export performance in the context of competitiveness of countries by pointing out the principal export sectors. The other tool is National Export Performance (NEP). It assesses the export performance of national economies in terms of product composition exports, dynamics of international demand, and growth patterns of leading export products of these national economies. These two tools from the ITC Country Map assess the present situation in export performance of a national economy. They also contain a dynamic component in the analysis that analyzes changes in the trade environment over the last four years. The dynamic component is based on historical data and by itself cannot yield more information on sectors and products that can be critical in the export of one particular national economy. Many theories suggest that the comparative advantages of a particular country change in time, so national economies are often dynamic in their international specialization. Changes in comparative advantage occur due to changes in natural predisposition, trade regimes, world market structures, etc. But methods that could specify which sectors and products can be most critical in future export is limited. One can only try to speculate on the analysis of change in demand, trade regimes, and market conditions in the future.

A. Trade Performance Index

The Trade Performance Index (TPI) calculates the level of competitiveness and diversification of a particular export sector using comparisons with other national economies. The last available results for TPI analyzes exports across 14 sectors and 184 national economies.²¹ For each national economy and sector, the TPI provides 22 indicators grouped in three groups of indicators:

1. a general profile;
2. the position of the national economy for the most recent year (for which there is data);
3. changes in export performance in recent years.

The following indicators are factored into the general profile:

- value of exports, presented in thousands of USD, for the most recent year;
- weighted trend of exports, for the most recent 4-year period;
- share in national exports, in the most recent year;
- share in national imports, in the most recent year;
- average annual change in per capita exports, for the most recent 4 year period;
- relative unit value, in the most recent year;
- average annual change in relative unit value, for the most recent 4 year period;
- revealed comparative advantage.

Most of these indicators consist of statistical data collected from the COMTRADE database, developed by the United Nations Statistics Division (UNSD) as the most comprehensive trade statistics in the world. Other indicators are derived from this data with more or less simplified statistical methods.

¹⁹ For more information about the methodology and results for other countries, go to the ITC website: www.intracen.org.

²⁰ International Trade Center, "Country Market Analysis Profiles: User Guide" (Geneva: ITC, April 2003) 1

²¹ International Trade Center, "The Trade Performance Index," background paper (Geneva: ITC, April 2000) 3.

The relative unit value (RUV) for each sector is calculated as the ratio of the average unit value of exports for a national economy to a world average unit value. It indicates if the national country is exporting its goods with a value lower than the world average (if RUV is under 1), at world average value (if RUV is equal to 1) or at a value higher than the world average (if RUV is higher than 1).

As a measure of comparative advantage, the corrected Revealed Comparative Advantage index developed by Center for the Study of Perspectives and International Information from Paris (Centre d'études prospectives et d'informations internationales Paris – CEPII) is employed. The correction tends to isolate the effects of the business cycle brought about by changes in real exchange rates. This corrected index is represented by following formula:

$$RCA'_{icl} = \frac{1000}{X'_{i..} + M'_{i..}} x \left[(X'_{icl.} - M'_{icl.}) - (X'_{i..} - M'_{i..}) x \frac{(X'_{icl.} + M'_{icl.})}{(X'_{i..} + M'_{i..})} \right]$$

with:

$X'_{i..}$ i $M'_{i..}$ national economy i total export or imports in year t, respectively
 $X'_{i.cl}$ i $M'_{i.cl}$ national economy i total export or imports of products belonging to the cluster cl in year t, respectively

$(X'_{icl.} - M'_{icl.})$ the observed trade imbalance of national economy i for the cluster cl in year t

$\frac{(X'_{icl.} + M'_{icl.})}{(X'_{i..} + M'_{i..})}$ the weighted of cluster cl in the national economy i exports in year t

$(X'_{i..} - M'_{i..}) x \frac{(X'_{icl.} + M'_{icl.})}{(X'_{i..} + M'_{i..})}$ the theoretical imbalance of national economy i for the cluster cl in year t.

In the group position of the national economy for the most recent year for which there is data, the following indicators are included:

- value of net export, in thousands of USD;
- per capita exports (USD per inhabitant);
- share in world markets, in percent;
- product diversification;
- product spread (ranking);
- market diversification;
- market spread (ranking).

The most important contribution of this ITC tool is that, apart from presenting these indicators in absolute terms, it ranks indicators among 184 observed national economies and points out as a relative matter which economies are superior in an observed sector.

In the last (third) group of indicators entitled “Changes in export performance in recent years,” the indicators included are:

- percentage change in world market share;
- trend of import coverage by export;
- matching with dynamics of world demand;
- change in product diversification;
- change in product spread;
- change in market diversification;
- change in market spread.

All these indicators are also relatively ranked between national economies.

For each of 14 sectors, all indicators are calculated on the 5-digit level of SITC nomenclature, which comprises around 3,500 products in total. Sectors are specially defined as production of similar products. The indicators

from the first group are only used for descriptive purposes and they are not used in the calculation of composite rankings. The other two groups of indicators are the basis for further analysis, namely, the calculation of two composite rankings such as:

1. Current Index
2. Change Index

The Current Index presents a current overall position and is based on the five most important criteria, namely value of net exports, per capita exports, world market share, the diversification of products and the diversification of markets. It is a snapshot of present export trade performance for the respective national economy.

The Change Index that shows changes in performance is based also on five criteria including change in world market share, the change in the cover ratio (representing the coverage of imports by exports), the level of specialization in dynamic products, the change in product diversification and the change in market diversification. This index shows the evolution of export performance of the observed national economy in a five-year period. In this way, the Trade Performance Index positions the export sector of national economies by export competitiveness from a static and dynamic perspective.

B. National Export Performance

The National Export Performance (NEP) tool provides an overview of the export performance of a given national economy's product composition of exports, the dynamics of international demand, and growth patterns of their leading export product or products. The results of this tool precisely show:

- the leading export products of each national economy and their extent of concentration or diversification;
- the products for which each country has out- or under-performed other countries, and increased or decreased in its share of international markets;
- the extent to which leading export products are positioned in growing or declining markets;
- the market segment in which leading export products are positioned in terms of unit values.²³

This tool yields static but also dynamic analysis results for the product composition of national exports. In static terms, this tool defines four products categories according to their export performance:

1. Stars – products with excellent export performance;
2. Emerging products – products that are on the rise, but are battling for their respective share of world markets;
3. Traditional products – products that national economies have exported for years and that have their (relatively well-established) place on the world market;
4. Snails – products that have a low growth or declining share in the world market.

All products in this categorization are presented in the special chart which shows the export value of product analyzed (by the size of the bubbles on the chart). It compares world market share (horizontal axis) with the growth of international demand represented by world trade volume growth in the selected period (vertical axis). Moreover, the vertical line representing constant world market share of all products divides the chart into two parts, and with the horizontal line of growth of world trade for all products, the tool thereby creates four quadrants. The first quadrant (upper right) consists of star products, the second quadrant (upper left) are emerging products, the third quadrant (lower left) are snail products, and the fourth quadrant (lower right) present traditional products.

In dynamic analysis terms, the results are presented in a separate chart. It shows the export value of the products under consideration (export value determines the size of the circles in the chart), and it compares the national export change in world market share (horizontal axis) to the growth of international demand (vertical axis). In addition, the chart indicates the average nominal growth of world imports (horizontal reference line) over a certain period. Moreover, the vertical line divides the chart into two parts. Exports of products to the right

²² International Trade Center, "Country Market Analysis Profiles: User Guide," (Geneva: ITC, April 2003) 8

of this line have grown faster than the average of world imports, and thereby increased their share in the world market. Conversely, products to the left of the vertical line have seen erosion of their world market share. The vertical and the horizontal reference lines are of particular interest from a trade development perspective, since they divide the chart into four quadrants with different characteristics and suggest which trade promotion techniques should be used. The quadrants have been labeled as follows:

1. Champions. Winners in growth markets (upper right, first quadrant)

These are the export products for which the country has performed very well. These are particularly dynamic products, which are growing faster than world trade in general and for which a given country has outperformed world market growth and increased its share in world imports. Exporters of these products have proven their international competitiveness during the late 1990s. Trade promotion efforts for these products are less risky, as these are national success stories, which can serve as reference points. Promotional efforts should aim at broadening supply capacity.

2. Underachievers. Losers in growth markets (upper left, second quadrant)

These products represent particular challenges for trade promotion efforts since international demand has been growing at above-average rates and the country in question has been falling behind. Its exports have either declined or grown less dynamically than world trade overall for that product. As a result, the country has been losing international market share. In general, the bottleneck is not international demand, but rather it is on the supply side. For these products, it is essential to identify and remove the specific bottlenecks, which impede a more dynamic expansion of exports.

3. Declining sectors (lower left, third quadrant). The export prospects for these products tend to be gloomy. World imports of this product have been stagnating or have actually declined, and the market share of the country has gone down. Trade promotion efforts for product groups in this category face great difficulties. They need to adopt an integrated approach to take into account bottlenecks for both supply and demand.

4. Achievers in adversity - winners in declining markets (lower right, fourth quadrant). Products in this quadrant are characterized by growing shares of the country exporters in world import markets that are declining or growing at a below average rate. From a trade promotion perspective, niche-marketing strategies are required to encourage this positive trade performance, despite the overall decline in these markets.

Appendix 2: Tables with TPI for sectors in Serbia and Montenegro by ITC calculations..

Trade Performance Index : YUGOSLAVIA

Indicators	YUGOSLAVIA			Fresh food		Processed food		Wood products		Textiles	
	Value	Rank (173)**	Rank (146)**	Value	Rank (146)**	Value	Rank (125)**	Value	Rank (112)**		
General profile											
G1	Value of exports (\$ 000)	141260		363561		29800					
G2	Trend of exports (99-03) p.a.	25%	29	217%	1	45%	60	11			
G3	Share in national export	6%		16%		1%					
G4	Share in national import	4%		9%		4%					
G5	Average annual change in per capita exports	8%	44	21%	20	17%	66	13			
G6	Relative unit value (world average = 1)	0.9		1.6		3.9					
G7	Average annual change in relative unit value	2%		17%		13%					
Position in 2003 for Current Index											
P1	Value of net exports (\$ 000)	-72829	118	-188727	105	-193242	89	75			
P2	Per capita exports (\$/inhabitant)	13.2	128	34.1	82	11.0	79	92			
P3	Share in world market	0.05%	94	0.12%	63	0.05%	69	82			
P4a	Product diversification (N° of equivalent products)	16	25	6	79	12	40	29			
P4b	Product spread (concentration)		40		69		43	51			
P5a	Market diversification (N° of equivalent markets)	11	35	7	57	8	44	29			
P5b	Market spread (concentration)		68		74		55	67			
Change 1999-2003 for Change Index											
C1	Relative change of world market share (% p.a.)	1.16%		5.20%		6.06%					
	Competitiveness effect p.a.	-0.83%	112	4.15%	36	1.17%	55	25			
	Initial geographic specialisation p.a.	2.97%	23	0.48%	68	3.74%	23	28			
	Initial product specialisation p.a.	5.98%	18	0.36%	62	-4.06%	108	42			
	Adaptation p.a.	-6.95%	162	0.21%	52	-0.24%	56	82			
C2	Trend of import coverage by exports	-3%	91	8%	29	4%	104	36			
C3	Matching with dynamics of world demand		23		32		36	49			
C4a	Change in product diversification (N° of equiv.		33		92		34	94			
C4b	Change in product spread (concentration)		34		92		36	97			
C5a	Change in market diversification (N° of equiv. markets)		32		103		27	11			
C5b	Change in market spread (concentration)		30		103		26	11			
A	Absolute change of world market share (% points p.a.)	0.0014%	59	0.0109%	24	0.0004%	59	40			
P	Current Index		77		77		63	73			
C	Change Index		9		14		35	20			

 Source: ITC calculations based on COMTRADE of UNSD
 ** ranking out of all exporting countries (number)

Trade Performance Index : YUGOSLAVIA

Indicators	YUGOSLAVIA		Chemicals		Leather products		Basic manufactures		Non-electronic machinery	
	Value	Rank (127)**	Value	Rank (84)**	Value	Rank (130)**	Value	Rank (107)**		
G1	Value of exports (\$ 000)	321'863					119'439			
G2	Trend of exports (99-03) p.a.	25%	28		40%	16	42%	17	29%	19
G3	Share in national export	14%			4%		25%		5%	
G4	Share in national import	16%			3%		11%		14%	
G5	Average annual change in per capita exports	14%	23		19%	6	12%	27	13%	31
G6	Relative unit value (world average = 1)	1.9			3.1		1.2		1.5	
G7	Average annual change in relative unit value	7%			12%		-9%		-2%	
P1	Value of net exports (\$ 000)	-612'626	79		-51'715	64	-60'842	55	-69'719	64
P2	Per capita exports (\$/inhabitant)	30.2	74		9.7	46	55.3	62	11.2	73
P3	Share in world market	0.04%	70		0.11%	47	0.11%	59	0.02%	58
P4a	Product diversification (N° of equivalent products)	11	64		6	33	8	74	52	18
P4b	Product spread (concentration)		65			30		59		24
P5a	Market diversification (N° of equivalent markets)	13	29		2	73	6	69	12	20
P5b	Market spread (concentration)		56			64		73		48
C1	Relative change of world market share (% p.a.)	3.26%			12.72%		7.79%		5.07%	
	Competitiveness effect p.a.	2.89%	39		5.73%	11	7.23%	14	4.92%	24
	Initial geographic specialisation p.a.	2.73%	24		3.80%	21	1.87%	47	4.57%	25
	Initial product specialisation p.a.	-1.94%	85		0.44%	36	0.37%	60	4.30%	18
	Adaptation p.a.	-0.42%	46		2.75%	10	-1.68%	96	-8.72%	99
C2	Trend of import coverage by exports	-5%	97		1%	22	-7%	92	-12%	96
C3	Matching with dynamics of world demand		32			61		41		64
C4a	Change in product diversification (N° of equiv.)		72			43		73		18
C4b	Change in product spread (concentration)		72			43		73		17
C5a	Change in market diversification (N° of equiv. markets)		94			64		122		75
C5b	Change in market spread (concentration)		97			63		123		75
A	Absolute change of world market share (% points p.a.)	0.0021%	34		0.0114%	20	0.0073%	30	0.0012%	42
P	Current Index		64			56		59		43
C	Change Index		64			28		72		44

Source: ITC calculations based on COMTRADE of UNSD
 ** ranking out of all exporting countries (number)

Trade Performance Index : YUGOSLAVIA

Indicators	YUGOSLAVIA											
	Electronic components			Transport equipment			Clothing			Miscellaneous manufacturing		
	Value	Rank (99)**	Rank (97)**	Value	Rank (97)**	Rank (117)**	Value	Rank (117)**	Rank (124)**	Value	Rank (124)**	Rank (124)**
General profile	G1	Value of exports (\$ 000)	59 692				170 407			143 185		
	G2	Trend of exports (99-03) p.a.	19%	37	63	20	26%			57%	9	
	G3	Share in national export	3%				7%			6%		
	G4	Share in national import	5%				3%			8%		
	G5	Average annual change in per capita exports	9%	35	81	26	12%			26%	14	
	G6	Relative unit value (world average = 1)	1.2				1.2			0.8		
	G7	Average annual change in relative unit value	-2%				-10%			-7%		
Position in 2003 for Current Index	P1	Value of net exports (\$ 000)	-262 755	61	54	69	21 382			-328 511		94
	P2	Per capita exports (\$/inhabitant)	5.6	72	81	80	16.0			13.4		74
	P3	Share in world market	0.01%	65	69	73	0.07%			0.02%		69
	P4a	Product diversification (N° of equivalent products)	14	39	5	14	38			9		73
	P4b	Product spread (concentration)		43	15	20						68
	P5a	Market diversification (N° of equivalent markets)	11	20	12	36	5			8		36
	P5b	Market spread (concentration)		45	39	61						65
Change 1999-2003 for Change Index	C1	Relative change of world market share (% p.a.)	2.17%				3.47%			17.07%		
		Competitiveness effect p.a.	-3.02%	77	47	34	3.36%			9.17%		23
		Initial geographic specialisation p.a.	11.73%	10	14	26	2.80%			2.67%		20
	C2	Initial product specialisation p.a.	-0.21%	62	7	102	-2.04%			-0.52%		84
		Adaptation p.a.	-6.33%	85	83	64	-0.65%			5.75%		3
		Trend of import coverage by exports	-11%	84	78	88	-9%			1%		64
	C3	Matching with dynamics of world demand		67	7	72						83
	C4a	Change in product diversification (N° of equiv. markets)		73	16	44						110
	C4b	Change in product spread (concentration)		73	15	44						110
	C5a	Change in market diversification (N° of equiv. markets)		49	9	20						106
C5b	Change in market spread (concentration)		47	9	19						111	
A	Absolute change of world market share (% points p.a.)	0.0007%	48	72	31	0.0045%			0.0029%		43	
Indicators included in chart	P	Current Index		56	44	57						73
	C	Change Index		81	11	37						80

Source: ITC calculations based on COMTRADE of UNSD

** ranking out of all exporting countries (number)

Trade Performance Index : YUGOSLAVIA

Indicators	YUGOSLAVIA		Minerals	
	Value	Rank (151)**	Value	Rank (151)**
General profile	G1	Value of exports (\$ 000)	105'631	
	G2	Trend of exports (99-03) p.a.	253%	2
	G3	Share in national export	5%	
	G4	Share in national import	5%	
	G5	Average annual change in per capita exports	37%	13
	G6	Relative unit value (world average = 1)	1.7	
	G7	Average annual change in relative unit value	4%	
Position in 2003 for Current Index	P1	Value of net exports (\$ 000)	-184'716	92
	P2	Per capita exports (\$/inhabitant)	9.9	128
	P3	Share in world market	0.01%	109
	P4a	Product diversification (N° of equivalent products)	9	1
	P4b	Product spread (concentration)		19
	P5a	Market diversification (N° of equivalent markets)	7	41
	P5b	Market spread (concentration)		82
Change 1999-2003 for Change Index	C1	Relative change of world market share (% p.a.)	4.60%	
		Competitiveness effect p.a.	0.05%	81
		Initial geographic specialisation p.a.	-1.22%	134
		Initial product specialisation p.a.	-3.58%	98
		Adaptation p.a.	9.36%	3
				57%
Indicators included in chart	C2	Trend of import coverage by exports		29
	C3	Matching with dynamics of world demand		1
	C4a	Change in product diversification (N° of equiv.)		2
	C4b	Change in product spread (concentration)		8
	C5a	Change in market diversification (N° of equiv. markets)		9
	C5b	Change in market spread (concentration)		70
	A	Absolute change of world market share (% points p.a.)	0.0021%	84
	P	Current Index		
	C	Change Index		1

Source: ITC calculations based on COMTRADE of UNSD

** ranking out of all exporting countries (number)

3. Growth Diagnostics in the Serbian Context

13. Problem of Serbian Economy since 2000

Serbia's economy lags behind advanced reformers in Central and Eastern Europe in both transition efforts and the level of development. In the 1990s, the country has managed to slip from the position of one of the leading reformers in CEE to one of the laggards of the process. Ideological biases, mismanagement, and sanctions imposed by the UN Security Council took their toll.

After the democratic revolution of 2000, the new government faced two problems: it had to accelerate economic growth, and to develop institutions appropriate to a market economy. The country needed strong leadership with a clear vision of a liberal and democratic society. Unfortunately, such an outcome was quite unlikely, since in general terms, the population in the region – at least at this stage of development – seems to prefer state intervention and income redistribution over private markets (Corneo and Gruner, 2002). In addition, the task appeared especially demanding, since the government was composed of eighteen parties struggling to outmaneuver their coalition partners in proposing ever more populist policies. Leaders of those parties demonstrated the inclination, already quite common in post-communist countries, of the middle-aged cohort to accept state intervention instead of free market values (Alesina and Fuchs-Schundeln, 2005). Simply put, they were not immune to lifelong indoctrination in collectivism, and therefore easily succumbed to the electorate's prejudices against a full-blown market system. In addition, large segments of this middle-aged group appear to be losers of market reforms in the short- and possible medium-run.

In any event, the institutional changes adopted in the last four years seem to be irrevocable. It is highly unlikely for the Serbian economy to return to one-party rule. But, underdevelopment remains a serious problem that challenges further improvements in democracy. It is also an obstacle to joining the EU, and any present or future government that seeks

integration into the Euro-Atlantic organizations must face the task of growth acceleration.

14. Approach

Transition countries have been literally swamped by different suggestions for reform strategies. All kinds of approaches have been suggested, and each political credo has been articulated into a comprehensive reform package branded as "the most suitable" one.

International financial institutions, such as the World Bank or the IMF, tried to organize this welter of confusing and often conflicting ideas into more practical, policy-oriented recommendations. At the beginning of the 1990s, the Washington Consensus emerged, emphasizing the following ten commandments: fiscal discipline, reorientation of public expenditures, tax reform, interest rate liberalization, unified and competitive exchange rates, trade liberalization, openness to foreign direct investment, and most of all - policies of privatization, deregulation, and securing property rights. It was expected that Central and East European (CEE) countries should implement these policies simultaneously and thoroughly.

Because these policies did not work as anticipated in many cases, a second-generation of reform suggestions emerged, i.e. the Augmented Washington Consensus (Rodrik, 2004). In addition to the objectives of the first Consensus, transition countries were given ten more items to improve: corporate governance, anti-corruption, flexible labor markets, adherence to the principles of the World Trade Organization, adherence to international financial codes and standards, liberalization of the capital account, exchange rate regimes, independent central banks, social safety nets, and targeted poverty reduction. A combination of sticks and carrots was devised by international financial institutions and associations of advanced industrialized countries to push transitional countries to adopt all those policies.

In formulating reform policies, international organizations overlooked at least two possible objections: rich countries often no longer resembled their earlier incarnations, and all attempts at transferring institutions without country-specific tailoring have historically failed, as forcefully argued by Nobel Prize winner Douglass North (North, 1990). For example, Iraq once used a version of the Belgian constitution, and several Latin American countries had practically adopted the US Constitution, but political life in those countries resembled neither the Belgian nor American experience.

Growing dissatisfaction with implementation of such rigid and even mechanistic policies prompted some critics to develop their own economic reform agenda. One of the leading contemporary development economists, Dani Rodrik, collaborating with two of his Harvard colleagues, has recently proposed a country-specific approach, which they called "growth diagnostics" (Hausmann, Rodrik and Velasco, 2005). Their first idea was that a one-size-fits-all policy contains several substantial weaknesses, and must be replaced with a policy based on a prior, thorough investigation of country-specific conditions. Their second idea seems equally powerful: a frontal attack on all economic distortions might simply fail due to limited political capital to implement reform in the face of opposition. Therefore it would be more fruitful to select just a few reform activities, invest the resources available in reducing restrictions in those sectors, and only after achieving positive results, proceed to tackle the next most pressing distortions. In other words, countries should adopt a sequence of reform activities.

In the main body of this chapter, we will present the key argument of growth diagnostics by summarizing the rich content of the proposal of Rodrik, et al. We will point out important implications of their model as it applies to the particular economic environment of Serbia. This chapter will be an introductory diagnosis of obstacles to more rapid growth in the Serbian economy. At a later stage, we will seek to identify the most binding constraints, but also recommend some practical steps to be taken in order to stimulate economic growth.

The outline of the chapter is as follows: first, we shall analyze objectives and constraints, and then proceed to discuss the inevitable distortions that create a wedge against optimal solutions. By incorporating political constraints into the model, we shall redefine the problem, and propose a set of criteria for selecting a reform strategy. Several policy

mixes will be analyzed. Finally, we suggest moving from theoretical deliberations to practical policy recommendations.

15. Reform Packages

Now we are in position to shed light on reform strategies proposed by politicians. At the beginning of the transition process, political parties usually propose broad reforms in order to demonstrate their understanding of people's needs and their capacity to solve problems. In that period, democratic parties follow the old communist style of politics by addressing all strata of society ("working people and decent intelligentsia"). After several changes in government, and a more detailed profiling of the electorate, political parties accept more modest programs, concentrating on specific issues. The growth diagnostics model may be substantial help, both for the electorate to evaluate the seriousness of different proposals, and for politicians to concentrate on policies that give them the highest return on the investment of their political capital.

a) Holistic reform

This package would be characteristic of the early stages of transition. However, the prolonged rule by the ex-communist party in Serbia, and the inability of the opposition to oust them from power, stimulated development of the holistic reform design. For example, the only successful program (i.e. the only program that aroused substantial interest among the electorate), as proposed by the Democratic Opposition of Serbia (DOS) coalition of parties in 2000, envisaged reform in all segments of social life, starting with the national question (border and minority issues), including overhaul of the political and economic system, and ending with demographic and intergenerational issues. It is interesting that voters accepted the offer, probably out of a deep-rooted sense of social crisis.

We may easily note the unrealistic character of the proposal. The program was built on the false premise that its authors have a complete knowledge of all prevailing distortions. Also, there was an underlying assumption that the parties that made the offer had the necessary capacity to carry out the program in its entirety. That was simply an impossible mission.

b) „Do as much as you can, as best as you can”

At the beginning of 2004, the DOS parties were replaced by another, somewhat similar coalition of parties that drew up a similar list of pressing problems, but also ranked their objectives. With the national question high on the agenda, the program also stressed passing of the new Constitution and strengthening of the rule of law (as related to the struggle against corruption, crime, and other illegal activities). The coalition agreement did not propose to accomplish the entire list of reforms, and even suggested an early election after the passing of the new Constitution. Once in power, each of the coalition parties promoted reforms within their own responsibilities, without any coordination, and with the assumption that early elections were around the corner. Their approach has been that more reform is better, since it presents an opportunity for a better starting position in the election campaign.

This tactic may be also called a laundry-list method (Hausmann et al. 2005). It relies on at least three false or at least arguable notions, namely that: (i) any reform is good; (ii) the more areas reformed, the better; and (iii) the deeper the reform in any area, the better.

With our model in mind, it is evident that some distortions are more important than others, and the implications of general equilibrium suggest that there must be a sequence of reforms. As we have seen, positive direct effects of some action may be substantial, but indirect negative effects may prevail in the absence of other reforms. In other words, we cannot be sure that any given reform taken on its own can be guaranteed to be promoting the objective function. Only in the limiting case of holistic reform, we can be assured that each action is beneficial, but as we have just seen, that approach is impracticable. Even as the number of reform topics grows, we cannot be assured of being on the right track, since reforms may fall prey to adverse interactions. The very same argument is applicable to the depth of reforms in particular sectors, since it is equally possible for a limited number of deep reforms to become an overall failure.

c) Second-best reforms

A less ambitious strategy, but more sophisticated, would be to search for an activity that has the highest indirect positive effect. Put simply, policymakers are aware of their limited capacity to solve the greatest distortions, and therefore look for small steps that could make a strong impact through interconnectedness of different sectors. They will

choose actions that, on balance, have positive effects and avoid those actions that appear to promise significant net adverse effects.

As an example, one may recall the first federal government in Serbia formed by the DOS coalition in 2000. That government had limited authority, practically restricted to the sphere of international relations and monetary policy, and therefore was not capable of any comprehensive reform. Because of that limitation, the government was forced to look for policies that could cheer up the electorate that voted the old regime out in 2000 at low political cost.

Consequently, the government chose to engage in foreign trade liberalization, and the closing down of the four biggest state banks, under the assumption that foreign products would foster competition on domestic market, force big socialist firms to raise productivity and cut costs in order to survive, and increase the competitiveness of the economy. Also, cheaper imports of raw materials and capital goods would give an additional boost to the stumbling economy, and cheaper imports of consumer goods, after prolonged deprivation under the UN sanctions, would raise the level of satisfaction and approval rate before the crucial Serbian republic-level elections. It was assumed that the immediate effect would be a growing trade deficit, but rising competitiveness would eventually reverse that negative trend.

This calculation proved overly optimistic. Ruined socialist firms were not capable of either boosting productivity or lowering costs. They were overburdened with surplus labor, since during the period of UN sanctions, employment termination was legally prohibited and the marginal product of labor was negative. Also, incompetent managers were accustomed to state subsidies and were not capable of competing with foreign firms. The trade deficit rose, along with a dramatic increase in foreign debt. The only beneficiaries of trade liberalization were a group of importers well-connected to the new government, and sugar (re)exporters who misused the preferential treatment offered by the EU to obtain profits through arbitrage.

Closure of the main banks was also envisaged as a policy with large positive indirect effects. The banks were burdened with debts and they were overstaffed with incompetent personnel who could not be retrained for modern banking. Also, wages in the sector were for a long time artificially kept above average, which produced resentment among the general public toward the employees who were privileged to work in the banking sector. Therefore political risks were negligent, and economic effects substantial. It was expected that by closing these

banks, financial discipline would be enhanced, and room would be created for arrival of foreign financial intermediaries.

However, the policy was only a partial success. Big foreign banks abstained from entering the Serbian market, and financial discipline was only somewhat improved. At the same time, big property owned by bankrupted banks was used improperly. The sale of the country's biggest steel plant, which was partially owned by the banks, and the creation of a private savings bank on the premises of the closed banks triggered allegations of corruption. In general, both policies were highly detrimental for the judicial system and the rule of law in general.

As a general conclusion, these second-best reforms possessed a principal weakness in an uncertain ex ante final outcome. Decision-makers were not able to quantify and determine in advance all the general equilibrium interactions. The strategy requires a very strong and accurate sense of the behavioral consequences of policy changes, which the decision-makers in our examples lacked.

d) Targeting the biggest distortions

This strategy presupposes ranking distortions by their direct effects and concentrating our efforts on the distortion with the largest effect. The second largest distortion comes into consideration only after the largest has been reduced to an acceptable level, and so on. The strategy is simple—in some cases, straightforward—and it may lead to improvement in welfare in terms of the overall conditions of the economy.

Sometimes it is easy to recognize the largest distortions. For example, with dissolution of the former SFRY and the imposition of UN sanctions in 1992, inflation accelerated and quickly established a world record. Evidently, that was the biggest obstacle to economic growth. At the beginning of 1994, an anti-inflation program was adopted with just one objective – curbing inflation. The author of the program insisted that all other policies were irrelevant at that moment. However, soon after initial successes in the struggle against inflation, it became evident that other important policies were lacking, notably privatization and deregulation policies. And by the time these shortcomings were realized, it was too late for accepting new policies since reformers had already lost political support.

It is not always clear, as it was in the previous example, where the largest distortions lay. Some distortions, like imperfect credibility, never show up. Sometimes the largest distortion is known, but never

confronted for political reasons. For example, there is a consensus among economists, and even politicians, that subventions to the state enterprise sector are currently a large distortion. However, no government from 2000 on ever dared to tackle the issue, fearing a political backlash if they tried. Perhaps the biggest problem with this strategy rests with the need to have a complete list of distortions, which is an impractical task in an age of uncertainty.

e) Relaxing the most binding constraints

Sometimes the government is not able to discern all the effects of its policy measures, or it may be reluctant to pursue policies due to a fear of secondary effects, which are unknown in strength, or which may have adverse political consequences. As time passes by, inactivity creates several bottlenecks, and some bottlenecks start to constrain other important activities. For example, the lack of investment in electricity-generating equipment, or untimely replacement of worn-out railroad tracks, may produce substantial hurdles in production and transport of goods. Or, a growing trade deficit may easily result in limits on foreign credit. Inactive government will wait for events to exert economic and social pressures on it, and consequently, it will only move to relax the most binding constraint.

It is hardly necessary to spell out all the shortcomings of such a policy. The model presented in this paper has a clear advantage since it concentrates on forward anticipation of, and not on chasing after, events. The model uses simple determinants of economic growth, and then identifies determinants with the largest direct impacts. Once the focus is selected, investigation is concentrated on associated distortions whose removal would make the biggest contributions to alleviating constraints on growth.

16. From Theory to Practice

There is an endless discussion among economists on the sources and strategies of economic growth. However, few would dispute that economic growth depends on accumulation, and on the use of disposable resources, as suggested by the founding father of the field (Schumpeter, 1911). Hausmann, Rodrik, and Velasco (Hausmann, et al. 2005) have continued along these lines, and have integrated their diagnostics algorithm into a simple growth model that depends on a couple of undisputable determinants. Hardly anyone would dispute that economic growth depends on

(a) returns on capital accumulated, where capital is used in a broad sense, including human as well as social capital,

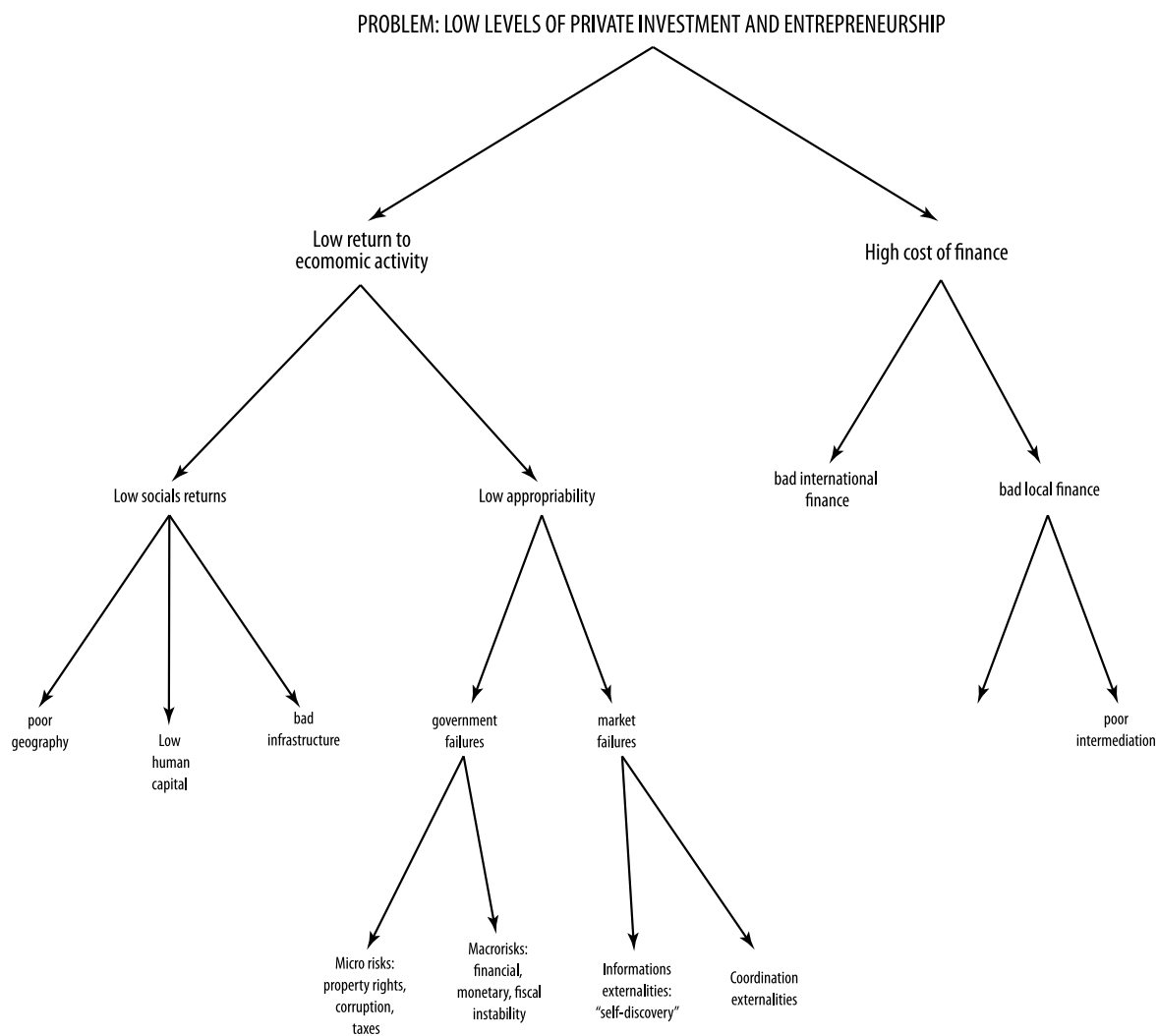


Figure 1. Decision Tree. Source: Rodrik, Dani (2004) "Rethinking Growth Policies in the Developing World", at http://ksghome.harvard.edu/~drodrik/Luca_d_Agliano_Lecture_Oct_2004.pdf.

- (b) possibility for private appropriation of those returns, and
- (c) the cost of financing accumulation.

The first factor of growth is mostly technologically determined, while the second and the third factors offer room for policy correction of return rate. For example, if there were a high tax rate on profits, owners of capital would not be willing to invest, despite the high rate of return. Also, entrepreneurs would not be able to realize their plans if the cost of capital is high, even though appropriation possibilities are favorable and return rate is high, compared to similar risk assessment.

The first stage of investigating a low growth rate would consist in uncovering which of these three factors poses the greatest impediment to development. Is it that existing technology is not capable of producing higher returns, or that investors are not able to reap the benefits of investment, or that the cost of capital is prohibitively high? If the answer suggests that the return rate is low, than the next question would be whether it is low because economy uses outdated technologies, or if it is low due to insufficient investment in complementary factors of production, such as the educational system, communication and transport facilities, etc.

If the answer is that appropriation is the main problem, we should investigate whether it is due to low contract enforcement (inadequate laws or corruption in the judicial system), poor property rights, strong labor unions, poor protection of patent and intellectual rights, or high taxation. Of course, all these factors may be present, but we should strive to discern which is the most constraining. If the answer rests with the high cost of finance (high interest rates), then we should investigate what causes it: fiscal deficits or poor banking intermediation? If it is an inefficient banking system, we proceed with questions on the inefficiency of the banking sector: are there conditions of low competition, high entry barriers, a low country rating (high risk of investment), etc.? In the course of investigation, we constantly ask more and more specific questions in order to design remedies that are as closely targeted as possible.

Now we may make a connection with the distortions that we discussed in the previous sections. First, we must admit that each agent is somehow constrained. And the level of constraints depends on the number, but also on the intensity of distortions. For example, with the opening of the country, an individual can ignore the domestic, inefficient banking sector and borrow abroad, but still be subject to a collateral requirement as a constraint, which in practice is very constraining

due to distortions, or wedges. Alternatively, a household may decide to accumulate its capital. We may easily reckon that accumulation of both physical and human capital creates a lot of externalities that are (positive) distortions. That, on the other hand, provides an incentive to the government to stimulate employment of an educated labor force by subsidies, which will produce negative distortions that may prevail in the long run.

We may also recall that the government provides services to citizens, for a price, such as the state health care system, or public security system. The price of services usually neither covers nor reflects production costs, which is by itself a large distortion or wedge. The difference between high costs and low prices is covered by subventions, which are paid after imposing taxes on individuals' income and consumption, but also on firms' costs and profits. As we already have seen, taxation is a source of large distortions. Moreover, even under very strict public oversight and auditing, government revenue is subject to bureaucratic waste that offers citizens no utility. That is also an important wedge that drives us even farther from optimal solutions.

An exercise in growth diagnostics consists of identifying and analyzing factors of growth to ascertain the most binding constraints on growth. All factors, together with government distortions and other wedges, influence the growth rate. We keep in mind not only direct effects, but also general equilibrium influences, and the challenge is to find the one with the highest net impact following a policy change.

We could better organize our thoughts by using a decision tree, as suggested in the following figure.

The objective of Figure 1 is to determine why the country faces low levels of private investment. Growth diagnostics will help us to explore the causes of such an unfortunate event, and to assist in formulating remedies. First of all, we should ask whether the low level of investment is due to low returns, or the high costs of financing ventures. High financial costs may be caused by international or domestic factors. If local factors are to be blamed, we should ask whether there is low domestic savings, or if the banking sector is inefficient.

However, if we found that low return rather than the high costs of finance was a principal cause of low investment, we should trace the left branch in Figure 1. There are two possible groups of factors that may produce a low return. One group may be labeled as objective, or social returns. Low returns may be due to unfriendly business conditions (bad infrastructure),

or to the fact that the labor force is of bad quality (low human capital), or to the fact that the country is peripheral to important commercial routes and destinations (geography).

Another group of factors may be labeled as subjective, since they can be changed more easily by human action. For instance, low appropriability may be due to government failures or to underdevelopment of markets. Mistakes by the government are reflected in higher business risks that may dominate both at the micro and macro level. Individual enterprises may be exposed to risks by poor protection of property rights, high corruption, or high taxes. Macro risks stem from the dire financial position of the state and/or its monetary and fiscal instability.

If the principal causes of low individual appropriation rest with the market, we should try to understand the nature of the failing. Maybe entrepreneurs ran out of ideas, or they were not able to protect their intellectual property and consequently were not able to collect additional profits in the market, making them reluctant to invest.

Yet another characteristic of underdeveloped transition markets is a fractured information system in which coordination problems arise. There are always those who are willing to emulate the leaders of industry, but since they lack pertinent information, they are unable to develop new products or processes, and consequently do not follow suit.

17. Pro et contra

The approach suggested by Hausmann and others builds on the novel idea of using expert knowledge of a particular economy in order to cure it in a more efficient way. Contrary to the contemporary model building practice that tries to draw far-reaching conclusions governing all “patients” from past data, this approach relies more on the present situation of a particular case, and the intuitive assessment of possible courses of events following reform (treatment). The authors have not used the word “diagnostics” by chance. The word is intentionally

associated with the medical profession. Medical diagnostics uses statistical information about the relevant population and the doctor’s specific knowledge in order to arrive at a specific remedy. In this approach, statistical knowledge is important as background information only. For example, the notion that sixty per cent of a particular population is HIV positive does not mean that chances for our next patient to be HIV positive is 0.6. Likewise, inferring from statistical data that a transition recession would take three years on average does not mean that the next transition candidate may expect the same duration of a recession. Moreover, statistical data in a changing economic system, where the statistical methodology itself is being overhauled, have very little meaning for estimating the effects of a certain policy.

The main idea of the model is acceptable, especially its suggestion for escaping a frontal attack on all problems at the same time, but focusing instead on the most binding constraint. One leading economist, Avinash Dixit (cf. Dixit, 2005), also supports this attempt to narrow down the set of possible actions. However, the sequential mode of thinking, based on a tree structure, is problematic for him. Instead, he is inclined to accept that each case of development failure is a consequence of multiple causes acting simultaneously. Therefore he is more willing to capture causes in a table, instead of a tree.

The next table shows such a grouping, where causes (labeled C_i) and effects (E_j) are given, as well as ex ante probabilities (π_i) of particular outcomes. Experienced experts with a lot of experience would estimate these probabilities. Both causes and effects could be a cluster or composite of several events. The entries in the table cells are conditional probabilities. When the cause C_i is present, the effect E_j will occur with probability P_{ij} . According to Dixit, these conditional probabilities are, at least in principle, estimated by econometric research.

In contrast to ex ante probabilities, from Table 1 we may calculate (Bayesian) posterior probabilities. If a particular effect E_j is observed, then the probability of a particular cause C_i is given according to the following formula

$$\frac{\pi_i P_{ij}}{\sum_{i=1}^m \pi_{ij} P_{ij}}$$

To select the right cause, a double criterion must be satisfied simultaneously: (i) the posterior probability of C_i is close to 1, conditional on observing E_j , and

Causes	Prior probabilities	Effects			
		E_1	E_2	...	E_n
C_1	π_1	P_{11}	P_{12}	...	P_{1n}
C_2	π_2	P_{21}	P_{22}	...	P_{2n}
...
C_m	π_m	P_{m1}	P_{m2}	...	P_{mn}

Table 1 – Causes, Effects, and Probabilities. Source: Dixit (2005)

(ii) when C_i is present, that P_{ij} is close to 1, so the rest of the P_{ij} 's ($j=1, \dots, m$) are close to zero, and if some other effect is observed, the posterior probability of C_i becomes close to zero. The ultimate aim would be to find causes that accelerated growth by this complex use of expert knowledge and econometric studies.

However, Dani Rodrik expresses reservations towards the use of econometric methods in estimating effectiveness of a policy (Rodrik, 2005). He views with skepticism the growing literature produced by academic researchers and development agencies, which predicts the impact of policy intervention on economic growth. The principal problem for Rodrik is how to interpret coefficients from cross-country regressions when policies are not random, but are used systematically by governments. Endogeneity is not only an econometric problem, but also a conceptual problem if we attempt to treat policy as if it were exogenous or random. The literature on cross-national growth is of little value because it assumes that it is enough to plug a policy variable in a regression in order to answer questions concerning effectiveness of policy or the government's motives. Instead, Rodrik proposes using intuition to understand how interpretation can go astray when policies are selected endogenously.

Rodrik defends the sequential approach and direct observation of channels through which policies operate. He proposes a series of indirect tests that can supply some clue for answering the key question: why is growth of a particular economy so low? (Rodrik, 2004):

- If the cost of capital is high, we may expect a current account deficit and domestic banks to be faced by unconstrained credit demand; an increase in autonomous foreign transfers would increase the investment/GDP ratio.
- If an economy is constrained by an objectively low rate of return, it must have few skilled workers, poor infrastructure and geographical or other disadvantages (peripheral geography relative to important trading channels)
- If rates of return are not low, but investors are not able to collect them (low appropriability), we would find high official and unofficial taxes: poor contract enforcement, macro instability, corruption, etc. A combination of surveys and cross-national benchmarking would help in this case.

As already discussed, once these issues have been analyzed, we may proceed to the next stage: if the problem is with the high cost of capital, is it due to low savings, a low level of integration into international financial markets, or poor intermediation? If indirect evidence suggests the

third factor is the culprit, we may proceed to the third stage and ask whether poor intermediation is due to low competition in the sector, high taxes on financial services, or some other cause. We proceed in a similarly sequential manner until we reach the most binding constraint.

In Chapter 7 of this study we will use this approach in order to identify the most binding constraints on faster growth of the Serbian economy. We will assume that accelerating economic growth is not only beneficial for domestic populace, since it reduces the level of unemployment and increases incomes and consumption, but also alleviates the foreign debt repayment burden, which will become the principal economic problem from the year 2007 on.

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4. Growth Diagnostics – Data

18. Introduction

As suggested earlier in section 15, there are two possible ways to approach bottlenecks thwarting greater competitiveness in the Serbian economy. One is to count all the obstacles and seek to eliminate each of them simultaneously. The other consists of prioritizing constraints by importance and engaging each separately, starting with the most binding constraint. The first strategy could be called a “laundry list” strategy, while the second strategy may be more appropriate for inadequately developed states whose governments lack sufficient expertise and resources for a frontal attack on obstacles to rapid economic development. Before we apply growth diagnostics in chapter 6, it is necessary to examine the state of growth and levels of investment in Serbia as of the end of 2005.¹

19. Gross Domestic Product

The value of Serbia’s gross domestic product (GDP) in 2005, according to preliminary estimates, amounted to about \$24 billion. During 2001-2005, GDP recorded constant real growth, with an average monthly rate of 5.6%. The cumulative rate of real growth for that period amounted to 24.6%, from which growth for 2005 can be estimated, relative to growth of 6.5% in 2004.

The realized rate of GDP growth per capita is somewhat greater than the growth of absolute GDP-a, taking into account that the Serbia population fell during the period in question. The most recent data on population trends refers to 2004, such that the real rate of growth in GDP per capita in 2004, starting from 2003, amounted to 9.6%, and, measured from 2001 onwards, 19.9%.

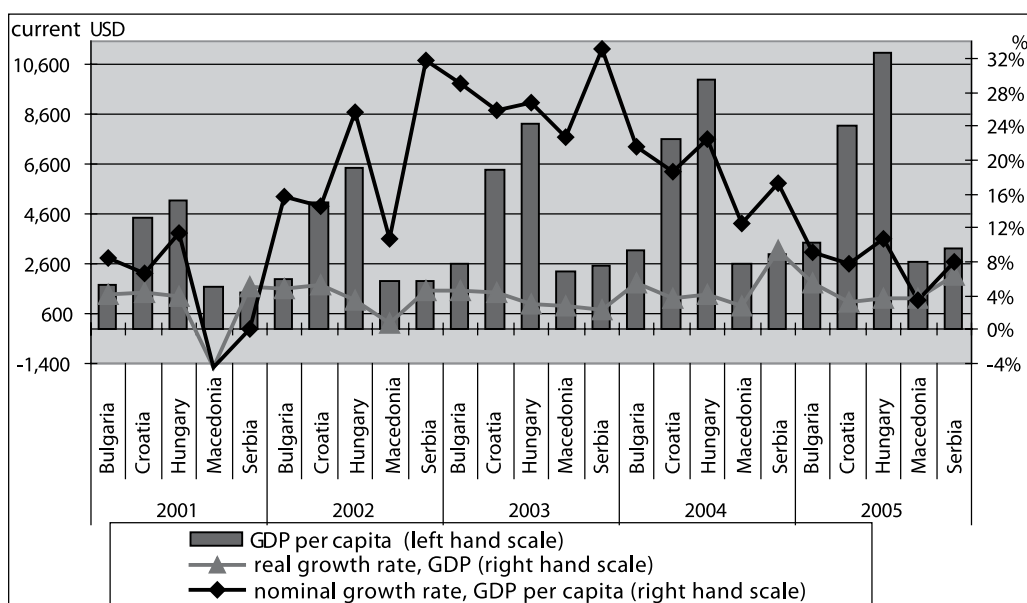


Chart 1. Comparative view of indicators of economic activity. Sources: for Serbia for the period 2001-2004, Bilten javnih finansija (Bulletin of Public Finance), (Belgrade: Ministry of Finance of the Republic of Serbia); for 2005, estimates of the author; and for other countries, Economist Intelligence Unit.

¹ In the greatest number of cases, the data refer to 2005. However, because of a lack of some numbers, some data as presented are available only for 2004.

As can be seen in chart 1, the dynamic of real GDP growth in Serbia follows a dynamic that is prevalent in the region. In 2001 and 2005, Serbia's GDP achieved the highest rate of growth compared to other observed countries. However, besides the fact that it grew, GDP per capita was higher only in comparison to Macedonia, and significantly lagged behind the advanced countries in the region.

Economic growth in Serbia in 2001-2005 was most remarkably led by growth in domestic demand, in large measure because of real growth in wages and pensions of residents. A part of this growth is the consequence of growth in budget expenditures, whose structure is such that the largest portion is directed to the payment administration of wages and pensions. The World Bank² proposed that the public sector be reduced, in order to create room for greater domestic savings and investment of the private sector, and to change the structure of public spending, in order to reduce expenditures for wages, pensions, and subventions, while increasing expenditures in public investments.

Analyzed sector by sector,³ the economy is dominated by the services sector, which creates more than half of gross value-added in Serbia. The uniqueness of Serbia during the previous period is the unusually high proportion of the primary sector, which was typically more than one-fifth of gross value-added. This indicates the importance of agriculture in total economic activity. Keeping in mind that agriculture by nature is extensive and insufficiently productive, its high proportion of economic activity is mainly the result of a significant decline of activity in the secondary sector during the 1990s. The trend of the last several years shows that participation by the service sector is increasing and the secondary sector is diminishing, while the role of the primary sector is mostly holding steady, accounting for close to one-fifth of gross value-added. Preliminary data for three quarters of 2005 show further change in the structure of economic activity, where the declining importance of the primary sector (16% of gross value-added (GVA)) and further growth of the tertiary sector (58% of GVA) can be observed.

Individual activities contributed to real growth in GDP in 2005, due to growth in service activities, above all in transportation, commerce, and financial services. Interestingly, agriculture, construction, and processing industries, which in 2004 contributed to a

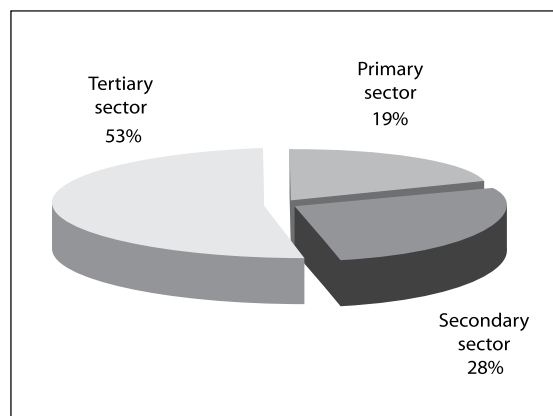


Chart 2. Structure of gross value-added in 2004.

high rate of economic growth, recorded a decline in activity during 2005.

Regarding the distribution of GDP, the latest data is from 2003. One negative feature visible at first glance is that, as a rule, the value of final spending in Serbia in recent years has exceeded the value of achieved GDP. In other words, Serbia as a whole spent more than she produced. In spite of that, a positive trend is that total investment activity is growing, such that the proportion of gross investment of GDP for 2003 amounted to 14%. This aggregate investment value is, however, lower than is preferable, and should amount to more than 20%.

20. Investment

The average GDP growth rate of 5.6% in the period 2001-2005 represents great progress compared to 1990-2000. However, it is still completely unclear how sustainable such growth is. For example, in 2001 and 2004, a high growth rate was accomplished thanks to strong growth in agriculture. Growth of gross value-added in agriculture in 2001 amounted to 19%, and in 2004, even 20%. Those were the years when GDP growth was greatest. GVA fell in agriculture by 3.4% in 2002, and by 7.2% in 2003. (Nevertheless, decelerating GDP growth in those years was not solely the consequence of falling GVA in agriculture, but also in processing industries.) Agricultural production by nature experiences large oscillations and cannot be a guarantee of sustained development.

The level of direct investment in 2001 appears insufficiently high to stimulate growth more

² World Bank, "Program for Economic Growth and Employment," Issue no. 29258-YU (2004).

³ Sectors are defined according to the NACE classification of activities, as follows: the primary sector encompasses agriculture, hunting, forestry, hydropower, fishing, and extraction of ore and stone; the secondary sector encompasses (light) processing industries, production of electrical energy, gas, and water, and construction; while the tertiary sector encompasses all other activities, including commercial and public services.

substantially. As shown in section 20, except for 2003 when direct investment amounted to \$1.36 billion, it had fallen again to \$890 million by 2004, though rising in 2005 to about \$1.5 billion.

As can be seen in table 1, the ratio of foreign direct investment to GDP in Serbia is not much less than in neighboring countries, but Serbian government statistics on foreign investments factor in revenue from privatization. (In 2003 revenues from privatization amounted to €929 million.) Those revenues enter the state budget, which the government later uses to cover a budget deficit, that is, for spending. In 2004, revenues from privatization had less and less of a role in the total influx of foreign direct investment. (For example, in 2005, revenues from privatization amounted to less than €400 million.) The share of greenfield investments increases within total investments.

Regardless of the higher level of investment, Serbia is an even more risky country for investing. As can be seen from the risk estimates carried out by the Economist Intelligence Unit, although the entire region is risky, Serbia is the riskiest country in the region. High risk deters foreign and domestic investors, and can be taken as a general reason why Serbia's economy grows more slowly than it could.

	2001	2002	2003	2004	2005 ^a
Serbia	1,2	3,4	7,0	4,2	7,0
Croatia	9,0	11,2	2,1	3,7	7,4
Bulgaria	6,0	5,8	10,4	10,7	7,6
Macedonia	12,8	2,1	2,1	3,0	-
Hungary	4,1	4,0	-0,6	4,2	4,2

Table 1. Net foreign investment as a percentage of social production. Source: ING Wholesale Banking. ^aEstimate from ING Wholesale Banking.

As seen in the previous section, economic growth was insufficiently rapid in 2001-2005, and was largely driven by high public spending. If we start from the lower layer in the "tree" of growth diagnostics (see

figure 1 in section 16), it is difficult without further analysis to conclude which problem in Serbia today is the most acute. The Serbian economy suffers from high and growing inflation, high public spending, high deficits in the current account, a high proportion of export credits from state debt, and weak protection of property rights as the consequence of an inefficient and corrupt judicial system.

21. Return on Social Capital

Drawing on figure 1 (section 16), low growth could be caused by high financing expenses and low rates of return on economic activity. The reasons for a low rate of return could be twofold. Either the reason for sluggish growth is return on public capital, or it is low appropriation. This section will present some data relevant to the first reason

Human capital. Contrary to popular belief, the quality of human capital in Serbia is low. Almost 6% of residents older than 15 years of age do not have any education. The number of persons with a university education is only 15% more than those without schooling. If we add the number of persons without any education to those who are practically illiterate (with only a third grade education), that total exceeds the number of university-educated by 17%. Moreover, almost one-quarter of residents have only an eighth grade education. If those without education were unemployed, and those with more educational instruction were entirely in labor relationships, we would claim that the employment structure is better than the qualification structure of the labor force. However, the educational structure of those employed is almost completely the other way around, because persons without a basic education make up only 3% of the unemployed

Wages. For the last four years, personal incomes grew faster than productivity. The growth of wages is one of the basic obstacles to a flexible monetary policy. The growth of the average wage over 2001-2005 amounted to 15% per year. This large growth in wages rendered a flexible policy on the dinar

	Overall grade	Overall estimate	Political risk	Risk from economic politicise	Risk from economic structures	Risk of liquidity
Serbia	D	64	D	D	D	C
Croatia	C	45	C	B	C	C
Macedonia	C	60	D	C	C	C
Bulgaria	B	39	C	B	B	B
Hungary	B	34	B	B	B	C

Table 2. Political and economic risk, September 2005. Estimates by the Economist Intelligence Unit (EIU). Note: Rankings are expressed by descriptive evaluations from A to E, where A signifies the least risk, and E the most risky. "Overall estimate" is a numerical expression of the "overall grade."

exchange rate impossible. In order for the dinar to have devaluated more quickly than in the period 2001-2005, and at the same time to prevent the danger of inflation, it would have been necessary for wages to grow more slowly.⁴

However, to limit wage growth, slower increases in prices are also necessary. Taking into account that the state controls one part of a given price, it often negotiates with public enterprises over price increases (oil, electricity, public utilities, edible oils, and so on). If the state approves price increases in public services, then it is difficult on the other hand to prevent the growth of wages in the public sector. That there are constant negotiations over prices and wages only shows that there exists inflationary pressure caused by high state expenditure.

Be that as it may, average gross earnings in Serbia grew in real terms by 70% in 2001-2005, and reached 308 EUR by the end of 2005, more than in Bulgaria or Romania, which are on the road to joining the European Union, but less than income levels in Croatia and Bosnia-Herzegovina, which also aspire to membership

This real increase contributed to growth in earnings in all the individual activities from the previous period. That especially applies to service activities, where the average of earnings is the most, but in 2005, activities with the highest earnings joined some branches of processing industries. A good part of these high earnings is connected to budget-friendly activities, such as for monopoly activities (for example, transportation, energy, public utilities, and so on).

A comparison of earnings in Serbia with those of neighboring countries shows that competitiveness based on low earnings is almost always lost. In truth, gross wages in Serbia during 2004 and thereafter were lower than those in Croatia (by 63%) and in Bosnia-Herzegovina, but were significantly more than in Romania and Macedonia (by 42%), and especially compared to Bulgaria (by as much as 85%).

Labor force flexibility in Serbia is lower than in surrounding countries. Privatized firms are usually contractually obligated, as compelled by the Agency for Privatization, to maintain their level of employment or to gradually reduce the number of workers by at most ten percent per year. The law imposes administrative difficulties in dismissing workforces in order to slow the growth in unemployment. Naturally, that also slows restructuring,

competitiveness of firms, and economic development.

One of the essential innovations of the Law on Employment and Unemployment Insurance (enacted in 2003) is the change of emphasis from passive to active measures of finding employment. Namely, although the unemployed used to receive monetary compensation and to wait for the National Employment Service to find work for them, now they have incentives to get themselves involved in the search. That is attained with the organizing of training and additional vocational education for the unemployed in order to gain new skills. On the other hand, the law shortened the duration of monetary compensation and introduced an obligation for the unemployed to call the Employment Service regularly and to accept work offered to them, or otherwise be removed from the register of the unemployed.

The second important legal act in this area is the new Labor Law, enacted in February 2005. The chief reason for its enactment (effectively suspending the reformist Law of 2001) is that it makes possible better protection of the employed by respecting European Union standards. It provides for the politics of earnings to be conducted through collective bargaining. It also provides for the formation of an Emergency Fund from which workers of bankrupt enterprises can quickly pay their claims. By this law, discrimination against workers on any basis is forbidden and sanctioned. In the event an employer wants to dismiss excess workers, the employer must come up with a program for solving excess employment, in consultation with the National Employment Service and representative unions. Now it is more difficult to dismiss surplus workers. The law demands that enterprises possess a long-term program for the reduction of their labor force in the case of technological surpluses, in spite of the fact that all firms, since the period of self-management, have surplus workforce capacity.

If an entrepreneur is not satisfied with a worker, the former is not permitted simply to dismiss the latter. Instead, he must give a formal warning with precise reasons for his dissatisfaction, inform the labor union about his intentions, and offer the employee alternative employment. Also, the law establishes an Emergency Fund for workers who lose their jobs because of the firm's bankruptcy. Employers pay supplementary taxes in order to finance the Fund, which makes the workforce all the more expensive. All these changes were made under the guise of harmonizing labor legislation with European Union standards, and only a few protesting votes called into

⁴ In truth, wage growth has not been uniform over all five years under observation. During 2001-2003, wages grew significantly faster, while in the last two years, wages grew more slowly and closer to growth rates in productivity.

question excessive EU directives on labor drawn up by the leaders of wealthy states.

Labor productivity. In principle, the high price of the labor force can exceed its productive benefits. The growth rate of productivity of the Serbian economy is greater than in surrounding countries. On the basis of the index of growth in the numbers of the employed and the real growth of earnings in 2005 compared to 2001, real growth in productivity is recorded in the context of all activity, but at different levels. Financial services recorded the greatest real growth (209%), while the smallest was realized in trade (20%). The processing industry accomplished growth of 94%, and agriculture achieved 87%.

Productivity by activity sector also can be analyzed according to gross domestic product per employee. The primary sector records the largest GDP per employee in 2004, amounting to \$41,700. This is a significantly greater value compared to the other two sectors: four times more than the secondary sector, and three times more than the tertiary sector. Such a big difference can be explained by the fact that this statistic does not include the agricultural population among the ranks of the employed, although agriculture certainly is an essential activity contributing to the production of GDP.

In relation to surrounding countries where the comparison was made, Serbia achieved the highest growth rate of productivity if we consider the economy as a whole, while regarding industrial productivity, Bulgaria realized the best results. In Serbia's case, growth in productivity is the consequence of real growth in GDP, but also

reduction in the number of those employed, as a result of restructuring of particular activities.

In the World Bank study *The Cost of Doing Business 2006*, Serbia was graded positively in regard to employment regulation, as compared to other countries. Nevertheless, it is necessary to emphasize that the World Bank's study used as its reference point for Serbia the Labor Law of 2001, a law which was rather liberal. Some of the key regulations in this law changed with the adoption of the new Labor Law in 2005.

Infrastructure. During the time of UN sanctions, hardly anything was invested in the infrastructure of the country. Resources were practically used up because in that period there were no additional investments. Railroad lines and wagons became worn out, and as a result, the average speed of railroad transport fell drastically. The survey from chapter 5 reveals almost universal dissatisfaction among managers with the infrastructure of the country, emphasizing particularly the bad state of the railroad system (98% of managers expressed dissatisfaction). Two-thirds of survey participants had experienced traffic jams that to a great degree increased their costs of production, and more than 80% of respondents considered infrastructure to be insufficiently developed. Contrary to repeated promises, the main highway, which connects Western Europe with Greece and Turkey, has not been completed. Driving conditions on that road and in other directions, but also bad conditions in ports, undoubtedly increase the costs of transport (according to 90% of those investigated).

	Serbia		Bulgaria		Macedonia		Croatia	
	$r(P)$	$r(P)$	$r(P)$	$r(P)$	$R(P)$	$r(P)$	$r(P)$	$r(P)$
2001	...	4,7	2	7,5	1,7	-13,5	7,6	9,8
2002	9,9	7,9	5,2	3,4	4,2	7,2	7,6	1,2
2003	3,6	5,1	10,7	1	8,5	5,7	3,5	3,7
2004	14,2	8,2	19,7	2,5	2,7	7	4	2,1

Table 3. Comparison of real annual growth rates of productivity (in %)⁵

	Serbia	Bulgaria	Macedonia	Croatia
Costs of employment ^a	25,0	32,2	32,5	17,2
Rigidity of the employment index	28	44	54	57
Costs of dismissal ^b	21	30	41	38

Table 4. Regulation of employment. Source: The World Bank, *The Cost of Doing Business 2006*. For the explanation of the methodology, see <http://www.doingbusiness.org/Methodology/HiringFiringWorkers.aspx>, a Expressed as a percentage of wages. b Expressed as weekly wages.

⁵ The source of data as the basis of calculations is the Wiener Institut für Internationale Wirtschaftsvergleiche. The index of productivity P_i is based on productivity in industry, and is calculated on the basis of data on the number of employees in industry and the index of physical volume of production in industry. The second index of productivity, P , is based on productivity as a whole, uses data on the number of employees (through an investigation of the labor force) and on the achieved real GDP.

The number of land-based telephone lines is relatively low (38 per 100 inhabitants), but is similar to regional norms. Business communication is impeded more by the unreliability of land lines as well as mobile telephone connections. Reliability is also a problem in respect to energy supplies, especially electricity. For the last several years, electrical current supply is under constant demand: there are no shortages, but the quality is rather low. More than half of respondents agreed with this opinion. Whenever the government or electricity exporters consider export to be profitable, they simply reduce the voltage of the current in the network, which damages equipment quite a bit. The price of electrical energy is close to regional levels, and it appears that the period of cheap (subsidized) current has irretrievably passed with the abandonment of the socialist model of development

In Serbia, the Internet is expanding. According to the 2005 study “The Internet on the Palm” by the Center for Free Elections and Democracy, 35% of respondents (i.e. millions of residents) use the Internet in Serbia. Of the total number who use the Internet, 41% of respondents do so daily, and 13% very rarely. In 34% of cases, the Internet is used for “surfing,” and in 28% of cases, for sending and receiving e-mail.

By and large, numerous elements suggest low social returns, as in many underdeveloped countries. However, there are a number of other factors that seriously jeopardize economic growth; among these, government failures appear to play a prominent role.

22. Appropriability

According to the model of growth diagnostics (chapter 3), low appropriability can be a second reason causing a low rate of return on invested funds. That would mean that the country has sufficient public capital to provide suitable infrastructure and processing of invested funds, that there exist significant sources of financing which protect the continuity of deposited funds, but there is a problem with payment of profits. Dani Rodrik establishes two possible causes for low appropriability: government failures and market failures. This section will consider each of them in the context of the Serbian economy.

Government failures can be separated into two types – micro and macro risks. **Micro risks** include taxes, corruption and property rights. If key bottlenecks are identified in this area, that would mean that the economic policy of the government is good, but that low appropriability is caused by weak

protection of property rights, high corruption, and high taxes

Corruption. At first glance, there are enough government failures to create risks at the micro and macro levels. According to international studies, corruption in Serbia is getting wider. It is probably one of the greatest problems that the government of Serbia confronts today. The first post-Milošević government fell because of a corruption scandal in the fall of 2003. The government of Vojislav Koštunica, although it promised in the election campaign that it would clear up all corrupt affairs during the tenure of its predecessor, did not do anything to keep its promise. The government generally did not react to several reports compiled during 2004 by the Council for the Fight against Corruption, a body established by the government in 2002 to research corruption as a systematic matter and draw attention to it. The persistent refusal of the government of Serbia to react to these reports confirms corruption in society and in state administration that resists its own uprooting. Some movement in the fight against corruption began to occur at the end of 2005 with the discovery of a good political reason for it.

According to several international institutions and non-governmental organizations that study corruption, Serbia ranks among the most corrupt countries. According to reports by Freedom House, estimates of corruption showed a high presence several years back, and most importantly, they are somewhat worse than the average estimates for the Balkan region, recognized for weak institutions and high levels of corruption.

According to a yearly analysis of *the World Economic Forum*, the state of public institutions in Serbia that enable the fight against corruption is poor. Table 6 shows a comparison of selected estimates for the state of public institutions in the region, according to the study *The Global Competitiveness Report*.

Year	2002	2003	2004	2005
	5,25	5,25	5,0	5,0
Average estimate for the Balkans as a region	5,04	4,86	4,97	4,97

Table 5. Corruption estimate for Serbia and average estimates for the Balkans as a region. According to the measuring system applied by Freedom House, an estimate of “1” indicates the absence of corruption, and an estimate of “7” indicates a maximum presence.

According to corruption studies carried out by Transparency International, Serbia is also ranked very low. In results for 2004 and 2005, Serbia had one of the most negative indexes of perceptions of corruption as a regional matter, and occupied 97th place among a total of 145 countries

At the end of May 2005, the Government of the Republic of Serbia adopted a National Strategy for the Fight against Corruption. At the moment, it is making its way through parliament. This strategy decided in favor of three fundamental goals: to define clearly the places where the phenomenon of corruption is possible and those who could commit

it, the production of an action plan, and the raising of anticorruption awareness among citizens.

The transparency of the work of the government, as one of the conditions for eliminating corruption, has not been satisfactory. One of the more acute problems is the budget of the government of Serbia. By means of the law on the budget, government consumption is announced to the public, but by the end of the year, there is no report submitted regarding the uses of the budget. The armed forces of Serbia and Montenegro have a non-transparent budget: it is submitted to the Finance Ministry only as a total amount of demands, without specific details on

	Serbia		Croatia		Bulgaria		Slovenia		Slovakia	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
Independence of the judiciary	85	91	88	76	81	88	54	50	62	67
Efficiency of the legal framework	87	78	80	79	88	97	46	50	60	68
Property rights	94	103	90	86	80	85	49	49	42	42
Protection of intellectual property	96	110	76	67	81	90	32	30	49	44
Transparency of government policy	86	-	87	-	91	-	49	-	69	-
Favoritism in government policy	79	95	87	77	89	101	57	50	74	91
Bureaucratic procedures ^a	10	66	7	4	87	93	57	50	13	27
Organized crime ^b	72	67	77	85	98	110	30	46	70	64
Gray economy	80	70	52	64	61	66	21	25	32	35
Bribery for export and import	83	55	69	67	29	38	22	21	48	40
Bribery in the public services sector	83	66	57	62	41	46	25	27	33	34
Irregular payment of taxes	79	45	59	64	31	33	24	30	37	38
Illegal influence of government policy	80		76		27		32		79	
Bribery in the judiciary	75	59	73	68	43	47	27	28	76	79
Influence of illegal political donations	64		73		79		42		87	
Diversion of public funds ^c		84		49		100		39		47
Position in the Public Institutions index	85	69	76	73	56	62	31	35	49	45
Subindex of corruption		55		65		38		25		37

Table 6. Position of selected indicators and aggregate estimates for the Index of Public Institutions which points to corruption. Source: The Global Competitiveness Report 2004-2005, and The Global Competitiveness Report 2005-2006.

^aThe measure by which bureaucratic procedures and contact with state employees impose a cost for business. ^bThe measure by which mafia-type racketeering imposes a cost for business.

^cThe measure by which public funds are used for private purposes.

	Serbia		Croatia		Bulgaria		Slovenia		Slovakia	
	2004.	2005.	2004.	2005.	2004.	2005.	2004.	2005.	2004.	2005.
Index of perceptions of corruption	2,7	2,8	3,5	3,4	4,1	4,0	6,0	6,1	4,0	4,3
Position	97	97	67	70	54	55	31	31	57	47

Table 7. Index of perceptions of corruption (CPI), by Transparency International. The CPI score relates to perceptions of the degree of corruption as seen by business people and country analysts, and ranges between 10 (highly clean) and 0 (highly corrupt). Source: Reports of Transparency International for 2004 and 2005 (<http://ww1.transparency.org/>).

where and how much the military budget is to be spent. The State Security Service (SDB) is almost completely closed to public view, even in those segments which the rest of Eastern Europe mostly opened to the public after the fall of the Berlin Wall in 1989. (For example, State Security refused for a long time to let the public see secret files on Serbia's citizens for the 1945-2000 period, and then in 2005 launched the story that the files were lost by mistake.)

Except for these discouraging facts, the survey data presented in section 27 reveals that more than half of top managers think that illegal donations to political parties are rather typical. Whether on the basis of such an impression, or for other reasons, more than three-quarters of persons do not think that the government is impartial towards business firms.

Property rights. A critical micro risk occurs in the area of abuses of property rights and the government's inability to protect them. One of the greatest problems is the return of property of which owners were deprived without compensation by the application of regulations and other acts enacted after World War II. A condition for legal and legitimate privatization is the passage of a law on restitution, which would be founded on the basic legal principle of respect for the continuity of ownership, as well as on the right to claim property.

A step forward was the passage of the Law on Declaring and Filing Seized Property (the so-called Restitution Act) that entered into force on 8 June 2005. This law confirmed a procedure for declaring and filing claims regarding real estate on the territory of Serbia as property seized without compensation at market value by the application of regulations and acts that entered into force after March 1945. Registration of seized property can be carried out by physical persons whose property was seized, or by their heirs, by no later than 30 June 2006.

That the government is incapable of protecting owners of private property was demonstrated in the case of the attempt to take over two influential enterprises that were partially privatized by law in the 1990s. In the case of the takeover of Knjaz Miloš, the largest producer of mineral water in Serbia, the government in the fall of 2004 exerted pressure on the Securities Exchange Commission to eliminate one bidder and favor another. In the case of C Market, small stockholders (who possessed over 50% of the shares) could not sell their shares on the stock exchange for a long time because the director of the enterprise did not want to sign the prospectus that would have made it possible to trade shares freely on

the stock exchange. Subsequently, the Commercial Court got involved in preventing small shareholders from trading shares by annulling the registration of shares in the Central Registry for securities. Although the shareholders of C Market have not been able to freely dispose of their shares since 1997, the government of the Republic of Serbia took no action to make possible the free disposal of private property until the end of 2005, when C Market was finally sold

This does not exhaust in any way the list of cases that reached the point of abuse of ownership rights. There was the "auditors' scandal" (involving the firm Putnik), the fraudulent operations reducing the share value of new broadcasts (Jugoremedija), the transaction of connected parties and abuses of official positions (Nacionalna štedionica), the insolvency procedure suitable for manipulation and fraud (Sartid), or the saga of the government's taming of independent institutions (the Securities Exchange Commission). Not one of these cases has reached the point of a court judgment.

One of the most striking examples where the government failed to defend its own property rights is the example of the corporation MOBTEL which operates in the field of telecommunications. In the name of unpaid dividends, this corporation, in which the state held about 50% ownership, owed the state €52 million for the period 1994-2004. Although the government of Serbia established a commission that confirmed during 2004 the indebtedness of MOBTEL to the state, the government did not succeed in forcing this corporation to pay its debts to the state until the end of 2005, nor did it succeed to confirm exactly how much the state's share of MOBTEL was, and how much belonged to other owners, whose identities are unknown.

Corporate governance. The inefficiency of protection of property rights is perhaps better seen in poor corporate governance in practice. The new Law on Companies (2004) significantly advanced the principle of corporate governance. Besides innovation connected to the simplification of procedures for founding and lower initial investment, the Law offers space for significant advancement of corporate governance in enterprises. For example, companies can have either directors or an administrative committee (not both), whose mandate lasts three years, and the shareholders' assembly can release them without citing a reason. The assembly has a control function in the company, and over shareholders' access to all relevant information and documents.

However, it should be kept in mind that the new law is not being implemented right away: it

anticipates a period of two years, during which enterprises have time to adapt to its provisions. That would perhaps be why the EBRD in its 2004 and 2005 reports gave Serbia its actual rating for corporate governance.

The system of corporate governance in Serbia at the end of 2005 showed serious deficiencies in respect to transparency of ownership and control, unreliable financial reporting, defects in measures to prevent asset-stripping, and share dilution – all those constituting otherwise normal protections of small shareholders. (See section 39 for more.) In some

possible comparability between domestic and foreign financial reports

However, introducing standards does not solve everything, and brings some new problems. First, there do not exist adequate controls over financial reporting, as the result of insufficient capacity in the government and other state bodies to carry out appropriate control over reporting. There exists no efficient mechanism for implementing all the prescriptions of the Law on Audits and Accounting from 2002. That disturbs competition between the private sector and enterprises with state ownership.

	Serbia	Croatia	Macedonia	Bulgaria	Hungary
World bank 2006.	5,7	3,0	6,0	5,3	4,7
EBRD 2004	2	3	2+	3-	3+
EBRD 2005	2+	3	2+	3-	4-

Table 8. Index of corporate governance in the Serbian economy according to the World Bank, The Cost of Doing Business 2006, and the European Bank for Reconstruction and Development, Transition Report 2004 and 2005. The maximum rating for corporate governance in the World Bank's study is 9.7, and in the EBRD study, 4+.

enterprises, especially in those which were privatized before 2001, it is impossible to identify the real owner. The new Law on Companies requires that all owners have access to the full list of owners, but the Securities Exchange Commission does not always possess complete lists of owners for all enterprises. The public's access to information on internal ownership structures occurs exclusively through stock exchange brokers. In some cases, owners list the name of their brokerage house instead of their own, personal name. Also, it often happens that the owner appears to be an enterprise registered in Cyprus or some other offshore location. The Securities Exchange Commission has no way to sanction the voting power of owners whose identity is unknown.

The financial situation of an enterprise is signed on the basis of a financial report. The form that expresses the enterprise's situation is the prospectus. It contains insufficient information on the financial situation of the enterprise and is updated only once per year. The application of international accounting standards began in 2004 for banks, and in 2005 for enterprises. That has brought significant innovation and improvement relative to the previous system. The most essential thing is that the new system is much more flexible, unlike the previous period, when the entire process was founded on legal regulations. That makes it possible to cover all potential situations, and for enterprises, in accord with the general framework, to apply decisions appropriate to their needs. Except for that, the application of international standards finally makes

There is an audit obligation only in the case of medium and large enterprises. In the case of small firms, except for formal confirmation of information on the occasion of submitting reports, and except for inspection reports on the part of tax authorities, accounting controls are not required. Financial reports are accessible to the public through the Center for Solvency, but practice shows that large and medium firms mostly do not present for inspection audited financial reports. For example, in 2004 about a thousand large enterprises submitted financial reports to the Center for Solvency, but of those, only 600 submitted auditors' reports. The Center warned firms that did not submit auditors' reports, but did not go farther than that. There is no information that anyone in Serbia has ever been punished for erroneously reporting information in financial reports.

Second, accounting audits are more concerned with whether information has been completed in accordance with regulations, and cannot get into the credibility of the documentation as the basis for completing the bookkeeping. Third, even where audits are carried out, that is no guarantee that the reports are good, because auditor responsibility is not adequately regulated. Existing regulations on criminal and civil responsibility as they relate to auditors do not represent a means of discouragement, and the Law on Accounting and Auditing in 2002 generally does not require controls over the quality of auditing practice.

Lastly, an essential problem is insufficient education of accountants and enterprise owners. There will come a time when completing and publishing financial reports ceases to be experienced as a legal obligation, and owners and management begin to use them as the most fundamental source of information for managing a firm.

Perhaps the greatest problem with accounting audits consists of the fact that for holdings, there is no legal obligation of delivering consolidated financial reports as a basis for inspection of cross-ownership (where one enterprise possesses another in similar industrial branches) between banks and insurance companies, or banks, firms, and the largest financial and industrial holdings that are being formed. The standard forms prepared by the Ministry of Finance and the National Bank of Serbia do not enable the submission of consolidated financial reports that enable the creation of monopolies, and are contrary to the Seventh Directive Company Law of the European Union.

The 2004 Law on Companies should have prevented owners with the greatest number of shares from increasing illegitimately their proportion of shares so as to dilute the proportion of small shareholders. Frequently, the practice is for new owners to be slow to register the enterprise for trading on the stock exchange, such that small shareholders cannot freely dispose of their shares. Under previous legislation, the owner with the greatest number of shares could, on the basis of a limited number of shareholders, increase his part of the firm and thus become an owner controlling more than 50% of shares. It is not uncommon that such an increase happens by means of exchange of goods or that the capital of the enterprise is used to finance the issuing of new shares. Implementation of the new law is still not effective, and the practice of asset-stripping is still always present

The new law does not supply sufficient protection for small shareholders because the procedure for takeovers is defined by the Securities Exchange Act of 2002. The procedure for takeover does not require that the buyer buy all 100% of shares, but it is possible for him to buy at least 30%. In enterprises in which the state through the Stock Fund has 40% of shares, the buyer can obtain a controlling share of over 50% with which he can endanger the position of small shareholders

The Securities Exchange Commission also does not have sufficient authority to protect shareholders and their ownership. The Commission does not have the authority to influence the work of the Central

Registry or the Belgrade Stock Exchange, not even when it can be shown that there is reason to suspect violations of the law. The Securities Exchange Commission forbids insider trading, but the punishment for manipulation of such kinds is negligible. Similarly, the law does not permit a prospectus to contain falsified information, but also does not provide for punishment if the enterprise does not have a prospectus at all.

Bad protection of property rights is visible in the surveys we discussed previously (section 27). More than half of respondents think that property rights are not correctly defined and therefore are unprotected. The same number of managers indicate that there is weak concern for the interests of investors, and more than 70% of respondents consider that minority shareholders are not adequately protected.

Land. A common phenomenon in Central and Eastern Europe and the former Soviet Union consists of privatization policies that permitted the sale of enterprises, but not of the land on which those were found. A similar practice continues in Serbia. Article 60 of the Constitution of Serbia of 1990 forbids the privatization of city civic lands. It is only possible to permit exploitation of the land by interested persons. However, the conditions of use are unfair. The Law on Real Estate Taxes obligates users of civic land to pay taxes on that land, although the owner is the state. That is an additional motive for state employees to delay privatization of civic land.⁶

In order to obtain land property in Serbia, it is necessary to be correctly included in the public books on real estate (the cadastre (registry) of real estate deed books). Only about 43% of the territory of Serbia is included in the deed books. Information is not up to date, and the number of objects is not registered. Legal security on the occasion of purchase of objects located on such land is not guaranteed. Because of the disorderly situation, it is not possible to use a mortgage as a means of protecting lenders and to jump-start the development of financing. Except for that, the Privatization Act does not prevent the sale of enterprises located on land that is not registered in the deed books. The buyer must calculate and pay the price for the land even though he cannot obtain ownership over it. Exceptional resources at the disposal of investors remain unused, and therefore economic subjects do not have the possibility to come by adequate capital for business, construction does not develop with the desired speed, and creditors lack legal security. To avoid these problems, which are connected to unclear property rights, it is necessary to create a single registry of real estate rights with reliable information.

Another aspect of land issue, which is also related to property right, has to do with the fact that Republic of Serbia took away from municipalities the right to use land. Under the Law on Asset Owned by the Republic of Serbia (adopted in 1995), municipalities were deprived of the opportunity to dispose of the land property and use it for economic purposes. Study on the Costs of Existence of State Property on the Asset Used By Cities and Municipalities in the Republic of Serbia prepared by the Economic Institute and G17 Institute listed different types of losses that originated as a consequence of the fact that municipalities were taken away property rights over land (inability to issue licenses for construction, lease out office space and collect revenues, employ people etc.) The total loss incurred is estimated to have amounted to €1.3 billion.

The judiciary. Weak protection of property rights can have only one main cause – an inefficient judiciary. The system of regulations that define the judicial system constantly change. Since 2001, there have been efforts to align the judicial system with European standards. The most acute problem for the justice system since 2000 has been its independence from political leaders. After reforms from 2001-2005, government officials and state employees still successfully exert pressure on the courts, public prosecutors, and try to influence the results of important (political) judicial trials. The system of choosing and releasing judges further permits the influence of political leaders. Although the reform of 2001 established two bodies that decide the reasons for electing and changing judges, the Serbian Parliament and parliamentary committees still use political loyalties for the selection of judges. Pressure is not exerted exclusively by declarations and threats, but also with low salaries and lack of personnel (especially law experts). The judicial system does not have a source of financing independent of the state budget, although that could be arranged, taking into account the numerous court taxes paid for the great number of lawsuits the courts process in the course of each year.

The work of the courts is not satisfactory in its efficiency. The shortage of information and statistical data on the resolution of different kinds of cases represents a special problem. The general situation in which the judicial system in Serbia finds itself is unenviable. Because of a lack of funds, the courts in Serbia are not motivated to solve cases efficiently, and the impossibility of following world and European trends in resolving disputes from various economic areas is a lasting problem.

The judicial system is overloaded with cases. The Court of the State Union (of Serbia and Montenegro) inherited from the former Federal Yugoslav Court over 1,000 unsolved cases and around 3,500 administrative disputes from the High Army Tribunal that ceased work on 1 January 2004. An enormous number of these cases are still undecided because the Court of the State Union, although now constituted, had not begun to work effectively as of the end of 2005.

Township and district courts in Serbia are also overloaded with cases that slow down their work. The basic reason for the slow work of the courts in Serbia is the enormous number of old cases that are maintained in the court for several years, mostly because of the failure to appear of one of the parties to a dispute. For example, the District Court of Belgrade at the end of 2003 had 990 unsolved cases in the area of criminal law, and by the end of 2004, it had 1,407 open cases. For other courts in other regions, the situations is similar. Each court possesses too few judges, such that judges are overburdened. To take another example, for the field of criminal investigation on behalf of the Belgrade District Court, there were only 13 judges in 2004, while in the same period there were introduced 1,661 cases, which amounted to 128 newly introduced cases per judge for the year.

The chief reason why courts work slowly are the frequent postponements of legal and criminal proceedings (see table 9), a key bottleneck in the case of local and district courts. The study *Reducing Backlogs in Open Cases* establishes the following reasons for the frequent postponement of court cases:

1. The practice of scheduling trials and audiences: fewer trials and audiences are held each day than are scheduled; the parties often do not appear at audiences, which prolongs the resolution of trials;
2. Parties often come unprepared to audiences because of the fact that there is no office to inspect ahead of time whether the parties have complete materials with them;
3. There is no practice of preparatory audiences, although it is prescribed by the Law on Trial Procedure;
4. A great number of audiences take place in the absence of the parties from the trial; judges rarely draw on their powers under the Law on Criminal and Trial Procedure to compel witnesses and attorneys to appear at trials, and also do not order sanctions for failure to appear;
5. Cases last a long time because of the presentation of evidence for which there is no limit in practice, except that there are too many scheduled trials and

⁶ The Ministry for Foreign Economic Relations on 28 November 2005 presented a proposal to the Court of the State Union of Serbia and Montenegro to put out of legal force the part of Article 60 of the Constitution of the Republic of Serbia that regulates state monopoly of ownership over city civic land. This court, however, does not have competence to put out of force provisions of the Constitution of Serbia.

Courts	Sample size	Failures to appear	New evidence	Expert report	Convenience of the court	Other Reasons
Criminal cases of original jurisdiction						
Belgrade 1st Municipal	94	28	17	7	6	11
Belgrade District	94	46	18	3	1	21
Kragujevac Municipal	103	66	25	10	9	27
Kragujevac District	85	25	15	11	4	15
Novi Pazar Municipal	109	53	12	2	7	5
Novi Pazar District	67	29	27	10	7	10
Trial cases of original jurisdiction						
Belgrade 1st Municipal	101	23	17	4	1	21
Kragujevac Municipal	103	45	18	10	7	29
Novi Pazar Municipal	101	40	18	9	17	24

Table 9. Reasons for postponing hearings. Source: Reducing the Backlog of Open Cases. National Center for State Courts, www.ncsc.org.yu.

audiences each day to collect all the evidence for one audience;

6. Expert witnesses do not complete their testimony on time, and often courts question their expertise, etc.

The system of Commercial Courts, especially the Belgrade Commercial Court, is a special case. These courts handle economic disputes and, the Belgrade Commercial Court is considered the most non-transparent and corrupt institution in the country. The case of the bankruptcy sale of Sartid, carried out by the Belgrade Commercial Court, is well-known. On that occasion, the bankruptcy proceeding was violated by the court itself. The Commercial Court selectively struck the registration of shares from the Central Registry of Securities. That happened in the case of the shares of C Market, the largest Serbian retail chain. The elimination of the registered shares coincided with the announcement of the intention of the commercial chain Merkator (of Slovenia) to take over a majority packet of shares of C Market.

Over the period 2000-2004, the Commercial Court carried a total average of 18,700 unsolved cases from each year to the next. Taking into account

that the average number of solved cases during one year in the same period amounted to 70,562 in total, that means the Court failed to solve about 26% of all cases (not just bankruptcy cases) every year. The average number of judges employed in the court amounted to 70.2, which meant that each judge worked on about 1,000 cases per year, or 3.83 cases each working day.

A particular problem in the work of the Commercial Court is the resolution of cases from the regions and the conduct of bankruptcy proceedings. In this area, this court represents one of the most inefficient institutions in the region. On 1 January 2005, a new Law on Bankruptcy Procedure was passed which simplified bankruptcy proceedings, but that law still had not begun to be applied as of the end of 2005.

In 2001-2004, the number of demands for bankruptcy proceedings in the Belgrade Commercial Court surpassed by far the number of bankruptcy proceedings on which one judge worked. The average number of new demands which the court received for one year in that period amounted to 4,996, but on average, bankruptcy proceedings are open for only 437 enterprises.⁷ At the same time,

	2001.	2002.	2003.	2004.
Number of bankruptcy proceedings per judge per year	2.520	1.401	836	297
Number of new demands received per year	11.104	12.244	5.661	1.997
Number of unsolved bankruptcy proceedings in the current year	3.167	3.543	1.273	861
Number of enterprises in open bankruptcy proceedings	515	651	340	242
Number of enterprises that have concluded bankruptcy	311	650	858	595

Table 10. Data on bankruptcy proceedings in the Commercial Court in Belgrade. Source: Commercial Court in Belgrade.

⁷ The total number of enterprises subjected to bankruptcy proceedings definitive from 1 September 2005 amounted to 565.

⁸ Included here are proceedings carried over from the previous years..

one judge each year in the same period, conducts on average 1,263 bankruptcy proceedings.⁸ The great overload leads to a large number of unsolved cases: on average, the Commercial Court carries 2,211 bankruptcy proceedings from each year to the next.

Domestic courts also have great problems with the application of contracts. According to data from the World Bank study *The Cost of Doing Business 2006*, Serbia in that regard has the most inefficient and expensive courts in the region, although, as shown in table 11, it is the only one in the region making progress in that area:

Because of the great inefficiencies of courts, firms resort to alternative ways of payment such as advance payment and establishing strong connections with suppliers and consumers, which makes the economy less flexible.

Taxes. During the last year, public revenues recorded a tendency to play a growing part in GDP, while public expenditures, beginning in 2003, tended to play a smaller role in GDP. The largest part of revenue comes from sales and import taxation. The

share of corporate taxes in state revenue is small because of false financial reports that do not show any profit at the end of the financial year. The efficiency of tax payments basically increased after the introduction of VAT on 1 January 2005. Compared to 2004, total payments to public revenue during 2005 were greater for 31.2% (in nominal terms) and 12.6% (in real terms). (All categories of public revenues and income, except taxes on fixed assets, achieved growth in payments during 2005 compared to 2004. The greatest contribution to growth in public revenue was realized through payment of taxes on goods and services, and in that context, with the payment of value-added tax. MAT 12/2005, p. 1.) At the end of 1995, that resulted in a surplus in the Serbian republic budget of €3.25 million.

The increase in public revenue was accomplished in large measure thanks to efficient payment of taxes, with a change in tax laws toward reducing tax burdens, widening the tax base, and evenly distributing the tax burden across taxpayers.

With respect to the rate of value added taxes and taxes on enterprise profits, it is possible to say that

	Number of proceedings		Vreme (dana)		Costs to enforce contract (% of debt value)	
	2004.	2005.	2004.	2005.	2004.	2005.
Serbia	36	33	1028	635	23,0	18,1
Croatia	22	22	415	415	10,0	10,0
Bulgaria	34	34	440	440	14,0	14,0
Romania	43	43	335	335	12,4	12,4
Hungary	21	21	365	365	8,1	8,1

Table 11. Application of contracts. Source: The World Bank, *The Cost of Doing Business 2006, 2005*.

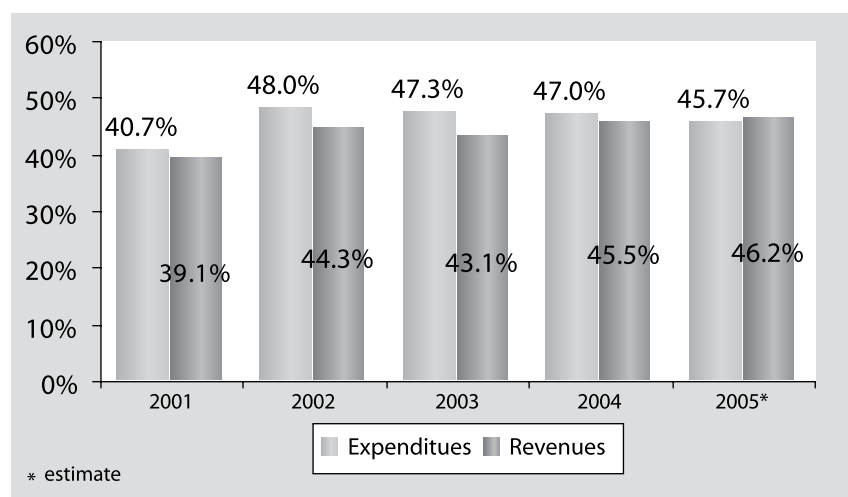


Chart 3. Share of consolidated budget expenditures and incomes in gross domestic product. Source: Memorandum on the budget and economic and fiscal policy for 2006. Ministry of finance, Republic of Serbia.

Serbia is competitive in comparison with surrounding countries, with some of the lowest rates in the region.

Erroneous decisions by state organs also can be identified at the macro level. Rodrik cites three macro risks in all: financial, monetary, and fiscal instability (Rodrik 2004). If bottlenecks are found here, that means that the primary culprit for low appropriability consists of bad government policies.

Fiscal policy. Reform of the public finance sector, which began in 2001, already led to relatively low deficits of 1.6% of GDP that year. After growth in the share of the deficit in the following two years, restrictive policies of public expenditure and real growth in gross domestic product resulted in a reduction of the deficit in 2004, and a surplus of 2.2% GDP in 2005 (26.8 billion dinars, that is, €3.25 million). However, it is necessary to mention there was a methodological change in budgetary

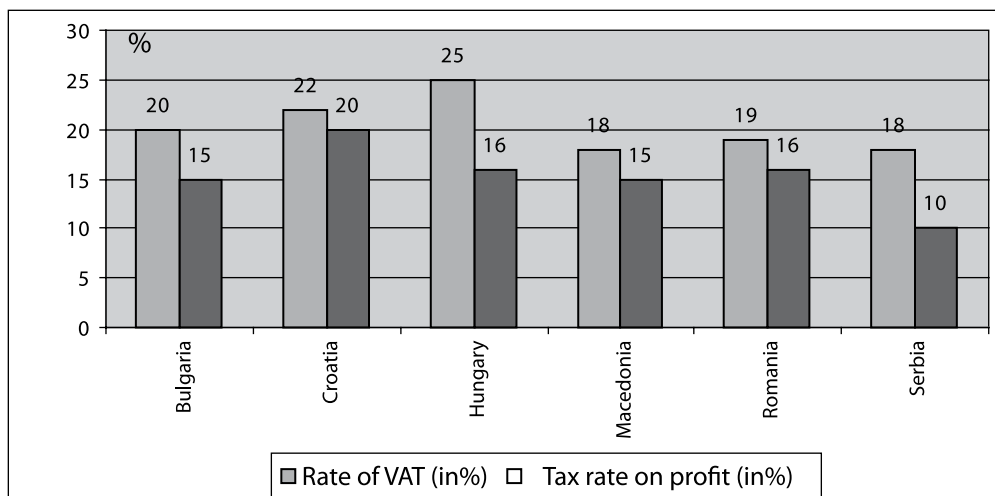


Chart 4. Comparing the extent of general tax rates on profit and value added taxes at the end of 2005. Source: Serbian Ministry of Finance and Economist Intelligence Unit.

Name of the taxes	Rate (in %)	Comments
1. Tax on enterprise profit	10	The lowest in Europe, after the rate in Montenegro. Regulated with the goal of attracting investment, above all FDI
2. Taxes on citizens' income::		
2.1 on income from independent activities	10	
2.2 on earnings		
2.3 on incomes from agriculture and forestry	14	Since mid-2001, the earnings tax is calculated on gross earnings.
2.4 on incomes from authors' rights and rights over industrial property		
2.5 on incomes from real estate	20	
2.6 on capital gains		
2.7 on other income		
2.8 on citizens' income	10	Paid by residents who realized a yearly income greater than four times the amount of the average yearly earnings per employee paid in Serbia. In 2004, that limit amounted to 986,640 dinars (about 13,600 EUR)
3. Real estate taxes:		
3.1 on claims to real estate	min. 0,4	
3.2 on inheritance and gifts	min. 3	
3.3 on the transfer of absolute rights	min. 0,3	
4. Tax on value-added (previously, tax on sales/circulation)	8 and 18 (previously 0 and 20)	Introduced 1 January 2005.

Table 12. Summary of the most important taxes in Serbia

⁹ Table 12. Summary of the most important taxes in Serbia.

bookkeeping at the beginning of 2005 by which the paying down of the public debt was not included in budget expenditures, such that it was even easier for the government to show a surplus in the budget

Be that as it may, compared to neighboring countries, it is possible to conclude that the budget of Serbia is significantly more balanced than the budgets of Hungary and Croatia.

Since 2004, the government has been striving to speed up economic growth and increase investment, accomplished with a combination of expansionary fiscal and restrictive monetary policy. Fiscal policy is directed at moving aggregate demand by means of greater spending. In the absence of a restructured

economy that would enable faster growth, this seems a logical choice. Increased spending should increase demand, and then greater demand should prompt enterprises to produce more, which should result in greater economic growth.

That combination of fiscal and economic policy, however, carries risks because it can lead to rising inflation. In order to reduce the risks of expansionary fiscal policy, it is necessary that monetary policy be restrictive. Fiscal policy by definition is directed at spending more than monetary policy; restrictive monetary policy to a great extent averts growing inflation, but it constrains the banking sector and prevents its greater liquidity.

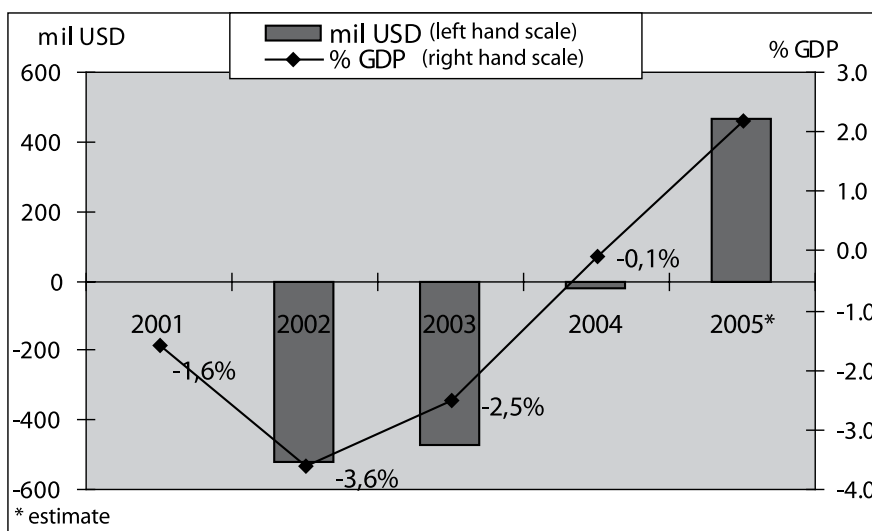


Chart 5. The budget deficit, in millions of USD and share of GDP. Source: Memorandum on the Budget and Economic and Fiscal Policy for 2006. Serbian Ministry of Finance.

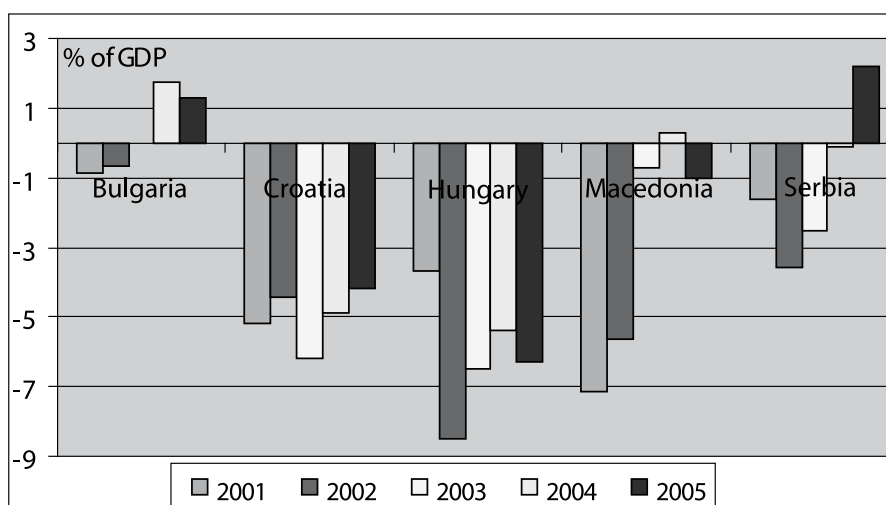


Chart 6. Comparative summary of budget deficits (as % of GDP). Source of data: for Serbia, the Ministry of Finance, and for other countries, the Economist Intelligence Unit.

That an expansionary fiscal policy would not be successful could be seen already at the end of 2004. Real economic growth at the end of the year was significantly larger (7%), but primarily thanks to successes in agriculture. An expansionary fiscal policy led to higher inflation (13.4% at the end of 2004, and 17.7% by the end of 2005) and to greater spending that, it appears, overflowed into a higher foreign trade deficit. In 2005, the government had budget deficit of 2.2% of GDP, and in 2006, it was projected to be 2.8% of GDP. (Public revenues in 2005 increased by 20% compared to 2004, but GDP also grew.) The government also reduced spending, but did not change its structure much. Deficit reduction as agreed with the International Monetary Fund was enabled by increased public revenues (to which greater inflation also contributed). Revenues from taxes grew in 2005, such that the structure of spending more or less remained the same.

That the government desires to solve the problem of growth by means of an active fiscal policy, instead of active restructuring of the industrial sector, can be seen from its attitude toward monetary policy and dinar exchange rate policy. If fiscal policy is expansionary, then monetary policy must be restrictive. A restrictive monetary policy requires a stable (fixed) exchange rate, and that creates a risk of high deficits in the current account (table 14), while monetary policy relaxation increases the risk of inflation. Nonetheless, it seems in this moment that it is better to favor a restrictive fiscal policy, and a flexible dinar exchange rate policy, that is, making it easier to control inflation through fiscal policy (less spending), and through exchange rate policy. That is what the IMF recommended to the Serbian government in the summer of 2004.

According to the Memorandum on the Budget and Economic and Fiscal Policy for 2005 published by the Ministry of Finance, it is expected that public spending will fall gradually from 45.7% in 2005 to 42.5% of GDP in 2008. Reducing public spending could lead to the possibility of conducting a more flexible monetary policy. But whether doing so is possible, taking into account that reduction in public spending endangers many social categories of people who depend on the budget, remains to be seen. According to IMF calculations from 2004, 47% of

the employed depend directly or indirectly on the budget (International Monetary Fund, Fifth Review Under the Extended Agreement (July 2005) p. 10).

Growth of wages is one of the fundamental obstacles to a more flexible monetary policy. Such a large growth in wages renders impossible a more flexible dinar exchange rate policy. However, limiting wage growth requires slower growth in prices. Considering that the state controls prices in the public sector, it often negotiates with public enterprises over price increases (oil, electricity, public utilities, edible

	2002.	2003.	2004.	2005. ^a	2006. ^b
Serbia	46,8	46,5	45,3	44,4	43,5
Croatia	44,37	44,39	42,5	40,2	38,0
Bulgaria	39,41	40,89	40,1	40,0	39,6
Macedonia	34,92	33,18	33,0	33,0	33,0
Hungary	57,8	54,0	51,6	51,0	51,2

Table 13. Comparative summary of public spending as percent of GDP. Source: EIU. ^a Estimate of EIU.

oils, and so on). If the state permits price increases for public services, then it is difficult on the other hand to prevent wage growth in the public sector. (Some public employees and pensioners in Serbia have their wages indexed, by law, to inflation or particular prices.) That constant negotiation over prices and wages only shows that there is inflationary pressure which leads to high social spending.

Given an expansionary fiscal policy, monetary policy must constantly control the quantity of money in circulation. A restrictive monetary policy has several consequences. In December 2005, the National Bank of Serbia (NBS) raised the level of compulsory bank reserves for citizens' foreign exchange deposits from 35% to 38%, making credit more expensive. Expensive credit makes current business affairs more expensive, so enterprises, as one measure, have to dismiss workers or temporarily pension them. (The real rate of unemployment at the end of 2004 amounted to 18.4%.) Excess unemployment in turn increases costs to the budget because the state must take care of them, and that prevents reductions in public spending.

Year	Serbia		Croatia		Bulgaria		Macedonia	
	2004.	2005.	2004.	2005.	2004.	2005.	2004.	2005.
Foreign trade deficit	-31,9	-22,3	-24,33	-23,35	-13,9	-19,6	-21,1	-19,8
Current account deficit	-13,2	-8,5	-4,7	-5,1	-8,5	-14,9	-7,9	-3,4

Table 14. Comparative summary of foreign trade and current account deficits expressed as percent of GDP. Data from 2004 and 2005. Source: MAT no. 12/2005, and Economist Intelligence Unit.

An expansionary fiscal policy and its consequences for monetary policy lead to a higher exchange risk. According to the risk estimates of the Economist Intelligence Unit, Serbia has a high exchange risk in the region.

State spending in 2001-2004 not only negligent and careless, but also uncontrolled. There is no independent inspection of expenditure of funds. The budget system imposes a hierarchical control from the top down and taxpayers have no control over the state apparatus, not even indirectly through their representatives. In effect, only the minister of finance possesses a detailed picture of state revenues and expenditures. He is in a position to stir up uncertainties at the micro level with arbitrary diversion of budgetary drains and subjecting certain markets or entities to pressure. A large part of the budget is used up for failed enterprises. They are kept alive instead of being filed for bankruptcy. Under IMF pressure by the end of 2004, this policy has significantly changed in 2005. The government started to pursue more restrictive fiscal policy, employing more prudent spending.

Inflation. State spending also creates a significant macro risk in the Serbian economy. Although spending has been reduced, its structure remains unchanged. At most, state resources are spent as an unproductive use because of which the rate of inflation grows, though spending has been reduced. The official estimate of inflation for 2005 was 9%, but by the end of the year, it amounted to 17.7%. Table 16 shows that these rates were far higher than in Serbia's main trading partners (mostly EU members),

and more than inflation in Montenegro, which adopted the euro as an official means of payment.

At the same time, the dinar has not been depreciating proportionally relative to the Euro, such that every day, Serbian exports are becoming more expensive. Up until now, the Central Bank has resisted all pressures on the part of exporters to devalue the dinar, but no one knows quite how much risk the exchange rate will create for daily business for the near future. There are basically two claims here. One is the predictability of depreciation, the chances of which are rather high. The other is predictability of sudden devaluation, which is speculative. The consequence of the first factor is increased through credit expansion, due to the arbitrage opportunities arising out of the interest rate differential, while for the second factor, this credit expansion is mostly short term.

Monetary policy in Serbia since 2000 has primarily been directed at attaining and maintaining macroeconomic stability. As a result of restrictive monetary policy over 2001-2003, the government accomplished a significant lowering of the rate of inflation, but in 2004 and 2005, inflation surpassed the projected rate of growth, partly due to external effects, and partly due to partial relaxation as a function of economic growth..

During the observed period, monetary authorities tried, using suitable instruments, to manage monetary aggregates, in order to establish a maintainable relationship between the need to reduce inflation, on the one hand, and to provide a sufficient quantity of money for economic and citizens' needs, on the other.

	Serbia	Croatia	Bulgaria	Macedonia	Hungary
General grade	C	C	C	D	C
General score	59	44	45	65	42

Table 15. Grade and score of exchange risk, July and August 2005. Source: Economist Intelligence Unit.

	2002.	2003.	2004.	2005.
Serbia	14,8	7,8	13,7	17,7
Croatia	1,89	1,66	2,69	3,5
Bulgaria	3,82	5,64	3,98	4,5
Macedonia	1,1	2,6	-1,9	2
Hungary	4,8	5,7	5,5	3,6

Table 16. Rate of inflation in Serbia and surrounding countries, as a percentage. Source: Economist Intelligence Unit (2003-2004); National Statistical Services (2005).

¹⁰ The rate of compulsory bank reserves periodically increases or decreases, in order to exert influence on both investment banks and the level of interest rates. During 2005, policy in this area became restrictive, such that in mid-2005, the rate of compulsory reserves for dinar deposits amounted to 21%, and for foreign currency deposits, 25%.

That meant that the money supply grew in real terms, but in a controlled framework. The gradual reduction of cash in circulation was very important, among other things, for the goal of reducing the size of the gray economy. Although it has never been at a satisfactory level, the share of cash in M1 was reduced from a level of 47% in December 2002 to 37% in December 2005.

Managing monetary policy relies to the greatest extent on the management of the high rates of compulsory reserves of banks in dinar and foreign exchange deposits, and in open market operations, which are not adequately developed. Open market operations were conducted with the sale of securities of the NBS, and since January 2005, the National Bank has initiated repo operation of long term bonds of the Republic of Serbia. During 2004, restrictive policies began to be conducted, in order to limit the growth of financing consumer spending, and to reduce bank obligations abroad.¹¹

These measures of the NBS continue to control bank liquidity (measured by the extent of free reserves), in order, on the one hand, to avoid endangering their business affairs, and, on the other hand, to avoid the danger of macroeconomic stability. Liquidity in the banking sector, although it varied from period to period, can be evaluated, on the whole, as satisfactory. Namely, banks mostly possessed surplus free funds, and NBS credits for keeping up daily bank liquidity were usually almost never used.

Foreign exchange rate policy at the beginning of the period was oriented toward keeping the rate stable (the dinar appreciated in real terms relative to the Euro), but the nominal rate since 2003 depreciated

somewhat more dynamically. During the initial slide, that resulted in real depreciation, but since mid-2004, exchange rate policy mostly lost that effect, with the consequence of dynamic price growth at retail. Relaxation of exchange rate policy began after the relatively successfully conducted first phase of stabilization (which was visible in the lowering of the inflation rate and the remonetization of the economy). It was meant to establish a foreign exchange rate that is closer to equilibrium in order to improve the index of exchange abroad. However, such an effect in the observed period is absent, because, in spite of real depreciation in the exchange rate, the foreign trade deficit continued to grow -- to a great extent, the consequence of structural problems in the economy.

Macro risks do not arise only in unforeseeable monetary policy, but also in arbitrary tax policy. A great number of those surveyed (section 27) are not satisfied with the government's tax policy or with tax rates. For now, all state efforts in tax policy were devoted to reducing tax evasion and creating adequate revenue for anticipated expenditures. International organizations, worried above all about the budget deficit rather than about the budget's composition, urged the government to take this approach. The structure of the budget showed enough room for savings (four-fifths of managers point to an inadequate structure of public spending). Above all, there are huge subsidies of state enterprises and some politically motivated subventions that are added to the ministries held by parties that control the state's finances. Also, subsidies are added to some dilapidated enterprises that use only part of their capacity and which cannot be privatized thanks to obsolete technologies. The government is not prepared to bear the political risk of shutting down and dismissing workers of these

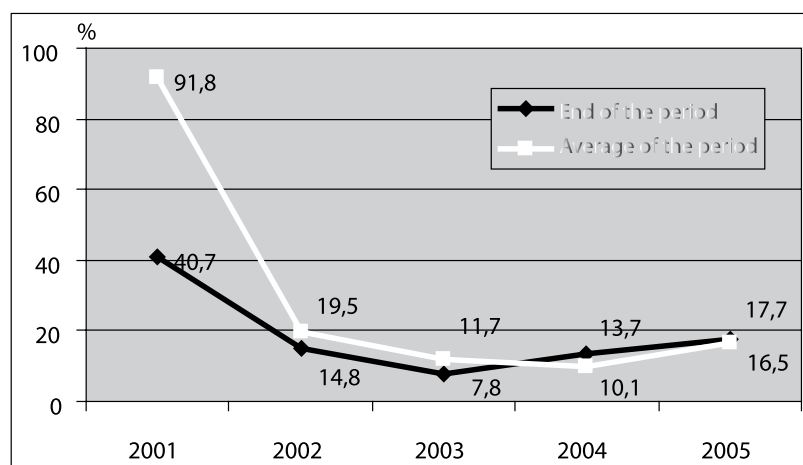


Chart 7. Rate of price increases at retail in Serbia.

¹¹To give an example, the average interest rate at a yearly level with which the NBS conducts open market operations grew from 11.35% in December 2003 to 16.30% in December 2004.

inefficient companies, and therefore it endlessly pours money into them.

In addition to that, the government uses tax revenue to support some politically motivated or insufficiently transparent investments through the Development Fund. Created as an institution for pouring money into inefficient socialist firms, the Fund has gradually diverted its official policy to support firms in insufficiently developed regions and imitating risky investment funds. However, the policy of the Fund is under political revision, and the structure of credit reflects corresponding political influence. Credits, which the Fund awards under favorable conditions and with subsidized interest rates, contribute to undeserved profits for enterprises, and large investors do not spare their effort trying to get favorable credits. Once again, taxpayers pay the bill, but to a great extent, this policy limits the development of market capital, creates enough disequilibria through financing projects with great political support instead of high rates of return on investment and leads to uncertainties provoked by political-business cycles. The law regarding the Development Fund changed around the middle of 2005. The innovations are that it is no longer financed from the budget, and only private enterprises can qualify for credit.

The costs of business. . Legal security for existing and potential investors in the previous era was disturbed by very slow and inefficient procedures of payment of creditors' claims. To that problem can be added slow bankruptcy procedures, which as a rule last for several years. That is why some key steps for improving the total business environment and strengthening financial discipline were enacted in the new Law on Bankruptcy Procedure and Law on Executive Procedure. It is expected that all proceedings will be significantly faster, simpler, and more efficient; with that, the usual slowness of bankruptcy procedures should be superseded. The courts are obligated to act urgently in executive proceedings, so that in a period of three days after the submission of claims, they must render a decision. A very important innovation is based on the reason for setting bankruptcy in motion. Earlier, that could only be done for extended incapacity to pay, and the procedure as a rule was started by the Bureau for Settlement and Payment. Now, as cause for legal insolvency, the creditor or the debtor can launch the procedure, and in exceptional cases, the public prosecutor or tax authorities can do so. What is new is the expected possibility of reorganizing the bankrupt debtor, creating the possibility for its recovery. (Some legal measures for reorganization foresee the possibility, with the goal of debt compensation, of selling or transferring a part of unencumbered real

estate, closing unprofitable operations, obtaining new investment or credits, dismissing employees, breaking unfavorable contracts, satisfying demands that have come due, and so on.)

Also, bankrupt managers in bankruptcy procedures receive much more authority than earlier, and can even carry out some solutions before the court's decision, but for that he must be skilled and possess the permission of the Agency for Licensing Bankruptcy Managers. These kinds of innovations are very important from the view of legal security, because they offer greater security to creditors that their claims will be efficiently settled. However, as in many other areas, passing the law seems the easier part of the job; the challenge is its implementation. Taking into account that both laws were relatively recently adopted, there is not yet enough information to judge the efficiency of its application.

Competition policy is yet another essential factor that influences the quality of the business environment. According to the transition report of the European Bank for Reconstruction and Development, Serbia received a grade of 1 for competition policy for 2004 and 2005. That is the lowest possible grade, received by only two other former communist countries: Turkmenistan and Bosnia-Herzegovina. The important steps made until now are liberalization of foreign trade, which has led to market competition from imports, and strengthening the sector of small and medium enterprises. However, in key areas where monopolies operate, reforms are applied slowly, even in cases when there exist legal obligations to do it. That imposes significant costs on enterprises and citizens, considering that these are mostly areas of public importance. One example is telecommunications, where the degree of penetration, costs, and quality and reliability of services are significantly lower than in developed countries, thanks to the land-line telephone monopoly, which, although it should have been broken up in the summer of 2005, still formally exists. It is expected that the Law on Protection of Competition, adopted in September 2005, will finally regulate this question. The law should protect the equality of all participants in the market, and a Commission for Protection of Competition is expected to be formed, as a special organ that will take care of protection of competition. The law defines situations that are considered violations of competition, and provides for punishments. For example, agreements among market participants, or abuse of a dominant position, to set or impose prices, production quantities, dividing of markets, imposing additional obligations on the conclusion of contracts, etc., are considered

violations of competition. Also, concentration in markets is regulated, such that it can be carried out only with the approval of the Commission.

Regarding what kinds of perceptions businesspeople have in connection with the business environment in Serbia, and how those perceptions have changed since the beginning of the transition process, the World Bank study *The Cost of Doing Business in Serbia 3* offers important information. The findings of the research show that it is possible to evaluate the level of efficiency of state organs as improved, relative to previous years. Namely, waiting and costs connected to contact with state organs are reduced, because management and other employees must spend less time than before when dealing with state employees (inspections, different offices, etc.) and have more time to devote to their affairs.

There is a positive shift also on the level of information on enterprises. Not only are there a greater number of firms that present sought-after financial and statistical reports, but the efficiency of their work has also increased, because enterprises in such businesses use up less time than before. A criticism that could be leveled is that the possibilities of informational-communication technologies are still not sufficiently used, as much connected with the acquisition and application of standardized software, as connected to the possibility of delivering sought-after reports by electronic means. As one example, enterprises could submit reports in electronic form, but after scheduling a meeting with the civil servant responsible, and coming in personally to hand it to him, that eliminates the advantage of electronic delivery of reports.

Another area where it could be said, with reservation, that there is progress, is the general evaluation of the level of corruption, which can be evaluated as stagnating. In addition, there are areas where this problem is less apparent than before, such as in foreign trade and registration of businesses, but also areas where corruption is more pronounced than before, as in relations with local authorities and inspections.¹²

The analyzed factors lead to the conclusion that it is the legal environment factor which has the most significance for business. However, the negatives are

those variables that describe the legal environment, the stability of the legal environment, and the possibilities and limits of law, estimated as considerably worse than in previous research. With that, we can confirm in this moment that the legal system really represents the main obstacle to improvement in the business environment in Serbia, because in many areas there is a lack of either adequate legal solutions, or of corresponding efficiency in carrying them out.

Although there are certain shifts compared to earlier states of affairs, the great problem is that it is possible to discern among businesspeople an overwhelming dose of pessimism connected to events in the future. What is worrisome is that they expect a more active commitment of the state in economic life. Such expectations are a relic of the former way of doing business, and contradict the principles of the contemporary market economy. Therefore it is recommended that the government and other state organs become more involved in informing businesspeople about the real role that the state has in a market economy, and raise the level of awareness, to the effect that businesspeople must take responsibility for successful or unsuccessful business of their enterprises.

Development of the private sector after 2000.

New registration procedures for enterprises were significantly simplified during 2004, such that enterprises are now registered quickly and efficiently. During 2005, there developed a process of re-registering enterprises in order to form a single registry of all enterprises in Serbia. That should reduce the possibility of abuses, previously widespread, when businesspeople formed phantom enterprises or undertook registration for the purpose of avoiding payment obligations. In 2001-2004, the rate of founding new enterprises was consistently somewhere under 10% (Table 19). According to the data of the Agency for Small- and Medium-sized Enterprises, more than 10,000 new enterprises were founded in 2005, as a consequence of easier conditions for their registration.

Although founding enterprises is simplified, the registered private sector is insufficiently strong. Its portion of total GDP in 2004 amounted to about 55%, which is less than the share of the private sector in neighboring countries (Table 20). According to the same data, the share of employees in the private sector

	Serbia	Croatia	Macedonia	Bulgaria	Hungary
Return of funds (% of the bankrupt estate)	20,3	28,4	15,4	33,5	35,7
Time (in years)	2,7	3,1	3,7	3,3	2,0
Cost (% of the bankrupt estate)	23,0	14,5	28,0	9,0	14,5

Table 17. Bankruptcy procedure in Serbia: comparison with countries in the region. Source: the World Bank, *The Cost of Doing Business 2006* and 2005.

¹² It should be mentioned that in regions where it is estimated that the level of corruption worsened, the frequency of bribes declined, but the amounts increased.

is 35%, and the share of the private sector with respect to capital is 29%.

In Serbia, by the end of 2004, enterprises that were not 100% privately owned were by far the largest and most profitable. According to the rankings published by *Ekonomist magazin*, on the list of the twenty largest enterprises as measured by total revenue were four enterprises with predominantly private capital: Delta Holding, US Steel Serbia, Rodić M&B Co, i MK Commerce (*Ekonomist magazin* 2005, 18). All four still had relations with the government, and their good market position may have had something to do with the absence of a policy of competition carried out by governments in market economies. The situation is not much better on the list of the most successful firms. Among the top twenty most successful firms as measured by profits in 2004 are eight purely private enterprises – thus, less than half of the top twenty firms (Ibid. 94). In order to dispose of enormous funds (that is, which one can dispose of without controls) in Serbia, or to extract great profits, it is necessary to be a state enterprise or somehow to convince the government to forget about competition policy and not touch monopolies.

The result of low competition is sluggish restructuring of the industrial sector. The Agency for Privatization in 2001 set aside 71 enterprises with the intention of restructuring them and then privatizing them. From this list of enterprises, ten enterprises were sold over four years, or about 14% of the total. These enterprises employ about 150,000 workers, which meant that their rapid privatization could be politically dangerous. That probably means that the state abandoned the strategy from 2001 by which it should have sold enterprises earlier, and mitigated the social repercussions of privatization for subsequently dismissed workers, and returned to a policy of subsidizing loss-making public and social enterprises. The course of privatization in 2004 and 2005 also demonstrate that. In 2004, the number of privatized enterprises amounted to 42% of the number which were privatized in 2003. In the same period, revenues from privatization amounted to 20% of revenues realized in 2003. In 2005, the results of privatization were not much better. Total revenue from tenders and auctioned sales amounted to €268 million, and of that, the sale of only one bank (Jubanka) collected €152 million. (As shown in table 21, total realized sales from privatization amounted to €390 million, but belonging to that was €122 million in revenue accomplished through shares

		Amount in EUR	No. of days
Work permits	2001	733	22
	2003	2,603	30
	2004	3,051	10
Product certification	2001	1,364	-
	2003	1,815	13
	2004	870	50
Costs of customs and transport of exports	2001	5,740	-
	2003	79	94
	2004	3,049	18
Construction permits ^a	2001	3,981	-
	2003	13,542	-
	2004	637	-
Registration of enterprises	2001	237	50
	2003	1,314	40
	2004	673	9
Payment of taxes and fees	2001	-	-
	2003	-	-
	2004	39,520	-

Table 18. The costs of business in Serbia, selected indicators. ^a The data is one sum necessary for obtaining all permits at once (usually through specialized firms that offer such services), instead of procuring each permit individually. Note: Considering that the question changed over time, comparable data is used. Besides the comparability of data, it should be kept in mind that the sample during the observed years is not the same, and that for some questions, there are a wide range of answers, such that the average value, given here, can be unexpectedly high. Source: Cost of Doing Business in Serbia 1, 2, 3 (2002, 2004, 2005).

Year	Number of newly registered enterprises	Number of liquidated enterprises
2001.	6.959	1.614
2002.	7.634	1.828
2003.	6.692	2.302
2004.	6.329	1.703
2005.	10.500	(no data)

Table 19. Number of newly registered and liquidated firms by years. Source: Agency for small and medium size enterprises.

traded on the stock exchange where, in the greatest number of cases, property only changed owners and the state achieved less profit.)

According to research in 2001 published by the Wiener Institut fuer Internationale Wirtschaftsvergleiche, (Christie E. & Holzner M. (2003). "The Dark Side of the Balkans", in: WIIW Monthly Report, no. 8-9) the gray economy in Serbia, measured on the basis of domestic spending and undeclared taxes, produced 36% of GDP. It is possible that both of these gray economies have shrunk since 2001.

As far as existing enterprises are concerned, data from 2005 show that two-thirds of registered enterprises are privately owned, while 5% are socially owned or are otherwise under the ownership of the state. Private enterprises visibly dominate the great majority of activities, especially in the area of commerce, and a minority of private firms participate in the areas of education and health, which remain mostly under state ownership. Separated by type of organization, limited liability companies (LLC, or in Serbian, DOO) dominate private enterprises, by a proportion of 70%. What is interesting is the exceptional number of one-member LLCs, which make up 36% of the total number of

registered private enterprises, and are mostly small enterprises, the owner of which is also usually the manager. Until recently, such an organization type dominated activities where the majority of firms were privately owned, but their number and proportion of the total number of private enterprises is declining.

Monopolies. An important part of economic activity in Serbia is still under the control of the state. The state is still the owner of public enterprises that have significant influence on total business in the economy. At the end of 2004, public enterprises employed 11.7% of all employees and realized 16.8% of total revenues, 13.4% of net profits, and 13.5% of losses for the entire economy.

The process of restructuring public enterprises has not progressed very far, despite the demands of the IMF and the European Union. Because of that, their efficiency has not particularly improved, such that many of them realize losses, and they receive subsidies from the budget. Profits of public enterprises fell by 8% in 2004, relative to 2003, while during that same period, the private sector increased profits by 42.2%. Public enterprises also have large debts that amount to 13.5% of total debts in the economy. NIS, EPS and Railway alone account for 84% of total debt in the public sector. NIS's debts is, for example, 3.6 times greater than the value of its assets and 1.3 times over the value of working capital (data are from the study Analysis of the Business of Public Enterprises in 2004.)

At this stage, the majority of public enterprises are in the process of laying off and separating auxiliary activities from core activities. After that, it would remain to be seen which operations could be privatized in a timely period. Table 23 illustrates the dynamic of reducing work forces in 2004.¹³

	Serbia	Croatia	Macedonia	Bulgaria	Hungary
Share of GDP (2004)	50	60	65	75	80
Share of GDP (2005)	55	60	65	75	80

Table 20. Percentage share of the private sector in GDP. Source: EBRD Transition Report 2004, 2005

Method	Total sold	Sale price ^a	Investments ^a	No. of employees
Tenders	15	96.336	75.159	8.159
Auctions	204	172.000	43.000	29.023
Tenders + auctions	234	268.336	118.159	37.182
Market capital	282	122.291	na	31.302
TOTAL	501	390.627	118.159	62.520

Table 21. Summary of privatization in 2005. ^aIn thousands of euros.

¹³ It should be mentioned that in regions where it is estimated that the level of corruption worsened, the frequency of bribes declined, but the amounts increased.

Taking into account that the period for privatizing activities of public enterprises is not restricted, and that, until now, punishments were replaced with enacting and carrying out appropriate regulations, there is a justifiable worry that this process will last longer than is optimal. That is particularly problematic considering that these enterprises are by their nature monopolies, and that the economy and citizens suffer because of high prices and goods and services of unsatisfactory quality which public enterprises offer them.

Through control of the public sector, the government hinders the entry of new entrepreneurs in the areas of telecommunications, refining of oil derivatives, railroad services, and distribution and production of electricity. For two years already, the government of Serbia, in spite of continued pressure and threats from the IMF, has been unable to begin restructuring of even one public enterprise and thus carry out the assumed obligations that represent an integral part of its economic policies.

Furthermore, the example of the slow implementation of the Law on Telecommunications, so as to prevent the entry of third-party operators of mobile phones, provides additional confirmation of how the public sector deters competition and strengthens monopolies. (The Law was enacted but could not take effect until just three months after the publishing of the act on the election of the president

and members of the managing board, which happened only in May 2005.)

That the government still does not seriously intend to restructure the public sector is shown by the absence of independent regulatory bodies over infrastructure. The Agency for Telecommunications was established in May 2005, while the Council for Radio-Diffusion has been almost inactive since it was illegally inaugurated in the summer of 2003. Independent agencies which would regulate the spheres of public transport and oil traffic have still not been considered.

Indebtedness represents one of the primary levers of power that result from control over the public sector. This pertains not only to the great financial means which are at the state's disposal, but also to the possibility of nonpayment, that is, the manipulation of the debts between the public and the real sectors.

If state enterprises sell electricity, oil, telephone services, or transport – the complete infrastructure of a state – then it can extract a benefit from forgiving debts or postponing payments of these services. A good example of that is the privatization of three sugar refineries in October 2002. The sugar refineries were sold for €3 apiece to Miodrag Kostić, at that time a close friend of the Serbian prime minister. Kostić promised that, in return, he would pay the refineries' debts, which exceeded €20 million. Taking into account that the sugar refineries owed money to NIS,

	Privately-owned	Socially or state-owned	Other ^a	Total
Agriculture, hunting, forestry, and hydropower	2.564	247	1.877	4.688
Mineral and rock extraction	209	24	13	246
Processing industries	17.691	620	759	19.070
Construction	4.215	295	381	4.891
Commerce	41.098	603	591	42.292
Hotels and restaurants	1.224	95	67	1.386
Transportation, storage, and communications	4.953	159	153	5.265
Financial services	436	225	253	914
Education	1.024	1.896	427	3.347
Other	9.880	2.087	29.420	41.387
Total	83.294	6.251	33.941	123.486

Table 22. Number of enterprises by activity and form of ownership, as of 31 December 2005.

Source: Republic of Serbia's statistical office.

^aCooperative or mixed, or the form of property is not mentioned.

	NIS	PTT	ŽTP	JAT	Srbijašume	Aerodrom
Number of employees	17,328	17,900	26.200	3,672	3,983	1,059
Reduction	1,500	1,294	3,783	2,164	350	314

Table 23. Number of employees, and reductions in the number of employees of public enterprises in 2004.

two years after privatization, their debts have still not been paid.

Market failures. For bad business, entrepreneurs as a rule blame the government and the regulatory system. However, entrepreneurs' lack of resourcefulness in the market can also be a reason for slow economic growth. Rodrik calls this market failure. For example, firms are not motivated to make new products or advance workforce training. It is always cheaper to use innovations developed by foreign or domestic competitors, or to get around the problem of staff shortages by using previously trained and qualified workers or personnel who possess certain information, from competing firms. The failure to protect intellectual property rights leads to weak activity in research and development in enterprises.

It often happens that enterprises stubbornly cling to their products or their primary products without considering changes in market circumstances. This is evident not only among socialist directors, accustomed to state subsidies, but also among many private entrepreneurs. For example, when market conditions changed for the worse for selling strawberries, they sought state coverage of their losses. Not one strawberry producer thought of examining new production ideas, searching for new markets, or considering the introduction of more complex levels of processed fruit. Their position was that either the state needed to commit itself to reducing risk and covering their loss, or they would not produce anything. Resistance to accepting risk and caution in implementing new, profitable ideas are characteristic of insufficiently developed economies.

In such circumstances, it can be expected that the government will intervene to stimulate research and development activities among producers, to cover part of the market risk, or to provide organizational and informational support to entrepreneurs. Some governments go even farther, adding budget funds for research and development. However, the Serbian government has shown frugality in respect to investing in research and development.

In order to reach the goals supported by the IMF, the government is forced to reduce costs, but naturally not in a linear way. Thus, in accord with Olson's expectations (Olson 1982), the worst hit are those groups which cannot find common interests to exert pressure on the government. As a result, Serbia spends less than her counterparts on research and development, and similarly invests less in training qualified staff.

These facts are easily checked on the basis of data from those states, but in this instance, it can be pointed out that managers are aware of this problem. Almost three-quarters of surveyed managers in the sample confirm the lack of investment in research and development, and 86% agree that the general level of technological development in Serbia lags behind competitors (section 26). There is almost universal agreement among them that intellectual property rights are not sufficiently protected (95%), and therefore the great majority (two-thirds) do not see the purpose of paying for royalties. With such a state of affairs, it is rational for firms to grab all they can and avoid spending on research and development. It is a classic case of market failure, since everybody would be better off with strict implementation of the patent law, but there is no grass-roots initiative for it. Individual agents are reluctant to pursue such a policy since free riders could be in position to collect substantial payoffs.

This leads us to problems of other cases of bad coordination. There are several Serbian business associations, mostly with the same (overlapping) members. However, their main aim is to take the state captive, and not to coordinate profitable activities. The Yugo Project, planned in the 1980s, was practically the last one to include several business activities, but imposed from above by the communist party, and carried out through orders. At this time, entrepreneurs do not show interest among themselves to support some other export project. Viewed theoretically, the Economic Chamber is the institution that could provide support and coordinate export activities, but it is conceived in a communist manner, more as a shelter for retired politicians than as a true business organization. In the meantime, the government has established the Agency for Foreign Investment and Promotion of Exports (SIEPA).

23. Costs of Financing

The costs of financing represent the last (third) group of reasons where, according to the model of growth diagnostics, limits on faster growth can be found. If public capital is used in an appropriate way, and if there are no failures (government or market) precluding reasonable return on investments, it still does not mean that the economy will necessarily grow as long as the financial system is not readied in an appropriate way, that is, as long as the economy is not supplied with funds for economic activity.

Financing can be local or international. If local financing is poor, that means the country possesses an inefficient and weak banking system. The main loss-making banks were closed at the beginning of

the transition of this sector in 2002. The remaining banks are getting better and more competitive. Yet, the total of basic resources in the banking sector amounts to scarcely more than 40% of GDP, while, for example, in neighboring Croatia and Hungary, the value of the same coefficient is greater than 100%.

Real interest rates on credit are high, considering that debt is evaluated in euros. Nominally weighted monthly rates on loans to citizens at the end of 2005 amounted to 15.82%. The journal *Kvartalni monitor* shows that interest rates are falling, that they differ (as shown in table 24), depending on the kind of credit, and that they depend on credit risk, that is, on the type of client. There is one interest rate for citizens

Union was switching to the Euro, less than half of the amount of Deutsch marks exchanged for the Euro was collected by banks over the next three years. By the end of 2004, the total amount of savings was less than 1.5 billion euros, held almost exclusively in foreign currency (97%), and deposited on a short term basis (94%) -- and that amounted to just over one-fifth of GDP. 2005 saw continued growth in citizens' savings, after growth began in 2004. At the end of 2005, foreign exchange savings by citizens reached 80 billion dinars, and financing by citizens climbed to 65 billion, such that the growth of net savings was about 16 billion dinars (€181 million).

In theory, enterprises can choose between credits and issuing shares in order to finance investments.

		Consumers' rates (1-5 years)	Housing rates (10 years)	Rates for large enterprises (1 year)
Euro zone	Oct 2005.	6,7	4,0	3,91
Slovenia	Aug. 2005.	4,8	4,8	3,2
Croatia	Aug. 2005.	6,84	5,03	6,77
Romania	Sep. 2005.	7,3	9,0	5,3
Serbia	Oct. 2005.	15,82	10,01	9,21

Table 24. Interest rates in selected countries in 2005. Source: *Kvartalni monitor* no. 2, p. 73.

(15.82%), another for big enterprises (9.2%), and a third for small and medium enterprises (14.5%).

At the same time, interest rates on deposits by citizens were scarcely more than 2%, and on deposits by legal entities, the average weighted interest rate amounted to 3.6% in 2004. Such a great different in interest rates on borrowed or deposited funds is a sign of imperfect competition in the banking sector.

The trust of the population in commercial banks is increasing, as is banker readiness to extend credit to households. This can be seen in the increase of deposits and credits, as documented in chapter 6. The credibility of the central bank, on the other hand, is not increasing, which can be seen from the low share of savings in dinars. The level of deposits measures the credibility of the banking sector, while the level of currency substitution measures the credibility of the central bank.

The low credibility of the central bank consists in its inability to boost the dinar as the local currency in Serbia. In the 1990s, several pyramid structures collapsed, the state defaulted on its internal debt in foreign currency, and the population was effectively stripped of its saving accounts in foreign currency. All these elements created distrust in banks during the 1990s. The distrust was still present after the regime change in 2000. In 2002, when the European

However, the financial market is shallow. Most of the trading is in controlling shares of corporations. It is practically impossible for a firm to gather the financial funds on the open market because credits are the only source of foreign resources. Shares issued on the Belgrade Stock Exchange do not serve to collect capital for financing enterprises, but to obtain ownership over fixed capital in enterprises. Through shares on the stock exchange, they want to enter into possession of property, not ownership. About 80% of trades on the stock exchange take place over the counter, but the price is reported only from sales that took place at the stock exchange.

Furthermore, bonds that contribute to the state debt have a short and long term of maturity. Shifting to long term maturities of repayment would help the

Serbian financial market to stabilize debt, manage it, and attract foreign investment. In this way, those who manage debt are confronted with greater and more complex risks. Liquidity and transparency of the secondary bond market are small. The Securities Exchange Commission does not have the authority to demand that reports on trading also include the market price. It is necessary for either the Securities Exchange Commission to announce market prices, or the National Bank of Serbia to drive banks to announce market prices of bonds traded outside the stock exchange. Other than that, the period of

agreements for bonds is T+3. After executing transactions, brokers and custody banks inform clients about the concluded agreement. In these transactions, it is necessary to eliminate all barriers in the system of agreements and clearing, and in the system of transactions of compensation payments. The introduction of standard and transparency-adding techniques of agreements and an added system of market makers for (government) bonds would be of great benefit. Trades outside the stock exchange are not a shortcoming as an a priori matter, but there is too little information on it, which increases the inefficiency of markets and harms the mechanism of price formation.

Government risk is also great, in spite of the fact that economic sanctions were lifted in 2000. Political unrest, unsolved problems with neighboring states, and the need for collaboration with the Hague Tribunal are all factors of high risk according to estimates of several international agencies. In section 20, we saw that the Economist Intelligence Unit ranked Serbia, sometimes alone, and sometimes paired with Macedonia, as the state with the highest level of risk in the region. The riskiness of the banking sector is, without a doubt, greatest in Serbia (with a general result of 68 points, versus 61 points for Macedonia). Serbia received an average grade grades of D (risk is measured on a scale from A (lowest risk) to E (highest risk) in following areas: political risk, economic policy risk, risk of economic structures, and risk of foreign debt. This ranking is not without foundation, and the attitudes of interviewed managers in chapter 5 mostly concur with the mentioned risk estimates. All these elements contribute to the high price of financing that also is characteristic of insufficiently developed economies.

An expert in the Serbian economy would add to this inventory many more inefficiencies, but even this limited list of grave economic problems is quite sufficient for reaching an impression of the underdeveloped character of Serbian economy. One suggestion for a way out of this unfortunate state of affairs would be to attack all elements of this "laundry list" simultaneously. However, underdeveloped countries would not be underdeveloped if they were capable of solving all vital problems at the same time. The government usually does not have resources and/or political capital to solve all problems at once. Therefore, the government is limited to the position of selecting goals that will yield the highest returns in accelerating economic growth.

5. Growth Diagnostics – Attitudes of Entrepreneurs

This chapter scrutinizes subjective attitudes concerning the competitiveness of the Serbian economy. The analysis examines the attitudes of Serbian entrepreneurs obtained from the survey used by the World Economic Forum for its annual publication *The Global Competitiveness Report 2005-2006*. To facilitate the reader's ease in comparing objective analysis with subjective attitudes regarding the same issues, the structure of chapter 5 replicates the structure of chapter 4 as much as possible. Both are structured according to Rodrik's model of growth diagnostics (presented in chapter 3). This chapter investigates the attitudes of Serbian entrepreneurs concerning social capital, appropriability and cost of financing.

24. Methodology and Sample

This chapter draws on the findings of the survey developed for Serbia and Montenegro to fulfill the needs of World Economic Forum (WEF). (The data obtained are the exclusive property of the WEF and are published in *The Global Competitiveness Report 2005-2006*.) The research surveys the attitudes of entrepreneurs of 80 enterprises. There were no respondents from Montenegro. In some cases, where appropriate, the survey is supplemented by results from the previous year's survey (referred to here as the 2004 survey). The reason for this is that the 2004 survey contained some questions that the 2005 survey did not.

The survey was structured so as to provide two opposite attitudes, making respondents select one of the options available, stating whether they agree in full, mostly, or to a certain degree with the proposed answer, or whether they feel indifferent about both choices. Scores ranged from 1-7. 1 represents full agreement, and 7 represents full disagreement. Score 4 indicates that the respondent is indifferent between available choices (attitudes).

An enterprise is regarded as private if more than 50% of its equity is privately owned (whether the owner is of domestic or foreign origin). An

enterprise is regarded as an exporter if at least 10% of the respective company's income is generated by export.

The sample is dominated by small and medium enterprises. 38% of the firms employ less than 50 persons, while three-quarters employ less than 500 people. In regards to type of ownership, more than one-half of sampled enterprises are 100% privately owned, one-eighth are absolutely state or public owned, and in one-fifth of enterprises, foreigners possess equity or stock holdings in the company.

In the state-owned sector, the largest number of companies (40%) employ 100-500 people. The private sector is dominated by firms (43%) that employ up to 50 people. The companies surveyed are mainly in manufacturing industries, agriculture, hunting, forestry and water management, while one-fifth of firms are in retail.

Almost one-half of the firms do not report exports at all. Even those firms that do export report their export levels on a very small scale. For example, the income of only one-fifth of the exporting enterprises exceeds one-fourth of total revenue, while the income of only 5% of the firms exceeds one-half of total output. Most of the exporters, 80%, are privately owned.

Research was conducted during the period from March 1-28, 2005.

25. Economy and Economic Policy

More than half of the participants responded that they expected that Serbia would enter a recession, while only a quarter foresaw relatively stable economic growth. Regarding the volume of the grey economy, respondents had the option of choosing between two attitudes: “the grey economy does not exist” and “the grey economy takes up over 50% of economic activities.” As one might have expected, entrepreneurs mostly (over 60%) opted for the latter answer.

The respondents were asked to select five factors they consider to be the most troublesome for business activities in Serbia. Instability of economic policy ranked as the most worrisome factor, as selected by 35% of respondents, and one-half of participants ranked it as either their first or second biggest worry. The next most worrisome factor was inefficient government administration, appraised as the most troublesome factor by one-seventh of those filling out the questionnaire, and almost one-fourth of respondents selected inefficient government administration as either their first or second choice. Third in line was access to sources of financing, cited as the greatest impediment to business activity by one in ten survey participants, with 28% ranking access to financing as either first or second worst

26. Social Capital Returns

Poverty

The attempts of the government to reduce poverty and differences in wage levels are evaluated as unproductive or futile by 69% of the respondents. Out of total number of persons partaking in survey, 33.3% thought government efforts in these areas to be absolutely futile, and 35.9% estimated them as mostly unproductive.

Employment

A question was asked about hiring and firing employees. Around 40% of respondents leaned towards both possible replies (whether the rules regarding hiring and firing allows flexibility or rigidity), while one-fifth felt indifferent. The answers were divided into two classes depending on whether respondents came from privately or state/publicly-owned enterprises. Almost one half of entrepreneurs (47%) employed in the state sector considered hiring and firing procedures to be burdened with legislation (27% expressed such an attitude without hesitation), while one-third expressed an indifferent attitude. The attitudes of private entrepreneurs differ by

comparison to the work force in state sector, and they exhibit less conformity in terms of their opinions. In other words, 43% of private entrepreneurs consider that hiring and termination of employment allow flexibility in employer’s decision-making (22% found it mostly flexible, 11% found it absolutely flexible and the same percentage of respondents opted for “flexible to a certain degree”). On the other hand, a smaller share of private enterprise respondents (39%) believe that recruiting and firing employees is impeded by legal regulations (19% chose partial agreement, and 12% chose total agreement with the statement offered in the questionnaire). It is important to point out that the survey was distributed simultaneously with the enactment of the new Law on Labor (March 2005); therefore the survey does not measure how entrepreneurs judge this legislation or its consequences.

As for the question “do labor regulations in Serbia hinder the hiring of foreigners by the enterprises?”, the sentiments expressed by entrepreneurs are rather uniform regardless of the type of proprietorship of their respective firm. Half of entrepreneurs believe that legislation does not prevent recruiting a foreign labor force (one-fourth agree in full with that view), 15% of respondents believe that hiring of foreign staff is limited, and a large number of persons express indifference, making up 37% of the total number of respondents.

Regarding the issue of salaries being determined by collective bargaining, versus each enterprise having the liberty to work out remuneration of employees on its own, 60% of respondents, regardless of private or state ownership, believe that salaries are determined by the enterprise itself (one-quarter of respondents agree in full with this attitude).

One unfavorable aspect represents the belief of surveyed entrepreneurs, regardless of their type of ownership, that salaries in Serbia do not depend on employee productivity. In other words, only one-quarter of respondents reckon that salaries more or less depend on productivity, while 20% of respondents exhibited indifference regarding this issue and 54% believe that there is no link between salaries and productivity.

Productivity

According to the 2004 survey, Serbian entrepreneurs evaluated productivity in their enterprises, in addition to the most significant obstacles impeding improvement therein. The participation of entrepreneurs employed in state- and publicly-owned enterprises equaled 27% of persons participating in the 2004 survey, with the remaining

73% of respondents working in the private sector. The respondents were asked to evaluate productivity in their own enterprise compared to productivity in other firms. On average, entrepreneurs saw their own firms as being among the leaders in the industry regarding productivity. In other words, almost 55% of respondents consider productivity in their own enterprise to be high as opposed to competitors, with 20% agreeing in full, and one-quarter selecting the “mostly agree” option. Respondents who appraised their own company as lagging in productivity behind competitors accounted for 28% of the total number of persons filling out the questionnaire. The division of answers according to the type of ownership indicates that entrepreneurs evaluate private companies as more productive, while state-owned companies are generally thought to exhibit lesser productivity. Among the entrepreneurs employed in the state sector, a remarkable 54% considered the productivity of their own enterprise as low in comparison to the industry average (with a relatively high percentage of respondents – 29% - agreeing in full on this point), one-quarter felt indifferent in regard to the issue, and a minority (21%) held the opinion that their productivity equals the most productive enterprises in their sector. 68% of private sector entrepreneurs appraised the productivity of their own enterprise as high, with a relatively high segment of respondents (27%) agreeing in full with said appraisal. Among private sector respondents, persons evaluating their own enterprise as falling behind competitors’ productivity make up 18%.

It is interesting that a significant number of entrepreneurs evaluated the state of productivity in their own enterprises in relatively favorable terms compared to the world’s most productive companies in the industry. That is to say, although most entrepreneurs rated productivity of own enterprise as low compared to global competitors (47%), some 40% of respondents defended the opposite attitude, believing that their enterprises exhibit a high level of competitiveness in comparison to the world’s most productive companies in their respective industry. Again, entrepreneurs from the private sector gave better ratings to their own enterprise: almost one-half the participants evaluated their productivity level as high compared to global competitors. Such an attitude of survey participants contrasts with the real state of affairs in the domestic economy, characterized by an unsatisfactory aggregate level of productivity, and tends to confirm the perception that entrepreneurs are neither very familiar with the market where they do businesses, nor fully aware of the performance and global standing of their own enterprise.

Among the most significant obstacles hindering enhancement of productivity, entrepreneurs listed the following items in the 2004 survey: bad work habits, labor-related regulations, shortages in a qualified work force and training opportunities, and lack of capital and infrastructure. Lack of capital and infrastructure was declared the most troublesome factor by almost 70% of respondents (a high portion, or 37%, agreed in full with that attitude), while 20% did not acknowledge it as important. This problem is even more serious in regards to state-owned enterprises: 89% of state sector entrepreneurs identified lack of capital and infrastructure as an obstacle, with 62% of respondents declaring this factor being the most significant obstacle.

Some obstacles to productivity were found in bad work habits and the shortage of skilled labor. Approximately the same percentage of surveyed persons chose bad work habits as a significant impediment (43%) versus those who saw bad habits as an insignificant factor in terms of productivity (47%). It is interesting that more than half of state sector entrepreneurs find bad work habits to be an important disadvantage (54%), while 43% do not perceive bad work habits as relevant. Regarding private sector entrepreneurs, half consider bad work habits to be an irrelevant obstacle in terms of increasing productivity. This set of answers suggests that private companies have established better mechanisms designed to encourage employees’ dedication and commitment to work.

Half of the interviewed entrepreneurs rate business and industry regulations and by-laws as insignificant in terms of hindering enhancement of productivity, while 35% believe regulations and rules to be a significant obstacle. Both private and state entrepreneurs expressed similar opinions on this issue. It is interesting how the issue of skilled labor and the lack of training opportunities that prevents productivity development is perceived as an irrelevant obstacle by a majority of all entrepreneurs. 60% of sample respondents believe this to be an insignificant obstacle to productivity growth, and 30% declared the opposite. The findings are almost identical to those obtained in the private sector, while managers in the state sector leaned a little more than the average respondent towards the attitude indicating that the lack of skilled labor does represent an important problem (39%).

The 2005 survey asked the entrepreneurs to select the five most troublesome obstacles to doing business in Serbia. 53% respondents listed bad work habits as among the five greatest obstacles. Despite the number of respondents listing it as a serious concern, work habits were still at the bottom of the

list in terms of negative impact. Therefore it was usually rated as the fifth worst (in 38% of cases) or fourth worst factor (in 21% of cases). Regarding other obstacles affecting labor market, one-fifth of respondents cited a labor force lacking adequate education as the most serious challenge, with only 6% of respondents citing restrictive labor regulations in that respect. These findings suggest that surveyed entrepreneurs consider that the quality and work habits of employees represent an obstacle to efficient business in Serbia, but problems found in other areas of the business environment are more troubling.

Basic infrastructure

Infrastructure in Serbia is rated with an extremely negative score. Not a single respondent agreed, not even partially, with the survey statement evaluating infrastructure in Serbia as one of the best in the world. Everybody (except for two participants exhibiting an indifferent attitude) said that infrastructure was underdeveloped and insufficient. One-third of survey participants agreed in full with the claim of underdevelopment and insufficiency.

The quality of railway, ports, and internal water routes was rated as low. Namely, for rail or water transport, over 90% of respondents (98% in the case of railways) declared both types of transportation as undeveloped. The greatest percentage (over 45%) of respondents agrees with the previous statement to a great extent, followed by participants agreeing in full (35%).

The 2004 survey researched the availability of choices of transportation in Serbia. More than half of survey participants found such choices very limited (57%), while over one-fifth of respondents believed there was a large scope of available choices. Consequently, two-thirds of respondents opined that the integration of various means of transportation is complicated and unreliable, and no less than four-fifths consider infrastructure designated for shipping goods to be undeveloped.

Regarding the quality of the electrical energy system, there is no uniform attitude. In other words, half of respondents perceived supply to be inferior to systems in other countries, while the opposite conviction (the quality of supply meets the highest standards) is supported by 40% of survey participants. The prevailing attitudes on both ends represent partial agreements about supply, and if participation of indifferent respondents is taken into account, one might concede that in a great many cases, respondents believe that Serbia's system of electricity supply is neither better nor worse than what is found in other countries.

Postal services are found to be acceptable. When asked if one would have confidence in the postal service to ship a package worth \$100, more than half of respondents responded affirmatively. A small but significant percentage expressed absolute confidence (18%).

Education

The educational system in Serbia received a relatively unsatisfactory grade, considering that 45% of respondents took a stand that state-run, free education was of low quality, while a lesser percentage (38%) of participants believes that public education "mostly" or "absolutely" matches the best educational systems in the world. It is very symptomatic that almost two-thirds of those surveyed think that the educational system in Serbia does not meet the demands of the market economy.

The quality of education in the area of mathematics and natural science is rated as relatively high, considering that approximately 65% of participants believe it can match the best math and science education in the world. However, very few respondents agree with the statement in full; the degree of assent varies from "mostly" to "partially," meaning that although respondents are generally satisfied with the quality of education, there is still room for improvement. On the other hand, when it comes to business administration and management schools, these areas do not meet quality standards, according to survey participants. Translated into figures, findings reveal that 53% of those surveyed find business administration and management education disappointing.

The availability of scientists and engineers might be evaluated as satisfactory (62% of respondents assess them as numerous and available in Serbia). However, there is a serious problem with "brain drain," as talented people flee the country in pursuit of opportunities only available abroad. This sentiment was shared by 89% of respondents.

Research and development

Looking at science and research institutions in Serbia, almost every other respondent believes that the quality of these institutions is deficient, while 31% of the participants find them good enough and among the best in the world in their respective field. Taking into account that 71% of participants agree with the previous statement only partially or feel indifferent, one might conclude that the prevailing attitude is of limited satisfaction in regard to the quality and availability of domestic science and research institutions. The conclusion is

probably partially dependent on the experiences of interviewed entrepreneurs in the course of working with such institutions. In other words, responses suggest that the volume and quality of collaboration mentioned above cannot be assessed as satisfactory, considering that two-thirds of respondents evaluated business cooperation with domestic universities in the area of research and development as minimal or non-existent, while 20% believe it is intensive and continuous.

Regarding firms' investment in research and development, three-quarters of respondents think that businesses in Serbia do not invest enough in R&D activities, while only 10% of the respondents agree partially or mostly with the statement that R&D investment is sufficient. In other words, the latter 10% think that R&D attracts considerable investment in Serbian firms compared to similar enterprises abroad.

Perhaps related to the perception that the overall level of research and development activities is unsatisfactory, many surveyed entrepreneurs consider the level of technological development in Serbia to be lagging behind most other countries. Such an attitude is exhibited by 86% of respondents (and 40% of them agreed fully with the perception of technological lag). There is almost no difference of opinions here, regardless of whether the surveyed firm engages in export or not.

Regarding the ability of Serbian companies to absorb and implement new technologies, 58% of respondents harbor doubts. However, moderate responses prevail, such that if one combines the number of respondents selecting partial agreement with the opposite attitudes (either supporting the view of Serbian companies as capable of adopting new techniques or being capable and practicing it aggressively) to the respondents giving neutral appraisals, the result is that three-quarters of respondents hold neither excessively positive nor excessively negative attitudes about domestic firms' aptitude to adopt new technologies.

73% of surveyed entrepreneurs believe that technologies in Serbia are obtained by licensing or copying foreign technologies, and that R&D implementation is almost non-existent, which is consistent with our earlier analysis of research and development activities. The responses suggest that firms are much more likely to copy available technologies rather than purchase licenses. Almost two-thirds of participants agree with the statement that purchases of foreign technology licenses are rare.

Impact on doing business

According to the beliefs of 44% of managers, privatization of the major economic sectors in Serbia has had a positive impact upon the business environment, considering that managers believe that privatization creates long-term competitiveness and encourages efficient utilization of resources such as energy and materials. On the other hand, 31% of the respondents support the opposite attitude, believing that privatization of major economic sectors upsets competition and increases inefficient utilization of resources of energy and materials.

The efficiency of energy supply and distribution and any shift to alternative and replenishable sources of energy are considered low-priority issues in Serbia, according to 64% of respondents, in contrast to 20% who consider it a high priority issue. According to the sentiment shared by two-thirds of the participants, traffic congestion in Serbia impedes the efficient flow of goods and people, and certainly generates problems in distribution, increasing the expenses incurred by enterprises. Regarding pollution caused by traffic, 59% see it as enormous and as triggering reductions in the use of certain means of transportation, although 27% of interviewed entrepreneurs share the belief that such pollution does not yet represent an alarming issue in Serbia.

When it comes to the conduct of enterprises that exploit and process natural resources, 73% of the respondents believe such enterprises hardly pay attention to the degradation of the ecosystem, while 16% think that such enterprises undertake measures to preserve the ecosystem on which they depend.

Asked whether enterprises exploiting natural resources undertake analysis of ecological and social risks within the comprehensive framework of business risk analysis, 55% of participants responded negatively, with 27% expressing the opposite view. Also, the financial consequences of failure to comply with existing ecological and social standards do not grab particular attention. That is to say, only one-quarter of respondents think that firms' failures to comply with ecological and social standards are carefully evaluated, while a majority (58%) of survey participants believe these consequences are disregarded.

As for implementation of ecological and social standards set forth by multilateral development banks (e.g., the World Bank and EBRD), the survey findings reveal that almost half of respondents think such standards are not implemented by their enterprises (20% agree fully with such a judgment),

while 21% of respondents believe that their enterprises enforced such standards at least partially.

A majority of Serbian enterprises perceive the fulfillment of ecological standards as an imposed obligation, as opposed to an opportunity to be seized to improve their entire set of business operations. 56% of entrepreneurs believe that an ecological management system represents just a matter of fulfilling legal obligations, while 30% of entrepreneurs are aware of its significance in terms of achieving competitiveness. On the other hand, even two-thirds of respondents understand that environmentally friendly production, management of material flow, decrease in waste and recycling, and management of product life cycles do bear significance in regards to the business. The discrepancy, as compared to the previous question, suggests that entrepreneurs are generally aware of how meeting certain ecological and social standards affects enterprise operations, but they do not really understand that achieving ecological standards requires disciplined implementation and enforcement of laws, by-laws and certain procedures, with the possible benefit of improved global competitiveness.

27. Appropriability

Among other things, respondents were asked to evaluate the efficiency of the parliament. Regarding its legislative and supervisory role, the majority of respondents (70%) declared that parliament performs inefficiently, with one-quarter of that majority expressing full agreement with such a statement.

Regarding the administrative obligations of enterprises as required by law (permits, by-laws, and reports), a great many of survey participants (90%) think these obligations are too burdensome, with 40% of respondents agreeing completely with that notion.

When it comes to the safety and performance of the police, as well as police influence upon business operations, participants had several questions at their disposal. Only 20% of respondents replied that they had trust in the police to protect operations and the enterprise in general from crime, compared to 60% who believe they cannot count on police protection. 45% of survey participants do not see violence or petty crime as generating significant damages to business operations. However, a sizeable number (32%) of persons took the opposite attitude, believing petty crimes generate significant expenses for business. Similar findings are obtained for the issue of organized crime, with a somewhat larger number of participants (38%) supporting the view

that organized crime generates significant expenses in business.

Anti-monopoly policy in Serbia is rated extremely unfavorably, with 71% of survey participants finding it inefficient in fostering competition.

The structure of public spending is also evaluated negatively. In other words, 80% of respondents perceive the structure of public spending as unreasonable, with 29% agreeing in full with this claim, and 37% mostly agreeing.

Judicial system

On the legal system – particularly assistance with dispute resolution for private enterprises and challenging the legality of actions committed by the government and/or legality of regulations – three-quarters of respondents consider the existing legal framework inefficient and prone to manipulations. If one adds respondents exhibiting an indifferent attitude to that number, then 90% of respondents are not particularly satisfied with how the legal system works, or at least, unable to evaluate it positively.

A large number of participants (85%) consider courts to be very much influenced by officials, citizens, and enterprises, and one-third agree with this observation in full.

Property rights protection also received an unfavorable ranking from the surveyed firms. One-half of respondents believe that property rights are not clearly defined or legally protected, and even among the group favoring the attitude that property rights are clearly defined and well-protected, not a single respondent agreed in full with such a statement.

On the subject of the existence and enforcement of insolvency laws, particularly in regard to creditors' protection, the 2004 survey found that less than one-fifth of participants believe such insolvency laws are clearly defined and implemented strictly and consistently, while 60% express the opposite attitude. Bearing in mind that a high percentage of respondents took an indifferent attitude (22%), it is hard to escape the conclusion that the law on insolvency and its implementation were assessed unfavorably. We note that the 2004 survey was distributed prior to the enactment of a valid and effective Law on Insolvency Proceedings (July 2004), while the 2005 survey did not include any question to measure entrepreneurs' evaluation of the new law.

The vast majority of respondents (85%) believe that intellectual property protection is inefficient, and, if

that number is combined with respondents feeling indifferent about intellectual property rights, then 95% of respondents do not positively evaluate the protection of intellectual property rights in Serbia

Corruption and interest groups

According to the findings of the 2004 survey, only one in ten participants considered the scope of corruption to be increasing in Serbia over the past three years. A larger portion of respondents (40%) believed that corruption levels had decreased. However, a neutral attitude outweighed the others: half of respondents detected no change in the level of corruption.

Regarding the government's assignment of work contracts and policy, the majority of respondents (82.5%) believe that the government is not fair, but provides preferential treatment to certain enterprises and individuals. Three-quarters of the surveyed participants believe the diversion of public funds through corruption to the benefit of enterprises, individuals, or groups to be a common occurrence.

The 2004 survey asked a question measuring the extent to which firms had to bribe the government as a percentage value per contract, in order to be awarded the contract. 70% of survey participants declared they never had to resort to bribes under such circumstances. Among participants admitting they paid some money to secure the contract, one-fifth of such firms said they paid less than 5% of the total contract value. Similarly, the next question asked about the annual salary percentage that has to be stashed in government clerks' pockets as gifts and gratuities. However, slightly more than three-quarters of respondents denied ever practicing such behavior, and 22% of participants claimed to have paid less than 5% of the official's salary value.

Regarding the conduct practiced by other enterprises, half of the participants believe that bribing government and judicial officials leads to the absence of competition on the market, while one-quarter of respondents express an indifferent attitude in this respect.

The 2004 survey shows that more than half of the survey participants declared illegal donations to political parties to be frequent, while one-third expressed indifference about the issue. On the other hand, two-thirds of participants believe that close ties between enterprise donations and politics exist, with almost one-third of persons holding an indifferent attitude in that respect.

A great number of respondents do not have faith in the financial ethics of politicians: 94% of respondents mistrust the financial ethics of politicians, with a very high portion of respondents (60%) expressing that attitude in full.

When it comes to evaluating the influence of various interest groups upon recently enacted laws and regulations affecting business operations, the 2004 survey respondents revealed following responses:

- 61% said their enterprise did not interfere with the legislative process; if combined with respondents agreeing partially and mostly with that proposition, the above-noted attitude is supported by 89% of respondents;
- According to the judgment of respondents, domestic competitors were slightly more influential, but still not excessively, considering that somewhat over three-quarters of the respondents believed that most of their competitors do not exert any influence upon legislation;
- On influence exerted by business associations, similar responses are obtained, since almost three-quarters of the survey participants thought such associations hardly have any influence at all;
- Considering influence exerted by individual and firms with close personal ties with political leaders, 40% of respondents doubt these well-connected people have the power to influence officials, one-third of respondents thought the opposite, and one-quarter were indifferent about the issue.

Government failures and shortcomings

70% of respondents fully agree that the Serbian government's economic policy is too centralized. 40% of enterprise managers think that the government's agricultural policy is a burden for agriculture. 30% of respondents are neutral about the issue or declare that the government's agricultural policy balances the interests of all stake holders. Although the number of survey participants dealing in agriculture is not large enough to justify any valid extrapolation of this conclusion, it is interesting that their responses do not differ much from average replies across the entire sample; in other words, managers involved in the agricultural sector to some degree share the opinion that state agricultural policy burdens the economy.

The firms filling out the 2004 survey also made statements regarding their judgment of government reporting habits in connection with economic policy and regulations and amendments. The findings indicate that government is expected to put more

efforts in providing adequate information and disclosure to the general public since almost three-quarters of respondents believed such disclosure hardly ever happens.

Business ambient

Regarding treatment of foreign investments in Serbia, opinions are very inconsistent. 39% of respondents declare that foreign investments are encouraged, 28% believe them to be scarce, and one-third feel indifferent about the issue. 40% of respondents think legislation regulating foreign investment discourages the latter. A smaller percentage (33%) of respondents defend the opposite attitude, believing that regulations foster international investments.

The law on foreign investments abolished almost all obstacles in respect of investments provided by foreign persons, as well as introducing various incentives (mostly of a fiscal nature) designated to motivate this type of financing. This means that at least a plurality of respondents are not familiar enough with current legislation. It would be interesting to review the replies provided by foreign-owned enterprises, but that sample was not large enough to produce a representative answer.

Corporate governance

According to the survey findings, poor corporate governance constitutes one of the biggest obstacles hindering further development of the Serbian economy, increasing risk in investing in domestic companies. Half of the surveyed managers think that corporate governance in Serbia is characterized by deficiencies in carrying out management responsibilities toward investors and boards of directors.

Minimal standards of business conduct are established by relevant legislation, but in order to achieve long term competitiveness, the conduct of market participants must be also be regulated in compliance with voluntarily accepted standards. 42% of managers more or less agree that enterprise business ethics in their respective industry is among the worst in the world. Also, for two-thirds of the managers, business codes on workplace behavior and other aspects of corporate social responsibility are scarce or non-existent for domestic companies.

Regarding the protection of minority shareholders' rights in Serbia, 71% of managers adopt the attitude that these rights are not protected by law and that majority shareholders often violate the rights of

minority shareholders. It is a very common practice in Serbian enterprises that majority shareholders take advantage of inefficient enforcement of valid legislation, acquiring a degree of control that does not correspond to the voting power of his/her holdings on paper. The current practice suggests that many shareholders are not familiar enough with the rights underlying their shares, although they are guaranteed by the law.

Every company depends on the network of relationships among many individuals who contribute to its business operations, but also on assuming certain risks. Maximizing the entire company's potential might be achieved only by means of networking and fair treatment of all individual subjects involved. Among the managers filling the questionnaires, 46% hold the opinion that in the course of development projects that might affect certain communities in Serbia, those communities are hardly ever consulted for feedback or mobilized for support. We note that one-quarter of respondents felt indifferent regarding the issue. The necessity of changing business philosophy is also indicated by the fact that 30.8% of the surveyed top managers declared access to financing sources to be the biggest challenge in business.

Generally speaking, domestic managers exhibit a visible lack of understanding of the importance of the role of employees in their company. When asked about the character of the relationship between employers and employees -- whether conflictual, amicable, or cooperative in nature -- almost half of respondents (48%) replied that their relationship was conflictual (31% of respondents had an indifferent attitude in this respect). A significant number of shares of Serbian companies are possessed by employees in some firms. A large number of respondents (83%) think that very little is invested in employee training and advancement. Such a perception of human resources, especially if practiced by companies in need of specifically skilled or highly qualified staff, represents an obstacle to retaining valuable employees.

According to the sentiment shared by almost two-thirds of respondents, top management positions in companies are often assigned to relatives, as opposed to professional managers selected on the merits of their qualifications. Readiness to delegate duties to subordinates is rated low by 86% of interviewed persons, which means that top management controls most decision-making. Three-quarters of interviewed managers see remuneration packages for management as consisting exclusively of salaries, not in terms of opportunities or incentives

for obtaining bonuses and access to the company stock option plan.

Fiscal policy

Respondents' appraisal of fiscal policy in Serbia is rather inconsistent. The greatest number of respondents (45%) evaluated the tax system as complicated, whereas a significant number see it as straightforward and transparent (31%), or feel indifferent about it (24%). Entrepreneurs coming from state sector companies were more inclined to judge the tax system as complicated (55%) compared to entrepreneurs from the private sector, 41% of whom supported the view that the tax system is complicated. Conversely, private entrepreneurs were more likely to evaluate the tax system as simple and transparent (35%), compared to the 27% of managers from state companies who selected the simplicity and transparency description.

54% of respondents believe that tax rates are a burden to doing business and investment transactions. On the other hand, one-quarter of entrepreneurs believing that tax rates do not impede business activities, with the same percentage taking an indifferent attitude. In regards to their respective firm's total fiscal burden, 29% of respondents estimated it to be lower than 15% of net company revenue, 62% of respondents said fiscal obligations range up to 25% of net company revenue, and respondents believing that total fiscal charges take up less than 50% net company revenue constituted 91% of the sample.

Foreign trade policy

Regarding customs and non-customs protection, the prevailing attitude of entrepreneurs (55%) is that these do not have a negative impact upon the competitiveness of imported products in Serbian markets. with one-quarter agreeing completely.

If we divide the responses by export and non-export firms, an almost identical percentage of companies on both sides (54%) agree with the attitude that barriers do not diminish competitiveness of imported products, but a greater segment of non-exporting entrepreneurs believe that import competitiveness still has decreased (one-third of non-exporting respondents).

Regarding the frequency of bribery as a means of securing import and export permits, approximately one half of the respondents believe it to be a rare incident, with one-quarter of respondents who doubt it ever happens. However, a portion of the survey participants agree completely or to a certain degree with the notion that bribery is a very frequent

occurrence (38%). Taking into account only statements made by exporters, the picture gets even brighter: one-third of exporters think there is significant bribery to obtain import and export permits.

The 2004 survey contained several questions providing insight into entrepreneurs' attitudes towards the foreign trade regime in Serbia. Two-fifths of respondents thought that various customs and non-customs barriers increase the cost of imports by 10%. More than three-quarters of respondents claimed the increased cost of imports to be less than 20%. More than 80% of respondents evaluate customs import procedures as burdensome and inefficient.

External competitiveness

One-third of respondents think competition in domestic markets is limited, while one half adopt the opposite attitude, claiming that competition is rather intense in the majority of sectors. However, exporting enterprise managers are more likely to believe there is intense competition in the domestic market, a view shared by 58% of exporters. Only one-quarter of exporters believe that domestic competition is limited.

The modality of answers respondents selected most probably reflects what they encounter in the course of day-to-day business. If that assumption is correct, it would indicate that competition is fiercer in the areas occupied by exporters. This is an important conclusion, since it clearly suggests that the presence of healthy market competition encourages enterprises to improve their business, thereby contributing to export growth and enhancement of the overall level of competitiveness of the domestic economy.

The character of domestic market demand is illustrated by the fact that 71% of respondents believe that domestic consumers are not sophisticated, considering primarily product price when making purchases. Identical conclusions may be drawn and similar percentages are obtained when evaluating only the responses provided by exporters. It means that domestic demand encourages enterprises to cultivate price-oriented competitiveness. On the other hand, the presence of well-informed and demanding domestic consumers requesting top quality goods represents a significant factor that should motivate enterprises to enhance product supply over time. Unfortunately, domestic demand has no such power to affect the market, at least at present, according to the opinions of entrepreneurs taking the survey.

What do firms think of their suppliers? Two questions serve as indicators: the availability of suppliers in relevant areas, and the quality of domestic suppliers. Half of respondents believe that domestic suppliers are numerous and offer the most important inputs. (However, very few respondents agree in full with this proposition.) On the other hand, one-fourth of respondents opine that there are not many suppliers available. It is interesting that on average, exporters evaluated the environment of domestic suppliers more favorably, since 60% of exporters were more or less satisfied with the number of supplies available on the domestic market. Such an attitude also prevails among the respondents coming from manufacturing, with 65% support. However, both manufacturers and exporters agree only to a certain degree where their general satisfaction with suppliers is concerned; a negligible portion of respondents were completely satisfied with supplies available.

When considering the quality of domestic suppliers, most respondents express dissatisfaction. Less than one-fourth of respondents agree that domestic suppliers are good and competitive on international markets. Almost one-half of respondents said that the quality of domestic suppliers was poor because they were inefficient and have limited technological possibilities. Exporters' responses are rather inconsistent and conflicting. Although the percentage of exporters who are mostly dissatisfied with the quality of domestic suppliers is lower than the survey sample average, and percentage of exporters mostly happy about domestic suppliers' services is higher than the sample average, not a single exporter agrees in full that domestic suppliers are doing a good job.

Two-thirds are inclined to believe that marketing in Serbia is not sufficiently developed and sophisticated. Underdeveloped and inadequate marketing, in addition to other factors, explain non-competitiveness of domestic firms. Moreover, even the very concept of marketing is very poorly understood, and mostly boils down to the mere promotion of goods.

On the treatment of consumers, 80% of respondents agreed that enterprises treat their customers poorly. If only exporters' responses are taken into account, poor treatment of consumers is still the dominant opinion, but less prominent (60%) in comparison to the entire survey sample figure above. The difference might be explained by the fact that treatment of customers is somewhat better in industries occupied by exporters than the customary attitude representative of the overall economy.

According to the 2004 survey findings, half of local market respondents believe that local enterprises and local branches of multinational companies constitute competition, while 36% think that competition originates from importers. Identical figures are obtained if only private managers and processing industry managers are taken into account: 41% of this subset of respondents think that competition stems from importers.

International exchange

A large number of respondents report that they invariably import equipment. Only 14% of respondents agreed (mostly or to a certain degree) that equipment was almost always available from skillful domestic producers. Among processing industry enterprises, the attitude that equipment is always imported is even more prominent, supported by 80% of respondents.

The statement that low prices and natural resources are the foundation of international competitiveness of Serbian firms is supported by 79% of respondents.

The value chains controlled by domestic export companies are rather short. In other words, 79% of survey participants think that domestic enterprises deal mostly in exploiting natural resources and production, while neglecting design, marketing, logistics, post-sale services, etc. Considering that these activities are crucial in establishing quality and recognizable attributes of certain products, we offer another explanation why Serbian enterprises are not competitive in international markets.

45% of entrepreneurs estimate that foreign firms that do most of the marketing and distribution on behalf of Serbian enterprises abroad. If one takes into account only the responses provided by exporters, their belief that marketing and distribution are carried out by domestic enterprises exceeds the survey sample average and totals 30%.

Half of entrepreneurs see export to neighboring countries as limited in size. However, if only responses by exporters are considered (which is more relevant), we reach a totally different finding. The prevailing attitude among exporters (44% of them) suggests that Serbian exports to neighboring countries are significant and on the rise, which is confirmed by the Serbian statistics in the middle of 2005.

Clusters

70% of respondents do not think that cluster formations in Serbia are building up. (One-quarter

fully agrees with this). The same outcome is obtained if we consider only the responses provided by exporters.

The 2004 survey contained more questions referring to entrepreneurs' attitude towards various organized measures designated for advancement of export and competitiveness, including cluster development. Almost 70% of respondents mostly agreed with the estimate that organized efforts to enhance competitiveness do not exist in Serbia. The fact that majority of survey participants agrees with this attitude mostly or to a certain degree might be interpreted as a judgment by the entrepreneurs that such efforts do exist, but they are not sufficient or adequate. Some other attitudes presented in the 2004 survey are as follows:

- 80% of respondents thought that clusters in Serbia are rare and shallow.
- Taking into account the responses of more than half of the surveyed enterprises, cooperation within their clusters is non-existent, in addition to a large percentage of respondents upholding an indifferent attitude (30%).
- Regarding the procurement of components and parts specific to industry needs, 61% of respondents claimed they imported such parts and components, with one-quarter of enterprises almost always importing them. If only the responses supplied by representatives of processing industries are taken into account, the percentage of enterprises importing such equipment "always" or "most of the time" is slightly larger, totaling two-thirds.

28. Costs of Financing

The level of sophistication in financial markets in Serbia is seen as low, considering that 85% of the respondents rated it so (with 20% of respondents agreeing in full with the idea). The statement conforms to the real state of affairs at the market, taking into account that credits dominate the market, while the financial derivatives market remains underdeveloped. Regarding the solvency of banks, a majority of respondents believe in banks' financial health, stable profits, and loss accounting, but a high portion of participants disagree (34%), meaning they perceive banks to be mostly insolvent and likely to ask for financial aid from the government.

The 2005 survey contains several questions referring to the opportunities for financing of enterprises. Three-quarters of entrepreneurs think that innovative but risky projects can rarely obtain capital at the financial markets to finance their

endeavors. For example, 74% of respondents believe that it is virtually impossible to obtain a loan without providing adequate collateral. Collateral is not easy to secure since banks usually demand that the value of the security be several times greater than the value of the loan. However, some degree of optimism may be operating in the sense that perceptions of conditions governing the approval of credits to enterprises have improved: more than half of entrepreneurs (53%) believe that the conditions to apply for business loans were relaxed during 2004. The numbers of respondents exhibiting an indifferent attitude (the conditions of business loan approval remained the same) make up one-third of total respondents. Respondents claiming that the conditions of business loan approval worsened totaled 16% of those surveyed.

When considering other segments of financial markets, entrepreneurs viewed positively the opportunity to enter the stock exchange. In other words, when it comes to financing a company by means of issuing shares through the stock exchange, half of the respondents believe that this option is possible for businesses that are doing well, while one-quarter of respondents feel indifferently about it. Half of respondents think the rules on securities trading in Serbia are not sufficiently transparent and efficient, in addition to allowing interference by the government. A large group of respondents (38%) holds an indifferent attitude. Most strikingly, the percentage of those who do not consider these rules to be transparent and understandable is very high (88%).

43% of respondents think that money laundering through the official banking system is a rare occasion in Serbia. However, the percentage of the survey participants who believe that this phenomenon is widespread in Serbia, at least "to a certain degree," is not negligible (29%). Money laundering through Serbia's banking system has decreased in part thanks to the recently enacted Law on Preventing Money Laundering, although it calls for further development of various instruments to improve implementation.

Banks (as of January 1, 2003) and enterprises (as of January 1, 2004) are bound to comply with international accounting standards. The survey indicates that respondents are not properly informed on financial audit standards or standards for enterprise financial reporting because an almost even number of respondents declared national standards to be either low or high (37% and 36% respectively), in addition to quite a few indifferent respondents (28%).

6. Applying Growth Diagnostics

29. Setting the Stage for Growth Diagnostics

The main objective of this chapter is to apply the growth diagnostics model to the Serbian economy. The data and the model presented in chapters 3-5 represent the basis for the analysis. A short-term analysis shows that the main obstacle to economic growth is the poor protection of property rights. The government's strategy therefore should target the strengthening of the rule of law. If this strategy succeeds, it will lead to strengthening of ownership rights and limitations of corruption over the long run.

The chapter is divided into two parts. Part one explains why a "laundry list" approach usually fails. This strategy attributes equal weight to each obstacle. Taking into account that every obstacle has relatively autonomous causal strength and influences growth, this approach urges governments to adopt a growth strategy based on a frontal attack on all obstacles. The typical consequences of such a strategy are confusion in economic policy and the absence of a transparent growth strategy.

Part two is crucial for the analysis: it details how the growth diagnostics model applies in two stages. The first stage identifies the specific areas — social capital, financing, appropriability — in which the most important obstacle to economic growth could be found. The analysis shows that the main obstacle is in the domain of appropriability. However, this finding is too general, because appropriability consists of several sub-areas that theoretically cover a range of obstacles to economic growth. More precisely, obstacles could be caused by market and government failures within each appropriability subsection. Market failures imply information externalities and lack of coordination, while government failures involve micro risks (ownership rights, corruption, or taxes) and macro risks (financial, monetary, and fiscal instability).

As said, the analysis identifies the crucial obstacle in the weak protection of property rights. Better protection by an efficient and impartial justice system is needed in order to reach fast and sustainable growth. As will be shown in section 35, corruption is, beyond property rights, identified as a significant obstacle to faster economic growth. The growth diagnostics model prioritizes these two obstacles with respect to the speed with which they can be eliminated. The impact of corruption on growth is not completely evident in the short run. Corruption is usually a long-term problem whose elimination requires a range of recourses from various fields. It is important to emphasize the role of efficient laws and courts, as well as well-educated and uncorrupted judges who are sufficiently familiar with market economy principles. It takes years to reach this stage. As a long-term problem unlikely to be fully resolved during a single government's tenure, corruption is less relevant for this analysis. This analysis identifies the key bottleneck, the protection of property rights, as a policy measure that can be improved in the short run (within six months to one year) and certainly possible during one government mandate.

30. A Laundry List Strategy

Recalling Figure 1 from the introductory chapter, we may easily conclude that all characteristics of slow development persist in the Serbian case. If we start from the bottom line of Figure 1, we could hardly discern which problem is most pressing. We have seen in previous chapters, and especially in chapter 4, that Serbia suffers from relatively high and accelerating inflation, heavy government spending, a high current account deficit, a high debt-service ratio, and an inefficient and corrupt judiciary. Of course, Serbia is not geographically peripheral to important commercial routes, but other elements that have a significant impact on social returns — such as human capital and infrastructure — are more liabilities than assets. Let us examine these problems in greater detail, and then consider the option of attacking the problems simultaneously.

Low social returns. Contrary to established opinion, Serbian human capital is rather low. Almost 6% of population older than fifteen years has no education. The number of people that have a university degree is just 15% higher than those without any schooling. If we add the number of those without any schooling to those who are functionally illiterate (just three years of school), their composite number surpasses that of the university-educated by 17%. In addition, almost a quarter of the population has just eight years of elementary education. If those without schooling were unemployed and those with higher education were fully employed, we would say that the employment structure is better than the qualification structure of the labor force. However, the educational structure of the employed is the reverse, since those without elementary schooling constitute just 3% of the unemployed.

As we saw in section 21, wages and salaries over the last four years have risen more quickly than productivity. The gross average wage reached 280 euros by the end of 2004, and is higher than in Bulgaria and Romania, which are on the accession path to the EU, although Serbia's gross average wage is less than that in Croatia and Bosnia and Herzegovina, which are pretenders to the club.

Labor flexibility in Serbia is comparably low. Privatized firms are usually obliged by contracts imposed by the Privatization Agency to maintain their level of employment, or to decrease the number of employees slowly, up to 10% a year. In other words, the Law imposes some administrative burdens on labor force reduction in order to slow the rise of unemployment. Of course, such conditions also slow the process of restructuring, economic growth, and eventually state revenues.

Now, after a thorough revision of the Labor Law, it is even harder to fire the surplus labor force. The 2005 Labor Law requires enterprises to have a long-range program of labor reduction in cases of technological surplus, despite the fact that all firms that originated in the self-management period of the 1960s now have more labor than they need.

If an entrepreneur is dissatisfied with a worker, he is not allowed simply to fire the latter. Instead, he has to issue a formal warning, to give precise reasons for his dissatisfaction, to inform labor unions of his intentions, and to offer a job alternative to the concerned worker. Also, a Solidarity Fund has been established for employees who lost their jobs in bankruptcy procedures. Employers are charged by additional taxation in order to capitalize the Fund, which makes the labor force even more expensive. All these changes were made under the pretext of

harmonizing labor legislation with EU standards, and only a few dissenting voices questioned the EU labor directives that were designed in the high days of welfare state.

In principle, high costs of labor could be overcome by its more productive use. Section 21 suggested that the rate of productivity growth in the Serbian economy is higher than in neighboring countries. However, the starting level was rather low. During the period of UN sanctions, hardly anything was invested in the country's infrastructure. The resources were practically depleted since no replacement occurred in the period. The railway tracks and car wheels were worn out and consequently average rail transport speed fell significantly. The survey data presented in chapter 5 revealed the virtually unanimous dissatisfaction of managers with the country's infrastructure, particularly emphasizing the bad shape of the railway system (98% of managers expressed dissatisfaction). Two-thirds of respondents experience traffic congestion that significantly increases the cost of their products, and more than 80% of them consider Serbia's infrastructure as underdeveloped. Contrary to repeated promises by governments, the main highway that links Western Europe with Greece and Turkey has not been finished yet. Driving conditions on that highway and others, as well as so bad port conditions, undoubtedly raise the costs of transportation (90% of respondents).

The number of land-line telephones is relatively low (38 per 100 persons), but comparable to the regional standard. Business communication is more hampered by low reliability of both land lines and cell phone connections. Reliability is also a problem with the supply of energy, particularly electricity. In the last few years, electricity supply succeeded in matching demand and no shortages have been experienced, but its quality is rather low. More than half of respondents to our survey agreed with that notion. However, whenever the government or electricity exporters find electricity export to be profitable, they simply lower electrical potential out of greed, which is particularly damaging to electrical equipment. The price of electricity is approaching regional levels, and it appears that the period of cheap (subsidized) power has irrevocably ended with abandonment of the socialist growth model.

By and large, a lot of elements suggest low social returns, similar to many underdeveloped countries. However, there are numerous other factors that seriously jeopardize economic growth. Among them government failures appear to have a prominent role.

Government failures. To this bleak picture of objective factors complicating growth, we must add numerous subjective hurdles to growth. According

to all accounts, there are a lot of government failures that create risks at both the micro and macro levels. As we have seen in section 22, corruption in Serbia is thriving according to all international surveys. For example, the Transparency International ranking, which is a survey of perceptions of corruption across multiple countries, puts Serbia in 97th place out of 145 countries. The Global Competitiveness Report 2004/2005 shows much higher values of all indexes related to corruption compared to other states in the region, particularly emphasizing corruption in foreign trade, public procurement and protection of property rights (including intellectual property). Freedom House also ranks Serbia as the regional leader in corruption. In addition, our survey revealed that more than half of high-ranking managers agree with the notion that illegal donations to political parties are quite common. Partly out of that impression, or for some other reason, more than three-quarters of them do not consider the government as impartial toward business firms.

As we have seen, government consumption is high, reaching a level of almost half of GDP. Since tax administration is inefficient and/or corrupt, the bulk of revenues comes from taxing sales and imports. The share of corporate taxes in state revenues is small due to fraudulent, unpunished financial reporting that permits corporations to show no profits at the end of the financial year.

Since income taxes are still under consideration, and taxes on corporate profits cannot supply ample resources, sales taxes (or VAT) and taxes on wages and salaries have so far been the most abundant sources of state revenue. The structure of revenue reflects an inefficient system of tax collection, in which the state chooses to tax factors of production and individuals that are less capable of tax evasion.

However, the highest micro risks and the gravest government failures come from property rights abuses. The local media are full of stories of abuses of minority ownership rights (for example, C-Market), uncertainties over relative shares in big companies (Mobtel), or manipulations involving shares owned by the government (Knjaz Miloš). There are auditing scandals (Putnik), share dilution frauds (Jugoremedija), related-party transactions and abuse of official positions (Nacionalna štedionica), rigged bankruptcy procedures (Sartid), or virtual sagas of the government taming nominally independent institutions (the Securities and Exchange Commission). Although some newspaper stories may have been exaggerated or biased, it is nonetheless symptomatic that none of these cases has ever been resolved by a court verdict.

There is still no Restitution Law, although the process of privatization is under way, which adds to instability of property rights. Moreover, the Privatization Law is amended to increase discretionary powers vested in the Ministry of Economy and the Privatization Agency, creating more uncertainty. Some of the core provisions of the new Bankruptcy Law have been suspended for some firms slated for privatization, but not for all. We shall discuss these issues and other property rights problems in a moment, but for the moment, we simply note that it would be excessive to detail in this study a comprehensive list of property rights abuses that create a lot of micro-level uncertainties. In section 22, some topics under the heading of property rights were addressed. Our survey confirmed managers' concern regarding property rights abuses. More than half of them consider property rights not to be properly defined and consequently to be unprotected. An equal share of managers point to weak governmental responsiveness to investors' interests, and more than 70% of managers perceive there to be inadequate protection of minority shareholders. In Appendix 1 to this chapter, we present a typology of property rights abuses, together with suggested remedies.

Government spending is not only reckless, but unchecked. There is no independent control on spending. The budgetary system imposes only top-down control, and taxpayers have no way of controlling the government, not even indirectly through their parliamentary representatives. Practically, only one man in the whole country – the Minister of Finance – has a comprehensive picture of government revenues and outlays; apart from possible corruption, he is in a position to exacerbate micro uncertainties by arbitrarily redirecting budgetary flows and exerting pressure on particular markets or agents.

Government spending also creates significant macro risks in the Serbian economy. The budget deficit declined last year, and turned into a surplus in 2005, but nevertheless, the rate of inflation has accelerated. Official estimates for inflation in 2004 were in the single digits, but at the end of the year, the rate was 13.7%, and at the end of 2005 it was 17.7%. These rates are substantially higher than in countries that are Serbia's major trading partners (mainly the EU countries), and higher than in Montenegro, which has adopted the euro as the legal tender. At the same time, the dinar is not sliding proportionately in its value against the euro, which makes Serbian exports more expensive with each passing day. So far, the Central Bank has resisted all pressures exerted by exporters for devaluation, but no one knows what the rate of exchange will be in the near future, which

creates a lot of risks in everyday business. There are basically two claims underlying this point. One is the predictability of depreciation, which is pretty high. The other is predictability of sudden devaluation, which is speculative. The consequence of the first factor is increased credit expansion, due to the arbitrage opportunities given by the interest rate differential, while the consequence of the second is that this credit expansion will be mostly short term.

Macro risks are not only created by unpredictable monetary policy, but also by discretionary fiscal policy. More than half of our respondents cited instability of economic policy as the leading economic problem. For the time being, all state efforts in fiscal policy have been dedicated to curbing tax evasion and creating sufficient revenues for targeted levels of consumption. The government was encouraged to adopt such an approach by international organizations, which were primarily concerned with budget deficits and not with the structure of the budget. The structure of consumption indicates a lot of room for savings (three-quarters of managers point to an inadequate structure of public consumption). There are large subsidies for state-run companies (railways, state television), and some politically motivated subsidies were allocated to ministries held by the party that controls state finances (40% of managers find agricultural policy too costly). Also, subsidies are given to some run-down companies that use just a fraction of their capacity and cannot be privatized due to outdated technology. The government is not prepared to bear the political risk of closing down and firing labor from such inefficient companies, and therefore endlessly pours money into them.

In addition, the government uses fiscal revenues to support some politically motivated or outright corrupt investments through the Development Fund. Created as an institution for funneling money to inefficient socialist firms, the Fund gradually shifted its official policy to support firms in underdeveloped regions and to emulate a venture capital fund. However, the Fund's policy is under close political scrutiny and the structure of credits reflects relative political influence. Credits given by the Fund under favorable conditions and with subsidized interest rates create windfall profits to entrepreneurs, and big investors do not spare efforts to obtain privileged credits. This naturally militates towards the phenomenon of a captured state. Again, taxpayers pay the bill, but remarkably, this policy constrains capital market development, creates a lot of disequilibria by financing projects with high political support instead of with a high rate of return, and creates uncertainties due to a politicized business cycle.

Market failures. As is usual in underdeveloped economies, there are also market failures in addition to government failures. For example, firms have low incentives to develop their own new products or processes, or to upgrade their labor skills. It is always cheaper to use innovation developed by foreign or domestic competitors, or to overcome labor shortages by using already skilled employees from competing firms, as well as personnel that possess particular information. Unprotected intellectual property rights lead to low research and development (R&D) activity carried out by firms.

Many times enterprises stubbornly stick to their production mix or their chief product, regardless of changing market circumstances. This fact is evident not only among socialist managers accustomed to state subsidies, but also among some private entrepreneurs. For example, when market conditions changed unfavorably for raspberry producers, they demanded that the state cover their losses. Hardly any raspberry growers considered new production ideas, searched for new markets, or contemplated introducing higher levels of processing fruit. Their view was that the government should either cover their risks, or they would not produce at all. Reluctance to bear risks and caution in implementation of new, potentially profitable ideas is characteristic for underdeveloped economies.

In such circumstances, one could expect the government to intervene by stimulating R&D activity among producers, to cover a part of market risks, or to supply organizational and information support to entrepreneurs. Some governments go even further by allotting substantial budgetary funds for R&D. However, the Serbian government has proved to be thrifty when it comes to outlays in R&D.

In order to meet targets pushed by the IMF, the government was forced to cut its expenses, but, of course, not in any uniform way. Therefore, in tune with Olson's expectations (Olson, 1982), the worst hit were groups that could not organize effectively to exert pressure on the government. Consequently, Serbia spends less than its neighbors on R&D, and also less on educating a skilled labor force.

These facts are easily verifiable from cross-country data. We also note that managers are aware of the problem. Almost three-fourths of the sample of surveyed managers confirm that private R&D investments are lacking, and 86% of them agree that technological improvements trail behind competing countries. There is a consensus among managers (95%) that intellectual property rights are not sufficiently protected, and therefore a strong majority of them (two-thirds) see no use in paying for protection

of intellectual rights. In such a state of affairs, it is rational simply to seize whatever can be obtained, and firms spend as little as possible on R&D. It is a classic case for market failure, since everybody would be better off with strict implementation of the patent law, but there is no grass-roots initiative for it. Individual agents are reluctant to pursue such a policy since free riders could be in a position to collect substantial payoffs.

It is clear that some of the problem with developing and placing new products is rooted in the structure of firm ownership and management. Findings from the survey of privatized firms in chapter 7 suggest that restructuring does generally occur in recently privatized firms. After privatization, only 30% of the firms surveyed retained the same package of products, 25% introduced new products in addition to old ones, 15% introduced new ones and abandoned the production of old ones that dominated the production structure before privatization, whereas 30% kept the old structure of production but changed the share of old product production in overall production. After privatization, 50% of the companies surveyed switched to new suppliers, whereas 35% kept the same suppliers but added some new ones. In short, privatized companies in Serbia do restructure and become more active innovators, which is the groundwork for self-discovery.

This leads us to the problem of other coordination failures. There are several Serbian business associations, often with substantially overlapping membership. However, their primary concern is to capture the state, rather than coordinate some profitable activities. The Yugo project, devised in the eighties, was practically the last one to include cooperation among several businesses, but it was imposed by the ruling communist party and implemented by fiat. For the time being, entrepreneurs have shown no interest on their own in supporting some other export projects. Theoretically, the Chamber of Commerce is the institution that could supply help and coordinate export activities, but it was designed in a communist fashion, more like a retreat for retired politicians than as a genuine business organization. In the meantime, the government has set up an Export Promotion Agency, which is of even less help to exporters than the Chamber of Commerce.

All this adds up to a murky picture of a technologically backward economy that often fails to do all it can to identify, produce, and place products that can substantially improve Serbia's overall position on the world market.

Bad local finance. Serbia has an inefficient and weak banking system but due to increased competition, the remaining banks are becoming more and more efficient. Total assets of the banking sector are valued at just over 40% of GDP, while, for example, neighboring Croatia and Hungary show total banking assets valued at higher than 100% of GDP.

Real interest rates on credits are high, since debt is evaluated in euros and the nominal weighted average rate approaches 15%. At the same time, the interest rate on deposits is just over 2%. Such a big difference between lending and borrowing interest rates is a sign of imperfect competition in the banking sector.

The trust of the population in commercial banks is low but increasing, as is the banking sector's readiness to extend credits to households. This can be seen in the increase of deposits and credits. The credibility of the central bank, on the other hand, is not increasing, which can be seen from the low share of savings in dinars. The level of deposits indicates the credibility of the banking sector, whereas, in contrast, the level of currency substitution indicates the credibility of the central bank. In 2002, when the European Union was switching to the euro, less than half of the amount of deutschmarks exchanged for the euro was collected by banks over the next three years. By the end of 2004, the total amount of savings was less than 1.5 billion euros, denominated almost exclusively in foreign currency (97%), and deposited for the short term (94%) -- and that amounted to just over one-fifth of the GDP.

The banks are concerned with ability of customers to repay their debts, and usually demand collateral triple the worth of the loan. The problem is aggravated by the fact that real estate bookkeeping is inaccurate, and property for seizure often does not show up in the land registry. Consequently, just a small fraction of the population over 15 years of age has obtained credit (4.5%), and the share of credit relative to GDP is a negligible 0.2 per cent. Practically, the banks are swelling with funds, something confirmed by the fact that liquidity credit by the central bank is virtually nonexistent.

In theory, enterprises may choose between obtaining credit and issuing shares in order to finance investment. However, the financial market is shallow, mostly trading in controlling stakes of corporations. It is virtually impossible for a firm to raise funds on the open market; consequently, credit is the only source of external resources.

Last, but not least, Serbia's risk assessment as a country is high, despite the fact that the UN sanctions were lifted almost five years ago. Political turmoil,

unsettled issues with neighboring countries, and unenthusiastic cooperation with the Hague Tribunal are some of the factors that contribute to a high risk assessment by several international agencies. In section 22, we saw that the Economist Intelligence Unit repeatedly ranked Serbia, sometimes alone, and sometimes paired with Macedonia, as the country with the highest risk in the region. Banking sector risk is undoubtedly the highest in Serbia (general score 68, Macedonia 61). To this measure, one must add all the ratings of “D” that Serbia received (risk is measured on a scale from A to E), including political risk, economic policy risk, risk of economic structure, and foreign debt risk. These rankings are not groundless. We have learned from interviewed managers that they mostly agree with these high-risk assessments.

All these elements contribute to the high costs of finance, which is also a trait of an underdeveloped economy.

An expert on the Serbian economy would add much more to this inventory of inefficiencies, but even this limited list of grave economic problems suffices to emphasize the underdeveloped character of Serbia's economy. One suggestion for an exit from this unfortunate state of affairs would be to attack all elements of this “laundry list” simultaneously. However, underdeveloped countries would not be underdeveloped if they were capable of solving all vital problems at the same time. Governments of underdeveloped states usually do not have the resources and/or political capital to solve all problems at once. Therefore, the government is limited to selecting goals that will yield the highest returns in accelerating economic growth.

31. An Exercise in Growth Diagnostics

Beyond an initial consensus among growth theorists on the central role of accumulation for economic development, the next step is the subject of wide debate. Namely, if accumulation is found to be inadequate for initiating economic growth, additional resources for investments have to be found. At first sight, it seems logical to propose a transfer of resources from richer countries to poorer countries. But, we may equally propose that no income is so small as to prevent saving a part of it (Bauer, 1991). Moreover, foreign aid may create an addiction, a bad habit of relying on foreign resources and not on domestic accumulation, which could be devastating to economic growth. The first democratic Serbian government emphasized foreign aid, but the effects of

aid on economic growth proved to be almost negligible.

This leads us to the second proposition: not only does the amount of resources matter, but so does their targeted use. Domestic accumulation or foreign aid may be ample, but use of the funds may be woefully inefficient, with low economic returns. If, for example, decisionmakers build pagodas instead of production facilities, as they did at certain points in history, or construct “white elephants” – projects with negative social surplus – resources would be spent in vain, with few, if any effects on economic growth. Even worse, such policies of resource diversion crowd out socially desirable projects (Robinson and Torvik, 2005).

Next, even if resources are sufficient and invested in sectors that produce the highest returns, the entire increase in income can still be appropriated by the state, for financing health care, education and culture. The aggregate costs of these social programs soak up income that would otherwise reward private investors, thus contributing in the long run to slower economic growth. In that case, we suggest a third proposition: the low capacity of investors to control returns on their investment will likely lead to low economic growth.

Finally, resources may be ample and investors may be in a position to reap returns, but they may have no ideas about where to invest. The estimated economic surplus of each investment may prove to be too low. In that case, we would assert a fourth proposition: poor economic infrastructure closes off investment opportunities, which in turn produces slow economic growth. If the prospects of profits from investment prove to be meager, external financing will likely be costly, since few investment projects will show profitability. Economic growth would suffer from yet another cause.

By and large, lack of accumulation, low returns on investment, low private appropriability of returns, and high costs of financing investment are the principal factors that may impede higher economic growth. According to growth diagnostics (Hausmann, Rodrik, and Velasco, 2005), the first stage of examination consists of identifying the factor with the greatest influence on constraining economic growth.

32. Stage One

It might seem that in a poorly developed economy, all the factors identified in a laundry-list fashion equally contribute to restraining economic growth. Accumulation is usually low due to low income and low proclivity for saving, entrepreneurs face a constrained choice due to high costs of information on profitable opportunities, and labor regulation often substantially increases production costs, which in turn lower returns to investment. In addition, low GDP and populist political programs tend to increase the share of government consumption, which limits private appropriation and crowds out private investment. Finally, the banking sector may prove to be inefficient and/or uncompetitive, with the result of higher than expected interest rates according to relative factor scarcity.

Therefore, we need some tests that could distinguish the relative strength of constraints. If, for example, the high cost of capital constrains investment, we would probably find that foreign borrowing is near the extreme. In other words, we would expect the current account deficit to be high, and constrained only by the willingness of foreign creditors to lend on a short-term basis.

Financing. Now, let us turn to the Serbian context that we portrayed in previous chapters. Serbia does have relatively high interest rates. High interest rates are an indication that the cost of financing could be the major bottleneck to higher growth. Rodrik writes that in an economy

that is constrained by a high cost of finance we would expect real interest rates to be high, borrowers to be chasing lenders, the current account deficit to be high [...] and for entrepreneurs to be full of investment ideas. In such an economy, an exogenous increase in investible funds, such as foreign aid and remittances, will spur primarily investment and other productive economic activities rather than consumption or investment in real estate (Rodrik 2004, 7).

Two elements of this formulation are present in Serbia today: the current account deficit and interest rates are high. But the trend is downwards. The current account has been constantly rising since 2000. It jumped from less than a quarter of GDP in 2000 to almost one-third in 2004. However, as table 14 in section 22 showed, the deficit visibly lessened in 2005, which is by no means in line with trends in the region.

Interest rates are high. In 2001, the weighted interest rate on bank credits was 32.52% per annum, and decreased in subsequent years. By the end of

2005, it was 15.82%. At the same time, the interest rate on deposits is just over 2%. Such a big difference between lending and borrowing interest rates most likely indicate an imperfect banking sector.

A survey published by Quarterly Monitor at the end of 2005 (section 23) reveals that, due to the higher competition in the banking sector, interest rates in general are decreasing. Interest rates vary, and that different borrowers can access credit under different interest rates. Uneven interest rates point to a fragmented and disintegrated credit market in Serbia where banks respond differently to the same type of risk (MAT 1/2005, p. 32).

What causes such distortions in the Serbian banking sector? Access to credit is limited, but not because of scarcity of resources that can be employed. Rather, the limitations are found in non-financial factors, such as the absence of a credit registry and the weakness of judiciary system. This was revealed by the World Bank's study *The Cost of Doing Business 2006*. Serbia is identified as a country with a poorly developed public and private credit reporting system that normally would evaluate borrowers and try to help creditors diminish risk and allocate credits more efficiently. Nor is regulation of secured lending, such as collateral and bankruptcy laws, adequately implemented and applied. As table 1 shows, Serbia ranks low in both aspects.

The trend is clearly for the current account deficit to go down and for interest rates to continue to drop as the Serbian banking system grows. Actually, the banking system has perked up since 2001. This was confirmed by the January 17, 2006 IMF report entitled "Financial System Stability Assessment," which opened by stating that "the ongoing transformation of Serbia's financial system is bringing important economic benefits" (IMF, p.5), something quite expected for a banking sector that has been "undergoing fundamental transition from a state controlled sector to a private foreign-owned system" (IMF, p. 7). The assessment establishes what has been known for some time, namely, that the Serbian banking sector has been expanding credit activity in 2004 and especially in 2005. Credit demand, driven in 2004 by high public expenditure, is high, but, quite unexpectedly for a country where borrowers are supposed to chase lenders, the supply of credit has been even higher. The volume of dinar credits in 2005 compared to 2004 grew by 69%. The absolute increase was 146,782 million dinars (and reached, at the end of 2005, 360,514 million dinars). The structure of credit favors firms: credits to firms account for 63% of all dinar credit; by contrast, credits to consumers account for 35%, although consumer

credit expanded faster (by 94%) than firm credit in 2005 (MAT 1/2006, pp. 23-24).

At the same time, despite the deep distrust in the banking system, the volume of dinar and foreign currency deposits rose in 2004 and 2005. As the graph below shows, by the end of 2004, domestic deposits with commercial banks amounted to 40.3 billion dinars, whereas credit expansion amounted to 36 billion dinars. (Net savings was 4.3 billion). In 2005, the volume of credits increased by 65 billion dinars, but domestic deposits also rose by 80 billion dinars (net savings was 16 billion) (MAT 12/2005, p. 23).

Despite the growth of all monetary aggregates, the Serbian economy still appears to be undermonetarized. The M1:GDP ratio in 2001-2005 is 9%, as opposed to European Union economies where it is typically 36%-38%. Yet, actors in the Serbian economy informally use the euro along with the dinar, suggesting that the ratio must be higher. (In 2002, when the EU was switching from local currencies to the euro, Serbian citizens exchanged around €4 billion. One can surmise that at least half of it is still immobilized by banks, as well as circulating unregistered in the Serbian market.)

There are other reasons for why firms cannot access credits more easily. All are of a non-financial nature. The rise in monetary aggregates (especially cash) in circulation has posed some risk for the economy. Since consumers are demanding more credit than firms, the National Bank has had to constrain credit growth, fearing higher inflation. (In 2005, inflation was 17.7%, which was highest in the region.) Monetary measures to restrict credit growth (repo operations and the use of statutory reserve requirements on foreign currency denominated deposits) were designed to slow down consumer credits. Yet they have affected the very firms that are

in need of additional resources to boost export production by making it harder for them to access credits. Monetary policy, not the scarcity of resources, is the culprit. In addition, according to a regular monthly survey from January 2006 done by Institute for market research, around one-third of the surveyed firms complain they cannot access credits. But most of these have low credibility or are still socially owned.

As may be seen, Serbia is surely not the country where “borrowers are chasing the lenders” but rather the other way round. The banking sector as a whole is liquid (the exceptions are several state banks) and banks are swollen with funds. “They are financing credits from steady increases in euro-dominated deposits, reflecting improved confidence in banking system, as well as borrowings from headquarters of foreign banks” (IMF, p. 7).

Rodrik also argues that “an exogenous increase in investable funds, such as foreign aid and remittances, will spur primarily investment and other productive economic activities rather than consumption or investment in real estate.” However, in 2004, net transfers (with foreign donations) in Serbia increased from 16.6% to 17.9% of GDP, while gross investment share stagnated in GDP (around 16%), and domestic savings in foreign currency have risen steeply (from a negligible amount to two billion euros in 2005).

Net transfers (in which remittances of labor are the most important source) had covered almost half of the trade deficit in 2004. Net transfers accounted for up to 15.5% of GDP in that year. However, the current account deficit quadrupled its share of GDP and reached 13.2% in the same year. It was covered by a higher capital account surplus; consequently, central bank reserves increased. As the official data show, there was a steep rise in short-term credits, as well as mid-term and long-term credits.

Country	Public registry coverage (borrowers as % of adult population)	Private bureau coverage (borrowers as % of adult population)	ICredit information index	Legal rights index
Serbia	0,1	0,0	1	5
Croatia	0,0	0,0	0	4
Macedonia	1,9	0,0	3	6
Hungary	0,0	4,0	5	6
Bulgaria	13,6	0,0	3	6

Table 1. Indicators of credit informations. The first three indices measure whether registries possess necessary information on borrowers. A higher index number signifies a more developed registry system. The legal rights index ranks from 0 (absence of legal protection) to 10 (maximal protection). Source: The World Bank, The Cost of Doing Business 2006.

High interest rates are surely one of the reasons for low direct investments. Yet high interest rates are an indicator of high risk. Risk is created somewhere else. It is difficult for creditors to ensure the return of debt in case of default. The legal system is weak, the land registry is incomplete, and bankruptcy procedures typically last several years. The inefficient, under-resourced and corrupt legal system is the primary obstacle, generating other relevant obstacles in the area of financing.

Social capital return. If we exclude high interest rates as the principal cause of low investment, then maybe entrepreneurs do not invest due to a lack of opportunities to reap returns. Maybe the economy does not have an adequate level of skilled workers in relation to GDP, or the country has a poor infrastructure, or there are some geographical disadvantages.

As we have already stated, Serbia is not peripheral to primary trading routes. These facts are reflected in the structure of foreign trade. Around half of Serbia's foreign trade is with EU countries (56% in exports). Germany and Italy, as Serbia's two largest trading partners, combine for almost a quarter of Serbian foreign trade. Exports to neighboring countries comprise one-third of total exports, and are becoming increasingly important: regional trade exhibits the highest growth rates, due to bilateral treaties on free trade that include abandoning 90% of import duties and cancellation of the quota system. Also, according to the survey data presented in chapter 5, Serbian managers confirmed their trust in regional trade: almost half of them agreed on the rising importance of regional trade.

Serbia has similar free-trade treaties with Russia and Belarus, and it may be expected that implementation of these treaties, together with the fact that Serbia is sandwiched between EU countries, will probably show more effects in the future. By and large, geography cannot be considered a constraining factor on Serbia's economic growth.

Serbia's labor force has a skill structure and costs of labor similar to other regional countries, but the increase in labor productivity is the highest in the region. Other elements of economic infrastructure are about the same, with no marked deficiencies. The picture is corroborated in our survey: 60% of managers have no problem in finding and hiring able workers; 62% of them say that they have contact with numerous competent engineers and even scientists who are ready to take positions within the firm. On the other hand, more than half of those surveyed point to bad working habits of employees, particularly in the public sector. By and large, we may say that

opportunities for investment in a technical sense may produce similar rates of return as elsewhere in the region, and yet we see that economic growth in general is more sluggish than in neighboring countries. Consequently, we do not regard low human capital as the principal constraint to higher economic growth.

Appropriability. Finally, the only factor left in the growth diagnostics model is low appropriability. As we have seen, it may be a consequence of two failures – market and government. Since both failures are present in the Serbian context, we must evaluate their relative strength.

If we first examine market failures, we may observe all kind of problems, in information, coordination and “self-discovery.” Some of them we described in the earlier section on the laundry-list approach. However, there are also some positive elements that have to be explained in an effort to evaluate the relative strength of different failures.

Serbian managers have a long history of business relations with market economies. Trade with the West comprised more than half of foreign trade even in the 1980s. Moreover, economic sanctions imposed by the UN, however devastating for the economy, represented an additional challenge and positive experience for domestic entrepreneurs. They were obliged to find alternative ways, often illegal, to conduct trade, find new products that could be sold for hard currency, and import whatever was needed into the country. It was practically a “high school” of “self-discovery,” and only the most able survived this demanding test. Therefore, one could hardly label entrepreneurs as uninspired.

True, after initial successes, some entrepreneurs could not resist the temptation of government protection, and applied for state subsidies, import protection, guaranteed prices, subsidized credits, and tax rebates. After all, a quiet life enabled by a captured state is more pleasurable than a struggle for survival under conditions of unbridled competition. This behavior is characteristic of groups such as the previously mentioned raspberry growers, but on the other hand, there are a lot of success stories in the gray economy. Most entrepreneurs in gray economic activities never applied for any state help since their businesses were not eligible for state protection. Examples include shoe and garment production, but also other staples designed by the Western fashion industry.

With the phase-out of UN sanctions and opening up of possibilities for trade, the number of newly registered firms increased rapidly, which is also a sign

of vitality in business activities. In section 22 we found out that, each year, more than 6,000 new firms enter the market. Also, with institutional changes in 2004 and 2005 – the simplification of the business registry, the streamlining of procedures for starting a business, and the substantial reduction of the minimum required capital (from 5000 US dollars to 500 euros) for registration -- the number of new firms increased even more. Such a vibrant rate of new entry is a sign that entrepreneurs have not run out of ideas for collecting profits, and one could hardly characterize the economy to be burdened by “self-discovery” problems.

However, the structure of newly created firms also points to their predominant formation in trade and other activities with high turnover, suggesting an unwillingness of entrepreneurs to invest greater amounts of resources, or to invest in activities with a longer maturation period. Clearly, entrepreneurs are concerned for their investments because they do not trust the government. Therefore, we argue that government failures are the more pressing issue in the Serbian context.

By excluding the previously discussed constraints as the most binding, we may consequently conclude that low opportunities for appropriating investment revenues due to government failures are the most binding constraint for higher economic growth. However, this very general proposition must be dissected in the second stage of growth diagnostics. Private investors may shun investing due to broadly defined taxation, which comprises not just state and local taxes, but also poor protection of property rights, insufficient enforcement of contracts, macroeconomic instability, and widespread corruption.

33. Stage Two

If entrepreneurs are not able to enforce contracts, and feel that their property is unsafe due to general judicial uncertainty and widespread corruption, or if there is substantial macroeconomic instability, investors will have low incentives to place their resources in productive uses. Economic growth would be sluggish in such a state, and government failures would be the only culprit for blame. As we witnessed, government failures are reflected in rising macro and micro risks. Macro risks include financial, monetary, and fiscal instabilities, while micro risks include property rights abuses, corruption, and broadly defined taxation (i.e., not only central government and local taxes, but also increased costs of doing business).

We begin with macro risks in the Serbian economy, particularly the fiscal element of risk. Serbia has a flat corporate tax of 10%, which is among the lowest in Europe, and therefore could hardly be considered as an obstacle to investment. True, the government has made labor more expensive by taxation, and use of capital cheaper, which contrasts with relative factor scarcity. In other words, the government has been sending the wrong signals to entrepreneurs, but we cannot say that distorted relative prices hampered appropriability of investment returns, despite often-repeated complaints by investors.

Regardless of how relative factor prices changed, they were known to all investors in advance, and if the latter concluded that a certain combination of factors was unprofitable, they could have increased their capital intensity in order to meet the change. The ability to appropriate profits has not been distorted by this change in relative prices of labor and capital. As a matter of fact, we may agree that the government erred and made big failures in this area, but appropriation has not been hampered. One may even suggest that government failure, through low rates of tax collection, extensive tunneling from state and socially-owned enterprises to private firms, and false financial statements and inefficient controls all helped to increase private appropriation of profits.

Most government revenues come from taxing consumption. Starting in January 2005, Serbia abandoned an inefficient sales tax system with a lot of rates and exemptions, and introduced the uniform VAT rate of 18 per cent, with just a few exemptions. The new system, at least in theory, does not distort relative prices, and together with an increased, regular tax collection, stabilizes entrepreneurial expectations, which is a precondition for boosting investment activity. Given that the consumption tax is the main source of state revenues, one may conclude that investors' ability to appropriate returns from investment is not seriously jeopardized. And, as cross-national data revealed in chart 4 from section 22, the VAT rate of 18% is in the lower band among regional economies as well as among Serbia's main trading partners, and cannot be declared the prime suspect for low appropriation by investors.

The next possible explanation for the reluctance of investors to invest is monetary and financial instability. After the democratic turnover in 2000, one of the main objectives of the new government was price stabilization. Despite initial success, the rate of inflation has been accelerating from 7.8% to 13.7% in 2004, and in mid-2005, it reached more than 17% on a yearly basis. However, that rate is still

far from the hyperinflation range, which might destabilize the business environment. At the same time, the budget deficit shrank from 4.2% of GDP to just 1.5% in 2004, and it turned into a surplus in 2005.

Meanwhile, the domestic currency turned out to be overvalued, due to the fact that the exchange rate had not tracked the difference between inflation in the EU and domestic inflation. That created a heated debate among economists over the significance of an appreciated currency rate for the trade imbalance, especially after the record trade deficit in 2004. However, overall balance of payments is in positive territory, along with rising foreign currency reserves. We may therefore suggest that the gap is not so big as to cause macroeconomic instability, at least for the time being.

According to standardized international surveys, Serbia's real unemployment rate at the end of 2004 stood at 18.5%. At the end of 2005, the rate was probably around 20%. Even such a high unemployment rate could not be considered a threat to social stability, as clearly witnessed in this and other transition countries. Unlike developed market economies, many domestic urban dwellers still have relatives in the countryside or small plots of arable land that enable them to supplement their daily diet. By and large, although macro instabilities are substantial and almost endemic, they could not be considered an immediate threat to investors or a serious obstacle for accruing profits.

By successive elimination of possible macro culprits for low investment, we have finally reached the conclusion, easily confirmed in many cases, that micro risks are the principal causes of low investment, including poor protection of property rights.

34. Property Rights

As it is well known from property rights theory, a market economy cannot function properly without effective protection of property rights and enforcement of freely expressed consent given by contracting parties. Therefore, it is almost universally accepted that without a strong constitutional protection of those rights, there is not only a serious deterrent to productive activity, but also that there are broader effects on social faith in democracy. The freedom to undertake legal contracts between private parties, and have those contracts enforced by state institutions, is one of the basic features of a democratic society that fully respects individual freedom (Sunstein, 1993).

Several laws are vital for protection of property rights. In Appendix 1, we have enumerated several laws that are either deficient or simply are absent from the set of rules that govern Serbia's economic system. Here we shall examine three particular, vital laws for protection of property rights. Good company law is a safeguard that specifies the limits of firms' conduct. Good bankruptcy law protects creditors and businesses by making investments recoverable. The third vital law that protects ownership is the law on legal enforcement.

Property laws. These laws are vital in consolidated market economies. Nevertheless, post-socialist countries have to tackle one additional problem, which is restitution of the property taken decades ago from individuals on various grounds, i.e., in some legal or extra-legal way (Pejovich, 2005). Although fifteen years have passed since the introduction of a competitive multi-party system, Serbia still has no restitution law. In that respect, Serbia is the laggard in the region, with serious consequences for the stability of property rights. While the privatization process is under way, and original owners also advance claims on the state assets to be privatized, nobody is able to predict the final outcome of conflicting claims. The Parliament has adopted a law that stipulates evidence of property claimed by the original owners, which only shows the reluctance on the part of the government to solve the issue, given that there is ample official evidence of the property taken.

Once property rights are defined, business activities have to be regulated and protected by good company law. It is often held that common law and civil law traditions lead to diverging corporate institutions. However, each tradition has several diverging paths, or more loosely put, there is an interaction between markets, asset pricing, and legal institutions (Gilson, 2005). It is therefore hard to tell in advance which model protects property rights most effectively.

The European Union made substantial progress in unifying different company law traditions by issuing European Council and Parliament Directives. Member countries are obliged to adopt these provisions in domestic legislation in order to secure a smooth flow of capital across internal borders. For transition countries that seek to join the Union, this process of unification has an additional positive effect. It saves them effort, and also limited resources, in their attempt to devise their own company codes.

Serbia's laws on companies draw on the German civil law tradition. The latest version of the law,

adopted in the fall of 2004, incorporates all the European corporate law Directives, and sets a level playing field for foreign investors. However, implementation of the law is problematic because other laws that regulate capital markets are not in tune with this law and do not provide for a consistent system. There is also a problem with judges who are unfamiliar with some market economy concepts. In such a situation, courts do not make consistent decisions, which creates uncertainty concerning property rights. Several cases that were highly publicized showed especially weak protection of minority shareholders and the strong power of incumbent management structures, something confirmed by managers in our survey.

Both unfortunate traits led some foreign investors to change their mind and invest somewhere else (e.g., the privatizations of Knjaz Miloš and C-Market). Of course, it is one thing to drop a project of putting money in one firm and choose another in the same market; it is quite another to abandon the idea of investing in one country and relocate resources to an entirely different market, running a risk of ruining domestic credibility..

Bankruptcy laws. In 2005, Serbia started implementing a new Bankruptcy Law based on a creditor protection model. The previous bankruptcy law protected debtors, and was abandoned as a remnant of socialism. Often, it is considerably easier to change certain provisions than to accept a completely new legal approach. As an international survey clearly suggested, in many cases, the inefficiency of courts and their inability to deliver justice is due to the transplanting of unfamiliar legal systems (Djankov, et al. 2005a).

According to Djankov et al. (2005b), there are at least four main legal traditions that define creditors' rights: English, French, German, and Nordic. Moreover, we find different provisions under each tradition. If we were to rank them by assigning them a creditors' rights index that varies between 0 (poor creditors' rights) and 4 (strong creditors' rights), we might, for example, score a 1 for the United States and 4 for the United Kingdom or New Zealand. The American model of bankruptcy law gives greater protection to debtors and company management and fosters reorganization, but it is implemented in a highly competitive market for corporate control. In other words, it is not clear ahead of time which system is more effective: the answer depends on the nature of corporate governance and debt structures, and development of complementary market institutions (Sefa, 2004).

The previous Serbian Bankruptcy Law (of the socialist era) was quite ineffective, with bankruptcy

procedures lasting for many years (even decades in some cases). Also, some bankruptcy trustees were overloaded with more than a hundred firms in their portfolio. As no trustee is capable of managing a hundred firms at the same time, this fact signaled corruption in the judiciary. It is still rather early to discuss the merits of the new law, especially since its implementation is severely restricted by other legislation.

Privatization laws. Even before the new Bankruptcy Law became effective in February 2005, Serbia's parliament adopted new privatization legislation but exempted firms in the process of privatization from the Bankruptcy Law's provisions. The new privatization legislation intended to spur the process by making insolvent firms more attractive for sale through restructuring. In the process of restructuring, state firms are obliged to write-off debts of firms slated for privatization, and private creditors are left with an option to negotiate debt settlement with the new owners. Also, no collateral can be collected from firms under restructuring, for up to two years from the commencement of the restructuring process. Despite the good intentions to accelerate the pace of privatization, these provisions created additional uncertainties and instability regarding property rights. Consequently, the cost of doing business will increase, and investors will be reluctant to invest, with continued devastating effects on economic growth.

Since firms due to be privatized account for the bulk of debt in the Serbian economy, this practically means that the Bankruptcy Law has been suspended before coming into force, applying only to the tiny part of the private sector that is insolvent. Serbia is therefore in a position similar to some developing countries (for example Malawi), where otherwise credible bankruptcy legislation superseded by some other legislation (Djankov et al. 2005b). Such a legislative environment is certainly not encouraging for investors, but there may be even more discouraging factors, as we shall soon see.

Good laws must be coupled with an efficient judiciary in order to attain effective protection of property rights. Serbian courts are overloaded with cases; as we have seen, in some courts, each judge handles an average of one thousand cases per year. With 128 new cases arriving for each judge's consideration in a year, substantial backlogs are inevitable. Serious delays in trial or resolution (more than a quarter of cases are extended into the next year) represent a strong incentive for agents to use extra-legal means in enforcing their rights.

Almost all respondents in our survey were dissatisfied with the judicial system (more than 90%). The same majority pointed to cumbersome and often conflicting regulations, and almost 85% considered judges to be under government influence. In addition, more than 60% did not trust the police, and 38% considered costs of organized crime to be a regular part of production costs.

Inefficiency, coupled with corruption, in the area of law enforcement is perceived as substantial, not only by our survey, but also by several other domestic surveys. That finding is hardly surprising—Serbia is highly ranked in corruption in leading international surveys.

35. Corruption

Apart from inadequate laws and their ineffective implementation, we also found in our survey that a high degree of corruption is one of the principal causes for the low investment rate in Serbia. We will review here some of the indicators of corruption. Then, in the next section, we will establish the link between poor protection of property rights and corruption.

Corruption cannot be equated with mere bribery. It is a much more difficult and elusive problem to be discussed in this limited space, especially if it is of a systemic character. If corruption permeates the whole society, the question becomes: where to start with efforts to curb it? As a matter of fact, the problem is aggravated by ambiguity in the notion of corruption, that is, it is difficult even to define what corruption is.

The World Bank working definition that defines corruption as an abuse of position in order to gain personal benefit is the most widely used. The National Anti-Corruption Strategy advocated by the Serbian government uses this definition, too. However, misuse of resources, or their outright theft, both in public and private sectors, should not be classified as corruption, despite a clear abuse of office-holding. As argued by Colomatto (2003), corruption needs at least three persons: the principal, the agent, and the third party who derives benefits from the agent's activities. The third party has incentives to make an offer to the agent, who in turn has interest in abusing his position at the expense of the principal. In other words, the agent takes advantage of his discretionary position in order to sell property rights that do not belong to him.

Even by taking this more narrow and precise definition of corruption, one may easily detect its

wide scope in Serbia. Both grand and petty corruption are widespread, since top-ranking politicians are involved in several affairs documented by the government's Anti-Corruption Council. Petty corruption is also acknowledged in several surveys of corruption in courts, and among customs officials, physicians, teachers, or policemen. One-fifth of interviewed managers admitted that paying bribes is indispensable in order to win contracts, although, in their view, kickbacks rarely surpass 5% of contracting value.

The widespread character of corruption is also recognized in the National Strategy for Combating Corruption, a document adopted by the Serbian government and sent to the Parliament for approval in mid-2005. The findings of this document expressed the view that corruption permeates the whole society.

Although many authors point to devastating effects of corruption, economists have established, starting with the seminal Mauro (1995) paper, a clear (negative) relationship between corruption and economic growth. Empirical studies have confirmed that corruption alters the composition of government expenditure towards less productive activities, and, therefore, that it is detrimental to economic growth (Tanzi and Davoodi, 1997). Although in some cases, corruption may temporarily boost economic growth, it generally undermines good governance and inevitably hampers economic growth. For example, the sale under privileged conditions, and allegedly with extensive corruption, of the SARTID steel company proved to be economically beneficial to a certain extent. New owners not only restructured the company without shedding labor, but also dramatically increased production and export. Today, the company is the leading Serbian exporter, with a share of about 7% in total exports. Also, the buyer of the company used its influence to help Serbia in acquiring the most favorable position in export to the US market.

Undoubtedly, these were good points, but there is no way to know if some other investor might not have achieved even better economic results. Also, without competitive tender bids, one may never be sure that the highest value bidder acquired the company and its resources. Therefore, some other investor may have been interested in paying a higher price for the company, or willing to settle at least a part of company's debt. Any of that would have been a great relief for government finances. To be sure, bids by potential investors are by definition a matter of speculation, but what we do know is that the company was sold for a fraction of its estimated value and with no obligation by the buyer to settle the

company's debt with foreign banks (mainly from Austria and Germany). Also, the sale was conducted under a bankruptcy procedure with several flaws, and in the presence of substantial political pressure on courts (documented in the Anti-Corruption Council Report). Therefore, at least two short-run adverse effects could be discerned: state finances suffered, and German and Austrian investors showed great reluctance to invest in Serbia. In the long run, the case will produce lasting effects: the judiciary that experienced pressure by the executive branch of power may never feel capable of implementing laws and resolving disputes impartially. We submit that these broader effects of hampering the rule of law can outweigh the positive effects of a rise in exports, higher employment and income.

Nevertheless, several authors found effective quelling of corruption to be a substantial part of good governance, and a prerequisite for sustainable growth. Kaufmann (2004) found that governance and corruption issues constituted key constraints on investment and business, and that these issues were particularly significant in assessing a country's overall competitiveness. He has conducted a wide-ranging cross-national empirical investigation and found that a country that manages to reduce the extent of corruption by one standard deviation can expect, on average, to move at least 20 rank positions in the World Economic Forum's Growth Competitiveness Index.

This and other empirical findings on the importance of an effective struggle against corruption for the purpose of sustaining economic growth may be disputed. However, we strongly doubt that effective protection of property rights is possible with corrupt courts.

36. Short-term vs. Long-term

Application of the growth diagnostics model clearly pointed to one principal culprit for low investment and consequently sluggish Serbian economic growth. This is the poor protection of property rights. Corruption is, in large part, a symptom of weak formal protection of property rights. In the absence of reliable formal means for the protection of capital, informal means are used. These informal means take the form of corruption.

In searching for the most critical bottleneck, we should be searching for the problem that can be eliminated by short-term efforts, such as policy changes or the removal of certain institutional obstacles or deficiencies. Protection of property right is, and corruption is not, that kind of a problem.

It is hard to expect that corruption can be eliminated or controlled in a short period of time. What is more, corruption depresses the long-term growth rate, but does not have a clear impact on the short-term growth rate. As we saw in section 19, the Serbian economy grew by 6.5% on average in 2001-2005, although corruption was present for all that time. However, if the policy for strengthening property rights is successful in the short run, the struggle against corruption will benefit in the long run.

Keeping in mind the distinction between the short and long run, we propose some governmental measures to stabilize property rights, measures which would exert positive effects on economic growth.

First of all, we think restitution is the most urgent task. It is a prerequisite for privatization, which cannot be delayed anymore. Property rights are simply not protected in a country that expropriates some individuals and sells the very same assets to others. In addition, many original owners and their descendents live abroad, and continue to pressure their new countries to ban investment in Serbia, unless the issue is settled. As German and Austrian investors already invest in Serbia to a rather sparse extent, negative publicity campaigns in other countries cannot be dismissed as unimportant.

Next, the privatization of companies in the process of restructuring under the auspices of the Privatization Agency must be accelerated. At the beginning of this process, 71 companies were slated for privatization through restructuring, and after four years, only a few companies have completed the process. The latest changes in the Privatization Law open possibilities for an extensive increase in the number of companies that must wait to be restructured and sold by the state. That situation creates a lot of uncertainties concerning property rights, but also an abundant source of state capture and corruption. From this point of view, the best move would be to repeal these latest changes in the Privatization Law. The suggested move would also have positive effects in other spheres, mainly by enabling the implementation of important legislation, like the Bankruptcy Law and the Company Law.

For the time being, these laws have not been implemented, for various reasons. However, they are vital for a market economy. Ignoring these laws creates a lot of abuses of property rights and uncertainties, such as suppression of minority shareholders' rights, asset stripping, insider trading, slow restructuring, rigged bankruptcy procedures, etc.

Connected to the problem of properly defining and stabilizing property rights is the introduction of international accounting standards and procedures in the Serbian economy. The existing Law on Accounting and Auditing is founded on these standards, but a lot of necessary supporting regulations are missing. Professional organizations are weak and cannot impose codes of conduct, and proper education of accountants and auditors is lacking. In practice, a narrow definition of audit objectives and procedures is implemented, which in many cases, leads to audits that conceal more than they reveal. Therefore, the expectations of claimants of property rights are often frustrated, creating not only individual dissatisfaction, but also lack of confidence in capital markets.

Parallel with these institutional changes, the government must strengthen the existing regulatory setting. Several independent agencies with economic authority have been established, but they need a comprehensive regulatory environment in order to be effective. Typically, these agencies do not have the authority to impose sanctions on economic agents, their expertise is quite limited due to the low quality of personnel, and they cannot hire experts with a limited budget. Their budget structure is also inadequate, such that they are not in a position to make use of budgetary appropriations. Sometimes these agencies even lack proper office space. The government must focus on these and related problems, and it must respect independent rulings by these institutions, since they are vital for a market economy. Among the priorities is the need to establish the Commission for Protection of Competition (Anti-Monopoly Commission), but also the need to give additional legal powers to the Securities and Exchange Commission and the Radio-Diffusion Agency.

With each step toward strengthening property rights, the government would remove one crucial obstacle to investment, and, consequently, to economic growth. Therefore, an Action Plan must be devised with clear objectives, a clear designation of the institutions involved and the persons in charge, a precise timeline (describing immediate, short-, mid-, and long-term measures to be taken). High-profile political support for such a reform is needed, as well as a public awareness campaign.

The first steps in the struggle for the protection of property rights have already been taken by devising laws congruent with European standards, and Serbia entered the process of legislative harmonization with the strong support of the EU. On the other hand, the first steps in combating corruption have not been taken yet. These facts could suggest that the struggle

with corruption assumes paramount importance. Of course, corruption's effects on constraining economic growth could not be exaggerated. But relaxing this constraint would be a long-term task that needs careful design and implementation. This is not meant to become an excuse for doing nothing against corruption, but simply argues for a realistic notion that strengthening of property rights can be accomplished in the relatively short term, with almost immediate effects on economic growth, while the effects of an efficient anti-corruption campaign will come in the long run and in a roundabout way.

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7. Competitiveness of Privatized Enterprises

PART I: Corporate Governance After Privatization

37. Competitiveness of Privatized Companies

The chapter establishes whether the companies that were privatized after 2001 became more efficient. The analysis is premised on the assumption that competitiveness of the firm, not mere change of ownership, should be the focus of the research on privatization. Here, enhancing financial and operating efficiency implies an ability of the firm to accomplish four goals: adopt the principles of corporate governance, detach itself from the state, enlarge its position in the market, and increase profitability.

The data analyzed in this chapter present an extension of the survey data presented and analyzed in chapter 5. It gives a fuller picture on how Serbian firms understand their role in a competitive market.

38. Sample and Methodology

The analysis in Part I is based on a survey of 31 companies privatized through tenders in 2002 and 2003 (Table 1). The questionnaire was structured after, and rendered compatible with, a number of questionnaires used in Central and East Europe, in particular the Business Environment and Enterprise Performance Survey (BEEPS) by the World Bank. One significant difference from other surveys done after 1990 is that in the most of them, the sample consisted of both socially-owned and privatized companies, as well as firms that have never been socially-owned.

Other research was done by the Center for Liberal Democratic Studies from Belgrade in 2002. That study assesses only the changes in corporate governance, a subject that constitutes only one part of the analysis in this book. Second, the Center's study includes socially-owned enterprises as well as the companies privatized before 2001, whereas this chapter considers only privatized firms. Lastly, we note a survey conducted by the Faculty of Economics of the University of Belgrade in 2003.

This study, however, assesses exclusively the attitudes of managers in privatized firms, and reduces the issue of restructuring to subjective values. The ambition of this research was to establish the level of restructuring of newly private firms in an objective manner as much as possible.

The survey's sample is taken out of the pool of firms privatized in 2002 and 2003. A total of 879 firms were privatized (31 by tender and 848 by auction) during the first two years of the privatization program. The 879 firms are by no means representative of the structure of the Serbian economy. The sample includes all 31 firms privatized by tender in 2002 and 2003. Originally, the population was meant to equal the sample, but 61% the firms agreed to fill in the questionnaire (Table 1). In most of the cases, general managers, financial managers, or legal departments of the firms filled in the questionnaire. The survey was conducted in April-June 2005.

The research is based on a very small sample that is not statistically significant. It cannot be said that it even properly reflects the body of the 880 firms privatized in 2002-2003, let alone the whole economy. The results are rather an illustration of what the effects of privatization are on particular firms, rather than grounds for sweeping generalizations about the effects of privatization for the Serbian economy. However, Part II of the research includes a sample of 81 companies (31 tender and 50 auction sales). This sample is more significant statistically, but the findings of Part II deal exclusively with financial ratio analysis. (For more on the reliability of data and the sample for financial analysis, see section 45.)

39. Corporate Governance

Privatization does not necessarily imply separation of ownership and management. In cases where one person bought the firm, she may be both the manager and the owner. In such cases, the problem of corporate governance does not arise. Most of the privatized firms in Serbia resulted in concentrated ownership: 70% of the shares were sold, and 30% of the shares were given out to employees of the privatizing firms, and citizens. The survey tries to establish whether some privatized firms did in fact separate ownership from management, and to what extent they carried out necessary changes in running the firm. The findings suggest an implementation of the principles of corporate governance. The study focused on three aspects of corporate governance: a) relations between management and the owners; b) the position of small shareholders; and c) strikes during the working process.

The 2004 company law introduced a major change in the relation between the board of directors and management. Under previous legislation from 1996, a company's general manager enjoyed enormous authority. The board of directors typically was confined to a weak oversight function, and possessed little authority to override a general manager's decisions. Newer legislation gives boards the right to appoint managers. The division of responsibilities between management and the owners now seem to be more properly balanced. 63% of the firms said that the board of directors is composed of the people who are essentially independent from management. 21% responded that this was not the case, 10% responded with "partially", and 5% with "I don't know," both of which can be interpreted as a "no." Regarding who holds the greatest power of decision-making in the firm, 57% of respondents said that it was the owner, 26% answered that it was the board of directors, and 10% thought it was the manager. The manager, however, has significant impact on the board of directors: 31% responded that manager "practically always" influences the board's decision, and 63% responded that it happens "frequently." 58% of firms have internal written rules or regulations that deal with conflicts of interest between the members of management and the owners, but 37% have no such regulations.

These results deserve an observation. Although the majority of the firms claim that the board of directors is independent from managers, the influence the manager has over the board suggests otherwise. Perhaps, the answer to the question – "Is the board of directors really independent from the manager?" – can be inferred from the fact

that 57% of firms do not pay out dividends. This suggests that firm management is more successful than shareholders in promoting their respective interests.

Shareholders in general do seem to have some real power over management, but not all of them. As will be seen, the interests of small shareholders can hardly be said to be protected. 94% of the firms responded that shareholders have the ability to remove the manager. 57% said that the largest share of power in the company is reserved for the shareholders' assembly, and 26% for the board of directors. Only 10% of the firms responded that it is the manager who really calls the shots in the firm.

Taking into account the methods of privatization in Serbia after 2001, it is unlikely that the problem of protection of small shareholders appears in any dramatic form. The reason is that, on the sale model, new owners are able to purchase more than a controlling stake, meaning that they would appear to have no significant motive to obstruct small shareholders in the attempt to sell shares to someone other than the majority owner or the manager. But this is precisely the point of this survey: it establishes that, when it comes to the freedom of small shareholders, the obstacles to selling shares have not been generated by the sale model set up by the 2001 privatization act.

Some results indicate that the right of small shareholders to liquidate their shares is not ensured by privatization. 58% of firms responded that small shareholders do not have the right to freely sell their shares to someone outside the company. 10% of the firms inform their shareholders about activities in the company by written materials, 57% attach the note on the blackboard and leave it to the shareholders' personal insight, and only 26% of the firms permit the shareholders to learn about it upon request. The shareholder book (a book that contains the description of ownership structure) exists in 84% of the cases, but only 63% of the firms allow their shareholders to view it. 21% of the firms responded that "shareholders do have a right to examine the books but are not interested." Small shareholders are also not always free to become familiar with the terms under which their company was sold: 47% do have the right to view the contract, 26% do not, and 21% have the right to view the contract, but are not interested. "Not interested" was here inserted as a control question: it is most likely that all those who are not interested do not actually know if they have that right.

57% of the firms allow the shareholders to vote by mail and 36% do not. A large majority of 84%

responded that shareholders who are also employees of the firm do not have more rights and privileges than shareholders who are not employees, but a minority of 10% responded that this was the case.

Corporate governance also implies paying more to those who want to work more. Here, the findings document a poor understanding of how to motivate managers to be more efficient and competitive. Only 37% of the firms pay bonuses to the managers who try to perform better. A large majority of 47% do not do that, and 10% did not know. Employees are in a somewhat better position because 89% of the firms pay bonuses for working overtime.

If judged by the practice of divided pay outs, corporate governance and possession of private ownership does not pay off. The survey found that 57% of the firms do not pay out dividends to their shareholders. This points to a rather low corporate culture in Serbian firms and relates to another finding to the effect that 55% of the firms do not have their shares quoted on the stock exchange. (All of the firms are a publicly traded companies.)

Strikes and workers' protests have proven to be one of the major setbacks in the privatization process in Serbia so far. This was particularly the case with firms in which the very privatization procedure was irregular. The survey attempted to examine to what extent workers' discontent after the privatization can block the governance of the firm. The survey found that an average of 86% of the workforce of the surveyed firms belongs to the trade unions. 57% of those surveyed responded that trade unions play a "relatively significant role" in the life of the company, 10% said that unions play a "very important role," and 31% responded that trade unions played no role in the company. As much as 84% of the firms had signed a collective agreement with the trade unions in the company. This seems to have bearing on the absence of conflicts with trade union: 79% of firms responded that strikes and work lockout have never affected the work of the firm (even if it did occur), and 68% of the firms answered that strikes never occurred. Most of the new owners (63%) have paid back wages when they took over the firm. (In the rest (26%) there were no back wage obligations upon takeover.)

The record shows that, one year after the privatization, corporate culture in the privatized firms is beginning to take root. Further improvement in corporate legislation would certainly bring about further improvements in the practice of corporate governance.

40. Competitiveness

The findings suggest that a large number of the firms undertook some restructuring measures in the area of production so as to become more competitive. Yet, the effects of these measures vary. For example, the average share of all the companies in the domestic market declined from 52% to 47.7% after privatization, which suggests that some companies used to have monopoly positions that are now waning.

Modes of production were also affected by privatization. 95% of firms responded that they introduced some new lines of production. 30% of privatized firms retained the same product lines, 25% introduced some new products in addition to old ones, 15% introduced new products and abandoned the production of old ones (that had dominated the production structure before privatization), whereas 30% kept the old structure of the production but changed its share in the overall production. After privatization, 50% of companies switched to new suppliers, whereas 35% kept some of their old suppliers, but also employed some new ones. The client structure of the newly privatized firms is as follows: the government is a client in 15% of the cases, private companies in 100%, and socially owned companies in 85% of the cases.

The awareness of the need for product quality control seems to be on the rise, although very slowly. Only 30% of the firms have introduced some sort of quality standard (ISO or HACCP). 40% do not have it, and 30% still do not have it, but said it would obtain it soon. The phasing in of quality standards is among the preconditions for entering the EU market. The restructuring of firm departments seems also to have been taking place: 60% of the firms have a market research department, and 60% of the firms have a marketing department.

Some steps to enhance competitiveness of Serbian firms have been taken. Firms are trying to compete by introducing new products, lines of production, and quality standards. Yet the real indicator of competitiveness is the competitiveness of domestic firms on international markets. Serbian firms overall are performing very poorly in this respect, as Serbia ran a 33.7% trade deficit in 2004. Privatized companies appear to be no exception from the rest of the Serbian economy—75% of surveyed firms do not have offices outside Serbia & Montenegro.

41. Detachment from the Government

The strongest resistance to privatization, and hence restructuring, in Central and Eastern Europe came from old (usually bad) managers facing an 'endgame' situation. The resistance was indicative of the ties between the management and the government. Privatization is supposed to break these ties and detach the government from firm management.

Djankov and Murrell have shown that the enterprises that are more likely to restructure are the enterprises with concentrated rather than dispersed ownership structure (Djankov & Murrell 2000, 10). Since dispersed ownership leads to insufficient monitoring of incumbent managers, as the practice of the firms that were privatized in Serbia during the 1990s shows, the restructuring of dispersed ownership will naturally face larger obstacles. But this problem seems to have been solved by the application of the direct sale model that brought about concentrated ownership structures and thereby immensely facilitated the replacement of old managers. This survey proves that the direct sale model applied in Serbia is immune to this obstacle. Indeed, 70% of the firms reported the replacement of the general manager after privatization. In fact, 30% of the firms reported the replacement of all managers.

Management turnover cannot be the sole indicator of restructuring. New owners may wish to continue to use the state to extract subsidies (state capture). The majority of newly privatized firms detached themselves from the government. The survey found that 65% of firms do not receive anything from the government. 25% receive subventions for export, 10% are still subsidized. In addition, 5% receive exemption from custom duties, and the state tolerates unpaid taxes by 5% of firms. (More than one answer was allowed for this question.)

Of interest is the answer to this question: "how often have personal connections of the new owner helped solve the problems the company faced after the privatization?" 68% of those surveyed said that "this was the only way that the problems are solved," whereas 31% responded with "here and there." This points to the weakness of state institutions (police, courts) and the reliance of the new owners on informal ties, some of which may have well included links to the government.

The following table suggests the extent to which the government was ready to tolerate delays in tax payment by privatized firms. The question asked was: "how regularly does your firm pay taxes?"

The finding suggests that approximately one-third of firms pay taxes with a delay. An identical question was posed to the firms in the study *The Cost of Doing Business in Serbia in 2003*, and the percentage of those who did not pay or refused to answer was much higher (*The Cost of Doing Business in Serbia 2, 2003, 117*).

42. Employment¹

Our research contradicts the prevailing view that reduction in the workforce of firms is not a major sign of restructuring. In time, privatized firms, if they are reformed, decide to expand, which implies hiring. In this view, increased employment, not layoffs, is a sign of successful restructuring. However, some authors do not consider downsizing as part of strategic restructuring, but rather as a first step in corporate restructuring (Meyer 1998, 12). Privatization, on the long run, increases employment, but in this survey, this distinction between the two phases is irrelevant, for the aim here is to measure restructuring in the short run, namely in the first year after privatization.

	Regularly (%)	With delay (%)	By order of inspector (%)	Did not pay (%)	Did not have basis to pay
a) Purchase tax	68,4	15,8	0	5,3	0
b) Corporate tax	57,9	31,6	0	0	0
c) Retirement and social benefits contribution	57,9	31,6	0	0	0
d) Real estate tax	57,9	26,3	5,3	0	0
e) Building tax	63,2	21,1	0	5,3	0
f) Local tax	57,9	26,3	0	5,3	0

Table 1. Question: How regularly does your firm pay taxes?

¹The data on employment were extracted from financial statements, meaning that they refer to the full sample of 31 companies.

The analysis documents a drop in employment by 25% among the tender-privatized firms. Over 90% of firms experienced some reduction in their labor force. Among the 50 auction-privatized firms, the situation is the same. 88% of the firms reduced the workforce, which on average dropped by 62%. This finding is in line with the privatization record to date in Central East Europe, a record that suggests that employment decline is essential for successful restructuring. However, it seems that in the case of auctions, the drop of 62% was exaggerated. It is possible that some firms laid off more than they needed in order to reduce or avoid social and retirement benefits for the employees.

43. Financing the Firm

Financial consolidation will be addressed in Part II where financial analysis of the firms will be done in detail. This section analyzes the resources for firms' financing.

When asked what their two most dominant sources of investment were, survey respondents answered with the following:

The fact that 60% of financing is coming from personal investment and 50% from bank credits, but only 15% from retained earnings, suggests that the privatized firms are still not able to generate enough profit to support themselves financially. Moreover, the firms do not seem to be interested in attracting fresh money from external sources. The bulk of firms (70%) is not interested in attracting new investors, shares of the 55% of the firms are not quoted on the stock exchange, even though 65% of the firms claim they are getting ready to issue new shares to be quoted on the market. These findings confirm that the institutions of financial markets are weak and unattractive for the majority of the firms.

The following question suggests that financial discipline imposed by banks is rather weak. When

asked what creditors would do if their firm defaulted on loans, 40% responded that the bank would postpone repayment without changing the conditions. 15% said that the bank would postpone repayment but would increase interest rates, and 20% responded that the bank would not do anything because credit is insured. Weak financial discipline is a substitute for hard budget constraints. The absence of hard budget constraints suggests the absence of restructuring.

44. Conclusions

This part of our research shows that freshly private firms are implementing the principles of corporate governance and are adapting to a new situation where the government does not play an essential role in production. Yet, restructuring appears to be slow and uneven. It may have to do with governance structure, but it also may have to do with the conditions for privatization (so-called social and investment plans that have to be submitted to participate in a privatization tender). The unattractiveness and underdevelopment of the economic environment, especially financial markets, is still affecting restructuring of firms.

Source	%
Retained earnings	15
Personal investment of owner	60
Bank credits	50
Shares	10
Direct investments	10
Leasing	5
State subsidies	0
Credits from connected parties	10

Note: More than one answer was requested.

PART II: Financial Consolidation After Privatization

45. Methodology for Financial Analysis

This part relies on financial ratio analysis that measures and compares pre- and post-privatization financial and operating performance of 81 Serbian companies. The sample consists of 31 firms privatized by tender and 50 by auction in 2002 and 2003. The data were extracted from financial statements of the firms obtained by the Solvency Centre (Centar za bonitet) at the National Bank of Serbia in May 2005. Since the data for all firms were available, the population and the sample match. The t-test for significance has, therefore, not been run.

All companies that are surveyed were able to produce financial data comparable to pre-divestiture data. What was compared here was the data from the last year before privatization (YEAR -1) with the first year after the privatization (YEAR 1). The year of privatization defined as YEAR 0 is not taken into the calculus, as this year implied a simultaneously social and private status of the firm.

Table 2 gives the overview of all the ratios that were employed in the analysis. Table 3 gives the items (so-called positions) that were extracted from financial statements to calculate ratios. The major reason why the data in this part were extracted from a separate source (other than the questionnaire used in Part I) is that most firms did not want to answer the questions about profit in the questionnaire, thinking probably that these should remain confidential.

Although the data for financial analysis were extracted directly from financial statements, it is difficult to believe that these statements were fully reliable. Approximately 50% of the companies reported neither profit nor loss in their financial statements because of which all the ratios factoring in net income (ROS, ROA, SALEFF and NIEFF) are adversely affected. Unreported profit hints at rigging financial statements because it is difficult to believe that such a large proportion of firms experienced exactly zero loss or profit.

The data on employment also appear to be exaggerated and unrealistic. Although auction sales involved small and medium-sized firms (including up to 250 workers), one firm sold in auction reported the employment of 40,000 prior to divestiture and only 332 after the divestiture.

For both manipulations there are explanations. Income was not reported most likely in order to evade taxes. Abnormally huge reductions in work force are most likely a consequence of the wish to keep employees without reporting them to tax authorities and paying full social and retirement benefits tax (the rate for which in Serbia runs as high as 70%). It is difficult to imagine that a firm with 40,000 workers can, in only two years, continue to do business with only 332 employed. It is possible that the real number of employees was higher but that they were not officially registered.

* * *

There are three commonly used standards to make use of financial ratios: rule-of-thumb measures, past performance, and industry norms (Needles & Powers 2000, 691). Rule-of-thumb and industry norms cannot be employed in Serbia because these are not established. This leaves past performance of the company as the only valid measure. The idea of the analysis was not to compare firms with one another (which would be a typical requirement of an investor), but rather to compare the firms, as it were, with their respective previous incarnations, namely with the position for each firm as existed before divestiture.

In order to render the research findings comparable with previous findings on privatization, the selection of ratios (Table 2) was based on previous research by Megginson, Nash & van Randenborgh (1994), Boubakri & Cosset (1998), Megginson & D'Souza (1999), and Aussenegg & Jelic (2002).

The ideal relationship is supposed to document an increase in value in most of the indicators. Profitability, operating efficiency, investment, and output are expected to increase in companies that moved from public to private ownership. In leveraged cases, however, the situation is predicted to be the reverse. State-sponsored companies were able to borrow under favorable conditions. Privatization should lead to higher borrowing costs, thus resulting in leverage decline.

Liquidity is the only indicator that does not appear in previous research. It is used here as an essential form of measuring the financial strength of a company, and is expected to increase as the company switches from social to private status.

46. Profitability

One way to measure profit is to calculate return on sales and return on its asset ratio. The return on

sales ratio (net income before taxes divided by sales), which is essentially the profit margin of a firm, shows an average decline of 169%. In both years return on sales was negative, meaning that for each dinar of sales a loss of 0.06 dinars in YEAR -1 and a loss of 0.18 dinars in YEAR 1, respectively, was recorded. Firms sold in auction display the opposite tendency. The average profit margin increased from -1.03 to -0.33, up by 68%. Over 50% of firms saw an increase in both cases. (Results for all ratios are presented in tables 4 and 5.)

The return on sales ratio does not take into account the asset needed to generate operating profit. The return on asset ratio measures how effectively the company deploys its assets. The analysis shows that the return on asset ratio, on average, nose-dived by 300%. Again, in both years, the average return was negative, which indicates overall poor management of firms' assets. Each dinar of firms' assets produced an average loss of 0.02 dinars in YEAR -1 and a loss of 0.07 dinars in YEAR 1, respectively. Auction sales again saw an increase from -0.83 in YEAR -1 to -0.22 in YEAR 1, up by 26%.

The high negative percentage change in tender sales suggests that, overall, firms before and after privatization were unable to control costs relative to revenues, and that high costs continued to obstruct higher profitability. However, section 42 shows that firms managed to reduce their labor force, which means that some costs were cut. Decline in profitability is, thus, most likely to be the result of misstating net income, namely—the practice according to which firms do not report profit in order to evade taxes. A number of firms in their financial statements either did not report their net income for the observed period or simply stated 0 for profit or loss, or sometimes for both.

It is difficult to explain what caused the increase in profit with the firms sold in auction. It could be that smaller firms were less afraid to report profit because the profit in absolute terms was lower. Or it could be that smaller firms restructure faster. Other research done in Latin America, Africa and Central and Eastern Europe during the 1990s do not point to a unanimous conclusion. For instance, research made by Boubakri and Cosset (1998) found profitability increase by 124%. D'Souza and Megginson found statistically significant small increases in return on sales and asset ratios (1999, 13). However, Aussenegg & Jelic found an increase in return on sale ratios but a decrease in return on asset ratios (2002, 12). (Add what region for each research.)

47. Operating Efficiency

In this study, two ratios serve as proxies for operating efficiency: sales efficiency (inflation-adjusted sales per employee) implies the ability of the company to generate profit, and net income efficiency (inflation-adjusted net income per employee). The ratio is supposed to show if restructuring has lead firms to use their resources more efficiently. In both cases, tenders and auctions, the average sales efficiency ratio increased and the net income efficiency ratio decreased. Sales income efficiency increased a lot because, as data on employment showed, around 90% of firms reduced their workforces. However, since the reduction of workforces in some cases seems to be unrealistic, this is what made the sales income efficiency ratio increase unrealistically in absolute terms for particular firms, thus biasing the aggregate ratio. This was also probably the case with net income efficiency. Namely, beside total employment that went underreported in YEAR 1, net income, as suggested in the previous section, was misstated. Two misstated sets of data (income plus employment) most likely have led to absurd changes in net income efficiency ratios in absolute terms.

Although the absolute numbers are unreliable, they may be reliable in showing trends. Sales efficiency most likely did increase because some work force was reduced. It is likely that the increase in sales efficiency was not followed by an increase in net income efficiency. Firms have managed to sell more, but they did not manage to keep costs low. This is entirely consistent with the results obtained by ROS and ROA analysis from the previous section. Costs have increased much more than sales perhaps because firms increased debt (confirmed by findings on leverage in section 49) or because some firms were inactive prior to privatization and then had to purchase a lot of fixed capital to restart production.

Operating efficiency was found to increase in Boubakri & Cosset's research (by 25% in sales efficiency and 63% in net income efficiency). Similar results were obtained by D'Souza & Megginson (1999, 14). In contrast, Aussenegg & Jelic found a significant mean decrease in efficiency after privatization (2002, 15).

48. Capital Investment Spending and Output

Aussenegg & Jelic found an increase in investment after divestiture (2002, 16) and Boubakri & Cosset found a 126% increase in capital expenditures to sales

after privatization. D'Souza & Megginson, in contrast, found that capital investment decreases (1999, 14).

Higher capital investment than expected in the post-privatization period partly materialized in Serbian privatized firms. Two proxies were used to establish the level of investment after privatization. The mean capital expenditure to sales ratio shows an increase of 100%, whereas the mean capital expenditure to asset ratio shows an increase of 116%. However, the reverse trends are recorded with auction sales. Both ratios, CES and CETA, show a decrease of 16% and 41%, respectively.

The trends were reversed with respect to output (using the nominal sales/consumer price index). Output fell by 10% with tender sales, and increased by 3% with auctions.

The findings from this section are in line with other findings, especially with those from the section on leverage. The firms increased their debt that will most likely in the future lead to increases in output. However, it is too early to expect a significant increase in output in YEAR 1. The usual explanation is that higher output before privatization was, to an extent, sponsored by the state. This is again confirmed by the difference in output between tender privatizations (larger firms) and auction privatizations (smaller firms). Since the state's help is supposed to be withdrawn after divestiture, negative output could also be a sign of restructuring rather than the absence thereof. In addition, larger firms are adapting more slowly than smaller firms to the new situation, which results in negative output. Other research, once again, could be interpreted as supporting either conclusion. Boubakri & Cosset found an increase in output by 25%. D'Souza & Megginson found a spectacular increase of 270% (1999, 15). Jelic & Aussenegg's research revealed, however, a decline in output by 16% (2002, 17).

49. Leverage

In the socialist era, firms used credits to cover losses rather than to invest. This practice largely remained in force during the Milosevic era. Leverage shows whether the firm relies more on stockholders' equity or on credits. Creditors prefer low debt ratios, but stockholders are typically more interested in financing firms with borrowed funds because the debt can "leverage up" the rate on return to equity. Leverage is measured here by the debt ratio (total debt to total asset).

Hard budget constraints and the abolishment of subsidies to socially owned enterprises should lead

to more expensive credits. However, if privatization is followed by the expansion of capital markets, new owners will face more opportunities to borrow from banks. In their research, Aussenegg and Jelic found no statistically significant increase in leverage (2002, 19), whereas D'Souza et al. found a statistically significant decline of 6 percentage points (1999, 16). In our tender sample, the leverage ratio shows a mean increase from 4% to 13%, up 225%. A portion of 54% of the firms experienced an increase in leverage after privatization. A similar trend is detected with smaller (auction) firms where the leverage ratio increased by 214%.

Determining the optimal amount of debt is a complicated process. Generally, if the market is stable, the firm can make a profit even if the debt ratio is high. When the economy goes into a recession, high leverage exposes firms to risk. Since the analysis shows that the population's debt ratio increased, it could suggest that the firms want to use more leverage to boost production. However, the analysis from the previous sections suggest that the firms could not pull off an increase in output, profit, and efficiency, despite the fact that the macroeconomic circumstances in 2004 were favorable and the economy grew by over 8%.

It is too early to tell whether the privatized firms are properly leveraged and whether the assets were employed properly. Most of the firms have accumulated huge debts in the socialist and the Milosevic era. Companies cannot get rid of such debt (known as bad debt) within one year. It takes time to distinguish bad debt from leverage. Secondly, the effective results of the leverage debts that increase production (and potential profitability) should come in 2005 or 2006. As the findings from the survey suggest, at this point, increased leverage seems to be a burden, for 25% of the firms identify big debts as among the most dominant factors that obstruct the production. Among others are bureaucratic procedures (cited by 20% of firms), and upfront payments for working capital (10% of firms). Something else (mainly left unstated) is identified in 25% of the cases. 65% of firms owe money to suppliers, 45% owe banks, and only 5% owe the government. It is easier to reschedule repayment terms to another firm (e.g., a supplier) than to a bank, which is another indicator about financial discipline and underdeveloped financial markets that block faster restructuring.

50. Liquidity

Problems with liquidity arise when the company meets unexpected needs for cash. The current ratio (current assets relative to current liabilities) is one of the most commonly used ratios for measuring the liquidity of a firm. It shows a firm's ability to pay its bills and outstanding loans. If current debt is rising faster than current assets, the current ratio falls, and the firm is in trouble. The analysis found a decrease in liquidity as measured by the current ratio. It fell by 40.5%, which shows that newly privatized firms are facing problems in liquidity management. The mean current ratio also fell by 2.75% in the auction sample. This explains why Serbian banks are reluctant to extend credits under less expensive interest rates.

The quick ratio indicates the ability to manage short-term liquid assets arising from cash transactions, investment of cash, and extension of credit. This definition of assets typically excludes inventories and refers to assets that can be cashed relatively quickly. The research recorded a decline in the average quick ratio by 34%. The auction firm sample analysis records a slight increase in the quick ratio by 0.99%.

restructuring rather than the absence thereof. However, if the trend does not reverse in the consequent years, it would mean that restructuring either failed or was abandoned.

51. Conclusions

The findings from this part of the analysis document low profits, high indebtedness, high cost of production, and difficulties with cash management. Reported low profits are consistent with low financing from retained earnings. It is likely that in the first year of privatization, the restructuring of the labor force is taking place, as are significant investments, while increased profitability will only come later.

A decline in ratios that measure liquidity is indicative of the need for cash. However, it can hardly be argued that scarce cash is the sole responsibility of the business sector. It is most likely because of the weak financial system that the firms are reluctant to borrow from banks. Another potential conclusion would be that borrowing is avoided because the rate of return is low. Fiscal and monetary policy also affect to a great extent the circulation of money (See MAT 5/2005, pp. 25-27). It is thus up to the government to set better economic policy in order for the firms to manage their cash management better.

It is certain that privatization did bring about changes. The findings indicate that companies are having a hard time adapting to the new situation. Therefore, the decline in the ratios might suggest

Annex

No.	Name	Year of privatization	Identity number	Reasons why not responded to questionnaire
1.	Beočinska fabrika cementa	2002.	08028222	
2.	Kosjerić	2002.	07190425	
3.	Novi Popovac	2002.	07112904	
4.	Merima	2002.	07102160	Manager not interested
5.	Valjaonica bakra	2002.	07606273	
6.	Jedinstvo šećerana (MK)	2002.	08096198	
7.	Donji Srem (MK)	2002.	08071624	
8.	Šajkaška	2002.	08058075	
9.	Jugozapadna Bačka (MK)	2002.	08024723	Financial director thought that MK Commerce would not agree
10.	Zorka farma	2002.	07199821	
11.	Zdravlje	2002.	07204817	
12.	PKS-Lateks	2002.	07326947	
13.	Rumaguma	2003.	08250600	Manager did not have time
14.	Crvenka	2003.	08004617	Claimed to have sent it
15.	Žitopek	2003.	07204124	
16.	PKB Frikom	2003.	07042728	
17.	Mitrovačka industrija ventila	2003.	08039453	Filed for bankruptcy
18.	Polet	2003.	08019916	Manager did not care
19.	Putnik	2003.	07034377	
20.	Kolubara – gasbeton	2003.	07440626	
21.	Jelen Do	2003.	07219784	
22.	Frad	2003.	07187505	Manager not interested
23.	Nissal	2003.	17138367	
24.	Srbija-turist	2003.	07173598	
25.	DIN	2003.	07319665	Rejected because "it slows down production"
26.	DIV	2003.	07178972	Manager had no time
27.	Beopetrol	2003.	07524951	Secretary refused to give terminate answer
28.	Fabrika kablova Zaječar	2003.	07147350	
29.	Sava Kovačević	2003.	08065888	
30.	Valjaonica bakra Sevojno	2003.	07606273	
31.	Južni Banat	2003.		

Table 1: The list of 31 Firms Sold by Tender in 2002 and 2003

Variable	Proxy	Predicted Relationship
1. Profitability	Return on sales: net income/sales	ROS1>ROS-1 ^a
	Return on asset (net income/total asset)	ROA1>ROA-1
2. Operating efficiency	Sales efficiency: sales/total employment	SALEFF1>SALEFF-1
	Net income efficiency: net income/total employment	NIEFF1>NIEFF-1
3. Capital investment	Capital expenditure to sales	CESA1>CESA-1
	Capital expenditure to total assets	CETA1>CETA-1
4. Output	Real sales: nominal sales/consumer price index	SAL1>SAL-1
5. Employment	Post-privatization<pre-privatization	Post<pre
6. Leverage	Debt to asset: total debt/total asset	TDTA1<TDTA-1
7. Liquidity	Quick ratio: short term liquid asset/current liabilities	QR1>QR-1
	Current ratio: current assets/current liabilities	CR1>CR-1

Table 2. Financial ratios to be used in financial analysis of the firm

Variable	Items 2001-2003.	Column	Items 2004.	Column
1. Profitability	AOP 021	5	AOP 201	5
	AOP 275	5	AOP 228	5
	AOP 273	5	AOP 226	5
2. Operating efficiency	AOP 789	5	AOP 538	4
3. Capital investment	AOP 637	6	AOP 503	4
			AOP 501	4
4. Output				
6. Leverage	AOP 124	5	AOP 109	5
	AOP 054	7, 4	AOP 020	5
7. Liquidity	AOP 024	7	AOP 010	5
	AOP 131	5	AOP 114	5
	AOP 044+031	7	AOP 012	5

Table 3. Financial statements Items that were used to calculate ratios

Variable	Before	After	Absolute Difference	Percentage change	Proportion of firms: after>before (in %)
Profitability					
ROS (%)	-0,068	-0,183	-0,115	169	51,6
ROA (%)	-0,019	-0,076	-0,057	300	38,7
Efficiency					
SALEFF	1,771	2,459	688	38	83,9
NIEFF	-53,39	-343,3	-289,9	-543	41
Capital investment					
CES (%)	0,14	0,24	0,14	100	87,1
CETA (%)	0,06	0,13	0,07	116	74,1
Output					
RSAL	2.141.986	1.945.190	-196.769	-10	41,9
Employment					
EMPL	983	736	-247	25,13	90
Leverage					
LTDTA (%)	0,04	0,13	0,09	225	54
Liquidity					
CR	2,22	1,32	-0,90	-40,54	29
QR	1,00	0,66	-0,33	-33	35

Table 4: Results of Financial Analysis – Tender Sales

Variable	Before	After	Absolute Difference	Percentage change	Proportion of firms: after>before (in %)
Profitability					
ROS (%)	-1,03	-0,33	0,70	68	58
ROA (%)	-0,83	-0,61	0,22	26	54
Efficiency					
SALEFF	5,6	490	484	8650	92
NIEFF	-0,71	-58,36	-57,65	-8119	44
Capital investment					
CES (%)	0,31	0,26	-0,05	-16	44
CETA (%)	0,12	0,07	-0,05	-41	46
Output	43.863	45.194	1.331	3	48
RSAL					
Employment					
EMPL	7.814	2.974	-4.840	-61,94	88
Leverage					
LTDTA (%)	0,014	0,044	0,03	214	24
Liquidity					
CR	1,09	1,06	-0,03	-2,75	21
QR	0,67	1,66	0,99	149	50

Table 5: Results of Financial Analysis – Auction Sales

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8. Conclusion: Growth Diagnostics -Improving the Protection of Property Rights

This analysis concludes that the most critical bottleneck to sustainable growth in Serbia today is the weak protection of property rights.

To best illustrate that claim, consider the relationship between property rights and bank credits to industry. Many think that both today in Serbia present obstacles to faster growth. Property rights are weakly protected, which dissuades investors from investing, and credits for industry are expensive, which discourages enterprises from borrowing. The first obstacle, according to Rodrik's outline, falls under the heading of micro risks, relative to the area of appropriability, while the credit problem falls under the heading of financing problems (see graph model 1 in section 16). Expensive credits are clearly an obstacle to faster growth, but the analysis shows that high interest rates are explained by high political risk, that is, the inefficient court and justice system. The reasons for bad financing opportunities are, therefore, located in the non-financial sphere. Foreign banks, which by the end of 2005 dominated the market in Serbia compensate for political risk with high interest rates. An efficient judiciary, especially in the area of protecting property rights, would reduce that risk.

Other than that, the data reported in section 23 and the analysis from sections 31 and 32 point to the conclusion that the banking system is on the road to recovery. By contrast, the analysis from section 2 and the analysis from sections 31 and 32 show that the court system, especially the commercial court system where economic cases are resolved, represents one of the most inefficient and corrupt institutions in Serbia.

This is not to argue that enhancing property rights will solve all of Serbia's economic problems. Indeed, our analysis identified a number of problems across the economic and institutional spectrum. Rather, our task was to seek out the best next step in the sequencing of reform with the aim of maximizing return on growth of the Serbian economy.

The Growth Diagnostics model sets a priority among obstacles, on the basis of the speed with which the obstacle can be eliminated. For corruption, it is not completely clear what influence it has on growth

in the short term. The protection of property rights is a bottleneck that can be broken in a relatively short period. In chapters 4, 5 and 7, we listed many problems that are based on poor protection of property rights. To solve each of them, years are not necessary, but rather weeks or months, in the worst case. Let us take, for example, the result from the survey on privatized enterprises (section 39), according to which 37% of small shareholders do not have the right to inspect the list of shareholders. The violation of the rights of small shareholders is obvious, but the solution to the problem is simply demanding respect and protection of the legal requirements by which small shareholders have the right at any moment to inspect the ownership structure of enterprises whose owners they are. A similar situation exists with enterprises whose shares are traded publicly on the stock exchange, but whose ownership structure is not accessible to the public. It would only require legal changes in the form of amendments for the publishing of ownership structures to become an obligation of publicly traded enterprises and the bottleneck would be removed.

A special problem for protecting ownership rights is the motivation to obey the law. In many cases, the legal solutions are good, but there is no suitable penalty for actors for failing to respect the law. For example, all enterprises must deliver annual financial statements to the Center for Solvency. The statements must be an objective and accurate review of the enterprise at that moment. But, as shown in the survey on privatized firms, some enterprises do not even submit such statements. The reason for not respecting that rule most probably has to do with the fact that the Center for Solvency (or some other body), except for warnings, does not have any kind of means at its disposal to punish enterprises that submit inaccurate statements. A similar situation exists with enterprise managers who refuse to sign the prospectus that is a condition for trading shares on the stock exchange. As the case of C-Market showed long ago, the sanctions that existed for violations were obviously not enough of a motive for managers to respect the rule. All that is required is to make sanctions a criminal matter, and the degree of compliance with the law would probably be greater. And that is one bottleneck that is possible to remove with a simple change of the law in a short timespan.

