

LUND UNIVERSITY

Master in Economic Development and Growth

Transition of Serbia: Are transitional and institutional changes helping economic growth?

Aleksandra Cukovic

eut12acu@student.lu.se

Abstract: Transition from the planned economy to opened market economy is recognized as necessary process for the countries that have aim to grow. This process is demanding and complicated and it includes economic, institutional and social changes. Purpose of this work is to examine if changes that happened during still lasting transition helped Serbia to grow. The improvements are recorded since country entered the process of transition in 2000 but there is still space and necessity for the further development.

Key words: Transition, institutions, change, growth

EKHR92

Master thesis, second year (15 credits ECTS)

June 2013

Supervisor: Michaela Trippi

Examiner: Anders Nilsson

Table of Contents

1	Introduction.....	4
1.1	Research question	5
1.2	Methods.....	5
1.3	Structure.....	5
2	Conceptual framework.....	6
2.1	Transition	6
2.1.1	Liberalization	8
2.1.2	Different approaches toward process of reform.....	9
2.2	Institutions.....	11
2.3	Connection between transition and institutions	16
3	Empirical research	19
3.1	Background of Serbia.....	19
3.2	Data and methods.....	22
3.2.1	Data	22
3.2.2	Methods.....	22
3.3	Institutional change.....	23
3.3.1	First group of institutional indicators.....	24
3.3.2	Second group of institutional indicators	27
3.4	Transitional changes	29
3.4.1	First set of indicators.....	29
3.4.2	Second set of indicators	36
3.5	Analysis of the growth	55
4	Discussion and conclusion	59
4.1	Discussion	59
4.2	Conclusion	61
5	Bibliography	64
	Appendix A.....	68
	Appendix B.....	71

List of charts

Chart 1 Interest rates	25
Chart 2 Average Salaries of Employed Persons	26
Chart 3 Skill premium.....	27
Chart 4 Consumer prices percentage change	29
Chart 5 Transition indicators by sector	31
Chart 6 Inflation	35
Chart 7 Privatization revenues (cumulative, in per cent of GDP)	38
Chart 8 Private sector share in GDP (in per cent).....	39
Chart 9 Private sector share in employment	40
Chart 10 Budgetary subsidies and current transfers	41
Chart 11 Share of industry in total employment	42
Chart 12 Change in labor productivity in industry	43
Chart 13 Industry labor productivity increase	44
Chart 14 Investment/GDP	45
Chart 15 Share of administered prices in CPI.....	46
Chart 16 Share of trade in GDP	47
Chart 17 Trade volumes	48
Chart 18 Tariff revenues	49
Chart 19 EBRD indexes of financial reform.....	50
Chart 20 Asset share of state-owned banks and foreign-owned banks.....	52
Chart 21 Domestic credit to private sector	53
Chart 22 Infrastructure reform	55
Chart 23 GDP per capita	56
Chart 24 Graduated students by years	58
Chart 25 Foreign Direct Investments	59
Chart 26 Opinion of the sample (of the age 18+) about prevalence of the corruption	61

1 Introduction

When it is analyzed for the wealth of nations it could be seen that there is a clear economic difference between economically developed Western Europe and poorer Central and Eastern Europe. If analysis proceeds and look into past, it could be seen that: societies that were late to give up of communism and socialism, as their internal organization, are nowadays less economically developed. The common for the communist countries was the centrally planned economy system that was recognized as inefficient and unable to keep up with the needs of the modern markets. As it was closed, the economy was not allowed to evolve naturally following the demands of the market and the production was mostly focused on the existing resources of the country. That means that production was determined by the available resources rather than by the needs of market.

After the fall of communism it was assumed that transition to the democratic systems and opened economy will go faster and smoother, however, even today, after more than twenty years, some countries are still in the process of transition and the effects of the communism could be still seen. One of those countries is Serbia and the main focus of this work will be the analysis of the economic and institutional changes in the transition period of this country. As it is widely appreciated that institution building is the heart of the transitional process, I will devote one part of the work to explain for the institutions as they are the core of social and economic interaction.

By the Greif (2006) studying institutions can help to understand for the reasons why some countries are rich and others are poor, and why some of them have political orders that are welfare-enhancing while others struggle with disorders. Institutions that are beneficial for the society are promoting cooperation and action. As Greif (2006, p.4) explains, institutions are providing the setup for the quality functioning of markets “by efficiently assigning, protecting, and altering property rights; securing contracts; and motivating specialization and exchange”. Developed institutions also enable and promote production by fostering saving, and investing in human and physical capital, knowledge and education.

All of the above is important for the economic development and growth of an economy, and that is why it could be said that the change and creation of institutions is an important part of transition.

1.1 Research question

The aim of this work is to look at the connection between transition, institutions and development and to answer the question: Are the transitional and institutional changes supporting the growth in Serbia?

This work should contribute to the existing economic literature connecting the theory with the practice and showing on the real and empirical case (Serbia) how are transitional changes influencing growth and what are the difficulties that can come with the process.

1.2 Methods

Empirical part of this work will explain the methods of the analysis; show the indicators of institutional and transitional changes since the beginning of the transition in Serbia; and analyze the growth that came along. This is a qualitative research with representation of descriptive data and indicators.

1.3 Structure

Structure of the work will be organized as it follows:

Section 1: is introduction.

Section 2: Deals with the theoretical framework on transition and institutions and explanation for the relation between them.

Section 3: is empirical analysis. It explains for the Serbian background and its specific features. Later, it analyzes institutional change, transitional change, and growth since the beginning of transition.

Section 4: Discusses and concludes.

2 Conceptual framework

This section of the work includes the critical review of literature on transition and institutions. It is important to understand the connection between them and to have insight of their significance for the proper functioning of the economy that is changing background with the aim to grow.

2.1 Transition

A transition economy or transitional economy is an economy which is changing from a centrally planned economy to a free market economy (Feige 1994).

Typical examples of transition economies are the ex-Soviet Union and Eastern and Central Europe that were the part of an economic system that was isolated from the rest of the world. The economy was not allowed to evolve naturally following the demand of the market, but was centrally planned, and all the trade was done within the closed communist system. Transformation of the economy from a centrally planned to a market economy turned out to be one of the most complicated and challenging problems in the recent times, that is showed by the fact that some of these countries started with the process in the 1980's and they are in the midst of a transformation process at the present time.

It is important to emphasize that the planned economy is a feature of the communist or socialist Soviet-type economic system and that the free market is a feature of the capitalist system. In the past, at least during the 1950s and 1960s, which can be defined as a 'take-off stage' in Rostow (1960) terms, communist system was more favorable for the economy and development was remarkable because the working-class conditions in communist countries were better off than working-class conditions in a capitalist society during their take-off stages (Tridico, 2011, p. 6).

However, after the 1970s, the collapse of the system slowly started due to the political dimensions, rigorous regimes and some unfavorable features of the economy and the capitalist system showed to be the better option for the development of countries. For example, as Tridico (2011, p.7) explains:

- Planned economies were able to deliver better performance in physical terms, but they were not able to calculate opportunity costs.
- They were not able to diversify production, to exploit geographical advantages or to build appropriate institutions favoring openness and trade.
- Most of the former communist planned economies focused too heavily on natural resources and tried to exploit competitive advantages coming from there; however, this can lead economy to the limited production, with lower productivity gains in the long run and pollution problems. Moreover, the rate of investment required to improve output in a natural resource-oriented economy is very high and increases the capital-output ratio, reducing performance in terms of GDP growth in the long run, what can later cause increasing instability and the inflationary process, since the aggregate demand would be constantly higher than the supply.
- “The communist ruling class was politically hostile towards the middle class and middle-income peasants. Such hostility did not allow for the creation of more democratic institutions and, consequently, for a further accumulation process, which would favor, via parallel and private channels, the development process. Development relied solely on the developmental role of the state” (Tridico, 2011, p. 7).

Chakravorty (2000) is adding to this that in the old nationalist model the national state tends to be the principal agent of economic change, using an institutional and regulatory structure that emphasized centralization over federalism, state ownership of heavy industry and infrastructure over private ownership, and self-reliance or import substitution over export orientation. In the liberal (capitalist) model, state involvement in the ownership of industry and the regulatory structure affecting new investments are significantly weakened, entry barriers to multinational capital are lowered, export orientation is favored over import substitution, and steps are taken toward some decentralization of power and policy instruments in favor of subnational states.

Transformation process from centrally planned economy into market economy is complex to conduct because “a rapid transition from socialism to a market economy is

historically unprecedented and requires a fundamental restructuring of a nation's economic, political, social and legal institutions as well as its physical infrastructure” (Feige E. L., 1994, p. 1). To assure the irreversibility of reforms, the old system of central planning must be scrapped and replaced by a new system of legal, administrative, commercial, social security, fiscal and monetary institutions capable of supporting a market economy. Considering the unfavorable features of the centrally planned economy, most economists agree that an appropriate transformation program must combine elements of stabilization, privatization and liberalization. Feige E. L., (1994) further explains that these elements are reinforcing each other and therefore they should ideally be introduced simultaneously in one "big bang" reform, but before the reforms are introduced, private property rights must be created, distributed and credibly enforced before exchange in these rights can take place in markets. The curious thing to think about is that when analyzing theory on the transition matter, in many cases it can be red about the significance of the property rights. This is important to emphasize because the theory on institutions is also processing the property rights as the important feature of institutional development (Acemoglu, Robinson, & Johnson, 2012 for example).

2.1.1 Liberalization

Economic liberalization means that market forces set prices rather than a central planning organization and trade barriers are removed. As organizations develop and change within an institutional framework they will become more efficient and support the policies and politics that should lead to the economic growth.

In theory, when countries liberalize and get rid of closed economy constraints, they should enter the path of growth. However, economic liberalization had rather different impact on GDP growth in different cases. When the imperfect reform strategies are put into practice, the costs of rapid structural changes are becoming more visible and widespread. The serious threat is that, closure of large state enterprises and the experience of unemployment and hyperinflation, will produce revolt in people toward a politics that are advocates of rapid and radical reform. Copying and transplanting market mechanisms into formerly planned economies are unlikely to

succeed unless the institutional prerequisites for a market economy are securely in place. As Feige E. L. (1994, p.2) explains: “legal, commercial and administrative institutional precursors of market economies took generations to evolve historically, and cannot be readily created de novo” because the “long-standing expectations and behaviors generated by regimes of central planning are difficult to change”. One cannot expect that the time required to establish and conduct a high quality reform program as well as the institutions required can be counted in just a few years.

2.1.2 Different approaches toward process of reform

Tridico (2011, p.34) states that there could be at least three different approaches towards the process of reform:

1. A type of transformation oriented towards social democracy modeled on the Scandinavian socio-economic example. This approach is aiming the country’s political transformation while introducing the pluralism and democratic rules on the one hand, and an economic model on the other hand, starting to give the important role to the trade unions and workers in the economy what can be similar to the European social-democratic model.
2. The second approach was supported by the liberal economists such as Jeffrey Sachs, who advised for the radical transformation of the economy by following the Anglo-Saxon socio-economic model, towards the so-called ‘Reaganomics’, which combined the Reagan and Thatcher programmes of reform implemented in the USA and the UK during the 1980s. Reaganomics is currently known as the Washington Consensus (WC).
3. The third approach is proposing to follow for the continental European model applied and found in Germany and France. The idea is to transform the country in a gradual manner, introducing private property rights while retaining some state control over the economy.

Serbia is one of the countries that approached the process of reform by following the Washington consensus. The focus of the Serbian transition is on macroeconomic stabilization, liberalization and privatization, as the main principles of the Washington Consensus (Mitrović, 2011). What this means is that it is tried to allow for: the market forces to set prices rather than a central planning organization; the trade barriers to be removed; privatization of the state-owned businesses and resources; and a financial sector to be created to facilitate macroeconomic stabilization (bringing inflation over control and lowering it over time) and the movement of private capital.

When reviewing the theory on the matter, Feige (1994) finds that there are opposite opinions about the best way to conduct the reforms and the speed with which they should be undertaken. Murrell (1990) suggests that slow of transition might be a good choice as the economies in transition are vulnerable and face great challenges. The slow evolution-like path of transition is justified on the grounds that rapid and radical adjustments are likely to cause major short run disruptions while yielding only modest offsetting benefits. According to this view, a program of gradual reforms is more likely to produce a stable transition by maximizing the flow of output over the entire transition period. At the other extreme is Erickson's (1991) claim that reforms must be forcefully negative and disruptive. The important question is how a country can decide over the kind and intensity of changes.

According to Rodrik (2008, p.100) multinational organizations such as the World Bank, the International Monetary Fund, or the World Trade Organization (WTO) are promoting the best-practice model that "presumes that it is possible to determine a unique set of appropriate institutional arrangements ex ante and views convergence toward those arrangements as inherently desirable". The good side of the best-practice model is that it enables cross-national comparisons and benchmarking and the institutional performance is measured in many cases by arrangements made in order to minimize transaction costs. But, as Rodrik (2008) explains, the best-practice models cannot cover all the aspects of necessary reforms. He emphasizes, using the example of the courts and contract enforcement, entry regulations and entrepreneurship, import liberalization and global integration, credibility of monetary policy and economic performance, that successful policies applied in one country could be applied in another country but it is quite

possible that they will not record for the same improvements and will sometimes cause multiple distortions.

Feige (1994, p.3) suggests that in order to be successful, “a transformation program must be comprehensive, coherent, credible and dynamically stable”. As already mentioned, a comprehensive program of reform has to consist of the elements of stabilization, privatization and liberalization, that must be properly sequenced and mutually reinforcing. In order to reach for the credibility, consistent management of the reform program is required and in such a form that the expectations and commitments created by the reform plan are in fact fulfilled and thereby reinforced.

As it will be showed later, in the case of Serbia, it was decided to follow the option of radical liberalization. Authors like Mitrovic (2011) are commenting that this option created additional problems for the domestic production because non-tariff restrictions were abolished and the import tariff rate was reduced to single digits that led to the situation where weak domestic economy is exposed to tough competition. On the other side, different authors could comment that this was the proper way of introducing the changes as the countries industry needed competition to be encouraged to modernize and become more effective.

Why the transition is such a complicated process could have many answers. One of the possible ones could be the unpredictability of the economic forces and shocks but sometimes could also be the preparedness of the nation and population to change the inherited habits and enter the system different than the one they know. Abramovitz (1986) has the theory that the “*social capability*” of the nation is an important determinant of growth. He explains that not all nations are capable to adopt and adjust to changes. When introducing new technologies and methods it is important to have the labor force that is able to conduct the necessary processes. So, not only the economic institutions matter but also the educational system and the performance on the individual levels.

2.2 Institutions

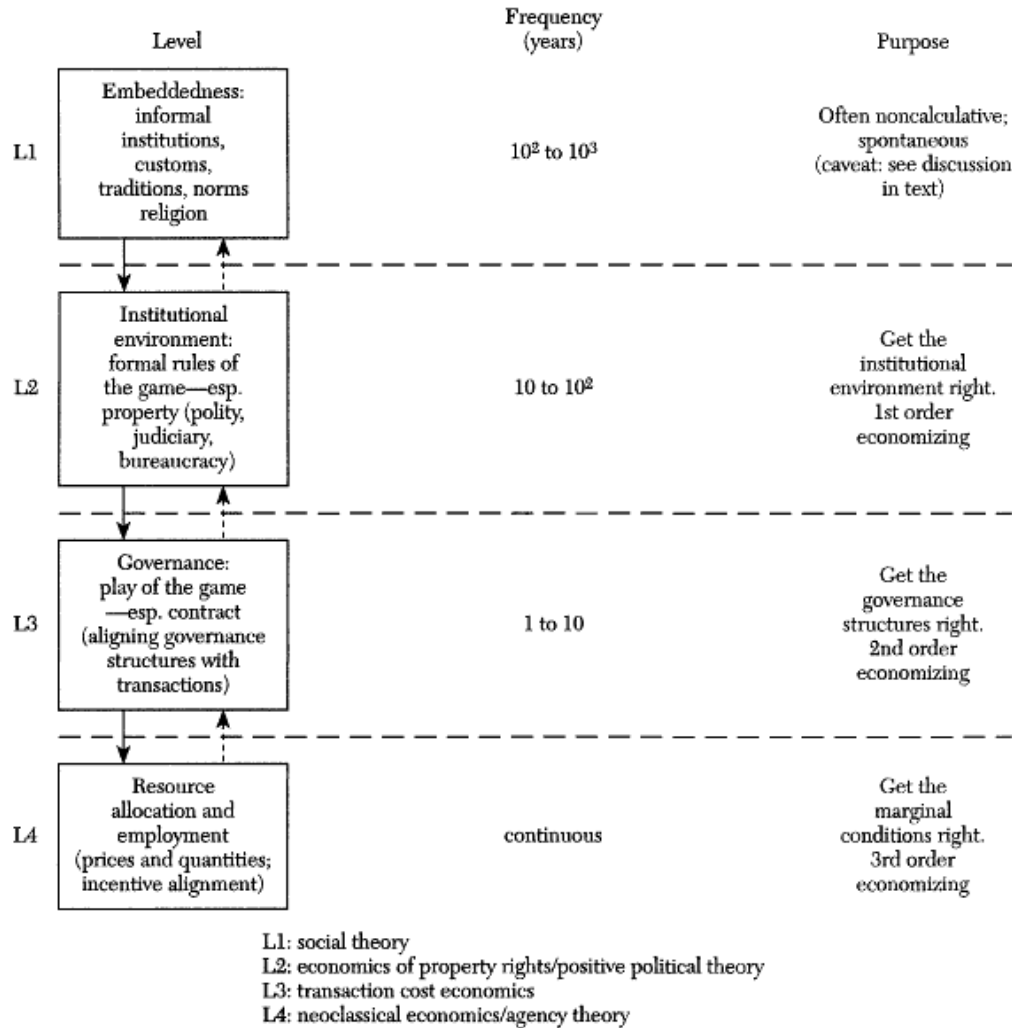
As it could be seen, when there is a word about transition, institutions are always mentioned as a significant part of transitional change. Transition is complicated process and it

enters in all the pores of the economy and therefore affects the society also. It could be said similar for the institutions. They are the core of the all social interactions and therefore deeply connected with the economy.

Before explaining institutional change it would be useful to define the institutions first or at least set the framework that would be the guidance when talking about the institutions, as the theory never agreed on one single definition. Different authors have different approaches. Following the different schools of institutional thought Williamson (2000), institutions can be divided into four levels of social analysis: embeddedness or informal institutions, institutional environment or formal rules of play, governance or play of the game and resource allocation and employment. All of these levels are explaining for the different types of social interaction. As it can be seen in the figure below, first level is representing embeddedness and informal institutions that are tradition, customs, religion and social norms. Many forms of informal institutions have spontaneous, evolutionary origins that are adopted and therefore quite static and inert. This means that they are lasting and change very slow having the significant influence on the society. The second level refers to the institutional environment or formal rules that constitute laws and property rights. These structures are partially evolutionary and they go beyond informal constraints. They include executive, legislative, judicial, and bureaucratic functions of government and the distribution of powers across the different levels of government. Defining and enforcing the property rights are important features and the argument of the theory is that a private-enterprise system cannot function properly unless property rights are created in resources, so that someone wishing to use the resources has to pay to the owner of the resources to obtain it. The weakness of this thought is supposes that defining and enforcing of rights is easy or costless. In order to regulate for the “rules of the game” contract is what is needed and that leads us to the third level that refers to the governance. Governance is needed to define the legal system with contract laws because “the ultimate unit of activity must contain in itself the three principles of conflict, mutuality and order and this unit is a transaction” (Williamson 2000, p. 599). Transaction is often used as a basic unit of the analysis and with governance that introduces order and shape incentives, conflict is mitigated and mutual gains are realized. It is often difficult to create the complex contracts that would be complete and adopted because of the contractual variations on the common theme. When creating a contracts (shaping incentives) there are usually four moves to be taken by governance: 1) naming and explicating the principal

dimensions with respect to which transactions differ, 2) naming and explicating the principal attributes for describing the governance structures, 3) effecting the discriminating match, according to which transactions are aligned with governance structures, and 4) ascertaining whether the predicted alignments are corroborated by the data. It is necessary to re-examine possible reorganization of transactions among governance structures periodically in order to answer for the changed preconditions. Fourth level refers to the resource allocation and employment or the adjustments to prices and quantities. This could be represented in the production function that is often used to explain for the firm. As the Arrow (1971) explains, any standard economic theory starts from the existence of firms and firms have their internal structures. That allows us to consider the firm as the governance structure (which is an organizational construction) in which internal structure has economic purpose and effect and that is how we can make the direct connection between the economic and institutional structures.

Figure 1 Four Levels of Social Analysis, adapted from Williamson (2000, p.597)



Furthermore, North (1990) for example, is making the distinction between institutions and organizations, what goes along with Williamson’s second level of institutions. North is explaining that both institutions and organizations are components of the structural framework that supports human interaction but they are not the same. Institutions can be considered the rules of the game and organizations can be considered the players. The purpose of the rules is to define the way that the game is played.

Acemoglu, Robinson, & Johnson (2012) are considering institutions to be very important for the national prosperity and stressing that secured property rights have the great significance for economic growth. Using Mexico, United States, early modern England and Spain, North and South Korea, Congo, Japan, China etc. as examples for their comparisons, Acemoglu, Robinson,

& Johnson are pointing out that organizational arrangements of societies have real importance when it comes to economic outcome and development.

North, Wallis, & Weingast (2006, p.3) could be opponents of the Acemoglu, Robinson, & Johnson's work saying that there is not only one factor that can explain for the economic development and that "the complex ways that societies structure human relationships - the institutions that shape economic, political, religious, and other interactions - appear to be the key to understanding why some societies are capable of sustained economic and political development".

Hence, it is to be asked what the "good" institutions are. As (Greif, 2006, p. 4) explains "socially beneficial institutions promote welfare-enhancing cooperation and action. They provide the foundations of markets by efficiently assigning, protecting, and altering property rights; securing contracts; and motivating specialization and exchange. Good institutions also encourage production by fostering saving, investment in human and physical capital, and development and adoption of useful knowledge. They maintain a sustainable rate of population growth and foster welfare-enhancing peace; the joint mobilization of resources; and beneficial policies, such as the provision of public goods". Rodrik (2008, p.100) would agree with this view is explaining that it is better to consider the functions of the quality institutions rather than their form or shape. He stresses that: "Desirable institutions provide security of property rights, enforce contracts, stimulate entrepreneurship, foster integration in the world economy, maintain macroeconomic stability, manage risk-taking by financial intermediaries, supply social insurance and safety nets, and enhance voice and accountability."

It often happens in economic theory that different authors will have different opinions on this matter. As could be noticed, many authors agree on the importance of the property rights but Sachs (2012) is highly critical toward the theory that says that secure private property are vital for the quality institutions and functional economy and entrepreneurship, and therefore stress that the accent on the primary importance of the change of the regulations that protect property rights is unnecessary. His argument is that Acemoglu, Robinson, & Johnson's explanation of the extractive political institutions and the governments that protect property rights and represent their people preside over economic development is rather simplistic and that kind of setting is placing power in the hands of a few and beget extractive economic institutions, which feature

unfair regulations and high barriers to entry into markets. He stresses that over-protection is designed to enrich small elite, and that institutions that promote it are inhibiting economic progress for everyone else. I would agree with this view in the sense that problematic situation could advent when the formal institutions and organizations have to decide on how much of the property rights and enforcement is a good measure and some of them are not strong enough to provide its market with the good proportion of each of these factors.

Because the individuals do not always recognize what will be socially beneficial nor are they motivated to effectively pursue it in the absence of appropriate institutions, the quality of the institutional foundations is very important for the development (Greif, 2006).

It is important to add that the “institutional change is a complicated process because the changes at the margin can be a consequence of changes in rules, in informal constraints, and in kinds and effectiveness of enforcement” North D. C. (1990, pp. 36-45). Even though the formal rules could be changed rapidly, informal constraints that are the part of the customs, traditions, and codes of conduct are much more complicated to influence and include to new policies. As he further explains, convictions are significant for the behavioral factor in many institutional settings. Informal constraints that are culturally derived will not change immediately in reaction to changes in the formal rules because cultural traits have tenacious survival ability.

2.3 Connection between transition and institutions

The theory is further suggesting that only the efficient institutions would survive over time and the inefficient ones should be weeded out, what will be the result of the process of the gradual evolution of more efficient forms of economic, political, and social organization. I would agree with the theory in the sense that the weeding should happen so that states could recognize the need for change and enter the transition process.

Usually, states have different set ups of institutional frameworks that create both productive and unproductive opportunities for organizations. Through the history economies showed different results caused by these set ups. It is interesting to examine why, for example, there is a divergence and a big gap in economic development of Western Europe and countries in

Eastern Europe and central Asia. The Central and Eastern European Countries, Commonwealth of Independent States or Former Soviet Republics, and Balkan countries all have a common background in communism. The characteristic feature of communist regime is the planned economy. That is why I found it would be interesting to go deeper into the transition process, from the centrally planned economy to the open market economy, and see what are the characteristic problems related to institutional changes in the transition process.

There are many theories, programs and international organizations that are pointing into the things that should be corrected, and talking about the right things to do and examples to be followed, but in practice not everything is that simple as on the paper. As Besley, Dewatripont, & Guriev (2010) notice in the Transition and Transition Impact report for the EBRD, even though there are broad principles including accountability, legitimacy (effective authority), transparency and competency that underpin effective institutions, it is hard to argue that there is a unique level of optimal institutions. In their view this is likely to result in a certain degree of “*institutional pluralism*” as the specific institutions are being influenced by the unique cultural, historical and economic circumstances of each country and “the one-size-fits-all solution cannot be justified on practical or theoretical grounds” (Besley, Dewatripont, & Guriev, 2010, p. 9).

At least one thing here could be taken as certain: Effective markets require a functioning legal system to enforce contractual obligations; regulation to deal with external effects and concerns about social cohesion; property rights protection – for both physical and intellectual property; and competition policy. The state as the market supporting institution and those public institutions that stand behind markets and make them work are heavily influenced by political economy issues, and it is necessary to understand that problems of governance combine economic and political concerns. Besley, Dewatripont, & Guriev (2010, p.8) stress that preconditions for an effective market economy have to be delivered by the state and “it is not enough to wish that the state be effective – it is important to understand the institutional structures that make it so”. As the focus on institutions emphasizes the role of rules, or the processes that deliver outcomes, sustained change comes from redefining these rules and exploiting the incentives that they create. Market economies would often generate and powerful interests (which could usually be created when the public firms became a private capital in the transition process) that try to influence the state in malign ways as producers will try to influence

the state and to lobby for protection against competition. Formal institutions should be created in the manner to devise a system of government which allows the benefits of the market to flourish while holding such interests at bay because they could be involved in many constraints that inhibit the development.

Authors are mostly agreeing that the quality transition is not possible without following institutional change as institutions are the core of social and economic interactions. As such, formal and informal institutions can influence growth both positively and negatively. Without institutional change to follow for the economic factor changes the transition could be prolonged and slow.

Tridico (2011, p. 3), for example, argues that the reasons for different levels of performance among countries in transition are attributable to institutions, together with the “policies and strategies implemented, the mistakes of policy makers, regulation, competition, international regimes, labor market institutions, monetary constraints, policies and incentives for human capital and innovation, agents’ reactions to new policies, levels of trust and social capital, democratic political institutions, people’s capabilities and opportunities, path dependency, control of corruption, participation and accountability of people and different initial conditions”. He stresses that all these variables identify a socio-economic model within the capitalist mode of production, and adds that institutions made the difference in countries that have “better political institutions indices (voice and accountability, democracy, freedom, political rights and civil liberties, and the rule of law) and socio-economic indicators (health and education in particular)” (Tridico 2011, p. 3). Those countries are Poland, Slovenia, Hungary, the Czech Republic and, to some extent, Estonia.

Tridico further explains that in the Commonwealth of Independent States a clear institutional approach and a socially oriented strategy were missing and that those countries are affected by political troubles, corruption, lack of trust and lower levels of voice and accountability, democracy, freedom, political rights and civil liberties, and the rule of law. The former Yugoslav republics, where the Serbia belongs, could be included in this group but it should be also stressed that these countries were negatively affected by war.

3 Empirical research

3.1 Background of Serbia

After critical analysis of the existing theory on the matter of transition and institutions, it is necessary to create the insight in the Serbian background, as its case will be used for the empirical study. In the Table 1 it is presented the Serbian fact-sheet with the country's most important features.

Table 1 Serbia Fact-Sheet Adapted from United Nations Country Team (2009)

Serbia: Fact-Sheet	
Location	Southeastern Europe
Area	77.474 sq km (88.361 sq km with Kosovo under UNSCR 1244/99)
Land boundaries	Total: 2,114.2 km Border countries: Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Macedonia, Montenegro, Romania
Capital	Belgrade (1.6 million population)
Provinces	Autonomous Province of Vojvodina and Kosovo-Metohija
Municipalities	168
Constitution	Adopted 8 November 2006; effective 10 November 2006
Political system	Republic
Population	7.5 million (10.1 million with Kosovo under UNSCR 1244/99)
Median age	Total: 37.5 years Male: 36.1 years Female: 39 years (2008 est.)
Life expectancy at birth	Total population: 75.29 years

	Male: 72.7 years Female: 78.09 years (2008 est.)
Nationality	Serbian
Ethnic groups	Serb 82.9%, Hungarian 3.9%, Roma 1.4%, Yugoslavs 1.1%, Bosniaks 1.8%, Montenegrin 0.9%, other 8% (2002 census)
Religion	Serbian Orthodox 85%, Catholic 5.5%, Protestant 1.1%, Muslim 3.2%, unspecified 2.6%, other, unknown, or atheist 2.6% (2002 census)
Languages	Serbian 88.3% (official), Hungarian 3.8%, Bosniak 1.8%, Roma (Gypsy) 1.1%, other 4.1%, unknown 0.9% (2002 census) note: Romanian, Hungarian, Slovak, Ukrainian, and Croatian all official in Vojvodina
Labor force	2.961 million (2002 est.)
GDP	GDP (2008 est.): \$45.0 billion GDP growth rate (2008 est.): 5.4% GDP per capita (2008 est.): 6.8%
Inflation rate	6.8% (2008 est.)
Unemployment rate	14% (2008 est.)
Budget	Revenues: \$9.6 billion (41.2 % of GDP) Expenditures: \$9.8 billion (42.5 % of GDP, 2007 est.)
Public debt	31.6 % of GDP (August 2009 est.)
Main issues	International obligations including full-cooperation with the International Criminal Tribunal for the former Yugoslavia (ICTY) Implementation (upon full cooperation with the ICTY) of the Interim Agreement of the Stabilization and Association Agreement signed on April 29, 2008

Kosovo under UNSCR 1244/99

Active and constructive participation in the stabilization and association process and regional cooperation

Comprehensive institutional, political, economic reforms, in line with priorities of the European Partnership

Economic transition in Serbia is very late compared to the most successful countries in transition, and in relation to the surrounding countries. Serbia entered the transition process while it was part of former Yugoslavia, that is, at the same time as the other European post-socialist countries but its transition politics were not directed towards a defined goal. The political changes in 2000 discontinued the galloping collapse of the country and its economy and also created the preconditions for a new beginning of transition, but with a delay of one decade. During the 1990s, while the rest of the former communist and socialist economies dedicated its efforts to conduct the transition, Serbia entered into the regional conflicts and war. As a consequence, economic situation of the country was devastating, suffering the hyperinflation, economic sanctions and vetoes. As it could be seen from the fact-sheet, Serbia is unique case because even the years after the regional conflicts ended it still has some opened issues with International Criminal Tribunal and Kosovo matter.

The timetable below (Table 2) is showing the most important occurrences from the early 1990s until the early 2000s.

Table 2 Timetable of 1990s and Early 2000s

Institutional, Political and Economic changes	
1991 Jun	Disintegration of Socialist Federal Republic of Yugoslavia begins
1992 Apr	Sovereignty proclaimed
1992 May	Economic sanctions introduced by UN
1993 Dec	Hyperinflation reaches peak
1994 Jan	Widespread price controls introduced

1994 Jan	Stabilization programme introduced
1997 Oct	Privatization law enacted in Serbia
1998 Jun	Economic sanctions tightened
1999 Mar	Kosovo conflict begins
1999 Jun	Kosovo placed under UN administration
2000 Oct	Milosevic rule ends
2000 Oct	Most price controls relaxed
2001 Jan	Export surrender requirement abolished
2001 Jan	Exchange rate unified and managed float introduced
2001 Jan	Current account convertibility introduced
2001 Jan	Economic sanctions lifted
Source: (EBRD, 2001)Transition report	

3.2 Data and methods

3.2.1 Data

As transition in Serbia in fact starts in 2000 the data computed and represented in empirical part of the work will mostly date from the year 2000. Data sources used are data bases of EBRD and Statistical Office of Serbia. Database created for the purpose of this work consists the gathered data from the various annual reports of these two organizations (Transition report 2000-2012 and Statistical Yearbook of Serbia 1996-2012). All of the charts and tables constructed in this work will have the more detailed explanation on the data sources.

3.2.2 Methods

This is an explorative study with the quantitative character. By studying what has been done so far in the field of measuring for the transition, institution and growth, this work intends to give a different insight and gather the three of them in the same place. Based on the previous research

in the field and theoretical foundation, the case of Serbian economic success or failure will be qualitatively analyzed. Subsequently, with the help of descriptive statistics it will be examined whether transitional and institutional changes are connected with the countries growth.

Analytical part of this work will deal with 3 important issues:

1. Institutional change,
2. Transitional change, and
3. Economic growth.

In this work, when it is talked about the institutional change, the main focus is pointed into the formal institutions. I will follow the various indicators that different authors used and try to represent the possible changes.

When it comes to the transitional change, I will use the European Bank's for Reconstruction and Development developed set of indicators to represent for the results of transition, and in some cases support them with additional explanations and chart from other sources and literature.

Last but not least, I will represent the data and indicators for the economic growth and try to explain if the institutional and transitional changes influenced the growth and to what extent that growth was positive or negative.

3.3 Institutional change

Previously in the work it is stated that for the economy to develop it is important to have efficient institutions in order to reduce transaction costs and thus increase market exchange and specialization, and therefore economic growth.

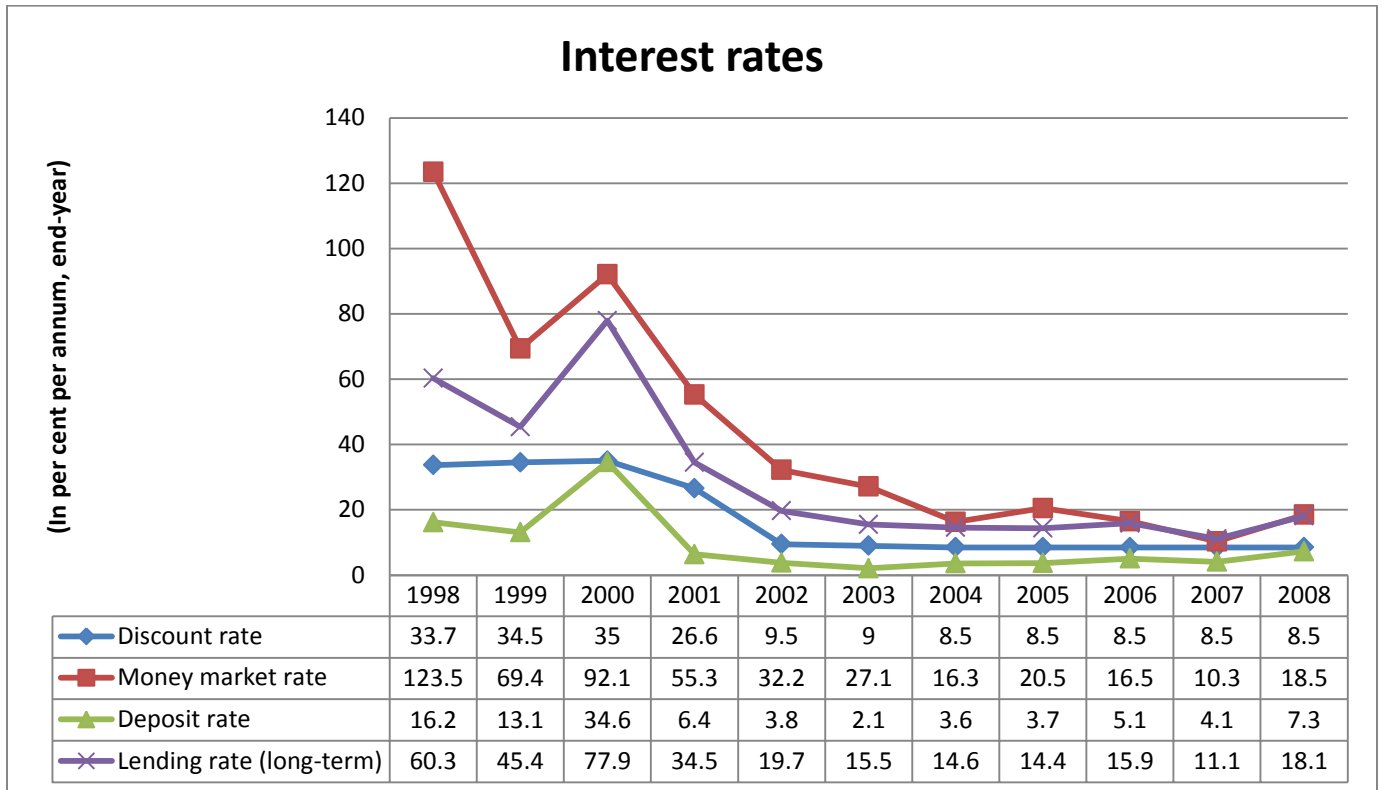
Zanden (2008) emphasizes that in order to test the links between institutions and their performance it should be focused on the institutional systems as integrated wholes in order to analyze for the effects that they have on growth. He further explains that there are three groups of elements that can shed light on institutional efficiency. In this part of work only two groups of elements will be analyzed as the data for the third group is not available.

3.3.1 First group of institutional indicators

The first group consists of elements that can measure the extent to which institutions guarantee property rights and promote trust. As shown in the economic literature, interest rate is probably the classic measure of the extent to which the institutions in a particular society protect property rights (of debtors and creditors) and enhance the amount of trust in a society. The more risk for investors there is the more expensive the capital will be and the higher will be the interest rate. Therefore, it could be argued that a low interest rate is probably the best proxy of the quality of the institutional framework. For the Serbian market the available data on the interest rates covers the period from the year 1998 until the 2008.

As it could be seen in the Chart 1, during the late 1990s when country was under the economic sanctions and have not entered the process of transition yet, and when it was involved into the regional conflicts, all the interest rates were on the very high level. The safety of the creditor's investments was under the high risk and that reflected on the prices of capital. In the year 2000, after a slight fall in the year 1999, the interest rates increased again. The possible explanation for this could be the political situation in the country as the year 2000 was the year of the elections. After the period of the very high tension and the Revolution that occurred in early October the democratic government was established and country entered in the process of the transition. We can also see that from the 2000 significant improvements are recorded and the interest rates are declining. The money market rate recorded the biggest decline from the 123.5% in the year 1998 to the 10.3% in the year 2007. The fall of interest rates is recorded until the year 2008 when it sharply increases comparing with the year 2007 (for the Money Market rate from 10.3% to 18.5%, for the Deposit rate from 4.1% to 7.3% and for the long term lending rate from 11.1% to 18.1%). This increase in the year 2008 could be due to the worldwide recession and changes on the money markets that crisis caused. It would be interesting to see what kind of changes are following after the 2008 when the data becomes available, but for now we can conclude that trust in the institutions highly increased after entering the transition process in 2000.

Chart 1 Interest rates



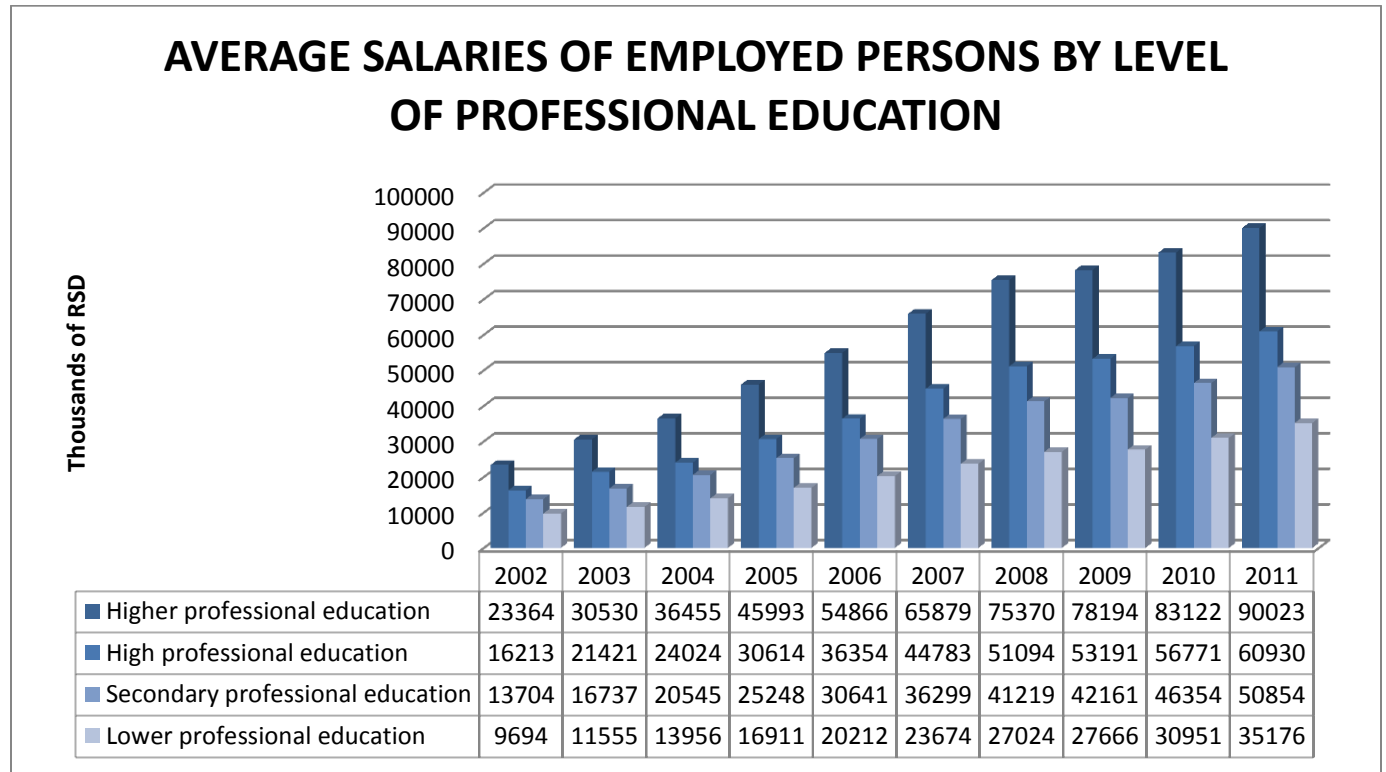
Source: EBRD, Transition report (2000-2012)

As it is not always easy to observe the interest rates (due to lack of sources), we can use the indirect indicators that will show for the amount of trust, like for example the skill premium. Skill premium is measured as the difference between the wage of a skilled laborer and that of an unskilled laborer. Furthermore we can say that the skill premium could be interpreted as the reward for investment in human capital. This investment in human capital involves opportunity cost and not earning an income during the period of achieving the higher education, in return for the higher income that is going to be earned after the training period. As Zanden (2008) explains, in theory, the connection between the skill premium and the interest rate is reflected in the worth whiling of making the investment in the education. If the interest rates are low the security of the earning the skill premium should be higher. Low skill premium will negatively affect the future skill formation.

In the chart below we can see the data on the average salaries of employed persons by level of professional education. The data is extracted from the various Yearbooks published by

Statistical Office of the Republic of Serbia and the average salary amounts are in Serbian currency Dinar.

Chart 2 Average Salaries of Employed Persons



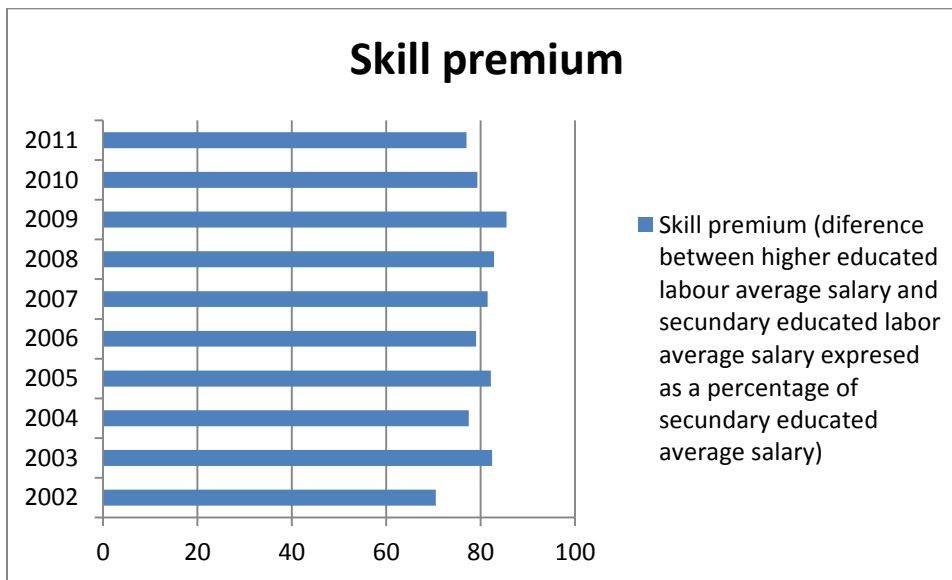
Source: Statistical Office of the Republic of Serbia, Yearbooks 2002 - 2011)

Here, it is important to explain for the difference between high professional education and higher professional education. In the educational system of Serbia, before the reforms and Bologna system are introduced, the university was consistent of “higher schools” and colleges. Higher schools were usually 2 or 3 years programmes used to specialize people after the secondary schools and they are recognized by the system and employers. By the higher professional education it is meant that employee has at least 4 years of additional training after the secondary education and that it is tertiary skilled by attending college.

From the Chart 2 we can see that there is a clear difference between the average earnings of the mentioned educational groups and the difference is increasing through the years in the absolute terms. When comparing the data from the Interest rates chart and differences in average salaries chart we can say that with decrease of the interest rates, there is more certainty that one can expect higher earnings after the skill formation.

In order for differences to be more understandable I will use the comparison between the Secondary professional education and Higher professional education. In the Chart 3 the skill premium is presented as a percentage of the secondary educated average salary. As it could be seen the percentage average is only slightly changing through the years and it is always around the 80%. This means that if secondary educated employee have had decided to finish the college, it would have around 80% higher monthly earnings. The data that the number of graduated students tripled from 16 807 in year 1999 to 46 162 in year 2012 can confirm us that the trust in the returns from the future formation increased in the transition period (Statistical Yearbook of Serbia 2000-2012).

Chart 3 Skill premium



Source: Statistical Office of the Republic of Serbia

3.3.2 Second group of institutional indicators

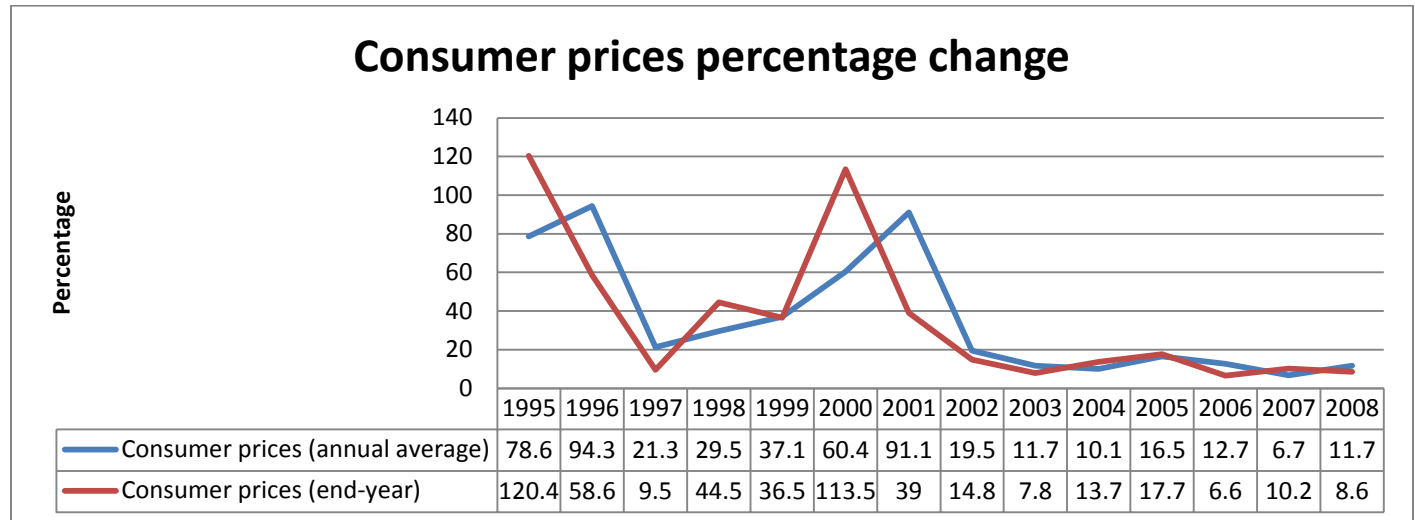
The second group of indicators is helping us to measure the extent of market integration in an economy under the assumption that efficient institutions reduce transaction costs, and therefore lead to high levels of market integration. As direct measures of market integration Zanden (2008) is using the variability of (annual) prices and the convergence of prices. The variability of prices is showing us to which extent are markets able to cushion shocks made by

trade forces. In general, if the market systems have the low variability, transaction costs should be low and volumes of trade high. If the shocks cannot be easily absorbed by the trade, that could mean that market systems are poorly developed. The convergence of prices can show us to which extent are markets correlated and mutually dependent. High convergence should point to a highly developed market system and vice versa.

North D. C. (1990, pp. 83-86) would agree with this view saying that the most important source of institutional changes are the relative prices. He further explains that relative prices consist of: “changes in the ratio of factor prices (i.e., changes in the ratio of land to labor, labor to capital, or capital to land), changes in the cost of information, and changes in technology (including significantly and importantly, military technology)”. Some changes of the relative prices are exogenous, but most will be endogenous and they are reflecting the “ongoing maximizing efforts of entrepreneurs (political, economic, and military) that will alter relative prices and in consequence induce institutional change”.

In the Chart 4 it can be seen that from the mid-1990s to the year 2002 volatility of prices was highly pronounced, what is not surprising when the economic sanctions and hyperinflation that occurs from the 1993 are taken into consideration. From the year 2000 and 2001 when country enters the transition and new economic measures are introduced, the consumer prices are decreasing together with the volatility. It can also be seen that prices are still rising from the year 2002, but there are no extreme changes recorded like in the 2000 and 2001 when annual average change for the consumer prices was 60.4% and 91.1%.

Chart 4 Consumer prices percentage change



Source: EBRD, Transition Report (2000-2008)

What it could be seen above, can lead to the conclusion that the institutions are improving, and it would be interesting to see how this trend is changing until the present time when the data becomes available.

3.4 Transitional changes

For the representing and measuring the Transitional changes I will be using the indicators and the system developed by European Bank for Reconstruction and Development. The indicators are divided into a two groups and they are covering the main features of the transition and the main features of the structural change. These indicators are developed in order to show for the country specific progress in transition.

3.4.1 First set of indicators

The main transition indicators are (EBRD, 2013):

1. Large scale privatization
2. Small scale privatization

3. Governance and enterprise restructuring
4. Price liberalization
5. Trade and foreign exchange system, and
6. Competition policy.

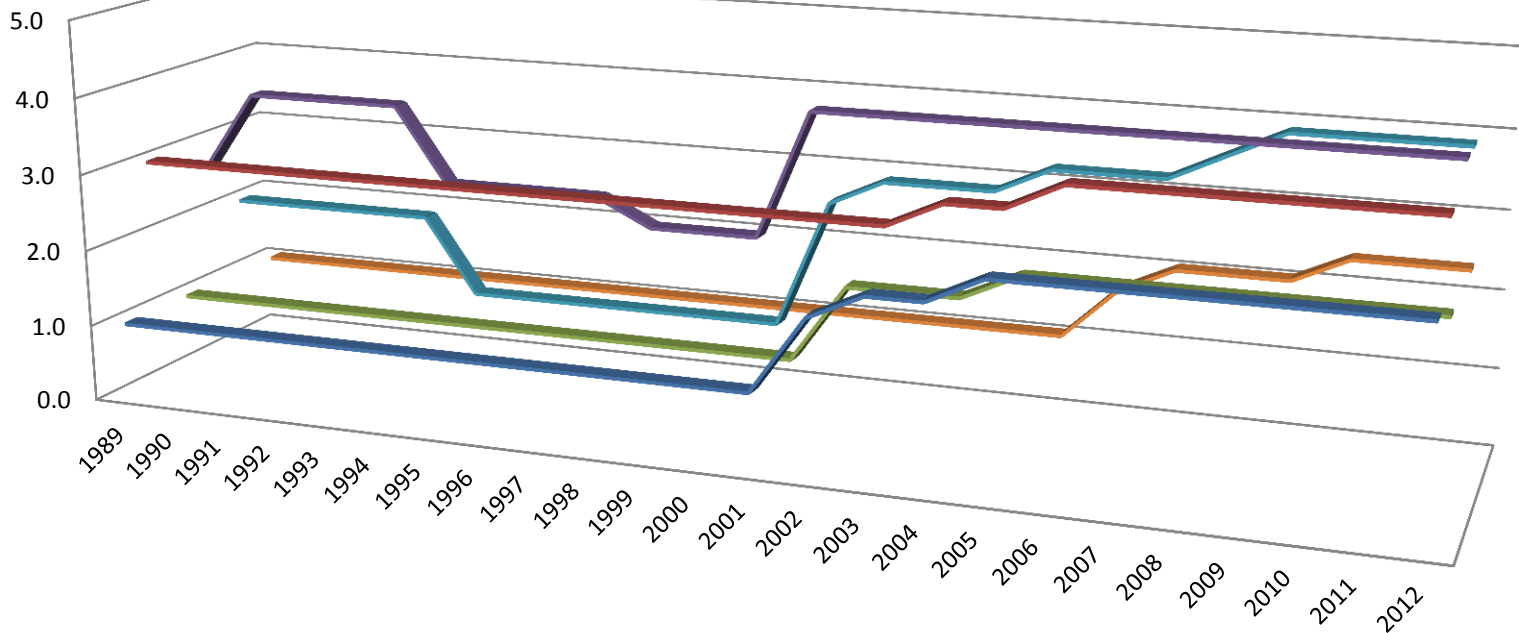
There are ratings created in order to measure the progress of the individual countries on each of these six fields that the EBRD is sorting as the most important in the transformation path to the open economy. These ratings are spread on the scale from one to four where one is the lowest rate and 4+ the highest rate. The more details on the rating of each of the six indices could be found in the Appendix 1.

As previously mentioned, in transition, country should conduct and focus on the macroeconomic stabilization, liberalization and privatization. As the macroeconomic stabilization is not directly included in the indicators listed above and I consider it important to be commented here, I will include the chart and comments on it in this part of work also.

Data available for this six transition indicators dates from the year 1989 until the year 2012. As mentioned above, the “real” transition starts in the 2000, and this can be confirmed when we look at part of the chart below that is showing for the 1990s period. It is easy to notice that there were no significant changes recorded and that ratings are very low for all of the six transition indicators.

Chart 5 Transition indicators by sector

Transition Indicators by Sector



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012				
Competition Policy	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7	2.0	2.0	2.0	2.3	2.3	2.3	
Trade & Forex system	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Price liberalisation	2.7	3.7	3.7	3.7	3.7	3.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Governance and enterprise restructuring	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Small scale privatisation	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Large scale privatisation	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Source: European Bank for Reconstruction and Development

3.4.1.1 Large scale privatization

Large scale privatization is rated with the lowest mark until the year 2002. We can conclude that in 1990s there was little private ownership and that most of the biggest firms were owned by the state. At the end of June 2001 the Serbian parliament adopted a new law on privatization allowing for at least 70 per cent of shares in state and socially owned assets to be

sold to private investors (EBRD, 2001). Law also stated that, any enterprise not sold within four years will be taken over by the Privatization Agency and sold or liquidated. Primary privatization method was auction and Secondary privatization method was direct sales.

Even with the Law on privatization adopted and later amendments on the Law in 2003 the privatization of the large firms went slow and not as successful as expected in early 2000s mostly due to political uncertainty. From the year 2005 the situation improves as the Law on privatization was amended again allowing for the government to write off the debts of selected companies to facilitate their sale. Still, the ratings for the large scale privatization are at the low level till the present days (2.7) what means that many large-scale companies remain state-owned and the sales of several other large enterprises have been held back or delayed.

3.4.1.2 Small scale privatization

Small scale privatization was more successful from the large scale privatization from the start. In the year 2003 state privatized double the planned number of companies. By mid-2004, over 1,000 companies had been sold (out of a total of around 2,500) (EBRD, 2004), and by the year 2007 around 700 more firms were privatized and the completion of the small scale privatization process was expected in end of the year 2008.

3.4.1.3 Governance and enterprise restructuring

It could be seen in the graph that governance and enterprise restructuring is one of the poorest rated indicators. During the 1990s there was no progress recorded and changes started only from the year 2001. State and socially owned enterprises in Serbia were plagued by a range of problems, including unclear ownership, lack of capital, large and persistent losses and soft budget constraints (EBRD, 2001). Changes of laws and bringing of new laws on Foreign Investments, Enterprises, Concessions, Secured Transactions, Bankruptcy, Competition, Company Governance, Control of State Aid and Antitrust (EBRD, 2001, 2002, 2003, 2004,

2005, 2006) were made in order to improve attractiveness of country for foreign investors and secure and enable businesses. There were also restructuring plans created for large state-owned companies in Serbia, which still rely heavily on state subsidies and make losses. In the year 2004 the corporate tax rate in Serbia has been reduced from 14 to 10 per cent, one of the lowest rates among all transition countries.

Even after all this changes the situation has not improved too much. Serious concerns about political instability, pervasive corruption and the poor functioning of the judicial system continued to the present day. Also, the implementation of the changed laws is slow due to lack of efficiency and efficacy of the regulatory bodies and lack of political will to improve it. The low rate that has not moved from the value of 2.3 from the year 2005 could be blamed on weak enforcement of bankruptcy legislation.

3.4.1.4 Price liberalization and trade and Forex system

Price liberalization is one of the best rated indicators in the transition process of Serbia. Serbian government abandoned almost all price controls and subsidies in late 2000 (EBRD, 2001). The challenge was rising of the price of the electricity, but that was gradually done with a few increases during the 2000s period. In the year 2002 the authorities introduced full current account convertibility by abolishing all restrictions on payments and transfers for current international transactions, and started with the bilateral Free Trade Agreements. In the year 2003 the progress was made in harmonizing tariff rates and phasing out of most of the non-tariff barriers on exports and elimination of import quotas. The year 2005 was significant for the change of tax policies because of the adoption and successful implementation of a value added tax (VAT) replacing the sales tax. The standard rate was 18 per cent. There was also the extension of the range of goods and services for which a reduced rate of 8 per cent can be applied. The low corporate tax rates of 10 per cent were introduced. We can see from the chart that from the year 2001 the rates are growing for both price liberalization and trade and Forex system reaching rate 4 that means that state procurement at non-market prices largely phased out; only a small number of administered prices remain; all quantitative and administrative import

and export restrictions (apart from agriculture) and all significant export tariffs are removed; there is no major non-uniformity of customs duties for non-agricultural goods and services; and there is a full and current account convertibility.

3.4.1.5 Competition policy

Competition policy is indicator that rates the poorest improvements from the beginning of the measuring period until the present date. The law on competition took effect quite late, from September 2005, and it is still poorly implemented. The law envisaged the establishment of an independent Competition Protection Commission by the end of 2005 but the process was slow and late. A number of companies are monopolies and the competition commission has yet to make a major impact, mainly because of its limited resources (EBRD, 2007). Slight improvements are recorded from the year 2010 mostly due to the new competition law that entered into force in November 2009. One of its main aims was to strengthen the authority of the Competition Commission by giving it enhanced powers to impose penalties (of up to 10 per cent of revenues) on companies that fail to comply with the law (EBRD, 2009). In addition, a new law on control of state aid, in line with EU law, has been adopted (effective from January 2010) under which any state aid that distorts competition is ruled out except under certain restricted conditions.

3.4.1.6 Macroeconomic stabilization

The important feature of macroeconomic stabilization is creating of the financial sector in order to facilitate macroeconomic stabilization. That means that inflation should be brought over control and lowered over time and the safer movement of private capital should be provided.

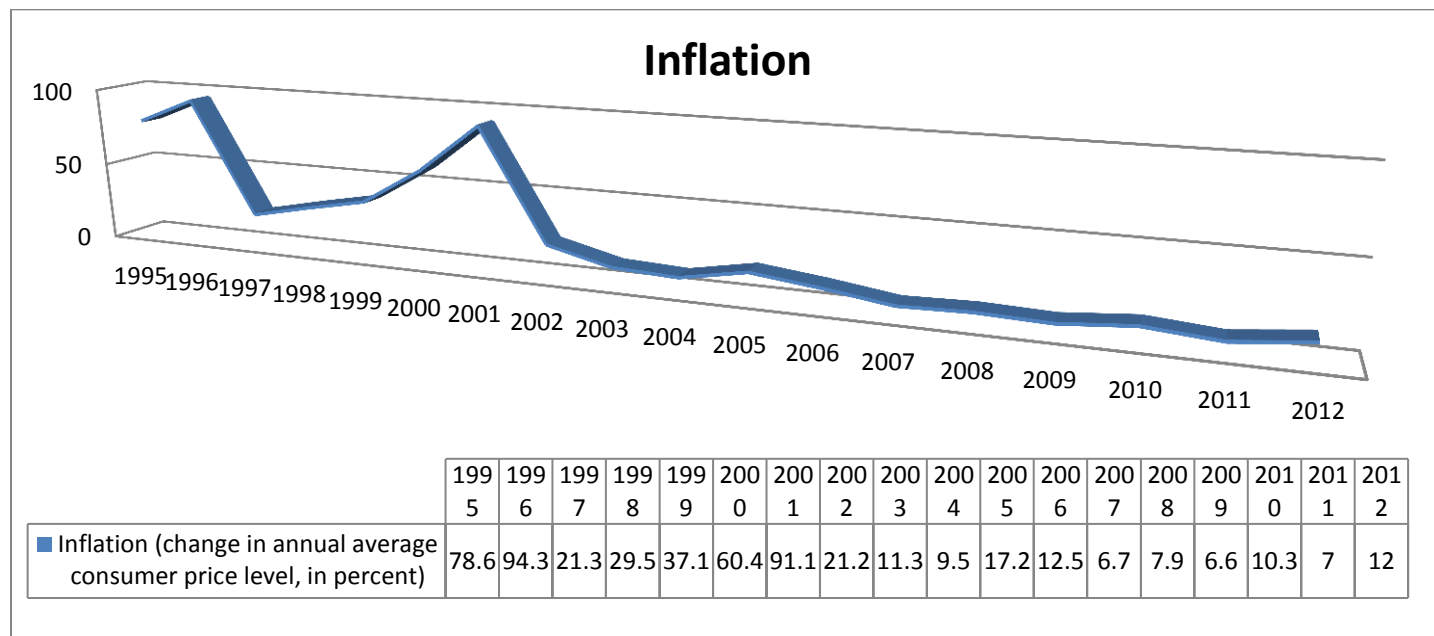
After the hyperinflation in 1990s and bankruptcy of many banks in the Serbian market, the Central bank had to find the way to recover the trust in the national currency and carry the burden of the debt created with the bankruptcy of banks.

Therefore, central bank unified the exchange rates, and started to operate with a managed float exchange rate regime, with frequent interventions in the currency market. To be able to intervene, Central Bank has sharply raised foreign currency reserves. The exchange rate policy has been successful in terms of restoring confidence to the currency and reducing inflationary expectations.

As it could be seen in the chart below, Serbia suffered from the very high inflation in 1990s (there was the hyperinflation in the 1993 when the change in annual average consumer price level, in percent was 116.5×10^{12}). From the 2002 situation started to improve and inflation started to fall but it remained in double figures in the first years, due partly to the effects of administered price increases. From the year 2007 it seemed that inflation rate finally stabilized as it was around 7 per cent for the three years but with the hit of global crisis oscillations started again.

The inflation chart was already presented earlier in the work but in the different form (Chart 1 Consumer prices percentage change) when it was explained for the indicators of institutional change. It could be seen in many cases that indicators for institutional change are overlapping with the indicators for the changes in transition, what is one more proof that transition goes together with the changes in institutions.

Chart 6 Inflation



3.4.2 Second set of indicators

The second set of indicators is consistent of Structural change indicators which are (EBRD, 2013):

1. Enterprises:

Privatization revenues (% GDP),
Private sector size (% GDP, % employment),
Budgetary subsidies and current transfers (% GDP),
Industry size (% employment),
Labor productivity in industry (% change),
Investment (% GDP)

2. Markets and trade:

Share of administered prices in CPI (in per cent)
Number of goods with administered prices in EBRD-15 basket
Share of trade with non-transition countries (in per cent)
Share of trade in GDP (in per cent)
Tariff revenues (in per cent of imports)
EBRD index of price liberalisation
EBRD index of forex and trade liberalisation
EBRD index of competition policy

3. Financial sector

Number of banks (foreign-owned)
Asset share of state-owned banks (in per cent)
Asset share of foreign-owned banks (in per cent)
Non-performing loans (in per cent of total loans)
Domestic credit to private sector (in per cent of GDP)
Domestic credit to households (in per cent of GDP)
Stock market capitalisation (in per cent of GDP)

Stock trading volume (in per cent of market capitalisation)

Eurobond issuance (in per cent of GDP)

EBRD index of banking sector reform

EBRD index of reform of non-bank financial institutions

4. Infrastructure

Fixed-line (mobile) penetration rate (per 100 inhabitants)

Internet users (per 100 inhabitants)

Railway labour productivity (2000=100)

Residential electricity tariffs (USc kWh)

Average collection rate, electricity (in per cent)

GDP per unit of energy use (PPP in US dollars per kgoe)

EBRD index of infrastructure reform

Electric power

Railways

Roads

Telecommunications

Water and wastewater

As it can be seen here, some of the already explained transition indicators are sorted in the Structural Change indicators, but I will further analyze data for the ones that are not already mentioned. The data available is dating from the year 2004 until the year 2010 for most of the indicators. For some of the indicators data was not available but are minority here. As the EBRD used the Statistical Office of the Republic of Serbia as a source for many of its data sets, I also used the Statistical Office of the Republic of Serbia data bases in order to fulfill the missing data sheets where possible and needed.

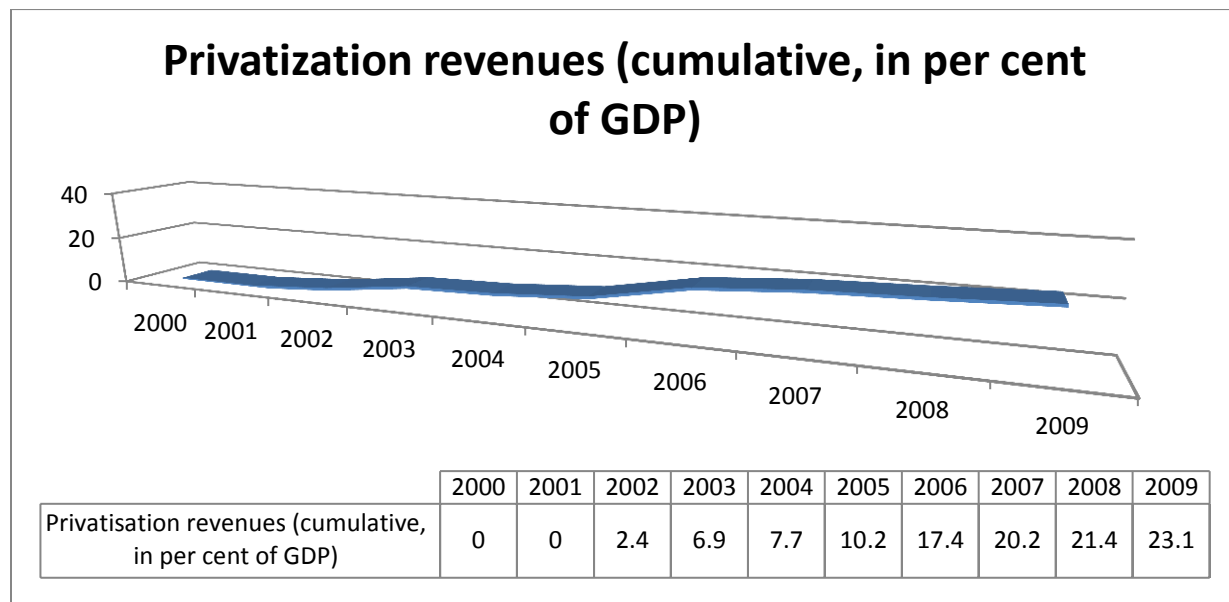
3.4.2.1 Enterprises

The chart below is representing the government revenues from cash sales of enterprises, not including investment commitments. We can see that until the year 2002 there was no privatisation revenues and from that point now on revenues significantly increased from 2.4 per

cent in 2002 to 23.1 per cent in 2009. There is no available data on privatisation revenues for the last three years but looking at the large-scale privatization indexes and the Transition reports of the IBRD we can conclude that there was no significant changes for this period and numbers should not have important changes.

The second interesting thing, that it could be thought about when we look at this chart, is the connection between privatisation revenues and GDP per capita. As will be shown later in the chart “GDP per capita in US dollars” the most significant increases in this category are recorded from the year 2006 when GDP per capita increased from 3349 USD to 3953USD and continued with increase to 5393 USD in 2007 and 6774 USD in 2008. We can see that significant increases in GDP per capita followed for the years when the privatization revenues were on the high levels (2006 and 2007) and conclude that privatization fostered growth.

Chart 7 Privatization revenues (cumulative, in per cent of GDP)

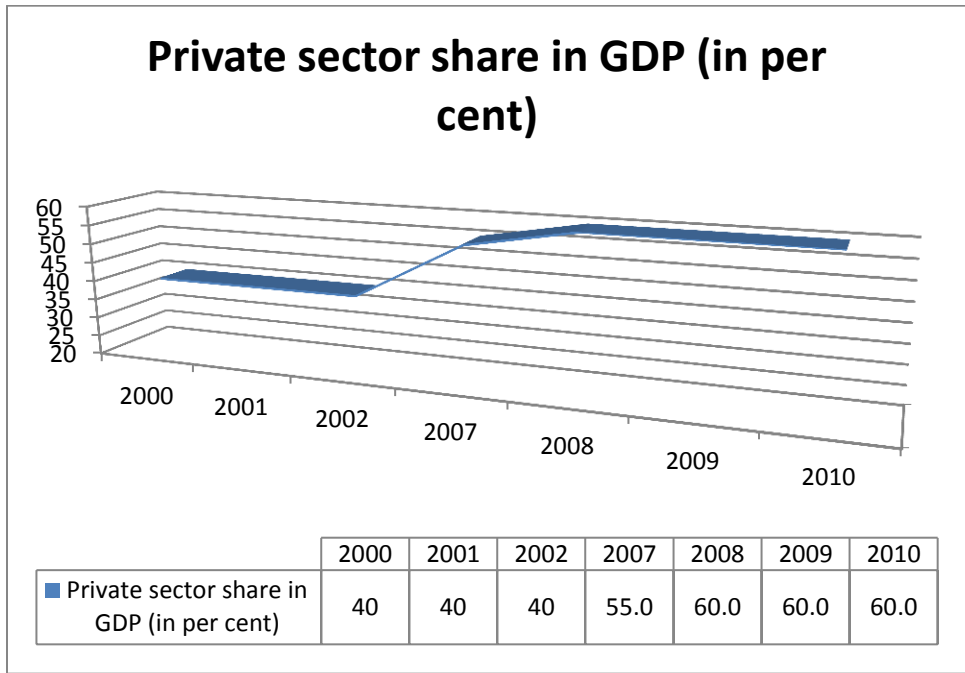


Sources: National authorities and IMF country reports.

When transition started in 2000 the private sector share in GDP was only 40 per cent. The situation was improving through the years and in 2010 private sector share was 60 per cent. This trend is following the improvements for the large and small scale privatization and it could be seen that there is room for more changes to come. The underlying concept of private sector value added includes income generated by the activity of private registered companies, as well as by

private entities engaged in informal activity in those cases where reliable information on informal activity is available (EBRD, 2013).

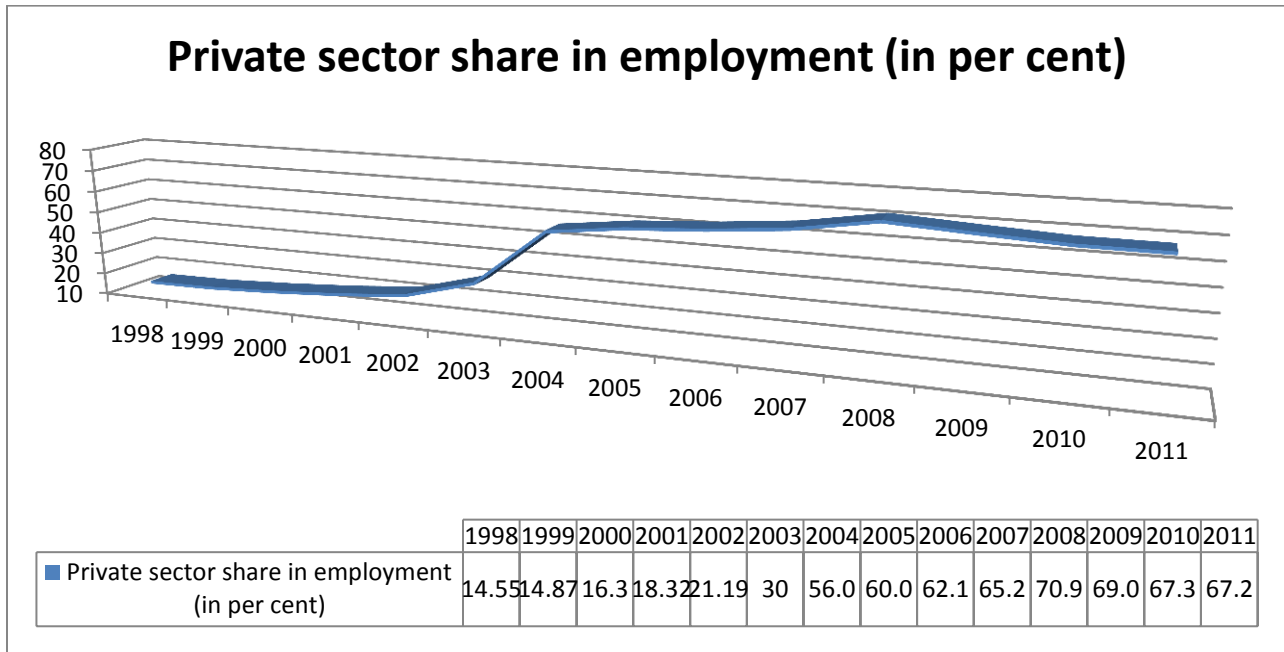
Chart 8 Private sector share in GDP (in per cent)



Source: EBRD staff estimates.

The private sector share in employment is helping us to create clearer picture on the ownership changes in the 2000s. Significant changes are made in this field and number of employees in private sector increased from 14.5 per cent in 1998 to 67.2 per cent in 2011.

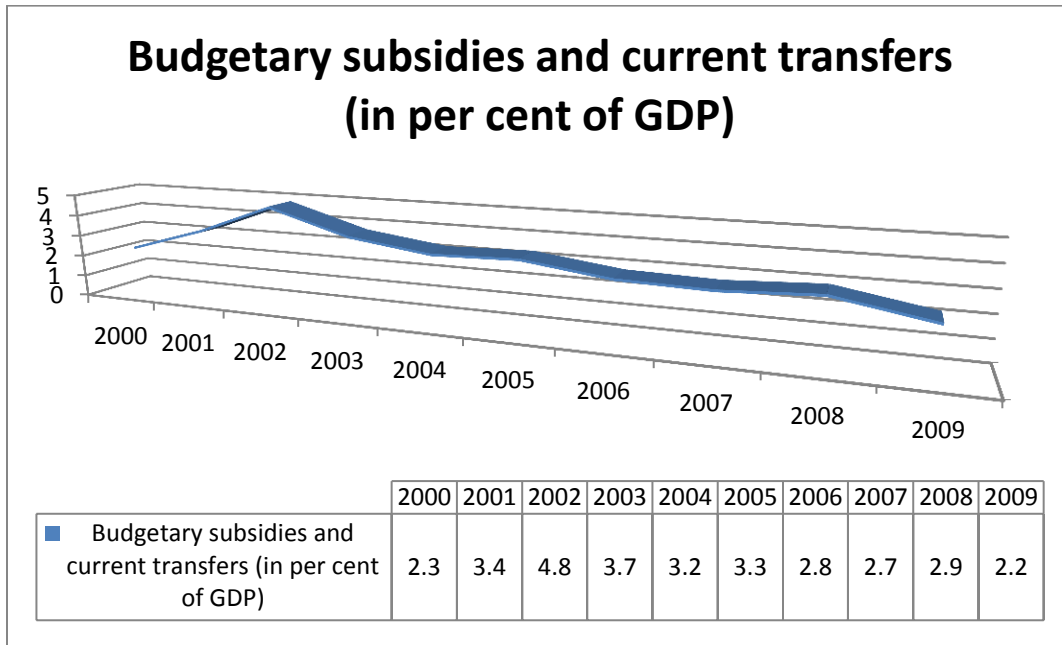
Chart 9 Private sector share in employment



Source: EBRD staff estimates and Statistical Office of the Republic of Serbia

Budgetary transfers to enterprises and households, excluding social transfers had upward trend from 2000 until the 2002 (from 2.3 percent to 4.8 per cent) and downward trend from 2003 until 2009 (the value decreased to 2.2 per cent in 2009). Sometimes is hard to define if governments should increase the amount of subsidies. It is necessary to create the system that would control for validity of subsidies because in some cases they could distort competition and create protectionism. In other cases it is good to subsidize some industries in reconstruction or to create programs that would foster development.

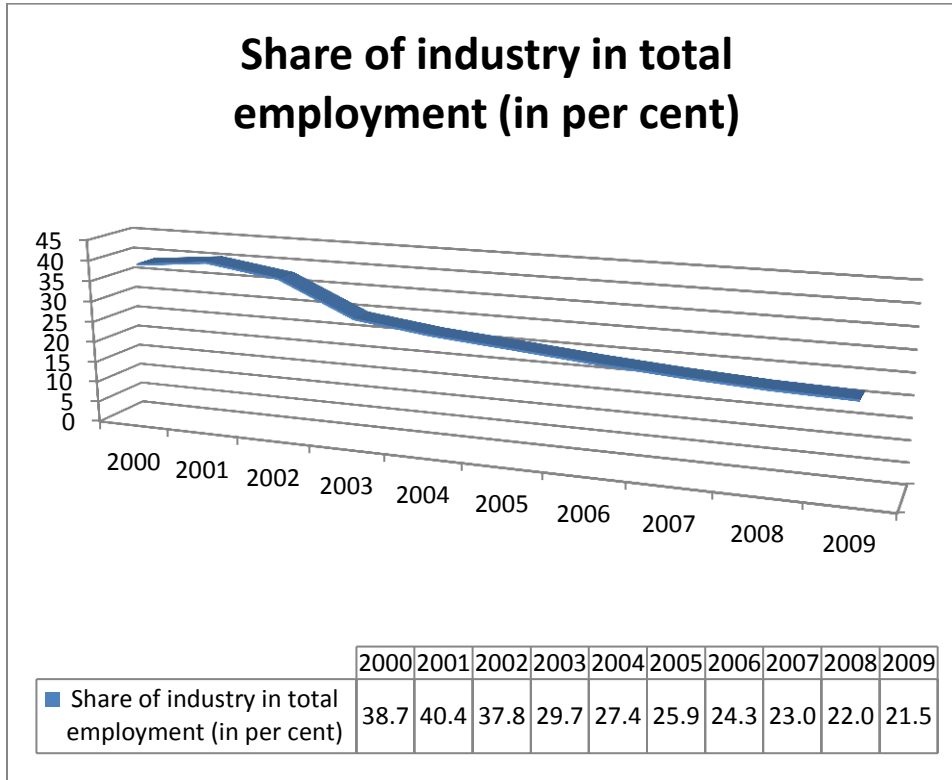
Chart 10 Budgetary subsidies and current transfers



Sources: National authorities and IMF country reports.

Share of industry in total employment seems to be changed but in negative way. When the transition started this share was around 40 per cent but after 2002 it recorded a fall from 37.8 per cent to 29.7 per cent in only one year. Later this percentage kept gradually falling and in 2009 it was 21.5 per cent only. The reason for this could be privatization and restructuring of the state-owned companies. This trend could be negative for the economy in the long term as this change could indicate that production is also diminishing and it would not be good for the economy to rely only to services and agriculture.

Chart 11 Share of industry in total employment



Sources: ILO, Labour Statistics Yearbook, UN, National Account Statistics, national statistical publications and IMF country reports.

The change in labor productivity in industry had a few increases and decreases during the years. It records the positive change through the 2000s until the 2009 when the change was negative (-3.2 per cent).

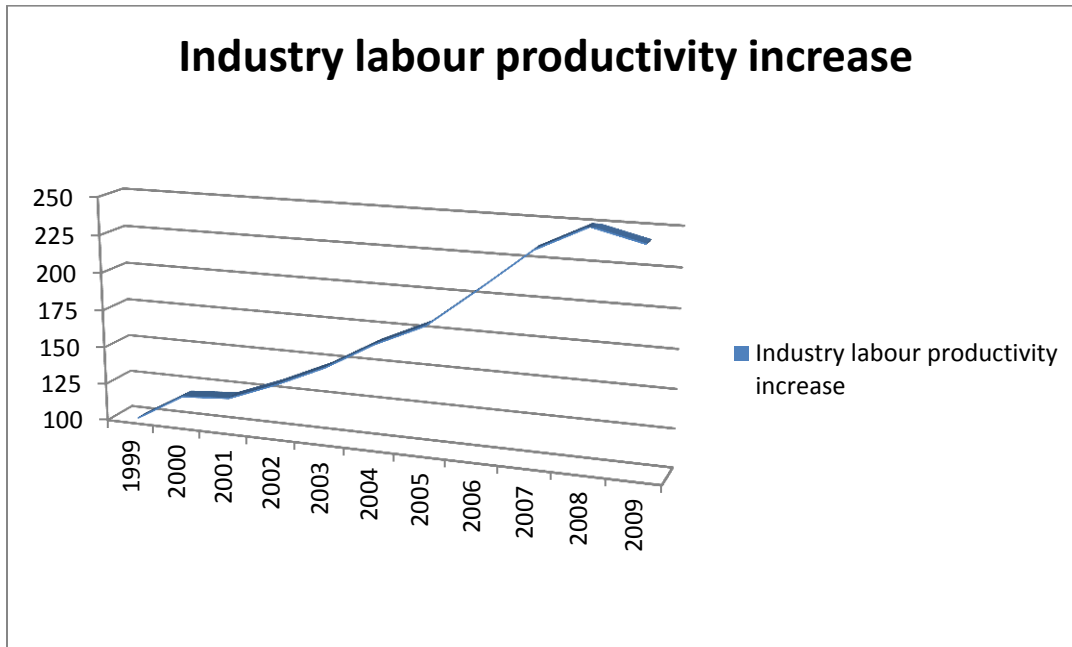
Chart 12 Change in labor productivity in industry



Sources: National statistical publications and IMF country reports.

In order to understand the change in labor productivity in the better way, we can look at the chart “Labor productivity increase” that is presenting the change in absolute terms. Value of 100 per cent is assigned to the year 1999 and that is the base for the calculation. As it could be seen, labor productivity was constantly increasing until the year 2009 when it slightly fell. In the year 2008 the labor productivity was around 2.5 times higher than in the starting point 1999. This could also be explained as the effect of privatization and reprogram of the state-owned firms. During the 1990s many firms went bankruptcy but only unofficially. That means that many firms were insolvent and stopped production but kept employees as the procedure of liquidation have not started. During the process of privatization, capital was injected in many of those companies and they were restructured, keeping only labor force necessary for the existing volumes of production. We can suppose that in 2009 volumes of production and sale fell due to the global recession but the number of employees remained the same or similar and that led to the fall in productivity.

Chart 13 Industry labor productivity increase

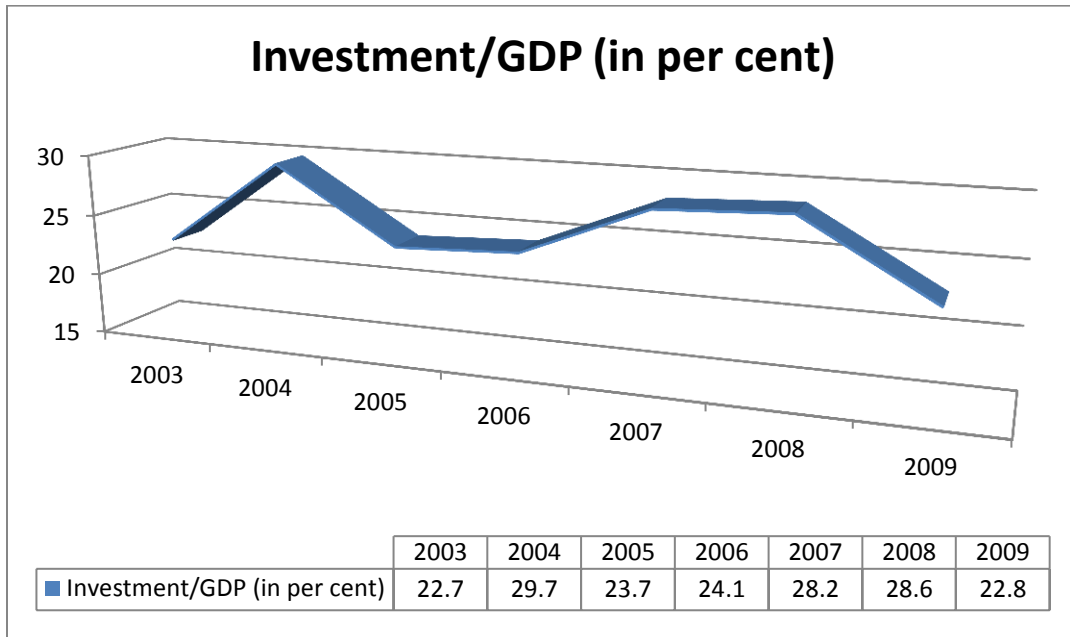


Sources: National statistical publications and IMF country reports.

Investments are very important for the development of the transitioning economy. Gross domestic investment consists of additional outlays to the economy's fixed assets, plus net changes in inventory levels. Fixed assets include: land improvements (fences, ditches, drains, etc.); plant, machinery and equipment purchases; and the construction of roads, railways, schools, offices, hospitals, private residential dwellings, commercial and industrial buildings, etc. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales and "work in progress". Net acquisitions of valuables are also considered as a capital formation (EBRD, 2013).

As we can see, value of the investment as a share of GDP was changing through the measuring period and it was always between 20 and 30 per cent. After a fall in 2005 investment was gradually increasing until the 2009 when it decreases almost 6 per cent comparing with 2008.

Chart 14 Investment/GDP



Source: EBRD macroeconomic indicators tables

3.4.2.2 Markets and trade

Markets and trade indicators include the IBRD indexes of price liberalization, Forex and trade liberalization and competition policy. As these indicators are already explained I will focus to analyzing for the rest of the indicators of market and trade sectors.

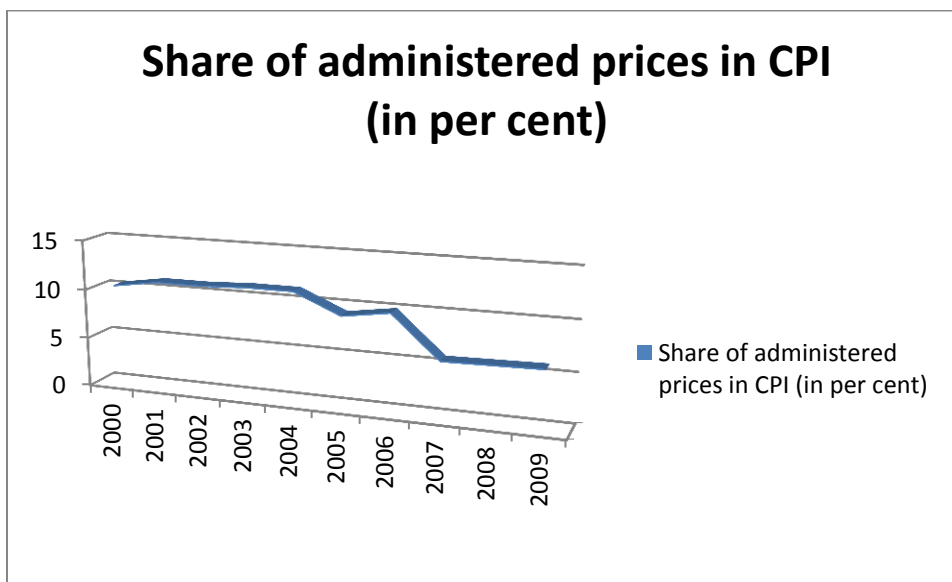
The Chart 11 is representing the share of administered prices in CPI. A consumer price index (CPI) measures changes in the price level of a market basket of consumer goods and services purchased by households and administered prices include (EBRD, 2013):

- directly regulated prices (price set up directly by the state)
- partly regulated prices (state has co-determination right in setting the price)
- quasi-regulated prices (in the case of goods which are subject to specific customer taxes)

- indirectly regulated prices (goods for which the state guarantees a purchase quote).

In the chart below we can see that share of administered prices was around 10 per cent until 2005 when it starts decreasing to the level of around 5 per cent after the 2006. We can assume that part of the consumer goods in the basket was under the protectionist policy of the state and that the percentage share of these goods decreased due to the price liberalization.

Chart 15 Share of administered prices in CPI



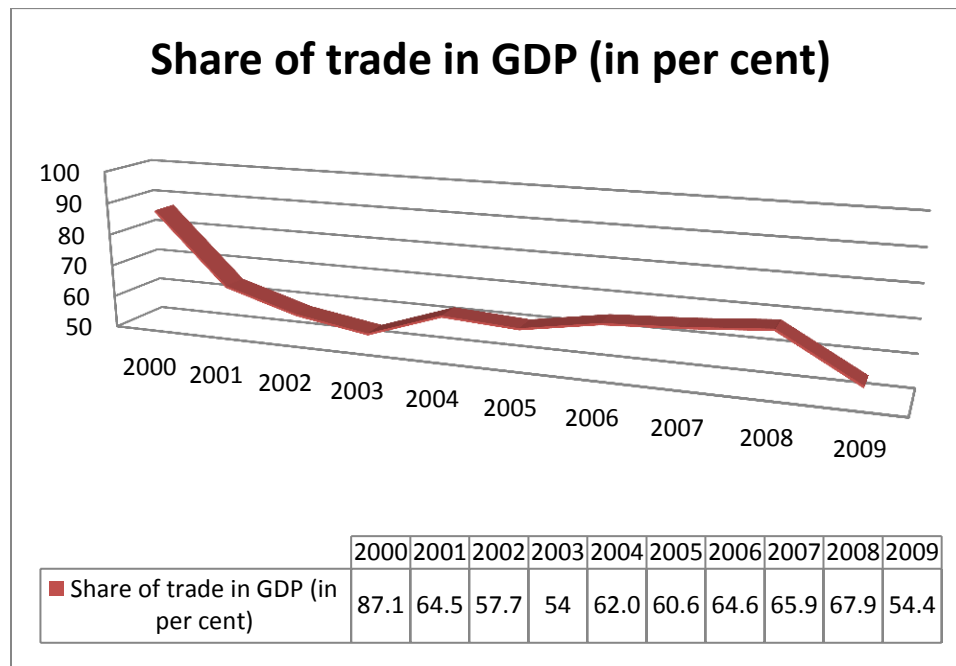
Source: EBRD macroeconomic indicators tables

Trade represents a significant part of GDP in many countries. Its economic, social, and political importance have increased in recent centuries, mainly because of Industrialization, advanced transportation, globalization, multinational corporations, and outsourcing (Dăian, 2012). As it is important for economy in transition to increase the levels of all of these countries, we could think about the positive connection between the trade and growth. There are various papers in literature that discuss the relationship between trade and GDP and the effects of trade openness on GDP. Irwin & Tervio (2000, p.7) are stressing that “the positive correlation between trade and income could mean that countries with higher incomes engage in more trade rather

than countries with more trade having more income”. This is important to think about when we analyze the data for the trade volumes.

The chart below is representing the ratio of exports plus imports to GDP. As we can see this ratio drastically fell in the 2001 and kept with a fall until the year 2004 when it starts with a recorded growth. This could be explained by saying that at first the volumes of trade could not follow for the increases in GDP per capita but later with growth situation changed.

Chart 16 Share of trade in GDP



Source: EBRD macroeconomic indicators tables

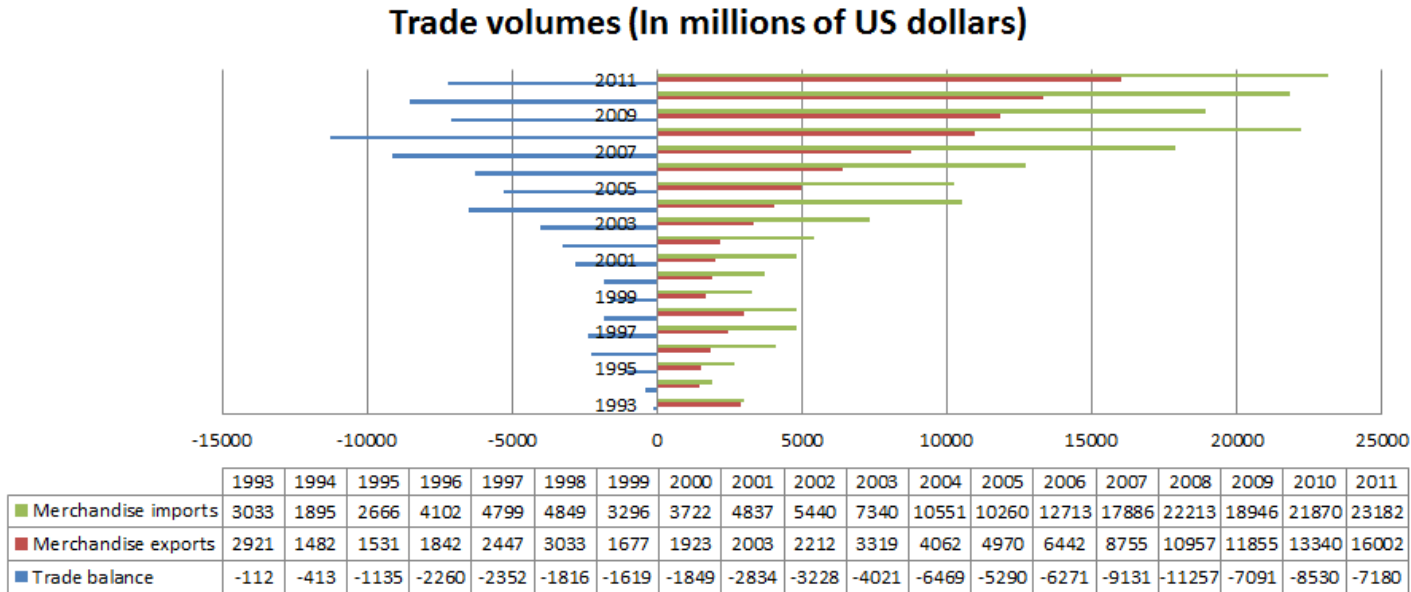
As Dăian (2012) explains, in terms of trade openness, the reason increasing imports might be beneficial to a country is that foreign inputs might be better than domestic inputs. The reason increasing exports might be beneficial to a country is the creation of economies of scale that drive down production costs.

As it could be seen in the chart below, in the case of Serbia trade balance is always negative that means that imports have bigger volumes than the exports. From the start of the transition period in 2000 import volumes recorded constant increase (accept in the year 2005 when they slightly fell) until the year 2009 when they record a fall from 22 213 millions of dollars to the 18 946 millions of dollars due to the global recession. Later it continued with

growth to the present days. The export was also increasing from the 2000 until the end of the measuring period but jet the trade balance stayed negative.

Before the transition started trade volumes were significantly lower.

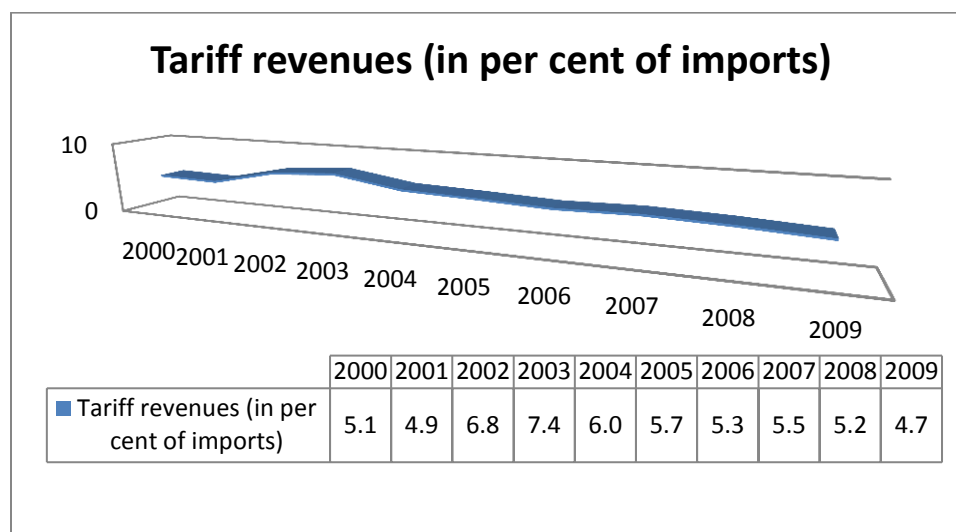
Chart 17 Trade volumes



Source: Statistical Office of the Republic of Serbia, Statistical Yearbook of Serbia (2000-2012)

Tariff revenues include all revenues from international trade. Imports are those of merchandise goods. As already explained the government of Serbia gradually reduced the trade tariffs that influenced the tariff revenues. We can see that not much was changed when we compare the year 2000 with 2009 but if we compare the year 2003 with the year 2009 the change is more visible.

Chart 18 Tariff revenues



Source: EBRD macroeconomic indicators tables

3.4.2.3 Financial sector

In Serbia, a two-tier banking sector has been in place since the late 1980s but events like hyperinflation, sanctions and bad economic situation have left the sector in deep crisis. At the end of June 2001 there were 81 banks in Serbia and many of them were insolvent. Most assets were concentrated in six large, state-owned banks, five of which were found to be insolvent in central bank audits (EBRD, 2001). Confidence in the sector was low, what reflected in a low savings rate and a minimal degree of financial intermediation, and consequently lending to enterprises was almost non-existent.

In 2001, a number of insolvent banks were closed or placed under supervision, reducing the number of “healthy” banks to 33 by the end of that year (EBRD, 2002). In January 2002, the Central Bank closed the four largest state-owned banks, all of which were found to be insolvent in external audits. Confidence was slowly returning to the banking sectors and credit growth during 2002 was substantial. Still, lending to the private enterprise sector remained limited in that period.

Between end-2003 and end-2004, credit to the non-government enterprise sector rose by more than 50 per cent. Interest rates on loans have fallen due to increased competition and bank

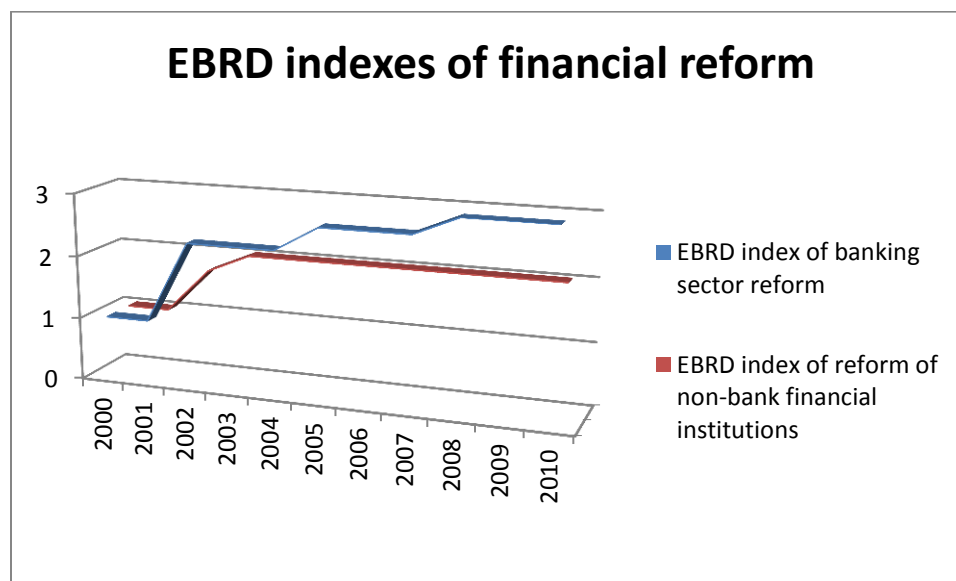
privatization has advanced in 2005 with the sale of several banks to foreign investors (EBRD, 2005).

Lending to households rose by more than 50 per cent in 2006 and lending to enterprises was relatively subdued, but still grew at about 15 per cent in 2006.

After the upward trend for the banking development, banking sector was affected by the global financial crisis, but the authorities took firm steps to restore stability and confidence. A number of banks suffered high deposit withdrawals in the final quarter of 2008, estimated at €1 billion (about 20 per cent of total deposits) (EBRD, 2009). In response, the government raised the level of deposit insurance substantially in October 2008 from around €3,000 to over €50,000 and other measures to ease liquidity in the market. As a result, the deposit base gradually recovered and the banking system remained sound, well-capitalized and liquid.

In 2006, significant changes were made in the non-bank financial institutions especially in insurance sector when National Bank of Serbia (NBS) has withdrawn the licenses of companies not satisfying required standards and a number of other insurance companies were put up for sale. Later this sector continued to develop, albeit rather slowly and capital markets remained generally underdeveloped in Serbia. This can be seen in the graph below of the EBRD indexes of financial reform. Even until the 2010 the reform was not rated more than 2.

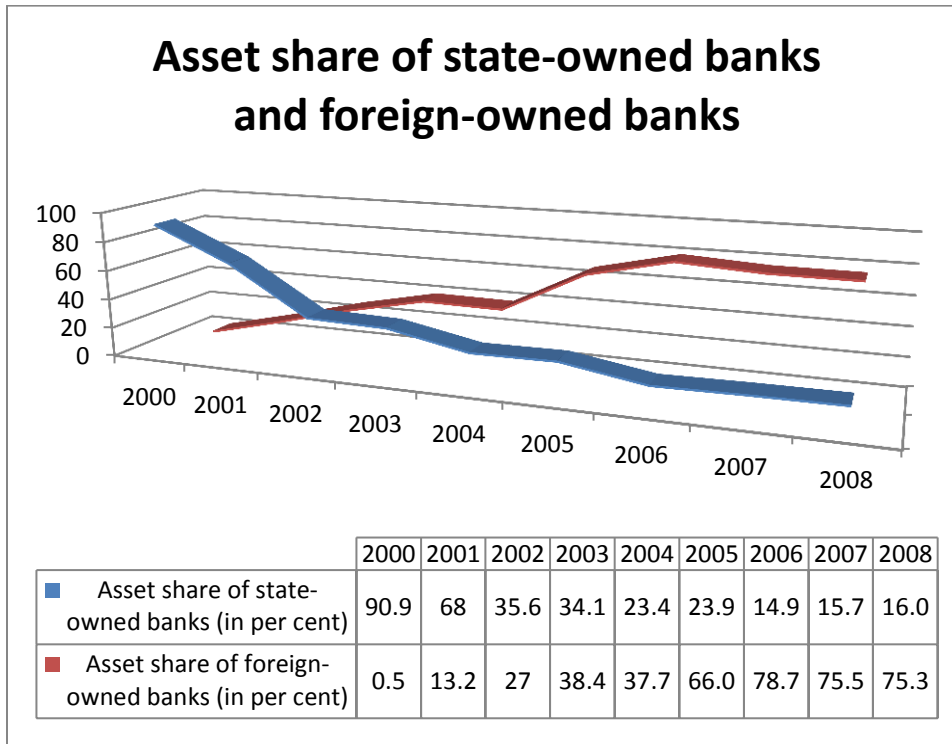
Chart 19 EBRD indexes of financial reform



Sources: EBRD survey of central banks

As previously explained, the structure of ownership over banks was gradually changing from the 2001. We can see in the chart below that as the Asset share of state-owned banks was falling the Asset share of foreign-owned banks was growing. The situation evidently changed in 2000s and Asset share of state-owned banks fell from 90.9 per cent in 2000 to the 16 per cent in 2008.

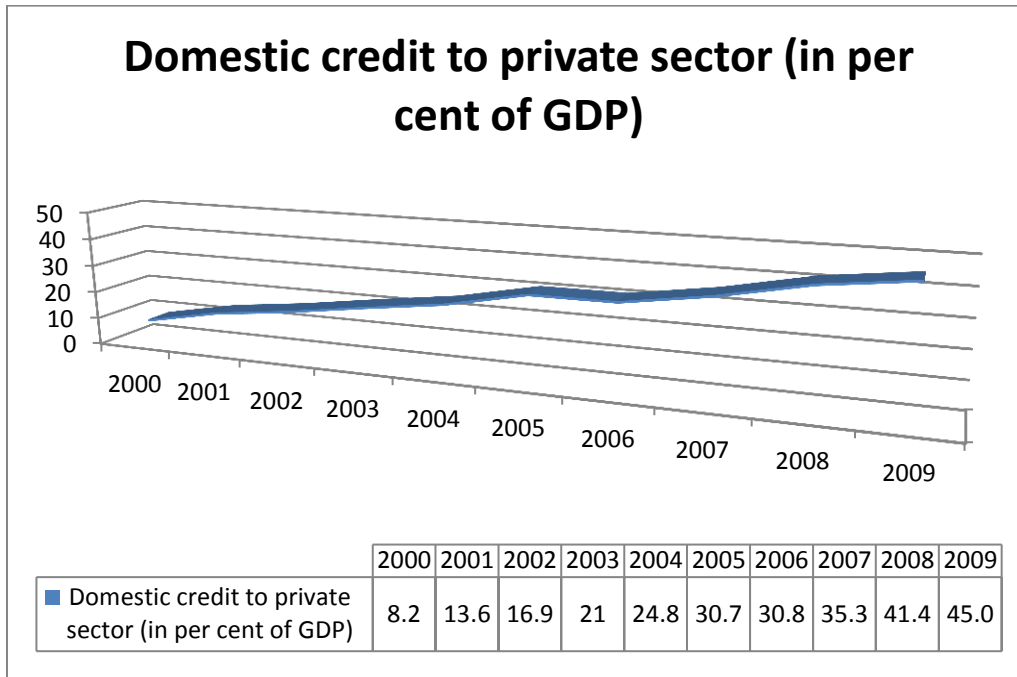
Chart 20 Asset share of state-owned banks and foreign-owned banks



Sources: EBRD survey of central banks

With the Nationals Bank of Serbia program of recapitalization and restructuring of banking sector and entrance of the foreign owned banks in the Serbian market, situation in the financial sector improved. The chart below can prove us that those improvements were major as the domestic credit to private sector increased from 8.2 per cent of GDP in 2000 to the 45 per cent of GDP in 2009. This can also show us that having healthy financial development will in many help the economic development and growth.

Chart 21 Domestic credit to private sector



Sources: EBRD survey of central banks

3.4.2.4 Infrastructure (EBRD 2000-2012)

In the beginning of the transition period in 2000 the infrastructure was on the low level of development. Energy sector was the poorest one mostly due to Kosovo conflict and NATO bombing when power facilities were damaged and needed solid reconstruction. The blackouts were frequent and widespread, especially during the winter months, and the country has had to import electricity. Railways and roads were also damaged due to the bad maintenance or no maintenance at all. Telecommunications were mostly in the state control. Fixed-line telecommunications company, Telekom Srbija was in major ownership of the state with 51 per cent share and private ownership of two foreign companies with 49 per cent share and exclusive monopoly rights. In the mobile sector there were only two companies competing.

Electricity tariffs were increased in various occasions in the early 2000s in order to reach the cost-recovery levels and the state-owned power companies went undergoing restructuring. Except for that no major changes were visible and the state decided to keep the ownership over

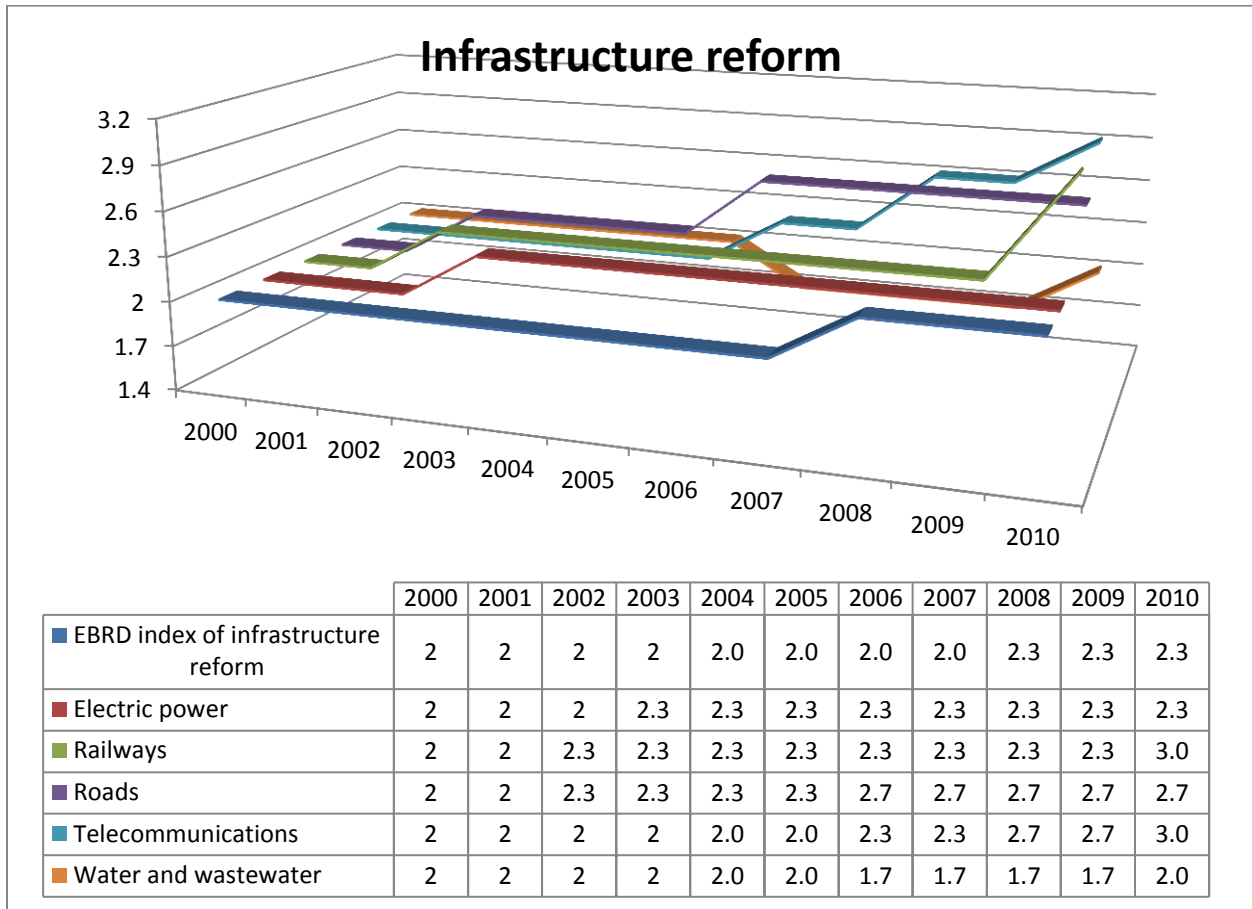
the power companies. While the deficient electric energy was still imported in 2012, the government has only plans for the construction of eight small hydropower plants and rehabilitation of fifteen existing plants.

Improvement of conditions of railways and roads started quite late as the parliament was failing to pass key laws for the sector. Only from 2006 the real changes started to occur in transport sector with the privatization of 80 per cent of the maintenance companies. The railway infrastructure and operations have been separated, contributing to significant staff reductions and the divestiture of a number of non-core activities. In July 2008, The National Council for Infrastructure was formed with the mandate to coordinate and manage infrastructure projects and strategies, particularly in energy, telecommunications, roads and railways. Several large projects for investments and restructuring of roads and railroads were signed in order to bring the country's infrastructure in line with European standards.

Telecommunications also recorded the slow improvements. In the 2006 foreign companies loosed the monopoly rights for the fixed-line telecommunications that were guaranteed by contract from the 1997. From that moment fixed-line communications liberalized but a dominant market share still stays in state-owned company. There were few tenders for sale or strategic partnership but none of them was successful. In mobile telecommunications there was a new company entering the market in late 2006 (Austrian telecom) but the process was rather slow due to the licenses that government should have provide. Today, Serbia still have only three mobile operators.

Operations in the water and wastewater sector are becoming more efficient very late and from 2010. Continued operational improvements from investments and corporate strengthening, together with improved bill collection and minor tariff increases, begin to move the sector towards more cost-reflective pricing and a better managed water sector overall. There have also been initial attempts of signing better contractual arrangements in the form of public service contracts between municipalities and water utilities in at least one city (EBRD, 2011).

Chart 22 Infrastructure reform



Sources: (EBRD, 2001- 2010)

Overall, the progress in infrastructure reform is slow and inefficient. Even though improvements are made, the sector is still a significant burden on the budget and lot of work should be done in order for infrastructure standards to be in line with European ones.

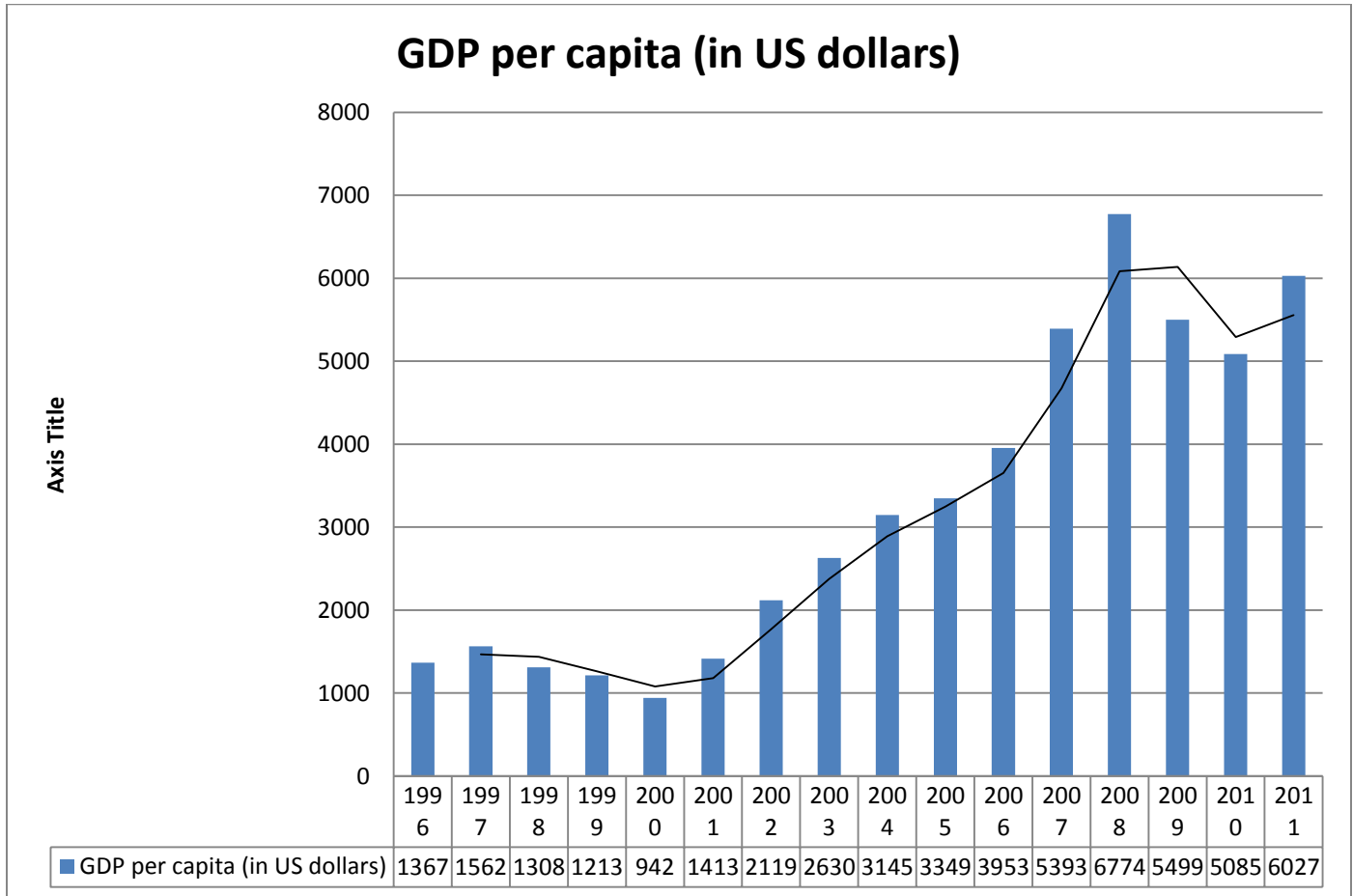
3.5 Analysis of the growth

From the existing literature analyzing growth, one of the main growth determinants seem to be the initial level of GDP/capita (Dăian, 2012).

In the case of Serbia it could be visible that the growth during transitional years was quite rapid. From the of 942 USD in 2000 GDP per capita increased to the 6774 USD in 2008 that is

the increase of more than 600 per cent. After the 2008 the GDP per capita had a harsh fall to the 5499 USD in 2009 that could indicate the vulnerability of the transition economies and dependence of development to the external factors and foreign investors. From the 2011 the growth is measuring the recovery as the GDP per capita newly increased to the value of 6027 USD.

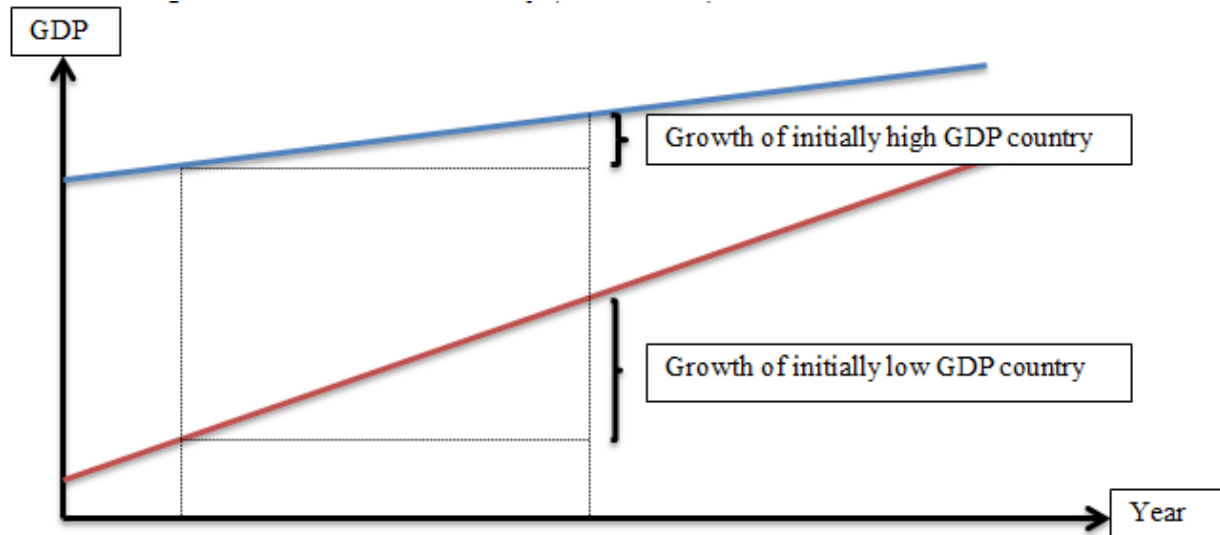
Chart 23 GDP per capita



Source: Statistical Office of the Republic of Serbia, Statistical Yearbook of Serbia (2000-2012)

This rapid growth could be explained by the economic mechanisms. It is expected higher initial GDP level to have a negative effect on real GDP/capita growth – a poor country, *ceteris paribus*, tends to grow faster than a rich country (Dăian, 2012).

Figure 2 GDP per capita growths for poor and rich countries adopted from (Dăian, 2012)



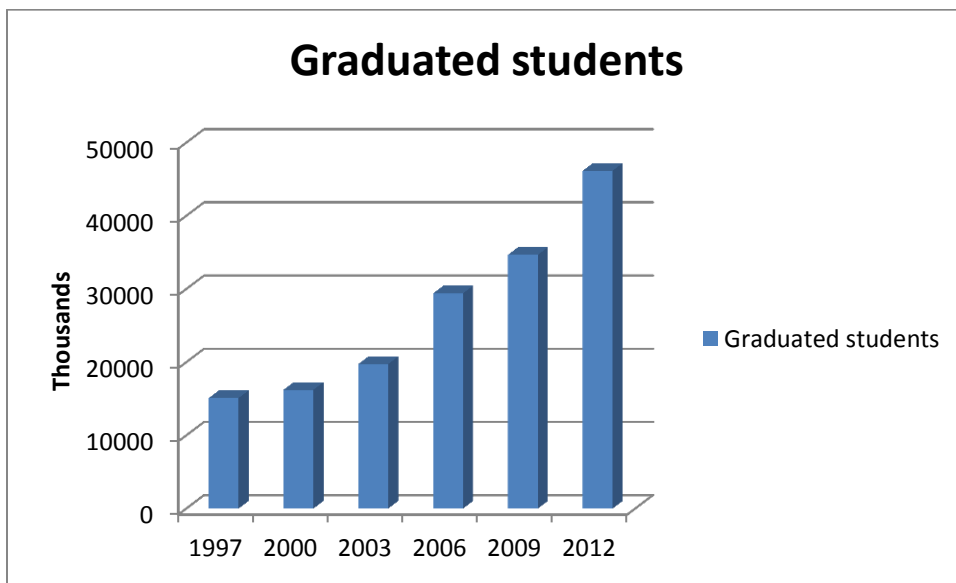
Other factors that could be the good determinants of the growth and development, for which the data is available, are: trade openness, foreign direct investments, human capital and taxation rates. As the trade openness and taxation rates are already analyzed in the previous part of this work, I will focus here on the connection between the FDIs, human development and growth. Higher initial level of human capital is expected to positively affect real GDP/capita growth what is consistent with Solow growth model and more importantly endogenous growth models. An increase in investments as a share of GDP is expected to positively affect real GDP/capita growth.

Foreign Direct Investment should stimulate productivity growth. The arrival of multinationals to a new country is usually associated with positive technological spillovers. They also trigger productivity and economic growth.

Borensztein, De Gregorio, & Lee (1998) tested the effect of foreign direct investment (FDI) on economic growth in a cross-country regression framework, utilizing data on FDI flows from industrial countries to 69 developing countries over the last two decades. Their results suggest that FDI is an important vehicle for the transfer of technology, contributing relatively more to growth than domestic investment. However, the higher productivity of FDI holds only when the host country has a minimum threshold stock of human capital. Thus, FDI contributes to

economic growth only when a sufficient absorptive capability of the advanced technologies is available in the host economy. It could be seen in the chart below that number of the graduated students is significantly increasing in the period of transition. That could indicate that the quality of human capital is also increasing. Still, in the case of Serbia, upward trend of the highly educated labor cannot be used as a proxy for the growth of the FDIs, as they do not correlate (see Chart 25). However, the increased number of the graduated students can be seen as beneficial for countries further development.

Chart 24 Graduated students by years

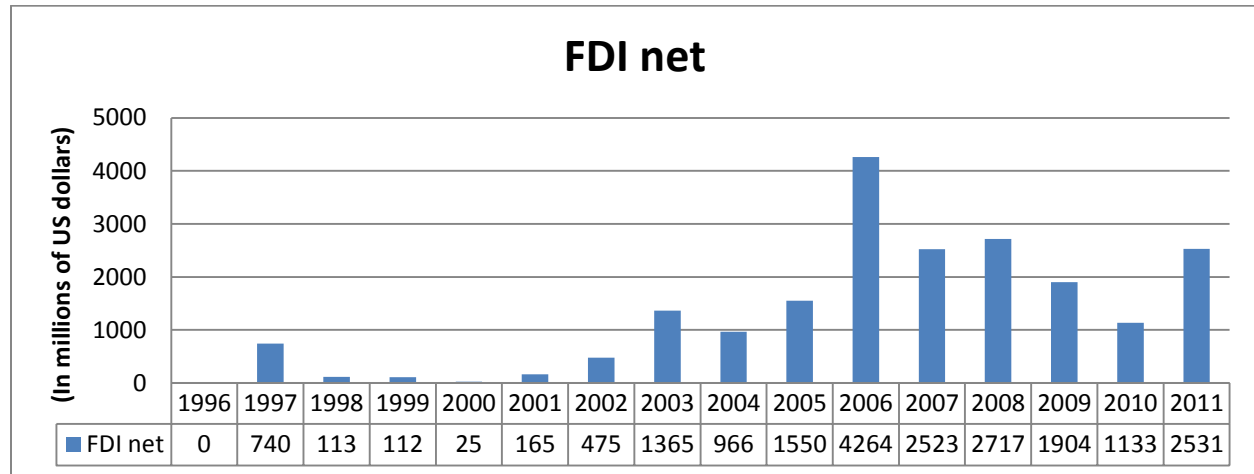


Source: Statistical Office of the Republic of Serbia, Statistical Yearbook of Serbia (2000-2012)

As it could be seen in the chart below, in the beginning of the transition period the FDI investment was on the very low level. With the privatization process and new legislation that guaranteed the higher security of the investors, the level of FDI increased and it was highest in the 2006 when FDIs had value of the 4264 millions of US dollars. It would be interesting to examine why this sector records so many oscillations but it is clear that the major increases occurred in the years of successful privatizations. As already mentioned in the 2005 the Law on privatization passed and that could be the reason of the drastic increase of FDIs from 966 million

of USD in 2004 to 1550 in 2005 and 4264 in 2006. In the later period when privatization slowed down the FDI amounts became lower.

Chart 25 Foreign Direct Investments



Source: EBRD (2001-2012)

4 Discussion and conclusion

4.1 Discussion

After analyzing for the changes during the transition in Serbia, we can see that there is significant progress made. Still, the development has slowed in the last period and that could initiate the discussion whether the cause is global crisis or there are some other not so noticeable reasons. If we think about the dependence of the country of the Foreign Direct Investments, the new technologies that come with it and knowledge spillovers, we can say that the slowing down is partially due to lack of investment in the crisis period. As the innovation systems are not developed in the country, the technological improvements could depend mostly on the entry of the multinational companies.

But it would be quite unadvisedly to accept the global crisis for the only reason for the slowed economy and if look between the lines we could have assumed that the causes were not only different but also started much earlier. Previously in this work there were no negative

comments on the governmental and political failures but the problems caused by them are quite serious. There is no official record on the efficiency of the parliament when it comes to passing of the extremely necessary legislation, but many times it could be noticed that sessions appointed for the amendments and addends of the laws were wasted on argues between the political parties. Also, even after the adoption of the laws, their implementation was hard and inefficient. Many of the laws were changed various times that slowed the processes in the economy. It became clear that one size does not fit all and that institutional frameworks should constantly follow for the needs of market.

Other thing to think about is how did the unsuccessful privatization of some big national companies slowed the growth and in what measure was the privatization important for development. We could see that privatization revenues were increasing after the passing of the law and at some point they started to decrease. They were significant part of the GDP and money earned from big sales was very welcome for covering the deficits in the budget. It seems that when privatization revenues decreased the problems with the deficit increased.

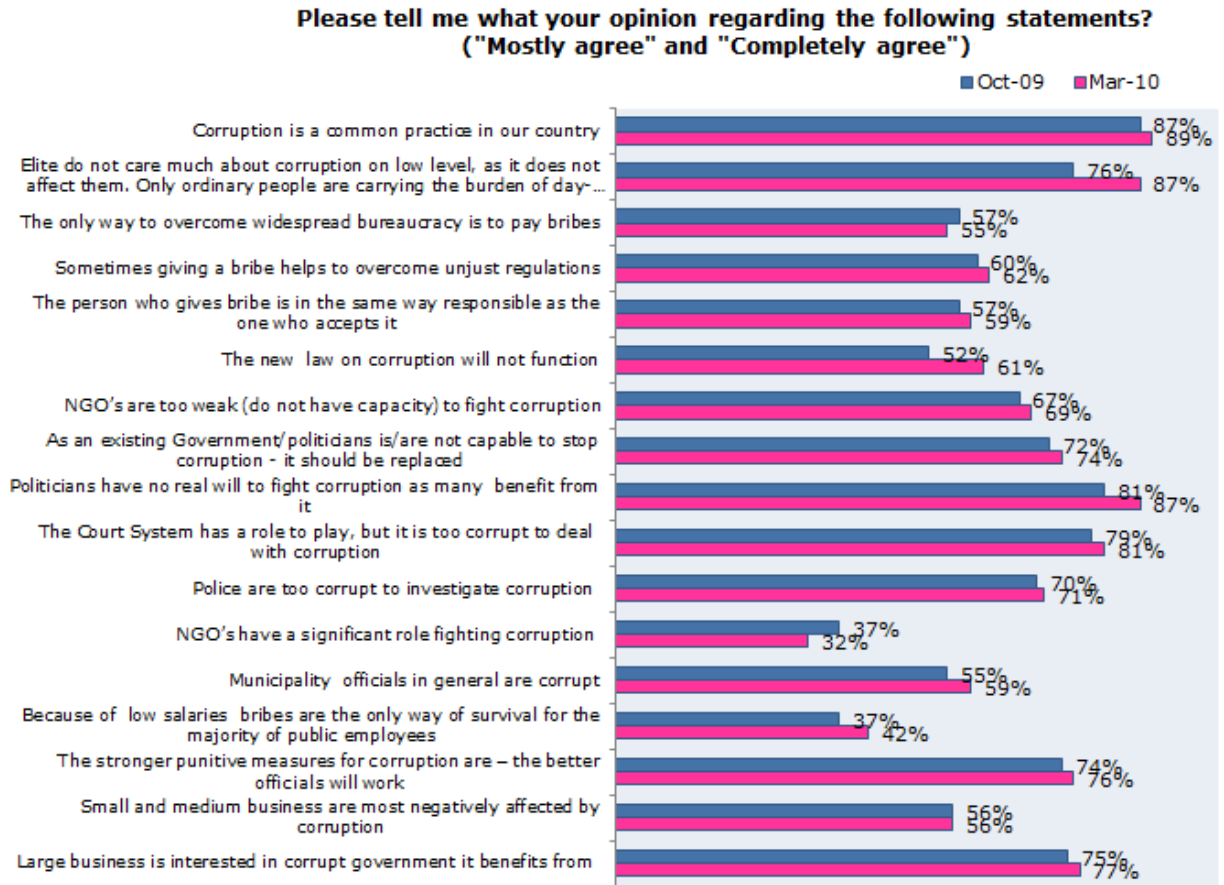
Analysis in this work showed one more concerning detail which is share of industry in total employment that is decreasing over years. This indicator could be differently interpreted, but most likely in negative way. It could be said that possible reason of the decrease is the modernization and technical innovation that could exchange for the labor force. It could also be said that the total changes of the economy sectors are present and that labor was moved to the increasing sector of services. Still, this change can also indicate that the Serbian industry is shutting down and that the production is challenged and threatened by the foreign competition.

There is also to be thought about the level of corruption in the country. According to a 2009 European Commission Progress Report for Serbia, Serbia made progress on improving the institutional framework for the fight against corruption. Still, corruption remains spread in many sectors and continues to be a serious problem. Obstacles to root out systemic corruption are major and not easy to overcome. Furthermore, in this report is stressed that there is no clear plan for the measures needed to implement the international conventions that have been ratified, and that the overall processing of corruption cases remains inefficient, with only a few final convictions. As it is very difficult to measure for the corruption the data on it is unavailable but there are some surveys that are showing for the seriousness of the mater. One of them is the

Serbia Corruption Benchmarking survey which is confirming for the widely spread corruption. The Chart 26 shows the opinion of the questioned sample about prevalence of corruption.

Chart 26 Opinion of the sample (of the age 18+) about prevalence of the corruption

TNS Medium Gallup – Serbia Corruption Benchmarking Survey, March 2010



Source: (TNS Medium Gallup, 2010)

For the fighting with the corruption, strong institutional framework and legislation and enforcement are needed. And here, one more time, it can be seen that institutions matter.

4.2 Conclusion

Transition is a delicate process of changing the framework of an economy. The changes from a planned economy to an open market economy are very demanding, and the economic factors are not the only ones that transform but, also the social ones.. When opting for a

transition, countries hope for economic development and growth, and in order to achieve that goal, they go through painful evolution. Literature on that matter agrees that the important part of the transitional process is the institutional change. There is a need for development that includes the improvement of both formal and informal institutions, as they are the core of all of the social interactions. Those institutions need to be constantly changed in order to meet the constantly changing needs of the market. It could be seen in the practice that formal institutions are more flexible than the informal ones. The inherited norms and rules of interaction need generations to change and they are rooted deeply in any nation.

Every country has a different background and therefore it is hard to compare their paths of transition. Some of them are successfully completing that process, achieving the growth and development while the others are lagging behind. Serbia is one of the countries that entered the process of transition very late, compared to the others, and a long way still stands ahead of it. Even though, this work is showing that there are significant improvements recorded.

As the theory showed, it is hard to measure the institutional change because of its complicity. Nevertheless, both groups of elements that indicate institutional efficacy show that a significant progress is made in the case of Serbia. The interest rates are decreasing, what shows that the country risk is smaller, and that the amount of trust in society is increasing. Volatility of the prices is reduced and convergence is visible, what means that the market is more capable to absorb any sorts of shocks.

Transitional indicators show that the development is being achieved, but also that there is additional space for future improvements. Privatization resolved the problems of many companies and filled the budget throughout the process. The small firms' privatization has mostly ended, while some of the large firms are still waiting for the private capital. Stabilization can be seen, as the inflation has significantly decreased and the price oscillations are very small. The liberalization led to the increase of the trade volumes, reduction of the tariffs and controls, as well as to the higher competition.

All of these changes have helped the economic growth that was more that noticeable. GDP per capita increased from the 942 USD in the year 2000 to 6027 USD in 2011. As the

countries in transition are vulnerable, the growth was slowed down, when the global recession had started. Nevertheless, after the fall in 2009, the growth has been recovering.

It seems that, in order to grow, Serbia has to pay more attention to the development. There are some clear obstacles that are inhibiting growth, such as: slowness of the juridical system, weak enforcement and implementation of the legislation, and the corruption.

From this work it can be concluded that the transitional and institutional changes are helping and fostering the growth in Serbia, but there is still more space for the qualitative changes and progress.

5 Bibliography

- Abramovitz, M. (1986). Catching up, forging ahead, and Falling Behind. *The Journal of Economic History*, 385-406.
- Acemoglu, D., Robinson, J., & Johnson, S. (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: Crown Publishers.
- Arrow, K. J. (1971). *Essays in the Theory of Risk-Bearing*. Chicago: Markham.
- Bardhan, P. (2005). Institutions matter, but which ones? *Economics of Transition*, 499-532.
- Besley, T., Dewatripont, M., & Guriev, S. (2010). *Transition and Transition Impact*. London: EBRD.
- Borensztein, E., De Gregorio, J., & Lee, J.-W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 115-135.
- Chakravorty, S. (2000). How Does Structural Reform Affect Regional Development? Resolving Contradictory Theory with Evidence from India. *Economic Geography*, 367-394.
- Dăian, M. (2012). *The Veil of Communism: An Analysis of Lifespan, GDP per Capita, Human Capital, and Agricultural Productivity in Eastern Europe*. Stanford: Stanford University.
- EBRD. (2001). *Transition Report*. London: European Bank for Reconstruction and Development.
- EBRD. (2002). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2003). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2004). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2005). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2006). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2007). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2008). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2009). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2010). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2011). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2012). *Transition report*. London: European Bank for Reconstruction and Development.
- EBRD. (2013). <http://www.ebrd.com/pages/research/economics/data/macro.shtml>. Retrieved from www.ebrd.com.

- EBRD. (2013). http://www.ebrd.com/pages/research/economics/data/macro/sci_methodology.shtml. Retrieved from www.ebrd.com.
- Ericson, R. E. (1991). The Classical Soviet-Type Economy: Nature of the System and Implications for Reform. *Journal of Economic perspectives*, 11-27.
- European Commission. (2009). *Serbia Progress Report*. Brussels: European Commission.
- Feige, E. L. (1994). A Fourth way? Privatization, property, and the emergence of new market economics. In G. S. Alexander, & G. Skąpska, *A Forth Way: Privatization, Property and the Emergence of new Market Economies* (pp. 76-97). New York: Routledge.
- Feige, E. L. (1994). The Transition to a Market Economy in Russia: Property Rights, Mass Privatization and Stabilization. In Skąpska, & A. G., *A Fourth Way: Privatization, Property, and the Emergence of the New Market Economies* (pp. 1-21). New York: Routledge.
- Greif, A. (2006). *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*. Cambridge: Cambridge University Press.
- Irwin, D. A., & Tervio, M. (2000). Does Trade Raise Income? Evidence from the Twentieth Century. *The National Bureau of Economic Research*, 1-18.
- Mitrović, B. (2011). *Belated Economic Transition and the Competitiveness of Serbian Economy*. Nis RS: Faculty of Economics.
- Murrell, P. (1990). *Big Bang Versus Evolution: Eastern European Reforms in the Light of Recent Economic History*. PlanEcon Report.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge : Cambridge University Press.
- North, D. C., Wallis, J., & Weingast, B. (2006). A Conceptual Framework for Interpreting Recorded Human History. *NBER*.
- Raiser, M., Di Tommaso, M., & Week, M. (2001). *The Measurements and Determinants of Institutional Change: Evidence from Transition Economies*. London: EBRD.
- Rodrik, D. (2008). Second-best institutions. *American Economic Review: Papers & Proceedings*, 100-104.
- Rostow, W. (1960). *The Stages of Economic Growth*. Cambridge: Cambridge University Press.
- Sachs, J. (2012). Government, Geography, and Growth- The True Drivers of Economic Development. *Foreign Affairs*.
- Statistical Office of the Republic of Serbia. (2000). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.

- Statistical Office of the Republic of Serbia. (2001). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2002). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2003). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2004). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2005). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2006). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2007). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2008). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2009). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2010). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2011). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Statistical Office of the Republic of Serbia. (2012). *Statistical Yearbook of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- TNS Medium Gallup. (2010). *Serbia Corruption Benchmarking Survey*. United Nations Development Program .
- Tridico, P. (2011). *Institutions, Human Development and Economic Growth in Transition Economies*. Palgrave Macmillan.
- United Nations Country Team. (2009). *Common Country Assessment for Serbia*. Belgrade: UNCT.
- Williamson, O. E. (2000). The New Institutional Economics: Taking Stock, Looking Ahead. *Journal of Economic Literature*, 595-613.
- Zanden, J. L. (2008). The road to the Industrial Revolution: hypotheses and conjectures about the medieval origins of the "European Miracle". *Journal of Global History*, 337-359.

Appendix

Appendix A

Overall transition indicators EBRD rating scale

Large-scale privatization

- 1 Little private ownership.
- 2 Comprehensive scheme almost ready for implementation; some sales completed.
- 3 More than 25 per cent of large-scale enterprise assets in private hands or in the process of being privatized (with the process having reached a stage at which the state has effectively ceded its ownership rights), but possibly with major unresolved issues regarding corporate governance.
- 4 More than 50 per cent of state-owned enterprise and farm assets in private ownership and significant progress with corporate governance of these enterprises.
- 4+ Standards and performance typical of advanced industrial economies: more than 75 per cent of enterprise assets in private ownership with effective corporate governance.

Small-scale privatization

- 1 Little progress.
- 2 Substantial share privatised.
- 3 Comprehensive programme almost ready for implementation.
- 4 Complete privatisation of small companies with tradable ownership rights.
- 4+ Standards and performance typical of advanced industrial economies: no state ownership of small enterprises; effective tradability of land.

Governance and enterprise restructuring

1 Soft budget constraints (lax credit and subsidy policies weakening financial discipline at the enterprise level); few other reforms to promote corporate governance.

2 Moderately tight credit and subsidy policy, but weak enforcement of bankruptcy legislation and little action taken to strengthen competition and corporate governance.

3 Significant and sustained actions to harden budget constraints and to promote corporate governance effectively (for example, privatisation combined with tight credit and subsidy policies and/or enforcement of bankruptcy legislation).

4 Substantial improvement in corporate governance and significant new investment at the enterprise level, including minority holdings by financial investors.

4+ Standards and performance typical of advanced industrial economies: effective corporate control exercised through domestic financial institutions and markets, fostering market-driven restructuring.

Price liberalization

1 Most prices formally controlled by the government.

2 Some lifting of price administration; state procurement at non-market prices for the majority of product categories.

3 Significant progress on price liberalization, but state procurement at non-market prices remains substantial.

4 Comprehensive price liberalization; state procurement at non-market prices largely phased out; only a small number of administered prices remain.

4+ Standards and performance typical of advanced industrial economies: complete price liberalization with no price control outside housing, transport and natural monopolies.

Trade and foreign exchange system

1 Widespread import and/or export controls or very limited legitimate access to foreign exchange.

2 Some liberalization of import and/or export controls; almost full current account convertibility in principle, but with a foreign exchange regime that is not fully transparent (possibly with multiple exchange rates).

3 Removal of almost all quantitative and administrative import and export restrictions; almost full current account convertibility.

4 Removal of all quantitative and administrative import and export restrictions (apart from agriculture) and all significant export tariffs; insignificant direct involvement in exports and imports by ministries and state-owned trading companies; no major non-uniformity of customs duties for non-agricultural goods and services; full and current account convertibility.

4+ Standards and performance norms of advanced industrial economies: removal of most tariff barriers; membership in WTO.

Competition policy

1 No competition legislation and institutions.

2 Competition policy legislation and institutions set up; some reduction of entry restrictions or enforcement action on dominant firms.

3 Some enforcement actions to reduce abuse of market power and to promote a competitive environment, including break-ups of dominant conglomerates; substantial reduction of entry restrictions.

4 Significant enforcement actions to reduce abuse of market power and to promote a competitive environment.

4+ Standards and performance typical of advanced industrial economies: effective enforcement of competition policy; unrestricted entry to most markets.

Appendix B

Infrastructure reform EBRD rating scale

The ratings are calculated as the average of five infrastructure reform indicators covering electric power, railways, roads, telecommunications, water and waste water. The classification system used for these five indicators is detailed below.

Electric power

1 Power sector operates as government department with few commercial freedoms or pressures. Average prices well below costs, with extensive cross-subsidies. Monolithic structure, with no separation of different parts of the business.

2 Power company distanced from government, but there is still political interference. Some attempt to harden budget constraints, but effective tariffs are low. Weak management incentives for efficient performance. Little institutional reform and minimal, if any, private sector involvement.

3 Law passed providing for full-scale restructuring of industry, including vertical unbundling through account separation and set-up of regulator. Some tariff reform and improvements in revenue collection. Some private sector involvement.

4 Separation of generation, transmission and distribution. Independent regulator set up. Rules for cost-reflective tariff-setting formulated and implemented. Substantial private sector involvement in distribution and/or generation. Some degree of liberalization.

4+ Tariffs cost-reflective and provide adequate incentives for efficiency improvements. Large-scale private sector involvement in the unbundled and well-regulated sector. Fully liberalized sector with well-functioning arrangements for network access and full competition in generation.

Railways

1 Monolithic structure operated as government department, with few commercial freedoms. No private sector involvement and extensive cross-subsidization.

2 Rail operations distanced from state, but weak commercial objectives. Some business planning, but targets are general and tentative. No budgetary funding of public service obligations. Ancillary businesses separated, but little divestment. Minimal private sector involvement.

3 Commercial orientation in rail operations. Freight and passenger services separated and some ancillary businesses divested. Some budgetary compensation available for passenger services. Improved business planning with clear investment and rehabilitation targets, but funding unsecured. Some private sector involvement in rehabilitation and/or maintenance.

4 Railways fully commercialized, with separate internal profit centers for freight and passenger services. Extensive market freedoms to set tariffs and investments. Implementation of medium-term business plans. Ancillary industries divested. Private sector participation in freight operation, ancillary services and track maintenance.

4+ Separation of infrastructure freight and passenger operations. Full divestment and transfer of asset ownership implemented or planned, including infrastructure and rolling stock. Rail regulator established and access pricing implemented.

Roads

1 Minimal degree of decentralization and no commercialization. All regulatory, road management and resource allocation functions centralized at ministerial level. New investments and road maintenance financing dependent on central budget allocations. Road user charges not based on the cost of road use. Road construction and maintenance undertaken by public construction units. No public consultation in the preparation of road projects.

2 Moderate degree of decentralization and initial steps in commercialization. Road/highway agency created. Improvements in resource allocation and public procurement. Road user charges based on vehicle and fuel taxes, but not linked to road use. Road fund established, but dependent on central budget. Road construction and maintenance undertaken primarily by corporatized public entities, with some private sector participation. Minimal public consultation/participation on road projects.

3 Fair degree of decentralization and commercialization. Regulation and resource allocation functions separated from road maintenance and operations. Level of vehicle and fuel taxes related to road use. Private companies able to provide and operate roads under negotiated commercial contracts. Private sector participation in road maintenance and/or through concessions to finance, operate and maintain parts of highway network. Limited public consultation/participation and accountability on road projects.

4 Large degree of decentralization. Transparent methodology used to allocate road expenditures. Track record in competitive procurement of road design, construction, maintenance and operations. Large-scale private sector participation in construction, operations and maintenance directly and through public-private partnerships. Substantial public consultation/participation and accountability on road projects.

4+ Fully decentralized road administration. Commercialized road maintenance operations competitively awarded to private companies. Road user charges reflect the full costs of road use and associated factors, such as congestion, accidents and pollution. Widespread private sector participation in all aspects of road provision. Full public consultation on new road projects.

Telecommunications

1 Little progress in commercialization and regulation. Minimal private sector involvement and strong political interference in management decisions. Low tariffs, with extensive cross-subsidization. Liberalization not envisaged, even for mobile telephony and value-added services.

2 Modest progress in commercialization. Corporatization of dominant operator and some separation from public sector governance, but tariffs are still politically set.

3 Substantial progress in commercialization and regulation. Telecommunications and postal services fully separated; cross-subsidies reduced. Considerable liberalization in the mobile segment and in value-added services.

4 Complete commercialization, including privatization of the dominant operator; comprehensive regulatory and institutional reforms. Extensive liberalization of entry.

4+ Effective regulation through an independent entity. Coherent regulatory and institutional framework to deal with tariffs, interconnection rules, licensing, concession fees and spectrum allocation. Consumer ombudsman function.

Water and waste water

1 Minimal degree of decentralization; no commercialization. Services operated as vertically integrated natural monopolies by government ministry or municipal departments. No financial autonomy and/or management capacity at municipal level. Low tariffs, low cash collection rates and high cross-subsidies.

2 Moderate degree of decentralization; initial steps towards commercialization. Services provided by municipally owned companies. Partial cost recovery through tariffs; initial steps to reduce cross-subsidies. General public guidelines exist regarding tariff-setting and service quality, but both under ministerial control. Some private sector participation through service or management contacts, or competition to provide ancillary services.

3 Fair degree of decentralization and commercialization. Water utilities operate with managerial and accounting independence from municipalities, using international accounting standards and management information systems. Operating costs recovered through tariffs, with a minimum level of cross-subsidies. More detailed rules drawn up in contract documents, specifying tariff review formulae and performance standards. Private sector participation through the full concession of a major service in at least one city.

4 Large degree of decentralization and commercialization. Water utilities managerially independent, with cash flows – net of municipal budget transfers – that ensure financial viability. No cross-subsidies. Semi-autonomous regulatory agency able to advise and enforce tariffs and service quality. Substantial private sector participation through build-operator-transfer concessions, management contacts or asset sales in several cities.

4+ Water utilities fully decentralized and commercialized. Fully autonomous regulator exists with complete authority to review and enforce tariff levels and quality standards. Widespread private sector participation via service/ management/lease contracts. High-powered incentives, full concessions and/or divestiture of water and waste-water services in major urban areas.

