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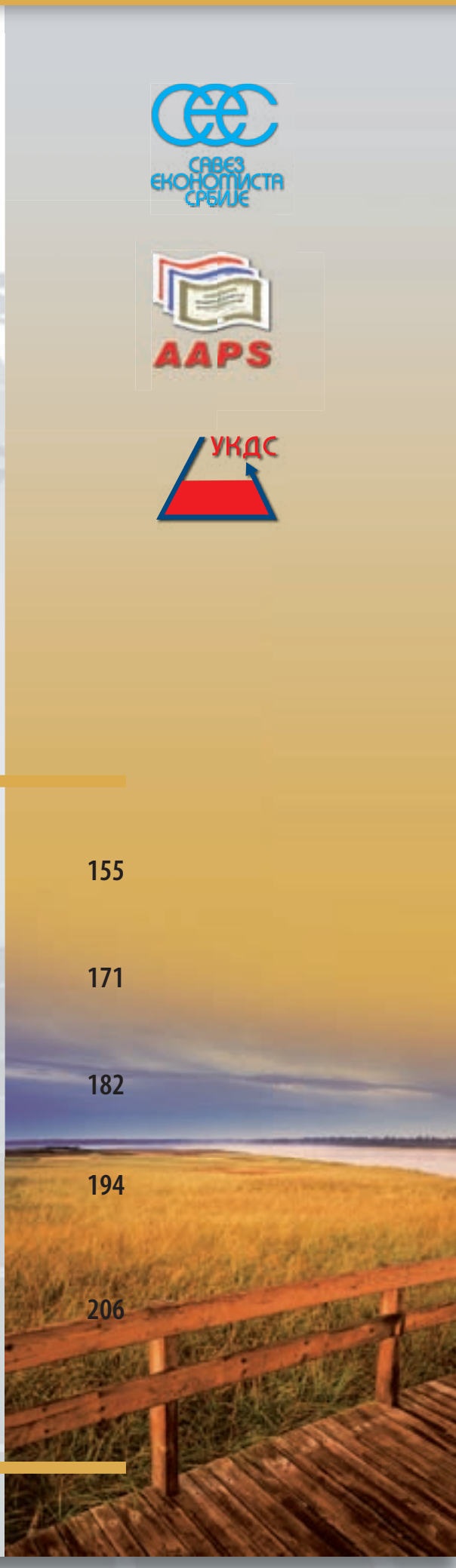

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This edition of our Review contains five articles with a possible common heading „Contemporary Issues in Transition Economies".

Prof. Dragan Djuričin, in his article „Serbia: From Transition to Transitionism and Back", after he analytically proved statement that Serbia, mostly because of geopolitical reasons coming with proclaimed liberalism and globalism of the world economy and internal inabilities to make an adequate repositioning, came into prolonged transitionism, is now looking for pathways to real transition. Identifying awareness of transitionism risks, necessity of accelerating efficient and effective EU integration and creating a strategy of competitiveness in the global economic environment as three key challenges of Serbia, he made a minute analysis and offered very useful recommendations on how to look for realistic transitional answers.

The article „The Challenges of Integrating Micro and Macro Aspects of Competitiveness", written by Prof. Dušan Vujović, is focused on an issue very important for economic growth and development especially for countries in transition. In that context, this paper contains, first of all, a very transparent and useful presentation of development of the World Economic Forum (WEF) Composite Competitiveness Indexes from the General Competitiveness Index (GCI), without business aspects of competitiveness, up to the New Global Competitiveness Index (NGCI). More important is that the author has deepened analysis of factors that influenced development of indexes and scrutinously exposed the key advantages and challenges of NGCI.

Prof. Dejan Malinić wrote the article „Creative Financial Reporting as a Source of Information Risks". Giving convincing argumentation that true and fair financial reporting is crucial for efficient capital markets with their tremendous role in every national and global economy, he expresses a very serious warning that all of that could be, and not rarely is, jeopardized through creative financial reporting. Then, for the sake of all financial statements' users, the author does a thorough explanation of aggressive accounting, earnings management and fraudulent financial reporting as the means of creative accounting and informational risks they bring with them. At the end there is a neatly done portrait of management's motives for creative financial reporting.

The treatise titled as „Competition Protection Policy in Transition Economies", prepared by Prof. Miroljub Labus, is focused on a crucial challenge for today's economies, particularly in countries in transition. The reasons for such an approach to this article are manifold. For example, the author's analysis of relationships between competition and economic growth is very helpful in anybody's rethinking of the question whether competition policy has a negative impact upon economic growth as well as the impact of price liberalization and foreign trade upon that growth. The same with the author's presentation of possible synergy effects of different dimensions of transition like those influencing competition protection mechanism. His coverage of all twenty nine countries in transition, not only through qualitative, but through quantitative analysis too, pushes this article into the sphere of wide interest. Focusing on the case of Serbia he offers useful ideas for readers interested in the Serbian competition state and policy.

The article „Growth, Immigration and Ethnic Structure Change: What is the Future of Europe's Low-Fertility Societies", written by Miroslav Macura, deals with the tremendous problem of trade-off between economic growth and ethnic structure change in European countries induced by law fertility. He makes a point and proves it by convincing quantitative analysis that the challenge of Europe mentioned above is not only present from the sixties, enlarged in the eighties, yet will become even more complex in the years ahead. He forecasts that the magnitude of shortage of the autochthon working-age population will be reached in the 2030's. Having that in mind, one can imagine how sharp the dispute would be between today's already confronted anti-immigration and pro-growth forces. Serbia would not be exposed to that problem in the short run only because of the current high level of unemployment.

Editor

EXECUTIVE BOARD OF THE SERBIAN ECONOMISTS ASSOCIATION

The First Constituent Meeting

The new Statute was adopted at the General Assembly meeting of the Serbian Economists Association by which the Executive Board was introduced as the executive body which shall performe the planned and current tasks and activities in the interest of the work simplification and efficiency.

The Executive Board is elected by the Presidency and comprises 13 members. The Executive board is presided by the President, Prof. Dragan Đuričin and Vice President, Mrs. Vesna Arsić. The following are the Executive Board members:

1. Cvjetićanin Danijel
2. Dabić Stojan
3. Đunić Danko
4. Čupić Vladimir
5. Josifidis Kosta
6. Malinić Dejan
7. Marović Boris
8. Spasojević Toplica
9. Stevanović Nikola
10. Stojanović Boban
11. Trbović Ana
12. Vlahović Aleksandar
13. Uzelac Vida

At the first constituent meeting held on September 4, 2008 the Executive Board adopted the Rules of Procedure, the Rules on Organization and Systematization of Work Positions, the decisions on the formation of funcional units, nomination of the Editorial board members and Editors-in-chief for both magazines, as well as the members of the Corporate Governance Center.

The Executive Board took an active part in preparing and conducting the Milocer Economic Forum 2008, and it is planning, in the ensuing period too, to organize forums, scientific seminars, round tables and topical discussions.

SERBIAN ASSOCIATION OF CORPORATE DIRECTORS

Current Activities

After a short summer break, the Serbian Association of Corporate Directors has continued the intensive training of its members and candidates for membership who are going to acquire membership or renew their status at the Association. Besides the training courses at the Center for Corporate Governance, the Association is planning to organize a series of courses within the program Directors to Directors, including sharing experience between directors of renowned world and domestic corporations.

The Serbian Association of Corporate Directors took an active part in preparing and conducting the Milocer Economic Forum 2008, where it was presented within the "Corporate Governance" panel. More than 70 academicians, economic practitioners, representatives of regulatory bodies and other participants were engaged in this year's Forum, while another 400 participants from Serbia and the regions of ex Yugoslavia took part in the discussions.

At the end of October this year the Serbian Association of Corporate Directors organized a seminar "Corporate Governance in Telenor" in cooperation with Telenor Serbia. More than 30 respectable corporate directors of domestic and foreign companies and banks gathered at Telenor's Intro Centre. Besides the representatives of Telenor Serbia, Mr. Stein-Erik Vellan, Chief Executive Officer, and Mr. Christopher Laska, Chief Corporate Affairs Officer, guests from Norway, Mr. Ingvald Fergestad, Senior Vice President and Corporate Adviser, Telenor ASA, and Ole Bjorn Sjulstad, Senior Vice President, Telenor ASA, Central & Eastern Region, spoke at the seminar too.

The course "Financial Statements Secrets – Managerial Approach" has been announced for the beginning of December this year. Mr. Nikola Stevanovic and Mr. Dejan Malinic, professors of the Belgrade Faculty of Economics, will be the lecturers. The course will cover the following topics: Balance Sheet Phenomenology, Financial Reporting Policy Implications upon the Quality of the Profit, Identification of Financial Statements Risks, Invisible Asset, and Ethic as Determinant for the Financial Reporting.

The Association shall, in the ensuing period too, remain strongly committed to its core goal: the development of efficient and ethical corporate and public governance, which will result in an increase of competitiveness, improvement of economic freedoms, and decrease of corruption.

Toplica Spasojević
Chairman

ORIGINAL SCIENTIFIC WORK
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SERBIA: FROM TRANSITION TO TRANSITIONISM AND BACK

Summary:

Transition represents a non-evolutionary institutional transformation of former socialist economies into modern market democracies based on private ownership.The process of transition takes place in a new global economy shaped substantively by the actions of developed countries and the emerging markets new greater levels of economic openness (trade liberalization) initiated through WTO with visible decline in home bias and an unprecedented increase in financial (capital) flows.

Despite its significant flexibility and adaptability, and huge positive impact on economic growth and reduction of poverty among half of the world population (China, India, Brazil, Malaysia, Thailand, etc.), in many respects globalization remains a controversial phenomenon. This is especially related to the geopolitical aspect of globalization.

The definition of globalization in economics differs from its meaning in geopolitics (including history, anthropology, and sociology). Namely, in economics globalization signifies a complex mechanism of interdependence accelerating the expansion of competitive advantage from local to global markets. Therefore, the key words that depict globalization are liberalization and integration. Despite attempts to show that globalization is a win-win proposition for all countries, regions and social groups, it is evident that in real life globalization creates both winners and losers.

Serbia appears to be one of the largest losers of globalization. During the last decade of the past century Serbia got lost in a vain effort to preserve Yugoslavia following the end of the cold war and the breakup of the Former Soviet Union. The geopolitical shock induced by the disintegration of Yugoslavia in 1990 followed by civil wars for heritage of the previous state stimulated the dawning of economic crisis and its inevitable consequences, the downfall of economic activities and the emerging un-tuned institutional infrastructure. The failure of geopolitical repositioning made Serbia's economic transition even more strenuous. In "yogi economy" the execution of transition, which is also a highly destabilizing process, is demanding since it strikes the margins of social durability. Despite the relatively favorable geopolitical trends stipulated by the political change in the year 2000, transition in Serbia has not yet been completed. In recent times, skepticism concerning economic transition has accelerated by facts such as: the raising of demographic risk, a continuously low level of economic activity, and growth of indebtedness. On the other hand, the conditional EU integration with an open list of geopolitical prerequisites even amongst globalization apologists creates doubts about the purpose of transition and generates suspicion that Serbia is, actually, excommunicated.

The political change in the year 2000 did not acquire the adequate epilogue due to the uncompleted process of geopolitical repositioning, negative economic heritage, narrow understanding of transition as financing of macroeconomic stability (exchange rate stability and somewhat price stability) through privatization earnings, as well as inherited pathologies of the previous economic crisis, which widely opened the door to populism in political and economic reforms. This energy converted transition from a shortcut to capitalism, into a labyrinth of transitionalism. Serbia's economy of mid 2008 entered a new stagflation stage, although still far from the pretransitional level of the 1989's economic activities. Indicators of the new transitional stagflation are: growth without development, strengthening of inflationary pressure, capital market fall, transfer of investments into less profitable industries (primarily construction and real estate), and growing indebtedness. This is not a conventional type of stagflation stipulated by hyper-production, yet a transitional stagflation stipulated by hypo-production in an un-tuned system with uncompleted institutional reforms, which are best described by a "strong currency in a weak economy" model. Contrary to skeptics, optimists define this phrase as "a transitional pause" which corresponds to a politically non-septic phrase for a slowing down rhythm of transition. However, a pause in the continuous process with terminus is oxymoron. A transition with frequent stop-and-go conceals a threat of converting transition in transitionism.

An uncompleted transition brings Serbia to a delicate stage of inability to realize its aims, as an impotent, uncompetitive, and un-tuned economy not able to confront new challenges which inflict a deeply receded process of globalization (complexity, liberalization, financial intermediation, demographic risk, concentration of wealth, and rising costs of repositioning). In mid 2008, the new government of Serbia accosts three problems: unsolved problems of socialism, unsolved problems of transitionism, and unsolved problems of globalism. Could the epilogue be new premature elections, a proven strategy of buying time, by which the spirit of reformism is sacrificed for the sake of political *l'art pour l'art*?

Key words: *Transition, catch-up, geopolitics, liberalization, integration, transitional stagflation, transitionalism, transitional deficit, brokerage mentality, investment myopia, demographic risk, corporate governance.*

INTRODUCTION

Transition and globalization are closely related phenomena. From its inception in 1989, transition from plan to market has been taking place in an increasingly global world economy, which defined the institutional and performance standards for the former socialist economies. The latest stage of globalization has been driven by the same core values and incentives that enabled the unprecedented capitalist growth of national economies through much of the XIX and XX century. These values included universally protected property rights, economic openness (free movement of goods and labor, full convertibility and liberalization of capital flows) and the dispersion of technological progress and knowledge through elimination of asymmetric information problems and of declining transport costs.

Despite liberal claims that globalization creates huge efficiency gains and, hence, represents a potential win-win proposition for all, many analysts argue that globalization entails a complex chain of relationships which, in reality, tend to favor some countries (i.e. their economic and political elites) and marginalize others [7, p.278]. The winners of the globalization process have realized notable economic expansion, as well as huge geostrategic gains often explained by actions aimed at the protection of human rights, global security and stability.

From the purely economic point of view, globalization starts with liberalization, and ends with the establishment of a global regulatory framework for goods, services, labor, and capital. The core hypothesis is that liberalization creates growth and increased welfare for all participants. It enables new FDI, provides access to new technologies and management practices, and attracts portfolio investment to local financial and capital markets. Large inflows of foreign capital increase domestic aggregate demand, which often leads to higher domestic prices and appreciation of the exchange rate. Applied globally, liberalization reduces the heterogeneity of local markets and, ideally, enables global companies to maximize their sales revenues, raise capital, hire labor and obtain inputs at the lowest cost, and, finally, organize production in most competitive places.

Although liberalization creates development possibilities, the achievement of development results crucially depends on other factors. Interestingly enough, as *J. Stiglitz* claims [10, pages:11-40], economic theory does not provide a firm and convincing justification for a full and outright liberalization. Likewise, empirical studies, which confirm the importance of education, health, institutions and geography for economic development, do not yield unambiguous results on the effects of liberalization. Consequently, many countries, including some of the most successful exporters, tend not to follow the free trade orthodoxy. On the other end, Western politician protect their free trade mantra and step-up pressure on the WTO to ensure symmetric application of free trade policies and standards.

The process of globalization ultimately leads to a new global economic and political order. The likely winners in this process are truly competitive countries with efficient institutions, strong human capital, and abundance of financial capital. Among them, the dominant position will likely go to big countries (with have large markets and huge innovative capacity). Small countries (such as Finland and Slovenia) will also do well in a global world economy if they are well economically integrated and geopolitically positioned. In today's global world, it is more important who you're with than who you are. Consequently, the game of globalization presents new opportunities and challenges suddenly and simultaneously for everyone.

Much like its predecessor, national capitalism, global capitalism suffers from many drawbacks. After all, global capitalism just expanded the size and scope of national capitalism with well known imperfections and negative externalities. Expectedly, anti-globalists have a bag full of criticism, but can not offer a viable alternative.

In a relatively short period of time after the end of the cold war and collapse of socialism, the emerging globalism has nourished a significant growth and considerable structural change in the world economy. Much of the ensuing change was a direct consequence of „creative destruction" in the *Schumpeterian* sense, driven by dynamic expansion of private enterprise and entrepreneurship from the local to the global level. The convergence towards a global capitalism has been reinforced by the economic transition

in Eastern and Central Europe as well as radical reforms in Asia Pacific leading to a mono-polar world.

Another characteristic of the emerging globalism is the growing role of geopolitical considerations and global regulatory effort driven more by objectives than principles. At times this led to coarse interventions or outright aggressions thinly disguised by humanitarian or democratic principles. Expectedly, the amount of force used tended to increase in the presence of so-called national interests, need for geopolitical positioning, as well as strategic economic interests (including but not limited to energy). Effectively, new globalism advocates a concept of limited and divided sovereignty. This concept permits and justifies violation of classical territorial sovereignty and allows penetration into local political space on the basis of state functions that have been (involuntarily) transferred to unspecified supranational level. Under new globalism traditional supranational structures and organizations (church, military alliances, multilateral financial and political organizations, international cartels etc.) continue to use already established channels of influence, while new organizations pursue their objectives predominantly using non-government organizations and media.

Serbia appears to be one of the largest losers of the new globalization round. The reasons for that can be found on many fronts. Initially, Serbia was adversely affected by the inability of the ruling domestic political elite to properly understand the geopolitical trends and forces unleashed at the end of the Cold War and the beginning of transition in 1989. The impact of wrong initial choices was exacerbated through subsequent biased, capricious and revengeful responses at the geopolitical level. The violent response followed a highly destructive scenario that sought not only to counter the remnants of the socialist doctrine and destroy the dignity of the misguided domestic political elite of the time, but indiscriminately violated human rights, international law and the core principles of statehood and sovereignty as the ultimate political and economic interest of the citizens of Serbia.

Delayed (and derailed) processes of EU integration and the recognition Kosovo's unilateral declaration of independence further marginalize Serbia. To survive in the short run and prosper in the long run Serbia's emerging market democracy needs an honest political and a well structured economic support from the EU.

Without geopolitical realignment, economic and institutional transition looses much of its meaning. Serbia embarked on a transition path as a constituent part of former Yugoslavia, at the same time as other former socialist economies (Yr 1990). In the initial years of transition Serbia had a better privatization record than other former Yugoslav republics. However, wrong geopolitical choices and ensuing sanctions undermined economic stability, stopped and even reversed economic and institutional reforms and indefinitely postponed economic restructuring. Today, the structure and performance of the Serbian economy significantly lags behind the EU average. Maintaining macroeconomic stability is expensive and unsustainable (as it heavily relies on remittances and privatization proceeds). Monetary policy is overly focused on inflation control and completely ignores longer-term development aspects and competitiveness. Regional and industrial policies do not exist. The regulatory framework is incomplete and non-transparent, regulators are capricious and often render contradictory rulings and weak policy advice.

Strategically speaking, Serbia does not have significant deposits of natural resources as a basis for its geopolitical positioning or as a source of economic growth. After years of brain-drain and instability, the labor force supply does not seem very adequate, the emerging industrial culture has been devalued and the tradition of efficient quality agricultural production lost.

In an environment characterized by the absence of efficient labor force, lack of capital and credit, incomplete and weak institutions, and poor management incentives, economic performance remains unimpressive. At the end of 2007 for the Serbian economy we can identify following so-called vulnerability indicators:

1. Level of economic activity is at 66% of the last pre-transition GDP (Yr. 1989)
2. *Okun's* un-conformity index is 0,30 (=inflation rate 11,4% + unemployment rate 18,8%), knowing that the upper tolerance level is 0,10
3. Savings rate is only 12,7% , half the average rate of developed countries, and one third of the rate in most dynamic economies (China and India)

4. Credit rating has dropped to BB- (*Fitch* and *S&P*) and is now at margin of investment grade
5. Profitability of the economy is below the average of transition economies, and the capital market is falling significantly.

It is not easy to attract foreign and domestic investors to commit their resources to such an un-stable economic and institutional environment, with little certainty about the future.

Serbia painfully confirms the old wisdom that those who have lost time, have lost everything. The loss of the transition momentum in the early 1990's and again at the beginning of the XXI century indicates that the transition process may not be completed any time soon. Does it mean that transition may linger for ever? Is it possible that instead of being a short-cut from socialism to capitalism, transition in Serbia becomes a permanent state of affairs – transitionism – a political and economic system characterized by chronically incomplete institutions?

This paper has three objectives. The first is to demonstrate the risks of transitionism – a prolonged and failed attempts at institutional and policy reforms in Serbia. The second is to identify the actions necessary to move Serbia to a credible EU integration path. The third is to depict the key challenges in defining a strategy to increase competitiveness in an emerging global economy. To achieve this, the paper has been organized in four sections, introduction and conclusion. The first section draws the main lessons learned from successful transitions. The second analyzes the process of transition in Serbia and detects characteristic manifestations of transitionism. The third section proposes a set of actions that could end state of transitionism and move Serbia to an EU accession path. The fourth section contains core recommendations for increasing competitiveness after completion of the transition process.

1. TRANSITIONAL TERMINUS

At the beginning, transition process posed two large challenges regarding the speed and cost of transition. The issue of speed involved a choice between quick and slow transition roadmap (shock therapy vs. gradualism), while the cost issue required that the economic and social costs of transition (in unemployment, retraining, and supporting entrepreneurship) be properly identified and absorbed. Today, at the end of transition, we are faced with the third question regarding the effectiveness of the transition process, in terms of not only how fast but also and how far have we advanced the economic and institutional reforms?

Regarding the first set of questions, contrary to some naive expectations, it is quite clear that departing from socialism does not automatically reinstate capitalism. Market democracy is based on specific mechanisms and institutions built for generations, often through a process of trial and error, resulting in a viable legal and regulatory system, supplemented by a range of professional associations, a corporate culture and a code of ethical behavior. To get to that level of institutional development, transition must be carefully managed and regulated. Managed transition requires a state with a clear long-term vision and sufficient trust to induce the necessary consent and patience among key stakeholders (especially vulnerable social groups). Time needed to carefully design reforms and build social consensus in their support is the price a country has to pay to ensure sustainability of reform outcomes.

A plunge into a shock therapy transition revealed many risks including the creation of an institutional and legal vacuum which led to the emergence of a widespread shadow economy and grey markets. As much as grey markets helped meet the immediate consumer demand, in the longer run they gave rise to corruption, proved to be a poor substitute for free markets, and became a barrier to improved competition. Most of all, grey markets hinder the introduction of transparent institutions (i.e. protection of property rights and contract enforcement). With hindsight, it is now clear that in many countries shock therapy turned out to be a shock without a therapy. At the start of transition, we suggest that the rhythm for transition be fast but not too fast (*allegro ma non troppo)* [2].

Before we continue, let's back to the basics. Every transition strategy has to cover four dimensions: (i) privatization (and restructuring), (ii) macroeconomic stabilization (or disinflation), (iii) institutional reforms, and (iv) reindustrialization. Privatization along with restructuring trigger the transition process, price and exchange rate stability create the friendly environment for investment, while institutional reforms provide sustainability of achievements. The issue of reindustrialization and industrial policy emerges much later as countries begin to complete the transition stage and begin to catch up developed market economies closing the income and performance gap.

The nature of transition is inherently destabilizing. Aside form instability served through creative political and social destruction, transition imposes a huge economic challenge through an inevitable transitional recession which often becomes a full transitional stagflation.

Price adjustments and structural imbalance between aggregate demand and supply are the primary sources of initial inflationary pressures during transition. In addition, many transition economies have also experienced the *Balassa-Samuelson* effect (for detailed explanation see [1] and [9]) caused by the uneven speed of transformation and productivity growth in transition economies. While the growth of real wages in the restructured enterprises and/or sectors of tradable goods are based on higher productivity and, hence, sustainable, higher wages in the un-restructured enterprises and sectors with non-tradable goods often a result of demonstration effect. Hence, they give rise to inflationary pressures.

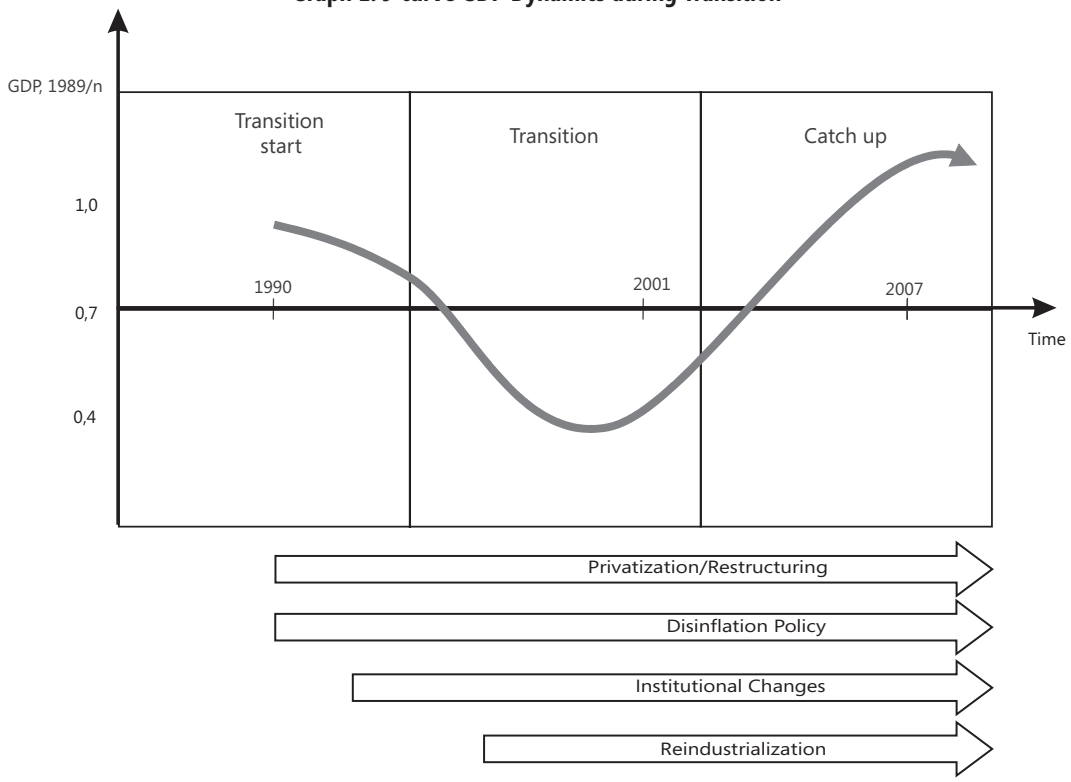
On the financing side, foreign capital inflows from privatization proceeds and new FDI, frequently lead to appreciation of domestic currency. In the short run this provides a strong nominal anchor which partially counters the above inflationary pressures. In the longer run, however, the resulting overvalued exchange rate may adversely affect the competitiveness of domestic industries and the reindustrialization efforts or lead to mild forms of Dutch disease. Stronger cases of Dutch disease are usually found in economies with substantial overvaluation of domestic currency due to large foreign exchange revenues usually from exports of energy, natural resources, and tourism, or from sale of assets.

Aside from inherent instability, the performance of economy in transition can also be affected by inadequate regulatory framework in both the real sectors (market imperfection and counterproductive monopoly control) and the financial sectors (low quality of supervision of banking and non-banking financial institutions).

The effectiveness of the overall institutional framework becomes an issue as countries near the end of the transition process. From the substantive point of view, transition approaching to its terminus when the following three conditions are simultaneously and irreversibly met: (i) the effects of transitional stagflation have been overcome and real GDP has surpassed the pre-transition level, (ii) macroeconomic stability has been secured on monetary and fiscal front, and (iii) the quality of domestic institutions and policies are recognized by commitments and real actions of investors (domestic and foreign).

The process of privatization and enterprise restructuring is critical in overcoming the transitional stagflation. The framework for achieving and sustaining macroeconomic stability is substantively depicted by the principles of *Washington Consensus* and *Post-Washington Consensus*, while EU's *acquis communautaire* provides the desirable institutional environment targeted by the transition economies in Eastern and Central Europe. Clearly, this institutional framework also encompasses the process of political and economic integration with the EU, including the formidable task of closing the income and performance gap with respect to EU countries. Recent productivity growth provides a vivid example: during the 1995-2005 period labor productivity in transition economies grew 30% faster than in the EU15 group of countries. Initially, this was driven by the reduction in excess employment, and later became a consequence of new investment and reindustrialization effort. The resulting GDP dynamics is shown on Graph 1 trough J curve:

Graph 1: J-curve GDP Dynamics during Transition



At first, the question of optimal transition path may appear irrelevant as long as transition process has been completed and real pre-transition GDP level achieved. Efficient transition path, however, also assumes that the institutional system created in the process is capable of handling multiple challenges posed by the new global world economy. In other words, the end of transition is achieved when a country successfully reverses the economic legacy of the past and prepares itself to face the real challenges of the future in a difficult global economy.

2. TRANSITIONISM: SOURCES AND SYMPTOMS

Slow and protracted economic and institutional transition without clear vision and geopolitical repositioning tends to degrade into transitionism – as the case of Serbia vividly confirms. During the first ten years of transition (1990-2000) Serbia fell into a geopolitical void which resulted in an economic and political isolation and sanctions. An organized and methodic implementation of economic reforms during that period would have been extremely difficult even if the reforms were supported by the regime. Hence, stalled transition process and reform reversals during the 1990's do not come as a surprise. It is surprising, however, that geopolitical considerations continued to adversely impact transition even after the watershed political change in 2000. Due to complex political reasons, not least the huge burden of collaboration with the Hague Tribunal, successive (democratic) coalition governments failed to reach consensus on clear geopolitical repositioning and full commitment to EU integration.

On the economic front, a successful completion of the transition process, with full sustainability of economic growth and new institutions, can only be achieved on the basis of viable reindustrialization effort. Clear examples are Poland, Slovenia, Hungary, Czech Republic, and Slovakia (TC5-transition champions). By contrast, Serbia's stock of enterprises and banks was devastated during the 1990's (not only by sanctions and wars, but also by self-induced hyperinflation). A significant acceleration of reindustrialization efforts took place after the change of government in 2000, but this does not seem sufficient to turn the situation around in the presence of: (i) limited domestic capacity, (ii) high systemic risks, and (iii) a visible tendency of domestic investors to acquire existing enterprises and assets rather than attempt green-field investments.

Table 1. GDP, Inflation and Growth during Transition for the Sample States

	Serbia and Montenegro			Hungary			Slovenia			Croatia			Romania		
n	GDP 1989/n	Inflation	Growth rate	GDP 1989/n	Inflation	Growth rate	GDP 1989/n	Inflation	Growth rate	GDP 1989/n	Inflation	Growth rate	GDP 1989/n	Inflation	Growth rate
'90	0,92	580,4	-7,9	0,96	28,9	-3,5	0,92	n/a	-7,5	0,92	n/a	-7,1	0,94	5,1	-5,7
'91	0,81	118,1	-11,6	0,85	35,0	-11,9	0,84	115,0	-9,0	0,73	123	-21,1	0,82	170,2	-12,9
'92	0,58	Mega	-27,9	0,82	23,0	-3,1	0,79	207,3	-5,5	0,64	665,5	-11,7	0,74	210,4	-8,8
'93	0,40	Mega	-30,8	0,81	22,5	-0,6	0,81	32,9	2,8	0,59	1.517	-8,0	0,76	256,1	1,5
'94	0,41	3,3	2,5	0,84	18,8	2,9	0,86	21,0	5,3	0,63	97,6	5,9	0,79	136,7	3,9
'95	0,44	78,6	6,1	0,85	28,2	1,5	0,89	13,5	4,1	0,67	2,0	6,8	0,84	32,3	7,1
'96	0,47	94,3	7,8	0,86	23,6	1,3	0,93	9,9	3,7	0,71	3,5	5,9	0,88	38,8	3,9
'97	0,51	21,3	9,0	0,90	18,3	4,6	0,97	8,4	4,8	0,76	3,6	6,8	0,82	154,8	-6,1
'98	0,52	29,5	1,9	0,95	14,3	4,9	**1,01**	**8,0**	**3,9**	0,78	5,7	2,5	0,78	59,1	-4,8
'99	0,43	37,1	-18	0,99	10,0	4,2	1,06	6,2	5,4	0,77	4,0	-0,9	0,77	45,8	-1,1
'00	0,45	60,4	5,2	**1,04**	**9,8**	**5,2**	1,11	8,9	4,1	0,79	4,6	2,9	0,79	45,7	2,1
'01	0,47	91,1	5,1	1,08	9,2	4,1	1,14	8,4	3,1	0,83	3,8	4,4	0,83	34,5	5,7
'02	0,50	21,2	4,5	1,13	5,3	4,4	1,19	7,5	3,7	0,87	1,7	5,6	0,88	22,5	5,1
'03	0.51	11,3	2,4	1,18	4,7	4,2	1,22	5,6	2,8	0,92	1,8	5,3	0,92	15,3	5,2
'04	0,55	9,5	8,4	1,23	6,8	4,8	1,27	3,6	4,4	0,96	2,1	4,3	1,00	11,9	8,5
'05	0,59	17,2	6,3	1,28	3,6	4,1	1,33	2,5	4,1	**1,00**	**3,3**	**4,3**	**1,04**	**9,5**	**4,1**
'06	0,62	12,5	5,7	1,33	3,9	3,9	1,40	2,5	5,7	1,05	3,2	4,8	1,12	6,6	7,7
'07	**0,66**	**11,4**	**7,0**	1,37	7,8	2,5	1,48	3,2	5,5	1,11	2,3	5,5	1,20	7,0	6,5

Source: EBRD Transition Reports, various years and national statistical data.

* Until 2006 data refer to Serbia and Montenegro.

How does Serbia compare to other countries? One could compare Serbia to EU15 group of countries, or to TC-5, or to the EU27. These comparisons would have limited use due to huge differences in performance. One example: based on 2007 data, Serbia has GDP p/c in PPP terms equal to 37% of the EU27 average. Hence, it may be better to compare Serbia to its neighbors, also transition economies which recently shared a similar geopolitical situation. A good reference point would be a sample of countries which includes two champions of transition (Slovenia and Hungary), one late starter (Romania), and one former Yugoslav republic and also an EU candidate (Croatia).

As indicated in Table 1, while other comparator countries have already overcome the effect of transitional stagflation (Slovenia in 1998, Hungary in 2000, Romania and Croatia in 2005), Serbia in 2007 still has a transition deficit equal to 34% of GDP and a double-digit inflation. Serbia reached the lowest point in 1993 when the level of production dipped to 40% of pre-transition 1989 GDP. An impressive average GDP growth rate of 6.9% in the most recent period (2004-07), considerably above average rates of the comparator countries (5.0%) and the world economy (3.7%), was not sufficient to overcome the transitional deficit or secure macroeconomic stability.

Table 2 provides a summary of select viability indicators for Serbia in 2007. In terms of competitiveness measured by World Economic Forum Serbia is not only ranked low (91st) but lower than the previous year (87th). Based on IFC/WB Doing Business indicator Serbia also scored relatively low (86 out of 178 countries), while according *Fraser Institute* Serbia ranks low (119 out of 141 country) in terms of economic freedom. Regarding corruption, *Transparency International* places Serbia at a somewhat better 79 place (out of 179 countries). Despite some variation across different dimensions, Serbia does not look very viable or attractive to foreign investors.

Table 2: Serbia's Viability Indicators, 2007

Performance	Source	Rank (No of countries)
Competitiveness	WEF, CGI	91 (127)
Easy of Doing Business	IFC/WB	86 (178)
Corruption	TI, CPI	79 (179)
Economic Freedom	FI, EFW index	119 (141)

Basic macroeconomic indicators in the most recent period 2004-07 presented in Table 3 show that despite rel-

atively strong economic growth in the past four years and p/c GDP of almost EUR 4.000, Serbia still has a number of structural problems manifested in high current account deficit (17% of GDP) and growing total foreign indebtedness (60% of GDP) approaching to the critical level of 80% of GDP. These levels may not be sustainable in the case of an economic downturn triggered either by external factors (such as present global financial crisis) or domestic factors (such as political blockade of further economic reforms). Downward adjustment may be rough and costly. Recent fiscal populism (which produced increases in public sector wages beyond productivity growth and upward adjustments in pensions over and abode cost of living increases) has effectively eliminated the effective use of fiscal policy in macroeconomic management, and will make the adjustment more difficult and painful. Wages grew 15,3% per year in average for the mentioned period. Pre-election wages growth in the sub-period May 2006-May 2007 in all sectors was surprisingly 36%.

From the longer-run point of view, Serbia suffers from investment myopia caused by incomplete institutions and lingering transition process. Strategic investors are still cautious in making longer-run commitments and the market continues to be dominated by rent-seeking brokers riding on domestic and foreign speculative *quick money*. Local investors predominantly target portfolio and real-estate investment with a potential for quick resale gains and quick exit. In the longer run these options will dry up and substantial capital injection will be needed to close the accumulated gaps in production (R&D) and information technology, as well as in the quality of management and marketing practices.

Most importantly, speculative investors tend to augment present market and institutional imperfections,

Table 3. Serbia - Macroeconomic Indicators, 2004-07

	2004	2005	2006	2007
Economic activity				
GDP, mil €	19,723	21,077	24,254	29,920
GDP pc, €	2,642	2,832	3,272	3,971
Real growth rate GDP, %	8.4	6.2	5.7	7.5
Inflation				
Retail prices index (end of period), %	13.7	17.7	6.6	10.1
Consumer price index, annual average, %	11.4	16.2	11.7	7
Foreign trade				
Export of goods, mil €	2,831	3,608	5,102	6,432
Import of goods, mil €	8,623	8,432	10,462	13,358
Foreign trade balance, mil. €	-5,791	-4,831	-5,360	-6,926
Imports / Foreign trade balance	-1.49	-1.75	-1.95	-1.93
Imports / GDP	0.44	0.4	0.43	0.45
Liquidity from foreign transactions				
Current account balance (without donations), mil €	-2,606	-2,050	-3,346	-5,227
Current account balance (without donations), % GDP	-13.7	-9.7	-13.8	-17.5
FDI (net), mil €	777	1,245	3,399	1,602
Monetary indicators				
Foreign exchange reserves NBS, mil €	3,117	4,935	9,025	9,641
Foreign exchange rate (RSD/€)	78.89	85.5	79.0	79.24
Savings, mil €	1,461	2,274	3,413	5,028
Employment and wages				
Unemployment rate, %	19.5	21.8	21.6	18.8
Net wages (annual average), RSD	14,108	17,443	21,707	27,759
Foreign debt indicators				
Foreign debt, mil €	10,366	13,106	14,965	17,846
Foreign debt / GDP, %	52.5	62.2	61.7	59.6
Public debt / GDP	53.3	50.2	36.2	29.4
Fiscal budget balance, mil €	-10.14	314.6	383.5	162.8

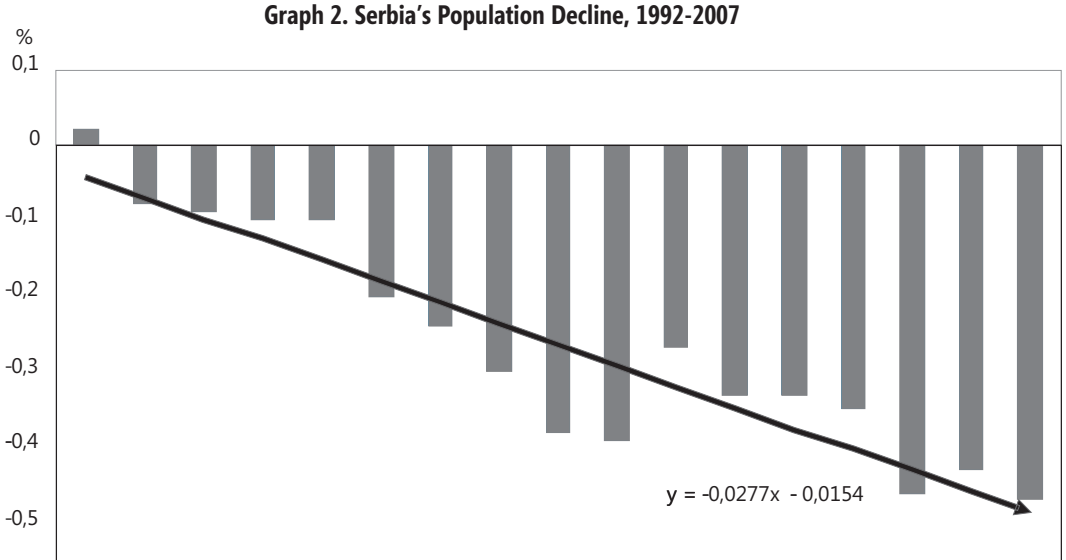
not least increase corruption and create speculative bubbles. Their main concerns are short-term cash flow gains and aggressive marketing moves aimed at increasing the market share and making a quick profit. Much of foreign direct investment has been targeting retail chains and acquisition of companies with large market shares. Overall, these types of foreign investments tend to put additional burden on the balance of payments as they sell an ever increasing volume of imported goods and move out of the country surprisingly large share of total profits as payments of dividends. Admittedly, this may be caused partly by declining returns on investment and limited opportunities to reinvest the profits locally. But, it appears very likely that much of the investment that came to Serbia was intended to be short-term. It came in response to incentives (unintentionally) created by domestic regulators, and left in line with the perceived country risk which steeply increases with time.

If indeed the rates of return are so low and reinvestment opportunities so few, realistically, what is Serbia's potential to complete the transition process with a successful reindustrialization following the TC5 example? Can it compensate with strong human capital?

Unfortunately, human capital does not represent a strong side of Serbia's competitive advantage. The overall demographic risk is high both in terms of unfavorable overall population dynamics, worsening age structure, and uneven spatial distribution of population. Expectedly, the economic and geopolitical crises have triggered continuous declines in population since 1992 as shown in Graph 2. Compound average growth rate of population for the period 1992-2007 is – 28,26‰. In addition to a cumulative population decline, Serbia's population has also aged. With average age of 41.6 years Serbia has the oldest population in Europe and among the oldest in the world. With only 1.69 births per fertile woman the situation is not likely to get any better. The demographic structure has also been affected by migration flows. On the one hand, Serbia had a huge influx of some 620 thousand refuges from Croatia, Bosnia and Herzegovina, and Kosovo, comprising a large share of older, rural population. On the other hand, around 350 thousand mostly young and highly educated people left Serbia since 1991. On balance, the age and educational structure has considerably worsened in the past two decades. Uneven spatial distribution of the population is another serious problem. Again, on the one hand Serbia has pockets of intense emigration (especially in the south) caused by worsening economic and ethnic conditions, and a huge immigration pressure on larger cities raising urban costs, causing XIX century (1837-74) Serbia had the highest rate of population growth in Europe (14 ‰).

Instead of being a major contributing factor to Serbia competitiveness and productivity growth, population has become a source of political, economic and fiscal con-

Graph 2. Serbia's Population Decline, 1992-2007



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Growth rates	0,02	-0,08	-0,09	-0,1	-0,1	-0,2	-0,24	-0,3	-0,38	-0,39	-0,27	-0,33	-0,33	-0,35	-0,46	-0,43	-0,47

cern. Instead of contributing to deflation, population has become a source of inflation. Demographic ratio in Serbia is 1.6 employees : 1.0 pensioner. With such population dynamics, *pay-as-you-go* pension (and social insurance) system becomes unviable.

Sustainability of the current account deficit and the level of foreign indebtedness associated with slow reforms and sluggish investment performance is another difficult reality check for Serbia. In the absence of true long-term capital aimed at restarting industrial production and increasing exports, Serbia is entirely dependent on privatization proceeds and remittances in financing its sizeable current account deficit. Moreover, this lack of long-term development orientation on the part of investors and enterprises affects household behavior (increases their propensity to consume) and makes it very difficult for the authorities to manage public sector wages and aggregate demand. Privatization proceeds are drying out. Namely, too large share of privatization proceeds goes to consumption as a typical case of disinvestment. This bias against domestic and foreign long-term investment deprives Serbian economy of fresh risk-bearing capital and, more importantly, new technology and knowledge indispensable for increasing competitiveness and efficient exports to help bring down the trade and current account deficits.

Misaligned exchange rate is another symptom of transitionism in Serbia. Despite large trade deficits and double digit inflation, the national currency has been mildly appreciating in real terms against over the past 18 months, and even in nominal terms over the last six months. Although strong currency offers a useful nominal anchor for the National Bank's efforts to control inflation, it does not support economic growth or the competitiveness of the Serbian economy.

Finally, the state of competition in the Serbian economy indicates yet another dimension of transitionism. Developed economies rely on monopoly controls primarily to promote competition and prevent the misuse of monopoly power. In principle, Serbia's anti-monopoly legislation follows theoretically established tests for the presence of monopoly power. However, the devil is in the details of implementation which in real circumstances often leads to counterproductive actions in an attempt to control monopoly power in the economy with dramatically reduced level of economic activity. Moreover, in digital age antimonopoly policy is out of date because "an innovation can turn an eight-hundred-pound gorilla into a baby chimpanzee overnight" [83, p.494]. In Serbia's case large market shares of some of the most successful companies are usually not the result of predatory actions against competition, limited or controlled entry or misuse of monopoly power. On the contrary, leaving aside computational problems, they seem to be the result of prolonged effects of transitional stagflation (slow restructuring and revival of other companies and generally low level of economic activity). Furthermore, market shares in access of legally set limits should not be treated as sufficient proof of market dominance, excessive prices and monopoly profits.

At the more strategic level, it is not rational to impose draconian penalties on value creating and vibrant companies that have survived the most difficult period of economic sanctions and are expected to be the engines of growth and employment. The level and base for assessing penalties (up to 10% of annual revenues) seems excessive and unrelated to either higher monopoly pricing or realized monopoly profits. In reality one finds absurd situations where a company with operational losses has to pay penalties for alleged monopoly profits. Cleary, this would only erode company's capital base and overall business potential.

Present anti-monopoly laws directly contradict previously adopted transition laws and policies, especially in the area of privatization. For example, privatization of some enterprises was allowed without any prior constraints on the market share or concentration levels. In some cases (e.g. tobacco industry) the state explicitly supported the existing level of concentration. These enterprises should be exempt from retroactive application of market share and concentration standards introduced through the anti-monopoly laws. Otherwise, investors may react by dislocating production activity, disinvesting and refraining from further investments.

On the technical side, one finds a range of methodological issues and unresolved data problems in defining the relevant market and computing market concentration indexes. The limited size and capacity of the regula-

tory body are seriously inadequate to implement the very ambitious anti-monopoly regulatory standards taken over from much more developed EU economies with larger capacity and decades of experience in analyzing complex market structures[1]. Due to limited own capacity Serbian Commission for the Protection of Competition frequently outsources the analysis of the monopolistic position and behavior to institutions without the necessary skills and experience. Aside from serious analytical problems this also creates a credibility gap as the Commission does not seem to own the outsourced results.

Clearly, pragmatic solutions in this area are needed to enable competition and avoid hurting the best and most propulsive industries in Serbia. One possible direction for such pragmatic solutions is the "conditional approval of concentration levels" [8] frequently used in the EU to bridge the gap between present problems and solutions viable only in the longer-run.

1 The British Antimonopoly Commission has determined empirically for each sector of the economy the minimal size that enables profitable production / distribution irrespective of the overall domestic market size. This information has critical importance in interpreting the market share data and determining the dominant position.

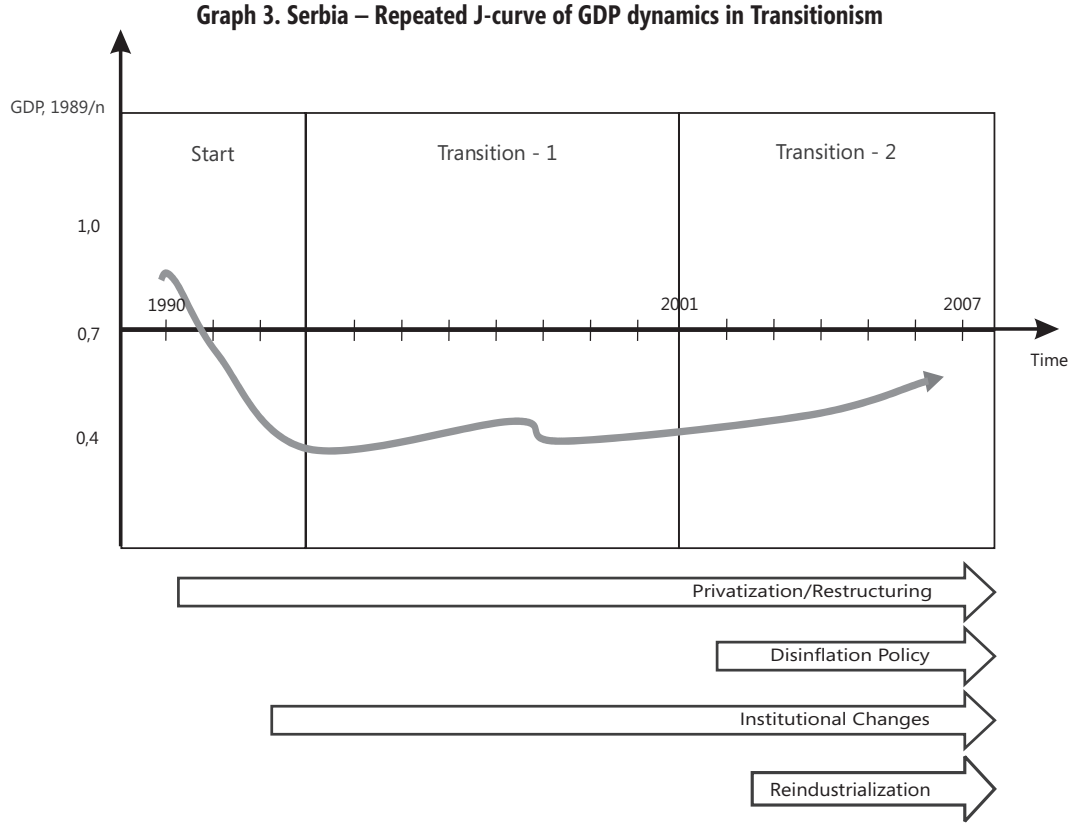
At the macro level, transitionism leads to "repeated J-curve" type of GDP dynamics. Failure to complete the first attempt at transition started in 1989 has necessitated another in year 2001 which has yet to be completed.

3. TRANSITIONING THE TRANSITION

Obviously, Serbia is again at the crossroads. It can continue to pursue the routine perfected over the last seven years based political and fiscal populism, and disinflation anchored in an overvalued exchange rate defended by ample remittances and privatization proceeds. Early elections and hot reform retoric are a necessary ingredient of this approach to avoid accountability for a failure to complete transition and move the country to sustainable growth path.

The other possibility is to decisively move on to complete the lingering transition process. Transition the transition. Obviously, the first task is to maintain sound macroeconomic stability and energize institutional reforms at the macro and micro level. The emphasis will be on implementation and results as a corner stone for the reindustrialization effort, including a smart industrial policy and regional development effort.

Graph 3. Serbia – Repeated J-curve of GDP dynamics in Transitionism



This will require a genuine long-term bi-partisan commitment and pragmatic, creative (albeit sometimes unconventional) solutions that yield results necessary to transform the Serbian economy and close the income and performance gap with EU countries.

Completion of institutional reforms and strong commitment to long-run development are critical to attract strategic foreign investment, which in turn enables reindustrialization, and guarantees sustainability of reforms and economic growth.

It is important to secure sizeable new investments in strategic sectors in which the state is the majority or the only owner (energy, agriculture, telecommunication, etc.). These sectors create an enabling environment for private sector investments and represent the cornerstones of increased competitiveness. The capital for the energy sector and telecom can be raised through IPOs and FDIs from strategic partners, while agriculture requires creative, unconventional solutions. Given relatively high levels of public debt, investment in infrastructure should be financed through concessions and BOTs. Local infrastructure can be financed through PPPs. It is reasonable to expect that these investments and a completed institutional environment will "crowd in" sizeable private investment aimed mostly at regional and global exports.

Finally, we return to the central question of transitionism in Serbia: the issue of geopolitical repositioning. This problem persists almost two decades after the start of transition. The political elites in Serbia before and after 2000 had huge ideological differences, but still shared a similar value system as a basis for political activity. Most glaring examples are campaign financing, use of public office for party or personal gain, lack of transparency, discretionary decision making, absence of public scrutiny.

Hence, the introduction of democracy and the change of political regime did not produce a parallel change in the operation of the public administration and the judicial system. Political discontinuity was not matched by an equal discontinuity in the system and operation of government (the executive branch and the judicial branch). Many initiatives to pass new laws and reform institutions were thus blocked in parliament by the same parties that were supposed to bring about change. Even the new constitution failed to establish the key principles of a rational political system and efficient state very well known to key political leaders. A well known Serbian novelist *S. Selenić* cynically observed „the more we change things, the more they stay the same".

Outside of petty political party interests it is hard to understand why would Serbia retain a parliament with 250 deputies, implying a level of representation 17 times greater than the US and 10 times greater than Russia? Or why would the number of deputy speaker in parliament be left open to political negotiation after the elections other than to reward potential coalition partners? Unspecified number of deputy-prime ministers, ministers, and state advisors serves the same purpose at the expense of transparency and inefficient use of taxpayer money. And last, but not least, the Constitution does not call for transparent, merit based selection process for regulatory bodies, state agencies and companies. This opens a Pandora box of biased politically inspired appointments (often without much justification) and undermines the quality and credibility of the state. Two obvious perverse outcomes are a hyper-production of well-paid positions for political allies and excessive hiring of inexperienced staff with nominal credentials (expert pedophilia).

Transition calls for a small, smart and proactive state which relies on national knowledge base (universities, academy of sciences, professional associations etc.). True, the geopolitical void and the prolonged crisis has deeply shaken and pushed in the background most of these institutions, while the active advisory space has been invaded by the new (quite active and entrepreneurial) non-government sector. With due exceptions, this sector often repackages and recycles old advice or mechanically repeats analyses based on new empirical research. It is supply (finance) driven rarely has the will or the capacity to provide genuine advice and add value in creating custom solutions for Serbia. Indeed, new non-government sector has unparalleled capacity to raise funding from international sources and even domestic state budget, which is almost never matched with their own knowledge base and capacity to deliver quality advice. The politicians should be able to recognize the merits of alternative sources of knowledge and policy advice and make the right choice.

Finally, it should be noted that these institutional and policy shortcomings make the Serbian economy extremely vulnerable to external shocks, especially to energy prices and interest rates (i.e. the cost of external financing). They also diminish country's ability to successfully meet the challenges of the global world economy and secure a sustainable economic growth in the longer run.

4. WHAT IS THE POST-TRANSITION AGENDA?

While Serbia still transits from plan to market with a mixed result, the globalization has taken the center stage in the world economy. Higher global competitiveness has become the primary objective for both established and emerging market economies. There are quite a few competing strategies to increase national and business competitiveness. They seek original and effective answers to the following challenges:

1. Growing complexity
2. Trade liberalization
3. Financial intermediation
4. Demographic risks
5. Concentration of wealth and income
6. Increasing costs of repositioning

1. *Growing Complexity.* Sooner or later market economies are faced with the risks of growing complexity. Globalization connects countries and markets and adds a whole new dimension to growing complexity [11, page 241]. For example, bankruptcies triggered by the US subprime mortgage crisis negatively affected the demand for derivatives and asset backed securities during 2007, much before it became a global financial crisis. In highly integrated global financial markets direct and indirect (ricochet) contagion effects easily spread to most financial institutions (banks, insurance companies, institutional investors, private capital funds, hedge funds) across the globe.

2. *Trade Liberalization.* During the last couple of decades trade liberalization has been the mantra of Western politicians and policy makers. Despite WTO efforts to come up with a system of fair and development oriented concept of free trade, political interests of the North and South again do not coincide in critical areas. This leads to frustration, slow progress and failed rounds of further trade negotiations. Potential controversies of globalization are best seen in the area of further trade liberalization.

3. *Financial intermediation.* Over the past three decades we witnessed strides in the liberalization of financial (capital) flows and internationalization (globalization) of financial markets. This led to formidable homogenization and integration of financial markets. It also rendered a basis to further professionalize financial management and outsource financial management services. Although the current global financial crisis has revealed some weaknesses and vulnerabilities of the modern global financial system, real progress made in the area of financial management and creation of complex financial instruments is here to stay. Systemic improvements are due in the area of supervision and financial controls to eliminate loopholes and adequately manage risks. Once the crisis is over and the global financial architecture has been reinforced, professional investors in new circumstances will again be faced with an old investment dilemma noted by *Keynes* [6, str.58] „is one's reputation better served to fail conventionally or prosper unconventionally".

At a more technical level, it should be noted that present financial intermediation on Basel II principles [5] and MPIs-*macroprudental indicators* defined by the IMF. They enable a comprehensive assessment of the state and stability of the financial system by linking microeconomic financial risks (i.e. viability of individual financial institutions) and key indicators of macroeconomic performance. The main objective is to link critical aspects of risk management, possible financial contamination and business cycle and propose alternative policy responses in case of a crisis. Obviously, it would be advisable to lower indebtedness in case of expected economic downturn (recession) and allow more debt in case of expected economic boom.

4. *Demographic risk.* Demographic factors can influence geopolitical importance of states and regions. Decline in fertility rates leads to lower demographic growth and may cause a number of other economic consequences which, ultimately, may lower growth and economic welfare. The following facts support this claim. First, adequate supply of quality (productive and efficient) labor is an important ingredient deflation and competitiveness. Second, *pay-as-you-go* pension and social insurance systems are not financially viable in circumstances where the number of retired people approaches or exeeds active population. Third, inadequate age and educational demographic structure lowers the base to recruit entrepreneurs, managers, engineers and technocrats indispensable to advance reforms, increase competitiveness and innovative capacity. Uneven spatial distribution of declining population causes both regional development problems in some regions and high infrastructure and social costs in urban areas, often accompanied by problems of social pathology and security.

   Since economic immigration does not seem to be a viable option for Serbia, declining fertility can only be addressed internally. Otherwise, a long run equilibrium will be established at a slower economic growth path.

5. *Concentration of wealth and income.* A stable democratic society at the end of transition must have an efficient economy and distribution of income and wealth that is perceived as fair, equitable and legitimate by the majority of people. If most citizens think that incomes and wealth are appropriated illegally, or that the distribution is unfair and unjust, sooner or later this will give rise to populist claims and political movements that would undermine the efficiency of the economy.

   Globalization has increased the concentration of income and wealth. In the US *Gini* coefficient has increased from 0,40 in 1980 to 0,47 in year 2005 [11, str.242]. *Gini* coefficient has also increased in Russia and China, but values recorded for 2005 (0,40 and 0,44, respectively) are somewhat lower than in the US. This may look counterintuitive given the strong trends in forming a class of large national owners, but *Gini* coefficients are usually computed using the houshoild survey data which do not capture well (or at all) the incomes of the rich.

   At the same time the distribution of income in the US has become more skewed: median income as percent of average income declined from 89,4% in 1967 to 73,1% in 2005. This also confirms increased concentration of income in the hands of the rich. It is interesting to note that the redistribution of income took place during a period of extraordinary economic growth.

   Concentration of wealth and income is also affected by technological and financial innovations in an increasingly connected global world economy. The wealthiest Americans on the *Forbes* list of top 400 come from the financial sector, information technologies and communications.

   Large concentration of wealth and income in transition economies usually comes from redistribution of assests and income on the local market, rather than from creating value added on the global world market. Next to maintaining macroeconomic stability, top priority for transition government should be to secure legitimate and just distribution of wealth and income. In doing that it is important to provide positive incentives for new entrepreneurs and proactive investors and suppress rent seeking behavior and brokerage mentality inevitably created during transition. Use of incentives based on the tax and industrial policy is advisable. By contrast, crude application of antimonopoly legislation to discipline the new owners is often a negative sum game hurting all domestic stakeholders and benefiting foreign com petition only.

6. *Increasing costs of repositioning.* Redefining the role of the state and transferring select functions of a classical national state to supranational (EU) and subnational (local) level is likely to have substantial design and transitional costs. Transitional costs include the creation of a new regulatory framework, phasing out of old and creation of new institutions,

mediation and other costs. For example, it is estimated that the implementation of the EU *acquis communautaire* in Serbia would require around 10 million Euros. Another example are costs to correct past environmental mistakes and protect the environment in line with the EU standards. Finally, new world order imposes significant additional costs needed to sustain the required security levels, finance geopolitical lobbying and maintain food and health safety. Eventual participation in international economic integrations, security and military (geostrategic) arrangements also has significant associated costs.

All these costs must be absorbed through increased economic efficiency while leaving sufficient efficiency gains to shield off new competition and make strides in the tough global markets. This is not an easy task.

Global capitalism is a reality which does not have a viable alternative at this time. It has many advantages and some drawbacks owed to market imperfections and regulatory failures. Some of the failures can be traced back to rigid views held by some dominant players or to geostrategic political and military factors. We hope that new and better regulatory environment will be completed and put in place to respond to present and future challenges. New regulatory setup is expected to replace the institutional chaos of the early globalization with a new global institutional order, and a new global economic system.

Nota bene

Today, in the middle of 2008, the Serbian economy is weak, out of tune, and without strategic focus. This is confirmed anecdotal evidence, theory and hard statistical data. Based on anecdotal evidence, an economy where the highest paid jobs are in politics, marketing (often closely linked to politics), and plastic surgery, can hardly be perceived as successful or sustainable.

From the perspective of economic theory, a model advocating „strong currency in a weak economy" is not sustainable either, as low inflation anchored in overvalued exchange rate can not be supported in the long run by the one-time privatization proceeds. Besides, there is no theoretical or practical basis to expect that total outright privatization would generate economic growth and welfare. The impact of total privatization is likely to be similar to the impact of total and immediate liberalization (i.e. increase in price level with zero supply response). What's more, overvalued exchange rate may sacrifice economic growth and competitiveness, the only permanent sources of strong domestic currency.

In the short run Serbia can not hope for optimal but rather second best solutions. To create a turning point in the historical trend, Serbia must invoke active industrial and regional development policy, and combine them with non-conventional initiatives aimed at creating new jobs for the new entrants in the labor market as well as labor shed by the sectors going through restructuring. The state should also maintain a strong foot in the public sector. In parallel, during transition the state must retain its enabling and catalyzing role in creating efficient markets and institutional framework, step-up its regulatory role in eliminating and correcting market imperfections, and strengthen its ability to sustain economic development, technological progress, education and innovation. Sectors of focus are energy, agriculture, and telecommunication, with a possible addition of pharmaceuticals that experience growing importance with increased longevity (hence the new name for the sector - *life science*).

As for statistics, hard data show that the slow roadmap of economic reforms does not generate or guarantee much stability (macroeconomic, institutional and political). Unlike the classical recession caused by excess supply (hyper-production), transitional recession is caused by hypo-production (low levels of supply), and investment myopia in a misaligned economy subject to high systemic risks. In this context policy actions aimed at boosting demand (through higher public sector wages beyond productivity growth, distribution of public assets as free shares, etc.) are not likely to end the transitional recession or address its structural causes.

Serbia was the first victim of that crisis that only now threatens to burst open. The citizens of Serbia concurrently entered transition and globalization hoping to leap from autocratic socialism into market democracy. Unfortunately, almost two decades later, the citizens of Serbia

are neither in market democracy nor in enlightened absolutism, but rather stuck in "transitionism", a dictatorship of uneducated dictators. This is largely due to long overdue and still pending geopolitical positioning. In a global world dominated by asymmetric relations, positioning has critical importance. Serbia is not yet positioned. This fact substantively influences the level of uncertainty and economic expectations of investors, decision makers, and common people.

Without geopolitical repositioning, in a weak and unbalanced economy, even the best economic policies and institutional reforms will likely miss the target (fail to achieve the desired results). Only upon resolving the geopolitical repositioning conundrum and related meta issues of state, a new government can shed the twenty year old stigma and send a clear signal to foreign (and domestic) investors. With both feet firmly down on the geopolitical bedrock, the new government can focus on the huge task of EU accession. Otherwise, there is a real and present danger that may be permanently stuck in the geopolitical nowhere land and expose itself to a devastating political and economic crossfire.

Pro-European orientation primarily means institutional compatibility with the EU. A pro-European program does not imply or require an anti-Russian orientation. On the contrary, good relations with Russia will be the basis for attracting strategic partners in energy and related sectors. Moreover, self-sufficiency in energy and related industries is only likely to strengthen Serbia's negotiating position *vis-a-vis* the EU.

Once the geopolitical puzzle is resolved, Serbia can rightly resume its constituent and leadership role in the region, and stop being the reluctant recipient of neighbors interests. A feasible and sustainable geopolitical solution is a basis for completing economic and institutional reforms, exiting transitionism and embarking on a path to EU accession and successful integration into the global world market economy.

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THE CHALLENGES OF INTEGRATING MICRO AND MACRO ASPECTS OF COMPETITIVENESS

Abstract

Last year the World Economic Forum announced an integration of the Global Competitiveness Index (GCI) and Business Competitiveness Index (BCI) into a new single composite index of global competitiveness. Although this integration has long been demanded by the users of WEF competitiveness indexes and appears fully consistent with the logic and true nature of composite indicators (to arrive at a single summary evaluation), it can potentially open a number of theoretical, methodological, and practical empirical issues. Based on the analysis of the evolution of the measurement of national and business competitiveness done at the WEF over the last decade, the paper concludes that the brunt of theoretical and methodological issues have already been resolved through a series of advances in the measurement of national competitiveness. Presently, both indexes follow the same concept of stages of growth (and development) based initially on factor mobilization, then increases in efficiency, and finally on innovations. Both indexes consider similar dimensions of institutional, macroeconomic and infrastructural (physical) enabling environment for future growth and development. The remaining challenges are mainly technical in nature (to eliminate overlaps and double-counting, use multivariate analysis to secure that the underlying structure of data is consistent with the measurement model, empirically derive an acceptable set of aggregation weights. and test if important dimension of competitiveness and growth had been omitted from the measurement model.

Key words: *Competitiveness, Growth Competitiveness, National Competitiveness, Business Competitiveness, Global Competitiveness, Composite Indicators, Composite Indexes, Growth, Development, World Economic Forum.*

INTRODUCTION

Last year Global Competitiveness Report[1], announced a formal integration of the two indexes that the World Economic Forum (WEF) carefully compiles and widely publishes for the past three decades. WEF global indicators are among the most comprehensive and best known measures national and business competitiveness in the world. The New Global Competitiveness Index (NGCI) is expected to integrate the existing Global Competitiveness Index (GCI) Business Competitiveness Index (BCI). This will be the sixth major change in the WEF's measurement of competitiveness in the last decade. The first large change took place in 1998 when a measure of micro competitiveness was added to the general competitiveness index already in existence for almost two decades. The new index was initially labeled Current Competitiveness Index to reflect the short-term nature of business cycles and, hence, business environment as opposed to the medium-term nature of the economic growth environment being captured by the general competitiveness index of the time. Despite the name change (to Business Competitiveness Index), the structure and focus on the microeconomic / business aspects of competitiveness remained largely unchanged to this day.

By contrast, measures of national competitiveness underwent more frequent and much deeper changes. In the first round of changes, the general competitiveness index was radically transformed into a Growth Competitiveness

1 For details see WEF 2007 and information posted on their web page: http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm.

Index, which has been substantially improved and fine-tuned in 2001. Despite that, it lasted only for a few years. In 2004 the Growth Competitiveness Index started giving way to a Global Competitiveness Index which underwent the last significant change last year in order be phased out starting this year and make history next year.

From the formal point of view, the announced methodological reintegration closes the full circle and brings us back to a „single competitiveness index" already used in the 1979-1998 period. Looking at substance, though, this reintegration brings about new quality in measuring competitiveness as a basis of economic growth and development. It accomplishes a simultaneous and unified consideration of macroeconomic, microeconomic and business aspects of competitiveness, and it pulls together long run, medium run and short run dimensions of competitiveness.

A simple question arises: If indeed this comprehensive integration was done so easily, why wasn't it attempted at the time when the Business Competitiveness Index was first introduced in 1998, or in 2000 when the Growth Competitiveness Index was introduced, or at least in 2004 when the full fledged Global Competitiveness Index was crowned? Was the ten year wait necessary to obtain the new battery of more robust empirical results as a basis for the reintegration of economic and business aspects of competitiveness? Has the long parallel existence of these indicators contributed to pragmatic integration of macroeconomic and microeconomic aspects of the global (national) competitiveness? Has this cohabitation in any way contributed to the resolution of the distinction between factors that determine the medium run growth and short-term considerations essential in understanding the real business cycles? Has the experience gathered during the last decade helped in pragmatically resolving the dissonant recommendations received from theory of growth and development, modern institutional economics and applied business economics?

The economic team gathered around the World Economic Forum is persistent in providing one answer to the above questions. For the past three decades WEF has been working hard to gather information, research and measure the complex phenomena of competitiveness, utilizing the best and latest theoretical and practical knowledge in this field. Ten years ago we simply did not have the necessary theoretical understanding and the body of robust empirical results that would enable such a comprehensive integration of micro, macro and business aspects of competitiveness.

"The methodology used to assess national competitiveness has necessarily evolved over time as we have taken into account the latest thinking on the factors driving competitiveness and growth. It was in this context that in 2004 the World Economic Forum introduced the Global Competitiveness Index (GCI), a highly comprehensive index for measuring national competitiveness, taking into account the microeconomic and macroeconomic foundations of national competitiveness."[2]

Available information and our intuition both suggest that each of the above questions merits, at least in part, a positive answer. Each of the six steps to innovate the methodology had to overcome important theoretical, research and practical constraints. A significant learning process took part within the broadly defined WEF team. The main objective of this paper are to revisit the questions of improving the measurement of competitiveness, shed more light on the path followed in the past decade, and identify the remaining challenges in rendering a full integration of national and business aspects of competitiveness into a single comprehensive index. This is the main task facing the WEF team lead by the world most prominent authors in the fields of business (micro) competeveness (M. Porter, Harvard University) and economic growth (X. Sala-i-Martin, Columbia University).

The first part of the paper will review the evolution of the theoretical and empirical framework followed by the WEF team in measuring different aspects of competitiveness. The second part will provide a brief account of desirable properties in defining, constructing and measuring composite indexes, and, then, evaluate the two WEF measures of national and business competitiveness against the five criteria suggested by the general methodology. The extent of compliance or non-compliance will then be the basis to evaluate the remaining challenges in further developing and integrating all aspects of competitiveness

2 Sala-i-Martin et. al.. (2007), published as chapter 1.1 in WEF 2007.

into a single comprehensive index. Clearly, the ultimate objective is to achieve a methodologically sound single composite index of competitiveness with greater degree of reliability and usefulness in: (a) designing economic policy and institutional reforms, and (b) providing reliable information on key aspects of the investment climate and long run investment and growth potential.

MEASURING COMPETITIVENESS: THE EVOLUTION OF THE THEORETICAL AND EMPIRICAL FRAMEWORK

From the very beginning three decades ago all WEF indicators were produced on the basis of a very transparent methodology and consistent set of criteria. Input data (comprising statistical and expert survey data), processing algorithms, aggregation rules, and final results have bee fully disclosed and published on an annual basis[3]. Expert surveys contribute a large portion of the overall WEF competitiveness data base. Compared to others, WEF gives significantly more importance to data collected through expert surveys and devotes even more energy in reaching thousands of most competent decision makers. Through membership and surveys WEF engages a rare combination of most powerful and influential decision and opinion makers at the global level, ranging from top businessmen, politicians, statesmen, and ministers, to artists, researchers and academicians at the national and global level. It hard to find an internationally known statesmen, minister of finance or economy, governor of a central bank or a CEO of large corporations who has not participated in WEF's global or regional for a, or took part in its competitiveness surveys. The most recent survey for the WEF 2008 was conducted in 131 country in the world which cover more than 90% of the territory and account for more than 95% of GDP and foreign trade. Following the recent consolidation, WEF presently tracks twelve pillars of competitiveness on the basis of 102 indicators (66 based on surveys and 36 on hard data).

The situation was quite different a decade ago, when a single composite index was being assessed for less than 60 countries in the world. The measurement was predominantly focused on national (macroeconomic) aspects of competitiveness, with few elements of microeconomic competitiveness. The linkages with the traditional theory of economic growth and development were assumed but stayed mostly implicit in the background, without any explicit statement in the annual competitiveness reports or other WEF publications. For the most part, the most important aspects of business competitiveness were absent from the WEF approach at the time.

In line with its high aspirations, growing international stature, and quite ample financial ability, in the late 1990's the WEF thrived to: (a) further expand the coverage of its competitiveness index to include critical aspects of business competitiveness; and (b) update the methodology and modernize measurement techniques in line with the latest academic and empirical results in related fields.

The choice of Harvard University was a good fit both in terms of its general very high reputation and in terms of specific path-breaking research results achieved in relevant fields during the 1990's.

In the area of business economics, such a path-breaking result was easily found in the work of M. Porter from Harvard Business School. His „competitive advantage of nations"[4] for the first time provided clear theoretical and practical linkages between strategic aspects of business competitiveness at an enterprise level, with its economic environment at the sectoral and macroeconomic level. Porter's approach was a perfect fit for the long-standing tradition at the World Economic Forum. It provided a strong theoretical and empirical justification for expanding the coverage of global competitiveness to include key dimensions of business competitiveness. It also gave WEF a full-fledged applied research methodology which has been used quite successfully in a number of specific regional and individual country studies of competitiveness.

Porter's fully developed theoretical and empirical framework to study and measure business competitiveness stood in stark contrast to the national (macroeconomic) aspects of competitiveness where such a framework simply did not exist ten years ago. Starting from the basic growth models and theoretical conclusions (postulates) emanating from the new growth theory and avail-

3 See WEF annual global competitiveness reports referenced in this paper WEF 1996, WEF 2000, WEF 2001, WEF 2002, WEF 2003, WEF 2004, WEF 2005, WEF 2006 and WEF 2007.

4 Porter (1990).

able empirical results, J. Sachs and A. Warner (WEF 2000) have identified basic macroeconomic and microeconomic determinants of growth using WEF's data base. Out of five empirically (econometrically) identified indicators, two have been rejected as pertaining to temporary phenomena[5], and three have been selected to form the initial definition of the new growth competitiveness index (GCI). These equally weighted indexes measure economic creativity[6], financial and international aspects of growth competition.

The following year J. McArthur and J. Sachs (2001) substantially revised the Growth Competitiveness Index, both in terms of its structure and weights assigned to new components of growth competitiveness which included indexes of technology, public institutions, and macroeconomic environment. For countries labeled as "innovators" the technology index gets a higher weight (½) and the other remaining indexes each get a ¼ weight. For all other countries the indexes have equal weights. The aggregation of subcomponents that enter the technology index follow a similar logic: for „innovator countries", the technology index is obtained as an unweighted average of the "innovation" and IT subcomponents, while for other countries the "innovation" subcomponent receives a lower weight (1/8), IT subcomponent retains a ½ weight, and a new subcomponents (on technology transfer) gets the second largest weight (of 3/8).

The Growth Competitiveness Index represented a huge step forward in establishing a clear and explicit link between the methodology used by the WEF, the economic theory and the growing body of high quality empirical (econometric) results aimed at identifying the key determinants of economic growth.

"When it was created, GCI represented an intelligent compromise between the need for complexity, reflecting the multiplicity of factors affecting the evolution of growth, and the need for a structure that was transparent and simple enough that it could be estimated for a large number of countries." Over time, … "it has become increasingly apparent … that we need a more comprehensive vehicle, one that better reflects changes in the nature of the global economy and the relative importance of key factors in explaining the evolution of growth in a large number of countries, with a considerable degree of institutional and structural diversity." WEF 2005, str. xx.

5 These include a measure of the initial p/c income level and the economic crisis index. The first has a negative sign as countries with higher starting income levels tend to have slower growth rates. Both measures have limited validity: the initial income level is valid only during the „catch-up phase", while the economic crisis index has an impact only during severe economic downturns and recovery.

6 For detailed analysis of this index and empirical results see Warner (2000).

Table 1: The Evolution of WEF's Composite Competitiveness Indexes

Period	Composite Competitiveness Indexes	
	National	Business
1979-1998	**General Competitiveness Index** Pragmatic index of competitiveness with no explicit link to theory or empirics of economic growth.	-- Business aspects of competitiveness absent.
1998-1999		**Current Competitiveness Index*)** Introduces new aspects of business competitiveness (quality of businesses and of business environment); Introduces three stages of developing business competitiveness: factor, investment and innovative.
2000-2003	**Growth Competitiveness Index** Establishes a clear link with growth theory. Empirical identification of key medium term dimensions of growth. Introduces different weights applicable in innovator and non-innovator countries.	
2004-2006	**Global Competitiveness Index 9** Expands the coverage of competitiveness to 9 dimensions and three stages of growth based on factor mobilization, efficiency enhancement and innovation.	**Business Competitiveness Index**
2007	**Global Competitiveness Index 12** Competitiveness assessed through 12 dimensions..	
2008-	*Global Competitiveness Index 12*	*Business Competitiveness Index*
2009 -	**New Global Competitiveness Index**	

*) The name of the index has been first changed to Microeconomic Competitiveness Index in 2001, and then to Business Competitiveness Index in 2002.

The principal authors of the WEF indexes quote two obvious examples which strongly support the need for a more comprehensive measurement of the multiple factors of growth:

- On the one hand, it is the example of sluggish growth performance of the EU15 group of countries which can not be fully explained without understanding the structural weaknesses (including, for example, labor market rigidities) and the slow pace of reform (such as slow of the single market, which prevents the economies of scale). The GCI does not address the issue of labor market rigidities nor the absence of economies of scale which adversely affect economic growth of the EU15.
- On the other hand, we have the problem of poor growth performance in most of Africa which can not be properly understood without adequate public health considerations which are as important as public resource management: both the epidemics and the wasteful use of public resources have a major negative impact on business and economic growth. GCI was equally silent on these important issues.

In order to construct a new, more comprehensive Global Competitiveness Index, WEF has invited X. Sala-i-Martin, one of the leading world experts in the theoretical and empirical analysis of economic growth. The new global index has retained many of the valid empirical results and theoretical underpinnings of the earlier Growth Competitiveness Index, but it also went beyond by expanding the coverage to include other important factors that affect the competitiveness of national economies. As detailed in Table 3, the initial design of the Global Competitiveness Index was based on nine pillars or sub-indexes, hence the name GCI-9. Four of them have an approximate equivalent in the previous growth index[7], and five represent new dimensions of competitiveness and economic growth. They refer to otherwise well known determinants of economic growth and development: infrastructure, health and basic education, higher education, indicators on market efficiency and business sophistication.

In parallel with expanding the coverage and depth of measuring various dimensions of competitiveness, the new global index has also firmed up the concept of stages of growth (and development)[8]. The core concept of stages of growth was already implicitly introduced under the Growth Competitiveness Index by recognizing "innovators" (higher stage of growth) and other countries (lower stage of growth). GCI-9 expands the concept to three stages of growth.

- The first stage represents a factor driven growth (GDP p/c less than $2.000). At this stage economic growth mainly depends on the quantity and quality of basic factors of production, and basic economic environment (infrastructure, policies and institutions). During the factor-driven stage basic economic requirements (the first four sub-indexes or pillars) receive the highest weight (50%).
- During the second, efficiency-driven stage (GDP p/c $3.000-$9.000), the emphasis moves to efficiency enhancers measured by sub-indexes of the second block. They look at efficiency of key markets, the creation of human capital (through higher education and training), and technological readiness to adopt, adapt and efficiently implement modern technologies. Consequently, the weight of the second block increases to 50% in the second stage.
- Finally, during the third innovation-driven stage of development (GDP p/c over $17.000) business sophistication and innovations gain in importance and the weight of the third block increases to 30%.
- During transition from the first to the second stage (GDP p/c $2.000 - $3.000), and from the second to third stage (GDP p/c $9.000 -17.000) relative weights of the three blocks of factors are not stable enough.

WEF 2007 introduced a revised Global Competitiveness Index based on 12 sub-indexes (pillars). The new GCI-12 has retained eight sub-indexes from its predecessor GCI-9. Composite sub-index on "market efficiency" has been disaggregated into its subcomponents measur-

7 These include public institutions, macroeconomic environment, transfer of technology and innovations.

8 Koncept faza rasta neodvojivo je povezan sa teorijom koju je afirmisao Rostow (1960), mada se ovde radi o bitno drugačijem definisanju faza rasta.

ing the efficiency of commodity markets, labor markets, financial markets, and overall market size. As shown in Table 3, this change involved a clear content mapping from the previous composite index to four separate sub-indexes. At first sight it appears that nothing has changed in the content and the structure of the index. But that's not really the case. By changing the number of sub-indexes within the efficiency block, their relative weights have been changed. Indirectly, the cumulative weight given to market efficiency sub-indexes has increased substantially. In and of itself this would not be a problem has this change been explicitly analyzed, justified and discussed in the description of the methodology.

The analysis of this change is not simple due to a parallel change in the weighting system. The new weights assign greater importance to „basic requirements" during the first stage of development (an increase from 50% to 60%), and lower importance during the "innovation stage" (a decrease from 30% to 20%). The new weights also adjust downwards the impact of efficiency enhancers during the first factor-driven stage (from 40% to 35%), and upwards during the "innovation stage" (from 40% to 50%). Finally, there was a marginal downward adjustment in the weight awarded to innovation factors during the first stage of development. The proposed changes in the weighting system sound plausible and have been supported by a fairly detailed empirical analysis presented in a separate chapter of the last year's report (WEF 2007, chapter 1.1).

Expectedly, the combined impact of these two changes is fairly complicated. In order to single out the impact of implicit change in weights caused by the disaggregation of the "market efficiency" sub-index, we have: (a) expressed all weights in terms of the initial nine sub-indexes; and (b) normalized the resulting numbers on the new system of weights assigned to stages of development under GCI-12. The results summarized in the last three columns of Table 2 clearly show the huge impact created by the implicit change of weights created by the unexplained disaggregation "market efficiency" sub-index within the b lock of efficiency enhancers[9]. The share of combined sub-indexes measuring market efficiency has been doubled in all stages of development, while the shares awarded to

9 Clearly, this analysis assumes that the change of explicit weights assigned to three blocks across different stages of development is entirely theoretically and empirically justified. The effects of that change have thus been neutralized by the chosen normalization procedure. This is numerically confirmed by zero rates of changes across all subindexes in „basic requirement" and „innovation" blocks.

Table 2: WEF GCI Indexes – The Impact of Weight Changes

		GCI-9			GCI-12			Normalized Weight Changes		
		Factor driven stage	Efficiency driven stage	Innovation stage	Factor driven stage	Efficiency driven stage	Innovation stage	Factor driven stage	Efficiency driven stage	Innovation stage
BASIC REQUIREMENTS		**50**	**40**	**30**	**60**	**40**	**20**	**0%**	**0%**	**0%**
1	Institutions	12.5	10	7.5	15	10	5	0.0%	0.0%	0.0%
2	Infrastructure	12.5	10	7.5	15	10	5	0.0%	0.0%	0.0%
3	Macro stability	12.5	10	7.5	15	10	5	0.0%	0.0%	0.0%
4	Health and education	12.5	10	7.5	15	10	5	0.0%	0.0%	0.0%
EFFICIENCY ENHANCERS		**40**	**50**	**40**	**35**	**50**	**50**	**0%**	**0%**	**0%**
5	High education	13.3	16.7	13.3	5.8	8.3	8.3	-43.8%	-50.0%	-62.5%
6	Market efficiency (commodity, labor, financ) and market size	13.3	16.7	13.3	23.3	33.3	33.3	87.5%	100.0%	125.0%
7	Technological readiness	13.3	16.7	13.3	5.8	8.3	8.3	-43.8%	-50.0%	-62.5%
INNOVATION FACTORS		**10**	**10**	**30**	**5**	**10**	**30**	**0%**	**0%**	**0%**
8	Business sophistication	5	5	15	2.5	5	15	0.0%	0.0%	0.0%
9	Innovations	5	5	15	2.5	5	15	0.0%	0.0%	0.0%

Source: WEF 2006, WEF 2007 and author's calculations.

higher education and technological readiness have been almost cut in half. That is a large change which should have received adequate prior empirical verification and a separate methodological explanation in the report in order to protect the integrity of the analysis and the reliability of the WEF composite indicators.

Before attempting a summary assessment of the state of integration of WEF indexes after a decade of constant evolution and improvements, and identify the remaining issues and challenges in derive a new single composite global index of competitiveness, we provide a brief account of the key principles for constructing reliable composite indicators.

THE PRINCIPLES OF CONSTRUCTING COMPOSITE INDICATORS

Composite indicators are obtained through compilation or aggregation of multiple individual indicators organized within a clear theoretical model which provides a precisely defines the multidimensional phenomena being analyzed and measured. Examples include competitiveness, economic structure, industrial policy, sustainability of growth and development, knowledge economy, etc. In other words, individual indicators measure separate dimensions of the multidimensional phenomenon being analyzed. Theoretically valid, consistent and empirically confirmed model describes the interaction between individual dimensions and provides explicit aggregation rules of individual dimensions into a multidimensional phenomenon.

These rules are valid irrespective of valuation method, i.e. whether individual and composite indicators are provided as quantitative[10] or qualitative[11] valuation of separate dimensions of competitiveness or other aspects of growth and development. As long as they follow the same methodology and are repeated in regular intervals, both valuations can be a basis to compare views across different observation units at a given point in time or for comparisons across time. This property is especially important is assessing policy measures or the quality of specific institutional arrangements since perceived trends and convergence of processes may ne a sufficient basis for effective monitoring and evaluation of set objectives, irrespective of the possible difficulties in securing a cardinal measure of desirable outcomes.

Based on extensive experience Saisana and Tarantola (2002) single out the following general advantages of composite indicators, which are particularly valuable in situations demanding decisions on complex economic and social issues. Well constructed and evaluated composite indicators are often helpful in putting an issue on the political agenda (in government or parliament), staring a public debate, forcing a decision, or informing the public. These advantages can be undermined if there are errors in the construction of composite indicators or weaknesses in the interpretation of the results they provide. This can lead to oversimplification, and wrong decisions which can discredit the method irrespective of the intent.

Composite indicators have strong proponents and fierce opponents. Proponents believe that aggregation of individual components to arrive at a single summary valuation makes a lot of sense since, whether we want it or not, each decision de facto does that. Hence, it is better to do the aggregation knowingly and openly, than implicitly. By contrast, the opponents believe that the valuation should stop at the level of individual indicators since further aggregation is entirely arbitrary (subjective). This debate will probably last for ever since both sides have pretty strong and logical arguments: The opponents of composite indicators are right in their claim that "the aggregation components reduces the richness of the multidimensional phenomena", while the proponents may be equally correct in saying that without composite indicators one can "hardly expect that decision makers will ever look at all dimensions of complex phenomena").[12]

Overall, one is tempted to conclude that composite indicators look more like complex numerical models than a simple statistical technique – they really are. Their

10 Quantitative valuations can be hard statistical data (e.g. number of cell phones in use) or some well defined processing of statistical data. Processing can be very simple (e.g. number of telephones per capita) or more complicated (e.g. real household expenditures on wireless telephon services).

11 Qualitative valuations may be based on common sense (e.g. views of randomly selected voters or consumers) or expert views (e.g. views from managers, decision makers, reasearchers, etc.).

12 See Saisana *et al*., 2005

quality depends more on the skill of the modeler than on the universally accepted (scientific or exact) principles of constructing, evaluating (numerically estimating) and solving models. The proof of quality of composite indicators is in their ability to respond to the task at hand and be accepted by the users and peers.

Five „easy challenges" of integrating national and business competitiveness

As we already wrote[13], for almost two decades we are witnessing a flood of international composite indicators focused on measuring complex economic, political and social phenomena. This huge set is dominated by indicators of economic and political freedom, democratization and corruption. The second largest subset deals with the quality of microeconomic environment and evaluates the investment climate. At the end we find a relatively small number of composite indicators dealing with competitiveness.

Despite the obvious hyper-production of composite indicators, until recently relatively little has been written on the desirable properties of composite indicators that would make them suitable for the main task they are designed to perform: enable and facilitate quality decision making on complex multidimensional phenomena. A recent OECD publication[14] provides a detailed review of the methodology for the construction of composite indicators. We single out the following desirable characteristics a reliable composite indicator should have:

1. Consistent theoretical framework which assumes
   - A clear definition of the multidimensional phenomenon being measured;
   - A theoretical model a full structure of the phenomenon; and
   - Detailed list of criteria for the selection of variables (indicators).
2. Choice of individual indicators and data sources including
   - Existing statistical data sources; and
   - Data and views (opinions) collected through surveys.
3. Use of appropriate multivariate analysis to
   - Assess the structure of available information; and
   - Compare it with the theoretical model.
4. Derivation of the weighting system and aggregation procedure to
   - Properly assess the importance of individual indicators;
   - Define the aggregation procedure; and
   - Secure the consistency of results with the original theoretical model.
5. Data base management to
   - Secure stable source of data;
   - Resolve the issue of missing data;
   - Normalize the measurement units; and
   - Monitor linkages with similar or related variables from other sources.

We will selectively use these criteria in evaluating the composite indexes of competitiveness produced by the World Economic Forum and assessing the remaining challenges in integrating them into a new single global competitiveness index.

PRESENT STATUS AND REMAINING CHALLENGES

Based on the summary presentation in Table 3 it is quite clear that a lot has been accomplished over the last ten years in improving the quality of measurement of competitiveness at the World Economic Forum.

On the side of national competitiveness, a sequence of four in depth changes has produced an impressive improvement in the theoretical consistency and empirical robustness. The concept of national competitiveness contained in the column labeled GCI-12 has a full structure with clearly defined coherent blocks (basic requirements, efficiency enhancers and innovation factors). Criteria that served as a basis for the identification of individual variables (sub-indexes) and their allocation across blocks are clear and theoretically consistent. The valuation process for each of the variables (based multiple sources containing hard statistical data and expert views collected through an annual world-wide survey conducted by the WEF) is described in detail and fully disclosed in the annual Global Competitiveness Reports. In addition, the World Eco-

13 See Vujović (2007) and (2005).

14 Nardo, M. et. al. (2005).

nomic Forum has conducted a full multivariate analysis which: (a) confirmed a high level of consistency between the available data set and the theoretical model; and (b) numerically verified the originally proposed and the revised weighting system which assigns different importance to blocks of indicators across stages of development. Finally, it should be mentioned that there is a full conformity (symmetry) between the dimensions of global competitiveness and the proposed stages of development.

On the business competitiveness side we observe a stable structure over the past ten years. The theoretical model identifies two essential dimensions: business environment and sophistication of business operations and strategy. The third dimension (state of cluster development) which plays a major role in Porter's theory, has not been consistently measured within the WEF indicators of competitiveness[15]. The Business Competitiveness Index (BCI) also introduced a concept of broader economic environment which is equivalent to the concept of stages of growth and development advanced by the Global Competitiveness Index. BCI distinguishes three types of economic environment or stages of competitive development:

- The first stage is factor-driven economy which aims to minimize costs and fully corresponds to the first stage of factor-driven growth.
- The second stage is investment-driven economy which aims to maximize efficiency and largely corresponds to efficiency-driven growth;
- The third stage is innovation-driven economy which aims to achieve unique value (through product differentiation) and corresponds to innovation-driven growth.

There is a large degree of correspondence between the three stages of growth proposed under GCI and three stages of economic environment and competitiveness proposed under BCI. The only notable difference is that BCI does not assign explicit weights to stages of competitiveness but rather changes the content of the dimension pertaining to "sophistication of business operations and strategy as indicated in the last column of Table 3.

The Competitiveness Diamond, which brought fame to M. Porter, has an important place in his theory and his approach to business competitiveness. In most situations one can easily establish the linkages between the four dimensions of the Competitiveness Diamond[16] and the type of economy (stages of growth and competitiveness), which then enable mapping to specific dimensions of competitiveness specified on the side of national competitiveness. These linkages are less obvious across different elements found on the business side of competitiveness as can be observed in the right hand side columns of Table 3.

CONCLUSION

Based on the analysis of the evolution in measuring national and business competitiveness during the past decade, we could conclude that both indexes have broadly followed a similar concept of growth and development. The brunt of initial theoretical and methodological differences between national and business competitiveness has been resolved, adjusted or completely eliminated in the meantime thanks to improvements in the design and measurement of national competitiveness and related concepts in macroeconomic, growth and development theory. Today, both indexes follow essentially identical concept of three stages of development with emphasis on the factors of production in the first stage, efficiency in the second, and, finally, innovation in the third stage. Both indexes identify similar dimensions on the side of institutional, macroeconomic, microeconomic, and infrastructural determinants of future growth and development. In other words, key outstanding theoretical, empirical, and conceptual challenges have been resolved at pragmatic level. Remaining issues and challenges are mostly technical in nature:

To complete the integration of two WEF indexes of competitiveness, the teams will have to provide a full operational mapping of specific dimensions of business competitiveness (especially all the elements contained in the four dimension of the Competitiveness Diamond) with the

15 We assume that the „state of cluster development" has not been covered in the measurement of business competitiveness due to lack of data for a considerable number of countries covered by the WEF indexes.

16 These are demand conditions, factor (input) conditions, situation in related and supporting industries, and context for firms strategy and rivarly. For details see Porter 1990 and WEF 2007, chapter 1.2.

stages of competitiveness (and growth), and further with the factors (determinants) of growth and competitiveness. Once this is accomplished and un-necessary duplications are resolved and eliminated, it will be possible to specify a fully defined and theoretically consistent model of integrated competitiveness. As indicated earlier, a two stage multivariate analysis will first test the appropriateness of the available data set for intended dimensions or measurement, second help derive an empirically based, logical, consistent, and acceptable weighting system, and third test if important dimensions of growth and competitiveness had been missed (omitted).

Table 3: Structure of WEF Indexes of National and Business Competitiveness

GCI (2000-2005)		GCI 9 (2005-2006)		GCI 12 (2006 -)	Growth depends on	Economy based on	Quality of business environment	Sophistication of business operations and strategy
Public institutions	≈	BASIC REQUIREMENTS	=	BASIC REQUIREMENTS	FACTORS	FACTORS (min COSTS)	Administration	Low Income
		1 Institutions		1 Institutions			Infrastructure	Cheap inputs
		2 Infrastructure	=	2 Infrastructure			General condit	Dev. of prod process
Macro environment	≈	3 Macro stability	=	3 Macro stability			Labor HD	Value chain
		4 Health and education	=	4 Health and education				Prof. management
		EFFICIENCY ENHANCERS		EFFICIENCY ENHANCERS	EFFICIENCY	INVESTMENT (efficiency)		Middle Income
		5 Higher education	=	5 Higher education			Sci & research	Regional sales
		Market efficiency		6 Efficiency commodity mark			Input condit.	International distrib.
		6 (commodit, labor, finan) and market size		7 Efficiency labor mark			Labor HD	Branding
				8 Financial market sophistic			Input condit.	Expendit. on R&D
Technology transfer	≈	7 Technological readiness	=	9 Technological readiness				Imported technology
		... link no 6		10 Market size			Demand cond.	Training
		INNOVATION FACTORS		INNOVATION FACTORS	INNOVATIONS	INNOVATION		High Income
		8 Business sophistication	=	11 Business sophistication				Capacity to innovate
Innovations	≈	9 Innovations	=	12 Innovations				Debth of internat market
ICT								Incentives
								Readiness to delegate

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CREATIVE FINANCIAL REPORTING AS A SOURCE OF INFORMATION RISKS

Abstract

Efficient functioning of capital market implies the existence of reliable and transparent system of financial reporting aiming at the decrease of information assymetry. Of course, investors and other users expect high quality information in order to make right decisions. The problem rises when management, supported by accountants and auditors, begins executing creative accounting practice. Concerning this, creative accounting implies activities directed towards intentional framing of financial reports in order to present only wished-for and not real profitability and financial position of a company.

In the first part of this paper, the effort was made to define creative accounting reporting as well as to point at the difference between creative accounting reporting and permissible policy of financial reporting. This part of the paper offers the explanation of the following terms: aggressive accounting, profit management, income smoothing and fraudulent financial reporting. This is followed by the analysis of motives essential for the application of creative accounting practice.

KEY WORDS: *policy of financial reporting, creative financial reporting, aggressive accounting, earnings management, income smoothing, fraudulent financial reporting.*

INTRODUCTION

Development of corporate business and of economy in general is inseparably connected with the efficient functioning of capital market. Developed capital market is an essential prerequisite for functioning of corporate businesses because it enables gathering capital from a wide range of investors, through primary emission of owner and debtor securities, but also because it enables exchange of those securities on secondary financial market. Concerning this, reliance of corporate businesses on capital market is not one-way bond. On the contrary, through primary emissions, corporate businesses enable necessary market material for functioning of capital market. Efficient market means efficient allocation of capital, faster economy growth and better performances of individual market participants, as well as of economy in general.

Basic evironmental premises of successful functioning of capital market are high-quality regulations, practicable for market processes, which is a problem nowadays primarily connected with transition economies characterized by unstable, not enough quality and mutually incompatible regulations, transparency of market processes, well-informed investors and safe depositors. It is always and elsewhere about current prerequisites, except that they are understood in market-developed economies, while in countries with developing financial markets these prerequisites haven't been satisfied yet. One of key problems, which limits reaching an efficient capital market, is keeping market participants unequally informed. This problem, usually marked as information assymetry, points out that investors mutually, and especially all of them opposed

to the management, are not in the same information position. Insufficient and unequal informing creates information problem for the investors, making recognition of the most profitable regions significantly difficult, increasing the risk of negative selection and unabling efficient allocation of capital.

Financial reporting plays an important role in the process of decreasing information assymetry. By providing reliable, relevant, unbiassed and publicly available information of great importance for the investors, financial reporting imposed itself as one of crucial sources of information for all the participants on capital market. Information from financial reports represent inevitable input in the process of making decisions on investing, keeping or selling shares, buying issued debtor securities, approving loans, reprogramming debts, etc. They are also of crucial importance for the evaluation of company's exposing to short-term and long-term financial risks. Eventually, these information are ground for the evaluation of quality in managing trusted capital, i.e. the evaluation of management's ability to create value added.

Of course, financial reporting is important only if it is fair and honest. Unfortunatelly, great financial scandals in the world were very often followed by various frauds in financial reports. In this paper we deal with information risks rising as a consequence of pretty wide-spread practice of creative financial reporting. Concerning this, the stress is put on recognising possibilities and dangers of creative financial reporting and understanding motives in the ground of such reporting.

INFORMATION NEEDS AND INFORMATION RISKS

There is no need to prove explicitely that financial reporting is a true need of participants on capital market. To be well-informed is a prerequisite for investors to participate on capital market. Equal availability, if not of all, than at least of crucial information, contributes to building trust in institutional mechanisms of market functioning, as well as safety with investors, which is important for the functioning of both primary and secondary market. Hence, financial reporting plays particularly important role here, being directed towards regular informing of investment public on company performances and implicitly on quality of their securities.

In the core of financial reporting lies its role in lessening information assymetry, since it spreads the entire information supply (by producing high-quality, overall and publicly available information), thus contributing to the decrease of information gap between management and investors. Hereby, accountants' task is not to eliminate risks, but to provide investors with proper and complete information on the presence of various risks.

There are several important reasons why financial reporting is the inevitable source of information. ***Firstly***, the system of financial reporting is the only entire quantitative information system including all business transactions of a company for certain accounting period. Skillful systematization of information in various reports gives the opportunity to investors to be informed on key indicators of financial position, obtained profit, cash flow, changes in capital and other information important for making decisions. ***Secondly***, public interest in such information, meaning instant recognition of their importance, was crucial for financial reports to take public character, as an immediate product of financial reporting. This enabled equal availability of information to all market participants and directly brought to decrease of information gap between uninformed and informed participants. Among other things, this has as a consequence reducing unusual high gains of ones (better informed) at the cost of others (less informed) investors, meaning more balanced and fair distribution of wealth. ***Thirdly***, high level of statutory and professional regulations and tendency towards considerable level of compatibility in reporting on the international level improve the quality of reporting, ease capital flow, reduce costs of financial report analysis and lessen information risks.[1]

Having in mind the importance of accounting information, we can understand the efforts of legislators and accountants to provide true and fair financial reports by means of quality regulations, basic accounting principles

1 On advantages of financial reporting compared to other information sources, find out more in: Malinic, dr D, Finansijsko izveštavanje kao determinanta kvaliteta korporativnog upravljanja, Zbornik radova: Uloga i zadaci finansijskog izveštavanja u procesu pridruživanja EU, XXXIX simpozijum "Računovodstvo i poslovne finansije u savremenim uslovima poslovanja", Zlatibor, 2008. str. 211-214.

and standards and promoting ethic behaviour. In order to provide higher security of those who base their decisions on such information, indipendent external auditing is imposed on companies with the aim to send investors and other users the message whether financial reports are true and fair account of company's success and financial position, i.e. whether they are created in accordance with relevant statutory and professional regulations. Furthermore, it is essential to undertake institutionalization of internal auditing, which, among other things, should serve to improve the quality of financial reporting.

Undoubtable efforts of accountants and legislators to keep the quality of financial reporting on high level due to real effect of information contained in those reports, unfortunately, are not always realised in practice. This is caused by variety and, often, complexity of company's business life so that accountants cannot always develop perfect reporting rules. Consequently, this creates maneuvering space suitable for various accounting policies.

Management of a company, which is eventually responsible for the quality of financial reporting, often practises hiding certain information, for individual purposes, by partial disclosure of relevant data, or even more serious report framing. Thus, instead of representing economic reality, financial reports are often considerably far from it. These activities could be performed by management itself (in the cases of ownership distortion when all owners are exposed to risks of losing invested capital), or in cooperation with major owner at the damage of small shareholders.

Immediate consequences of inadequate application of measurement and reporting rules are seen in the existence of hidden reserves and hidden losses in financial reports, which can considerably suppress their revealing power. Concerning this, information risks differ depending on whether we deal with hidden losses or hidden reserves. The existence of hidden losses in financial reports is a great danger to all information users, especially investors who can make wrong business decisions based on wrong perception about a company. In other words, low-quality financial reporting considerably increases the risk of negative selection and risk of moral hazard, rising from information assymetry. The implications of wrong information signals, based on low-quality reports, can be very embarassing to owners and creditors. They are manifested in lost shareholders' return in terms of dividends, opportunity costs in the ammount of best thrown investment alternative, owners' losses bassed on fall of share value, creditors' losses due to unpaid interests, as well as losses of both owners and creditors, based on liquidation of companies when the existing assets is not large enough to cover their dues towards the above mentioned.

The consequences of low-quality reporting can be dramatic. They are burden to national economy, investors, mostly small shareholders, business partners, while in practice top management very often bears inconsiderable consequences. Final epilogue of numerous bancruptcies in the USA, whose business running was very often followed by frauds in financial reports, indicate the complexity of this problem. In 2001, 171 companies left the debt of 230 billion dollars after their bancruptcy, which is more than double, compared to the year 2000. In 2002, after the bancruptcy of 122 companies, debts were 338 billion dollars.[2] Of course, besides to national economy, damage was made to investors, especially owners.

CREATIVE FINANCIAL REPORTING

Imperfection of accounting rules and often present option right in the process of evaluating assets parts leave considerably large maneuvering space in which unprofessional and unethical management can have great influence on presenting financial position as more or less favourable than it really is. Naturally, such activities cause damage to most of stakeholders. Continuous pushes of owners in terms of reaching unrealistically high aims, exeggerated personal ambitons of managers, tangible and intangible benefit that could be obtained, are some of the reasons to incite managers to reach for various «creations»in the process of framing financial reports together with accountants, and often with auditors' blessing. In this context, financial frauds could be understood as activities directed towards framing (misrepresentation) of company performances shown in financial reports. They can go from benign(

2 Roy, S., Walter, I., Governing the Modern Corporation – Capital Markets, Corporate Control, and Economic Performance, Oxford Scholarship Online, September, 2006. p. 17.

changes in accounting estimations) to drastic (misrepresentation of business transactions).[3]

Although accounting profession tends to develop precise rules which will enable high-quality reporting, it is not always that easy in practice to draw the line between the permissible and that beyond its frames. All those accounting activities outside free maneuvering space left by current statutory solutions, accounting principles and applied standards, stand for inacceptable and criminal practice. The presence of intention to form wrong view on financial position and success of a company so that certain interest groups could benefit more or less at the cost of other stakeholders is a typical fraud.

However, situation is not that simple when we should describe the accounting practice working within the available maneuvering space. Due to considerable flexibility in application of accounting principles and standards, it is possible in some cases that skillful accountants staying within the frames of permissible maneuvering space, i.e. not colliding explicitly with the law perform the activities targeted towards conscious hiding of profit or losses as well as misrepresentation of debts, meaning conscious deception due to a personal benefit or that of an interest group, which is, of course, always in relation to the damage of other interest group. This is a typical example of unethical and inacceptable behaviour, which, by its consequences, is not much more different from direct breaking of the law.

In order to explain creative accounting practice, it is necessary to point out at the meaning of aggressive accounting, earnings management, including income smoothing and fraudulent (deceptive, misrepresented) financial reporting.

Aggressive accounting

Aggressive accounting means intentional selection and application of accounting principles leading to reporting of wished-for, often increased or overrated profit.[4] Concerning this, aggressive accounting does not mean the application of accounting principles, techniques and procedures targeted on the creation of true and fair reports, on the contrary, the aim is altering financial position and profit of a company, thus creating misconception on company performances. In this way, existing and potential investors, as well as other interest groups using the information contained in financial reports, come to the point where they have to decide on their interests based on wrong information inputs. Wrong decisions cause wrong allocation of capital, as well as damage to investors and national economy in general.

Aggressive application of accounting principles leads to shifting profit and losses among periods, but more often to delaying expenses and claiming income in advance, than vice versa. All this may result in objectivization of expenses and losses during later periods and, consequently, considerable losses in market capitalization. Aggressive accounting practice is realised by capitalization of expenses, application of aggressive methods of writing off debts, cutting the duration of fixed assets, recognizing revenue in advance, etc.

All these actions can run regularly, or seemingly regularly, within the statutory balancing rules and professional regulations, but they can go beyond the border. For example, U.S. Sunbeam[5] corporation announced, in its annual plan, considerable corporate restructuring including consolidation of administrative functions, reconstruction of production and storage capacities, centralizing of purchase, disinvesting by cutting production lines not particularly important for the company, etc. The result of such activities was that in the last quarter, pre-tax profit was burdenned by the costs of company restructuring which equalled 337.6 million dollars. In general, restructuring itself should bring positive effects to any company. Entering restructuring costs, which in the USA is among generally accepted accounting principles (GAAP), by itself does not mean aggressive accounting practice. However, intentional overrating of restructuring costs(which Sunbeam did, by writing off supplies and part of fix assets, among other things), which resulted in underestimation of profit in 1996 and delaying their publishing for the following year, means aggressive application of accounting principles. In addition to all this, in 1997, Sunbeam

3 Shilit, H, Financial Shenanigans, McGraw Hill, New York, 2002. p. 24.

4 Mulford, W. C, Comiskey, E. E, The Financial Numbers Game - Detecting Creative Accounting Practices, John Wiley&Sons, Inc, New York, 2002. p. 26-30.

5 More about this in: Ibid, p. 27-28.

began practising aggressive revenue reporting. Namely, the company increased its assets considerably by selling products to buyers with the agreement to deliver them later. Allegedly, buyers kept ordering goods, didn't pay for it and thus were dismissed. Sunbeam did not deliver those products, however it e recognized revenue, which opposes to GAAP.[6]

The epilogue of aggressive application of accounting rules was reporting operating loss of 285.2 million dollars in 1996, due to overrated restructuring costs. Thanks to shifting profit for the following year and aggressive revenue reporting, the company had »surprisingly» successful 1997, when it reporting pre-tax operating profit in the amount of 199.4 million dollars, which, compared to the previous year, was the difference of 484.6 millions. Reevaluation of achievement showed that the profit was overrated for 104.1 million dollars, thanks to aggressive accounting.[7]

Inadequate (aggressive) recognition of revenue, expenses, assets and liability obviously leads to overrating or underestimating income in one, at the cost of other periods, creating wrong impressions in both cases. The effects of such behaviour could be slighter if deviations would not be materially significant and if their intention would be to overcome short-term oscillations in achievement. However they could be dramatic if they tend to hide bad company performances. Later on appearance of hidden losses, which is the most often result of aggressive accounting, is usually sudden and cruel and reflects in devaluation of shares, or even liquidation.

Earnings management

In distinction from aggressive accounting, which is aimed at conscious influencing over published profit amount, more in accordance with current tendencies (every case is characteristic), than systematic, earnings management is thoughtful, systematic undertake directed towards disclosing earnings in accordance with predetermined objectives. Key issue is whether earnings management, or precisely, application of accounting instruments in these purposes, means permissible accounting practice. Concerning this, we should point out that earnings management could not be considered black and white process.

Having in mind large and complex corporations, we can understand the activities so in the phase of projecting, as in the phase of reporting profit, directed towards modelling of wished-for profit. It becomes more obvious if we have in mind that various interest groups tie their interest to profit, hence it could not be considered as residual proportion, still existing or vanishing at the end of period, but has to be carefully watched by management. Moreover, profit supported by managing activities and accounting policies, of course within the permissible maneuvering space, could be better indicator of perspective earning ability of a company. Also, such profit could be better ground for the estimation of business and financial risks. If it is possible to choose among different policies, within valid standards, it is natural to choose those leading towards maximizing the market value of a company.[8]

Noticeable segment of earnings management is the policy of income smoothing meaning doing efforts towards diminishing fluctuations in disclosed earnings. In fact, earnings management, at least in the case of public companies, is mostly reduced to income smoothing. The intention of management to practise the policy of stable dividends indicates to the policy of earnings stabilization. Possible unpredictible oscillations in profit achievement leave bad impression concerning stability and security of a company, as well as management's ability to create stable profit. All this has negative influence on market value of a company.[9] In order to avoid wrong investors' interpretation of company performances on the market, management tends to direct profit towards long-term desirable trends. In this context, income smoothing is seen as a way of communication between managers and investors, since they express their expectations concerning long-term trends in profit achievement. But, if there would not be

6 See: Ketz, J. E, Understanding Off-Balance Sheet Accounting, John Wiley&Sons, Inc, Hoboken, New Jersey, 2003. p. 8.

7 Companies in the process of restructuring sometimes practise so-called "Big Bath". Then they tend to underestimate assets and overrate liability, all this with the intention to leave space for future revealing of increased profit.

8 Scott, W, Financial Accounting Theory, Englewood Cliffs, New Jersey, 1997, p. 295, according to: Mulford, W. C, Comiskey, E. E, op. cit. p. 59.

9 Find more in: Malinić, dr D, Politika dobiti korporativnog preduzeća, Ekonomski faklultet, Beograd, 2007, str. 106-110.

for income smoothing, market would overrate company's risk and underestimate its market value.[10]

Income smoothing means moving extreme situations in proportion to disclosed earnings, i.e. «keeping» profit in successful business years, by forming hidden reserves, and using them in bad business years, when it is necessary to break down previously kept hidden reserves. We must admit that achievement of this aim by means of accounting policy measures, within the permissible maneuvering space left by laws and accounting standards, may lead to deviation from the essence of accounting principles, disabling in this way the exact allocation of revenue and expenses among diferrent periods. However, if we start from the point where reasonable hidden reserves are desirable and do not oppose to good business practice, then if accounting rules are not seriously broken in material sense, if income smoothing leads to interest achievement of stakeholders, and especially if it is not calculated to intentional creating of wrong view on company performances, earnings management could be regular business practice, especially because, if there is complete disclosure of apllied accounting policies, market could estimate the effects of earnings management on financial performances of companies, and consequently on the price of their securities.

Opposed to the above mentioned, if earnings management is considered to be active manipulation in reporting accounting profit, aimed at changing the view on business performances,[11] then it comes out of the proportions of acceptable business practice. Similar to this is the approach of US SEC (Securities and Exchange Commission), since it has a special treatment for the abuses of earnings management of a company. SEC considers that the abuse of earnings management of a company includes various forms of frauds directed towards framing of real financial performances of a company in order to achieve wished-for results.[12] This implicits that profit management could stay within statutory and professional regulations if it represents the permissible accounting practice, while other cases are considered as abuse, which could be sanctioned by SEC.

10 Mulford, W. C, Comiskey, E. E, op. cit. p. 80-81.

11 Ibid, p. 59.

12 Securities and Exchange Commission, Annual Report, 1999, according to: Ibid.

Fraudulent financial reporting

Fraudelent financial reporting does not contain any positive connotation. It is about intentional, thoughtful and false representation of company's financial position and performances, calculated to delude the user of financial information. Fraudulent of business transactions and absence of disclosure are side-effects of fraudulent financial reporting. In distinction from aggressive accounting which implies aggressive application of accounting principles, methods and actions, and as such usually stays within the accounting standards, fraudulent financial reporting implies behaviour coming out of these proportions into the sphere of criminal (illegal) activities. Typical examples are claiming fictitious profit, when sales does not happen, and capitalization of certain expenses, whose recognition in balance sheet is not allowed. Concerning this, capitalization of those expenses not likely to be useful in future is not allowed, i.e. all that opposes to the matching principle. In the period between January 2001 and March 2002, Worldcom used to capitalize corporate expenses in the amount of 3.8 million dollars, whereby it raised inexcusably the value of assets, and thus increased its profit, in the same amount artificially.[13]

The essence of fraudulent financial reporting is by itself clear, as from the viewpoint of intentions, as from the viewpoint of probable effects on information users. Investors' depending on such information implies wrong decisions, whose consequences are lost estimated profit, or more drastic-loss of invested capital. However, we should have in mind that this term is associated with those cases when regulatory bodies, with legal authority (as SEC in the USA), other supervisory institutions in charge and courts confirm the existance of fraud.[14] The thing that can relativize the severeness of such forbidden activities is established practice, conditionally, settlements in some countries (SEC in the USA) which mean sanctioning such events, but not necessarily pleading guilty. For example, in April 2002, SEC raised charge against company named Xerox, for misrepresentation of profit in the amount of almost 3 billion dollars. Xerox made an agreement with Securities

13 Pickett, S, The Essential Handbook of Internal Auditing, John Wiley & Sons, Ltd. Chichester, 2005. p. 20.

14 More on this in: Mulford, W. C, Comiskey, E. E, op. cit. p. 41-44.

Commission and paid the fine of 10 million dollars, still, it neither pleaded guilty nor denied being guilty.[15] Such behaviour may have sense if frauds were obviously made, but it would be difficult to prove them on court.

Creative financial reporting vs. permissible policies of financial reporting

Having in mind all previously mentioned, we could interpret creative financial reporting in two ways. By first, wider and more open interpretation, we could view creative accounting reporting as activities directed towards framing of financial reports contained in annual account of a company, including those done within the allowable statutory and professional regulations, as well as those beyond that border. In the context of our exposition, all mentioned activities associated with aggressive accounting, earnings management, including also income smoothing and fraudulent financial reporting could be considered as creative accounting. The problem with such interpretation of creative accounting is that we have in one place both permissible and forbidden activities, overlapping within the law and professional regulations.

Due to all this, it is necessary to make the difference between the permissible policy of financial reporting and creative financial reporting. Policy of financial reporting always exists and companies practice it consciously or unconsciously, using option right in entering business transactions. It is even better if it is thoughtful, and not capricious or left to casualties. Namely, we cannot doubt the efforts of management to achieve business and political goals to the wellbeing of all stakeholders, by choosing adequate accounting policies. For example, reasonable hidden reserves, coming from cautious profit measuring, stable profit and policy of stable dividends based on it, forming reserves from earnings in case of amortization of sudden shocks and business losses, forming provisions in order to cover certain risks and costs, are just some examples whose application will leave the mark on financial reports and they are considered as permissible acounting practice. Their positive influence on market value, stability, long-term survival and development of a company can be very significant. That is why we call this allowable policy of financial reporting, which may not always perfectly match accounting principles, but which almost certainly wouldn't come out of sphere of accounting standards or represent abuse of good business practice, and which is the most important, it wouldn't be directed towards fraudulent activities concerning company performances.

„Application of accounting rules in the way that opposes to their essence or giving up their application is the characteristic of creative accounting which differentiates it from the financial reporting policy."[16] In distinction from the permissible policy of financial reporting, which nurtures trust between management and investors or between other interest groups, and has positive influence on stability and market value of a company, creative accounting reporting may cause damage to a company, due to uncontrolled oscillations, even when it abides by accounting principles. Hence, we tend to conclude that the characteristics of creative accounting are:

- existence of manipulating information in financial reports,
- existence of previously conceived intention to do such manipulations,
- existence of materially important manipulation effects, meaning that financial reports considerably deviate from economic reality and
- deluding investors and other users by presenting such reports.

So, creative accounting implies intentional, calculated creating of misconception about financial position and performances of a company, inspired by partial interests of one interest group and not by general interests of all stakeholders. In other words, creative accounting practice implies unprofessional and unethical application of accounting rules (abuses, manipulations) aimed at presenting overrated income and more convenient financial position compared to economic reality (rather than vice versa). In accordance with this view, we could include aggressive accounting, or at least the most of it, into crea-

15 Pickett, S, op. cit. p. 20.

16 Skarić - Jovanović, dr K, Kreativno računovodstvo - motivi, instrumenti i posledice, Zbornik radova, Mjesto i uloga računovodstva, revizije i finansija u novom korporativnom okruženju, XI kongres, Savez računovođa i revizora Republike Srpske, Teslić, 2007. str. 54.

tive accounting practice, if there are abuses of flexibility of accounting principles and standards, or in earnings management and fraudulent financial reporting.

MOTIVES FOR CREATIVE FINANCIAL REPORTING

Nowadays it is not necessary to prove whether there is creative accounting practice. Numerous everyday examples conferm that. The fact is also that »creativity» is developed and realised in different ways. Recognizing unrealised revenue, capitalization of expenses, hiding liability, changes in accounting policies, more aggressive or conservative evaluation of assets, shifting revenue or expenses among periods, or within the same period among different activities (for example, non-operating to operating), wrong systematization of cash flow and inadequate consolidation, are only a few examples of management's instruments to be reached in realisation of financial manipulations. Putting aside the mechanisms serving these purposes, in this moment it seems more important to grasp into the motives causing such behaviour.

The list of reasons for manipulations in financial reports is rather long. Concerning this, Howard Schilit[17] sees three key reasons: it pays out to do so, it is rather easy to realise frauds and it is not likely that you will be caught. The first reason comes from the fact that such activities are always motivated by some benefit, whereby he dominantly relates it to the possibility of getting bonuses and other privileges related to achieved performances. The easiness of realisation comes from the fact that maneuvering space left by accounting principles and standards is wide, as well as from the fact that spotted lacks in financial reporting practice are slowly removed from professional and statutory regulations. Probability of sanctioning is related to the proportion of ownership dispersion (position of management in companies with distinctive dispersion are rather strong due to a lack of efficient control), unsatisfactory quality of external auditing, as well as for decision to use quarter reports not being the subject of auditing as ground for rewarding.

Without intention to evaluate in this paper how easy it is to realise manipulations and probable that they will be recognized and sanctioned, we must admit that these factors make the process easier, but also that key motives are primarily related to benefits rising from such behaviour. Coming from this point, the most important motives would be:

- effect of information contained in financial reports on fluctuations of share prices,
- achieving positive influence on the amount of capital expenses and other terms of indebtedness.
- possibility of achieving individual benefits rising from various incentive plans,
- absence of estimated performances in the application of chosen strategy,
- achieving tax benefits in terms of avoiding or delaying tax and
- relativization of the view on monopolistic position.

Relation between company performances reporting in financial reports and fluctuations of share prices is obvious and confirmed in numerous research studies. It is reasonable that market evaluates in one way companies with strong financial structure, good liquidity, stable profit, lower level of indebtedness and serious investments financed from internal sources, and in other way (unfavourably) companies with bad financial structure, fluctuations of profit, problems with servicing liability, which do not have high cash flow from operating activities and cannot invest. Investors are ready to pay more for shares of those companies with stable performances since such achievements imply higher level of certainty and lower exposure to risk. Financial reports, as means of communication between management and investors, signalize future profit achievements, cash flow and security of a company, thus contributing to easier and more certain decision making. It is natural to expect stable performances to support continuous growth and stable dividends, which has positive effect on share prices.

The problem rises when management, conscious of the importance of business stability in the process of evaluating shares by investors, and inable to achieve it through business activities, comes out of the proportions of permissible policy of financial reporting and tries, by means of various artificial creations, to misrepresent real

17 Shilit, H, op. cit. p. 28-33.

company performances. The intention is by representing performances as more favourable than they really are to achieve decrease of volatility of share prices, increase of market value and, of course, individual benefits related. Although these effects are usually short-term, and risks dramatic to all stakeholders in case of recognizing such creative behaviour (share price decrease, capital losses, business losses, liquidation), the presence of this motiv cannot be neglected. For example, in 1997 and in the first half of 1998, company named Twinlab Corp.[18] achieved the increase of share prices in more than triple amount, from 12 to 40 dollars. Splendid operating profits which served as the ground for investors' expectations and market price, were not real, as proven later. Reestimation of profits for 1997 and the first quarter of 1998 showed that a part of sales was recognised, although products were not shipped. Publishing of this information caused the fall of share price on starting 12 dollars.

Achieving positive influence on the amount of capital costs is also closely related to evaluation of performances in financial reports. Strong financial structure, favourable profit achievements and balanced cash flow create the image of high loan ability of a company, opening the possibility of drawing in additional capital. High security and, consequently, lower risk result in lower capital expenses. Also, good performances are ground for successful issue of debt instruments. For example, drastic increase of income from 5 million dollars in 1982 to 185 million dollars in 1986, as well as reporting operating profit of 24 millions, instead of previous losses, helped Miniscibe Corp. to realise bond issue in the ammount of 98 millions.[19] Reestimation of profits for 1996 showed that, due to representing fictitious revenue and manipulative decrease of expenses, real profit was almost twice lower (12.2 millions). Inability to cover company's activities with business performances caused its bancruptcy in 1990.

Besides, we should have in mind that good business achievements not only ease the process of obtaining capital, but contribute to more favourable terms in contracts with creditors. Namely, bad loan rating could influence various contract limitations by creditors. Such limitations may imply taking care that dividends in money couldn't be paid if liquidity ratio is below agreed normal values or that company couldn't make more debts. They can also be in the form of giving creditors rights to raise interest rate under certain circumstances, or ask for additional guarantees or even cancel agreed arrangements.[20] All this leads to conclusion that creative accounting practice could be driven by creating conditions for easier obtaining of borrowed capital under more favourable terms, but that motives going in that direction still exist at the end of this process. Namely, to avoid doubting in realisation of agreed obligations, during contract period management can introduce «creative» solutions in modelling financial reports.

Relating incentive plans to performances disclosed in financial reports. Possibility of making individual advantage is one of the most stated reasons why managers reach for creative financial reporting. The fact is that management is trusted with capital to be governed primarily aiming at creating income for owners. This also implies serious challenges concerning creating value, creating expected returns, sustaining payment ability etc. Their position and related privileges depend on achievement of set objectives. On the other hand, owners often cannot control management efficiently, which results in rising of agency expenses and decreasing of market value of a company. Concerning this, different types of incentive plans represent powerful instrument for directing management's behaviour towards creating value for the owners.

Relating incentive plans to performances represented in financial reports could result in unprofessional behaviour of management in the process of financial reporting. Concerning this, we can single out at least three characteristic situations. The first is probably the most benign, since it mostly implies staying within the permissible reporting practice. Since incentive plans, especially long-term incentives in form of bonuses, are mostly made to bring premiums only if profit is within certain limits, management could be motivated to manage this profit by revealing lower profit in balance sheet when it is in fact high and vice versa. This leads us to the famous practice of income

18 More on this in: Mulford, W. C, Comiskey, E. E, op. cit. p. 3-4.

19 Ibid, p. 5.

20 Ibid, p. 5-6.

smoothing.[21] The second possibility is again related to the problem of shifting earnings among various periods, whereby that shifting is not the consequence of consistent application of the policy of accounting conservativism, but thoughtfully directed to achieving individual benefits. Namely, valuable compensational packages containing options on shares could be the reason why management, applying creative accounting practice, sets financial achievements so that they contribute to maximum increase of share prices in the very moment of doing options.[22] By skillful accounting maneuvering, these activities may stay unnoticed, which of course does not mean that they are allowed. The third situation is the most drastic and relates to the cases when management misrepresents company performances in order to achieve rewards included in compensational plans. Hiding losses, misrepresentation of indebtedness, recognizing fictitious revenue and capitalization of expenses, which have to be considered as expenditure and not as assets, are just a few of the solutions in such situations. The consequences are payout of unearned rewards, drifting of cash flow and wrong image that it is about highly profitable companies with quality management. Later on appearance of such losses mostly results in huge investors' losses.

Various research studies confirmed the relation between compensations and creative evaluating of company performances. From 1996 to 2001, Erickson, Hanlon i Maydew compared 50 companies charged with frauds by SEC to 50 other companies not charged. Results showed that higher compensation sharing in form of shares (including options on shares and different ways of allocating shares) in entire compensations for five best paid executives increases the probability of accounting frauds for about 68%. Also, Efendi, Srivastava and Swanson established that (in cases of 100 companies which overrated profit between 2000 and 2001) the average value of compensations for top management in form of options was 30.1 millions, opposite from 2.3 millions in companies which did not overrate their profit.[23]

Absence of expected results in the application of chosen strategy. Apart from immediatelly seen reasons for doing accounting frauds, often studied in accounting research, it is very interesting to recognize strategic context as well, where executives reach for such activities. Absence of expected results applying chosen strategies undoubtedly incites accounting frauds. Incompatibility of strategies with external and internal surroundings results in the decrease of company performances, which incites the urge for counterfeiting information contained in financial reports.

In the core of researches done by R. M. Grant and M. Visconti is the strategic context of corporate accounting scandals. Creating considerable gap between managements' aspirations and business reality results in significant lagging of real results behind estimated results of applied strategy, which could be the motiv for overrating performances in financial reports. Orientation to growth strategy, for example, implies certain capital investments aimed at the increase of assets which should generate new profits, positive cash flow and expected return for stakeholders. Of course, management, as the taker of managing risks, recognizes in this process the opportunity to strenghten its position and get valuable compensational package. Overambitious strategies often result in the difficulty to compensate extremely high capital expenditures from operating cash flow, which leads to damaging target capital structure. Negative free cash flow, increase of indebtedness and consequential damaging of financial equilibrium are key indicators of increased risk. Precisely overambitious and risk-oriented strategies create the climate where management, exposed to certain pressure and fear of the consequences of low performances, reaches for accounting frauds in terms of hiding indebtedness, overrating profit, hiding losses and overrating capital. Such behaviour can only deepen the crisis and make the consequences even more dramatic after representation and market recognition of company's economic reality.

Achieving tax benefits. Achieving certain bene-

21 More on this in: Malinić, dr D, Malinić, dr D, Politika dobiti korporativnog preduzeća, op. cit. str. 107.

22 About compensations in general and problems of creative reporting aimed at achieving benefit for management, read in: Malinić, dr D, Kompenzacione šeme za menadžere, Zbornik radova: Korporativno i javno upravljanje u funkciji razvoja konkurentnosti, Miločerski ekonomski forum, 2007. str. 63-95.

23 About these researches more in: Grant, M. R, Visconti, M, The Strategic Background to Corporate Accounting Scandals, Long Range Planning, 39, 2006. p. 364-365.

fits rising from delaying or avoiding tax is probably one of traditional reasons for setting the amount of reported profit. To save in tax payments, one must avoid the effects of progressive taxation (where there is such tax system). In these cases, the policy of income smoothing is often applied. Meaning forming hidden reserves and representing lower profit if its amount implies entering the zone of progressive taxation. However, tax advantages may be achieved also in case of absence of progressive taxation. The possibility of delaying to disclose a part of current earnings to the following periods means getting the option of time when tax expenses will vanish, which could be very useful. Besides, in both cases companies achieve tax advantages also through delaying tax, thus enabling financing without interest. Of course, application of aggressive accounting techniques and false reporting due to obtaining tax advantages cannot be allowed. Still, it does not deny the existence of such motives for framing financial reports.

Relativization of the view on monopolistic position is also one of the motives for choosing creative accounting practice, i.e. creating insignificant achievements which could, vice versa, cause sanctioning by anti-monopolistic laws. Of course, this is about big companies, which in every way want to avoid declaring monopolistic position and negative effects related. Such problems may encourage the policy of aggressive expense representation and revenue delaying, in order to lessen or cover the effects of monopolistic position. Typical example would be the efforts of Microsoft, which tried to prove on court that its position on the operative-system market for PCs is not monopolistic.[24] From 1997 to 1999, Microsoft used to apply more than conservative policy of reporting on profit achievements. Notwithstanding the fact that accounting principles ask for capitalization of costs of software development, expected to be useful in future periods, Microsoft disclosed all development costs as expenses in the amount of 1.8, 2.6 and 3 billion dollars or 28%, 29% and 23% of operating profit before costs of researches and development, respectively in 1997, 1998 and 1999. Of course, disclosed profitability was lower than real. At the same time, company delayed recognizing uncharged, but present revenue, based on licence contract, in the amount of 1.4, 2.9 and 4.2 billion dollars, respectively in 1997, 1998 and 1999, which decreased the profitability of the company.

The list of possible reasons reffering to creative accounting practice is undoubtedly longer compared to those reasons mentioned in this paper. The examples of creative accounting application are numerous in practice. Available instruments for realisation of such practice are manifold. Some accounting manipulations are skillfully covered by accounting tricks, while some creations are brutal considering the way of application and negative effects.

CONCLUSION

Financial reporting system has very important role in the process of lessening information assymetry on capital market, providing high-quality and publicly available information for all users. Having in mind the importance of capital market for the functioning of economy, we can understand tendencies of legislators and accountants to provide high quality of financial reporting, through the establishment of quality regulations. Unfortunately, such efforts do not always give results in practice, since management tends to hide real information about financial performances of a company, through the application of creative accounting.

Creative accounting reporting implies intentional, unprofessional application of accounting rules, directed towards the creation of wrong view on company's profitability and financial position, due to obtaining benefits for certain interest groups. As such, creative accounting practice includes aggressive accounting, or at least the most of it, abuses in earnings management and fraudulent financial reporting. The most important motives for such behaviour are the influence of favourable financial position on share prices, achieving positive effects on the amount of capital costs, obtaining benefit from incentive plans, absence of expected results in realization of chosen strategy, tax benefits, relativization of the view on monopolistic position, etc.

The consequences of application of creative accounting practice can be drastic. They become a burden to investors, who lose invested capital, to companies, which, in case of their survival, recover slowly, to financial mar-

24 More on this in: Mulford, W. C, Comiskey, E. E, op. cit. p. 7-8.

kets which start being shaken by financial scandals, and, of course, to accountants, whose credibility could be seriously questioned.

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COMPETITION PROTECTION POLICY IN TRANSITION ECONOMIES

Summary

Transition countries in the Central and Southeast Europe and the former Soviet Union converge to modern market economies with certain distinct characteristics regarding competition protection. EBRD transition indicators show negative correlations between growth and the change of competition policy, as well as other liberalization policies. Additionally, a research based on BEEP's survey data indicates to better business performance of oligopolistic market structures than the pure monopoly or perfect competition.

In this paper, we tackle the issue of whether competition policy supports GDP growth or impose adjustment costs to transition economies. Our analysis is based on EBRD/IMF cross-section time series data for all of the twenty nine transition states during the period of nineteen years. The underlying econometric model deals with non-stationarity of time series data and is able to distinguish between short-term and long-term elasticity effects. The main long-term effect indicates positive elasticity of GDP with respect to progress in protecting competition in transition economies as a whole. However, the short-term effects support the said scepticism, but their estimates are not statistically significant.

Transition to market economies is a multi-dimensional process, which reveals strong synergy effects. Progress in the policy of protecting competition is positively influenced by the speed of improving financial system and restructuring enterprises, but under pressure from the development in the infrastructural sector. Other transition dimensions do not have significant effects on the policy of competition.

Analyzing competition policy in Serbia, our findings show that its main concern was related to the issue of horizontal concentration. This is understandable taking into account the present regulation, but comparative data do not support that concern. The level of concentration in the market of Serbia is lower compared to the average level in the transition economies. At the same time the market pressure of consumers on producers to maintain competitive prices in Serbia is much stronger than in the rest of the transition area.

JEL classification: P2, L4 and K21

Key words: *Competition, transition, economic growth, concentration*

INTRODUCTION

Business environment has a significant influence over behaviour of companies. As P. Mitra emphasized: "Competition and market structure is a key element of the business environment. So is lending for financing of fixed investments. [In transition economies]...both are converging towards structures in developed market economies..." [P. Mitra, 2008, p.10].

Still, convergence is not a straight-line process. This note refers not only to investment finance, as P. Mitra particularly insists, but also to the influence that development of competition protection institutions has over economic growth. In general terms, the overall transition process, beyond the pure introduction of competition protection instruments, is a complex process with long-term and short-term effects that do not necessarily have to overlap. Lawson and Haifend underline the short-term effects and make a strong claim that "the dominant link between transition indicators and growth is found to be generally negative. There is clear evidence that price liberalization, enterprise reform and competition policy are negatively associated with growth." [Lawson and Haifeng, 2005, p. 24].

For our purpose it is especially interesting to see how competition policy correlates with economic growth in transition economies. Is it really true to claim that competition policy has a negative influence on economic growth, thus presenting an unavoidable cost of transition? The status of competition consists of a very complex set of strong factors. Research indicates that all of them can be grouped under four categories: (i) market structure (monopolies, oligopolies, perfect competition), (ii) consumer preferences reflected in elasticity of demand (ine-

lastic, relatively inelastic, unitary elastic and very elastic demand), (iii) degree of openness of economy (presence of foreign companies / importers) and (iv) market pressures (by consumers, domestic and foreign competitors) to innovate products and reduce production costs[1].

In a transition process the government influences the above factors related to establishing a competitive business environment. Through liberalization of foreign trade and foreign currency payment systems the government allows free foreign trade and entry of foreign competition in the domestic markets for goods and services. Further, by setting up competition protection institutions and enforcing appropriate policies to protect fair market competition, the government influences development of a competitive market structure and behaviour of competitors. Through liberalization of prices, the government reduces the scope of its interventions in the markets for goods and services and allows establishing of real market signals used to determine consumer demand and reactions of industry to pressures from competitors.

Thus, government's economic policies and approach to setting up institutions can foster a competitive business environment, or hinder and deform it. All countries of Central and Southeast Europe, including member countries of the former Soviet Union – a total of twenty nine countries – began their transitions from command to market economy in 1989, after the fall of the Berlin Wall. Since then, it has been nearly two decades of growth. Certain countries have made strong progress in this process and qualified for European Union membership. Other, fewer countries are still on that track, while the remaining countries will have to complete transition process independently of this regional integration.

Transition is a multidimensional process. If we consider the aspect of establishing a competitive market environment, transition has not been completed even in the new member countries of the European Union. According to an EBRD report, none of the new EU members has a transition index in the area of competition above 3.3 (relative to the maximum of 4.3 that signifies completion of the process). In addition, the state of competition is "a living organism", which is always changing and requires full attention and effective adjustments. Consequently, we are witnessing changes that are happening in the European Union, both in the regulatory field and in enforcement activities, which is creating additional adjustment requirements for countries that are potential membership candidates.

In this paper we shall analyze the progress made by countries of Central and Southeast Europe, as well as former Soviet Union members, in terms of transition process and development of a competitive market environment. In the first section, we shall use the same data series as the above quoted researchers to establish whether competition policy has a negative influence upon economic growth. In the second section, we shall look closely at the impact of price liberalization and foreign trade upon economic growth and compare their influence with effects of competition protection policy. In the third section of this paper we shall look at possible synergy between different dimensions of transition, especially those that affect development of competition protection mechanisms. The fourth section refers to Serbia and determining of its position relative to all other transition countries, in terms of creating a competitive business environment. The fifth section is an analysis of concentration in Serbian economy and compares it to other transition economies. The final section is in the form of conclusion and provides a brief overview of analytic outputs.

COMPETITION AND ECONOMIC GROWTH

It is widely understood that competition and economic growth are positively correlated, and that it is the primary economic rationale for legitimate government interventions in markets, in order to foster a free, market competition. However, this understanding can not be accepted unconditionally in transition economies. Empirical evidence indicates that the rate of GDP growth and EBRD's index of competition growth have negative correlation coefficients. This relationship is a serious cause for questioning the conventional opinion stating that an advancement of competition protection policy boosts economic growth. Still, this negative correlation is not a *prima facie* proof of ineffectiveness of competition in

1 Pradeep Mitra: *Innovation, Inclusion and Integration, From Transition to Convergence in Eastern Europe and the Former Soviet Union*, the World Bank, Washington, 2008, p.54

promoting economic growth. On the other hand, there is much evidence showing that initial recession in transition economies is followed by positive growth rates. This is usually attributed to progress in building structures of market economy. Anyhow, the relationship between economic growth and progress in developing market mechanisms requires additional explanations.

In principle, macroeconomic and microeconomic methodologies can be used as tools for analysis of competition policy and economic growth, or global effectiveness of economy. Carlin et al. [2001] analyzed this issue at enterprise level in transition economies. They used a very extensive BEEPS database (Business Environment and Enterprise Performance Survey), which was set up by the World Bank and EBRD, as well as a survey of business performance of enterprises in 25 transition economies. In 1999 survey, 3,300 questionnaires were filled out, while the 2002 and 2005 samples were made wider to capture more enterprises. The general relation between business environment and business performance was rechecked with 2002 data. [Fries, 2003].

According to the mentioned analysis, the relationship between competition and business performance is positive, but it is not a straight line. In fact, companies without competitors (pure monopolists), and those with numerous competitors, have poorer performance than companies with a lesser number of competitors (one to three). Simultaneously, companies that hold a greater market share (due to inelasticity of demand for their products) exhibit higher growth of productivity than companies with a lower market share (due to high elasticity of demand for their products). Consequently, certain elements of monopolistic behaviour and limited competition have been more effective in fostering growth and productivity in transition economies than the extreme market structures – pure monopolies and perfect competition.

While positive correlation between competition and business performance of companies has been repeatedly emphasized in economic literature, there is no such correlation between growth rates of transition economies and transition indicators kept by EBRD. Lawson and Haifeng [2005] are the most outspoken proponents of assumption that creation of competition policy, as other policies tied to institutional transition of countries in Europe and former Soviet Union, is the cost of transition from non-market economic systems to market economy. Thus, it is the chief reason for the earlier mentioned negative correlation. They do not claim that a positive correlation between institutional changes and rates of economic growth is nonexistent in principle, but only in the specific case of countries in transition for which they were unable to confirm such an assumption. They even arrived at opposite conclusions.

In their analysis of transition and economic growth they used the analytic framework of growth models based on conditional convergence, and referred to extensive economic literature[2]. Those models link converging of transition economies towards developed market economies, the initial conditions of growth and structural changes that are introduced during development phase. In transition economies of Europe and former Soviet Union, convergence coefficients are much higher than in other developing countries. Other control variables also have the usual signs, as well as the usual values. Macroeconomic stability measured by the rate of inflation, has a positive effect upon economic growth, as well as investments measured by the share of investments in GDP. Due to insufficient data they were not able to assess the impact of education as a factor that is a strong determinant of the quality of human resources.

Relative to other models of convergence, Lawson and Haifeng made an innovation by making a parallel observation of effects of *level* of transition indicators and their *rates of change*. According to them, rates of change, which exhibit a generally negative effect on GDP growth, represent cost of transition, while levels of transition progress indicators represent benefits of transition. We have already mentioned their main conclusion that the dominant link between transition indicators and growth was generally negative, and that there was clear evidence showing how price liberalization policies, enterprise reforms and competition policies were negatively correlated to growth.

2 Lawson C. and Haifeng W. *Economic transition in Central and Eastern Europe and the Former Soviet Union: Which Policies Worked?*, 2005, Centre for Public Economics Working paper 01-05, Department of Economics, University of Bath, p.2 and 3.

A question that still goes unanswered is whether policy of developing competition mechanisms contributes to economic growth, or is it a necessary cost of overall transition towards modern market economies? In this paper, we shall show that the effect of competition policy is positive in relation to economic growth, although much weaker than, let's say, the effect of price liberalization or foreign trade. Our analytic model includes the comments of Lawson and Haifeng on negative correlation between growth rates and transition indicators, but it is superior in terms of econometrics. From econometric aspect, Lawson and Haifeng used a model very similar to an EC model (Error Correction Model), but, their theoretic ideal of growth convergence prevented them to make full use of this circumstance, and provide a logical explanation of negative correlation between growth and transition. Our EC easily explains negative correlations between transition changes and growth rates, while underscoring the long-term positive reinforcement between growth, competition and trade liberalization.

In this paper we shall examine all transition economies (29) over a period of 19 years, between 1989 and 2007. Thus, we have expanded the analysis to cover Serbia, Montenegro, and Bosnia and Herzegovina, which was not done earlier as the analysis had been done only up to year 2000. The updated database on transition progress published annually by EBRD in its "Transition Report"[3] makes it possible for us to do this. Pooling time series and cross-sections for every country in transition we get a matrix of 29x19 data sets. In this paper we shall refer to it as panel data on transition. The data relates to GDP growth rates and progress scoring in all areas of transition, and especially in the area of competition and liberalization (trade and prices), which we took from EBRD. IMF is the source of data on GDP levels in US dollars. This way, we connected quantitative data (GDP growth rates) with qualitative assessments of progress in creation of competitive business environment.

Lawson and Haifeng did not check whether data series were stationary or not. One of their control variables, GDP per capita, is not a stationary series, while the growth rates data series is stationary (Table 1)[4]. When one of data series in a regression model is not stationary, there must be a special procedure of model reparametrisation in order to proceed with evaluation of coefficients, which do not have false values due to presence of unit root in a data series (spurious regression).

Table 1: Unit root testing

Test	Null hypothesis	Statistics (t/W stat)	Probability	Statistics (t/W stat)	Probability
		BDP per capita		Rates of growth	
Levin, Lin & Chu	Common unit root process	10.4882	1.0000	-35.8275	0.0001
Im, Pesaran & Shin	Individual unit root process	11.4145	1.0000	-10.0827	0.0000

Our initial dynamic model provides a logarithmic format of GDP levels and competition index (gdp_{it} and $comp_{it}$) and their time-lags:

(1) $$gdp_{i,t} = a_0 + a_1*gdp_{i,t-1} + a_2*comp_{i,t} + a_3*comp_{i,t-1} + \varepsilon_{i,t}$$

for i=1,2,...29 countries and t=1,2,...19 years. Gross Domestic Product series is non-stationary, while the competition indicator series is stationary:

Table 2: Unit root testing

Test	Null hypothesis	Statistics (t/W stat)	Probability	Statistics (t/W stat)	Probability
		Log(BDP)		Log(Comp)	
Levin, Lin & Chu	Common unit root process	6.09291	1.0000	-11.8206	0.0000
Im, Pesaran & Shin	Individual unit root process	6.77884	1.0000	-6.86992	0.0000

That is why it is necessary to reparameterise initial model (1) in the following way:

(2) $$\Delta gdp_{i,t} = a_0 + a_2*\Delta comp_{i,t} - b_1*(gdp_{i,t-1} - b_2*comp_{i,t-1}) + \varepsilon_{i,t}$$

where

$$b_1 = (1 - a_1)\ ,\ b_2 = (a_2 + a_3)/(1 - a_1)$$

The initial model (1) has now been reformatted into

3 Database is available at webpage http://www.ebrd.org/country/sector/econo/stats/index.htm

4 Two tests were applied: Levin, Lin and Chu (LLC) and Im, Pesaran and Shin (IPS) test for unit root. LLC test rests upon zero hypotesis of presence of common unit root. That means that autoregression coefficients are the same for every country. ISP method allows individual unit roots, i.e. differences in autoregression coefficients from one country to another.

Error Correction Model, under the condition that value of parameter a_1 is less than one. The expression in brackets ($gdp_{i,t-1} - b_2*comp_{i,t-1}$) represents a long-term equilibrium between level of economic growth and competition indicators. This long-term level is characterized by short-term fluctuations that reflect short-term imbalances. The level of adjustment needed to re-establish the long-term equilibrium is determined by parameter b_1, which must have a negative sign. If the current GDP level is higher than the long-term equilibrium level, it is then adjusted down by softening of institutional changes. If, on the other hand, it is below long-term level, the adjustment is made upwards through acceleration of institutional changes. Stability of this adjustment is made possible by the parameter value $a_1<1$, which represents convergence coefficient linked to per capita value, under the models of conditional convergence.

Parameter a_2 reflects the short-term elasticity of GDP relative to changes in competition, and it is not crucial for explanation of long-term relationship between transition and economic growth. On the other hand, evaluation of parameter b_2 from expression (2) indicates a properly assessed long-term elasticity. Such a proper assessment is not available for short-term elasticity a_2 from expression (1), when time series are non-stationary and when the least squares method yields a false evaluation of regression parameters (spurious regression).

Table 3: Effects of competition to economic growth

	No cross section/ period effects	Cross section effects	Period effects
C	0.1486**	0.4368**	0.1671**
	(0.0320)	(0.0571)	(0.0301)
LOG(?_GDP(-1))	-0.036**	-0.2530**	-0.0241**
	(0.0098)	(0.0249)	(0.0090)
DLOG(?_COMPETITION)	-0.1121	0.0783	-0.1967*
	(0.0987)	(0.0952)	(0.0908)
LOG(?_COMPETITION(-1))	0.1085**	0.4648**	0.0390
	(0.0433)	(0.0621)	(0.0425)
R2	0.0412	0.2845	0.2742
DW	1.5922	1.6203	2.0145
F-statistic	6.1119	5.1072	7.7271
Prob(F-statistic)	0.0004	0.0000	0.0000
Cross-section F		4.8345	7.7228
Cross-section Chi-square		125.8852	119.7063

Estimated coefficients of model (2) are shown in Table 3. Values of t-statistics are given in brackets; one star is denoting statistical significance at 95% level, while two stars denote its significance at 99% level. The table can be used to calculate coefficient of elasticity of economic growth with respect to competition policy. It is positive, but also quite low: $b_2 = 0.3317$. Estimated impact of changes in competition policy is negative, but it is not significant at 90% level of confidence, while regressors of competition level and one time lag of GDP are significant at 99% level of confidence. A negative sign for one GDP time lag is the key factor for establishing a positive long-term level of elasticity of economic growth, relative to the level of competition.

Lawson and Haifeng (LF) used growth rates from EBRD's database as an independent variable, while they used GDP per capita with one time lag as a control variable. As for the dependent variables, they used levels and rates of changes in competition policies. In addition, they had another two control variables: inflation rates and shares of investments in GDP. If control variables are excluded from the model of conditional growth convergence, LF model has variables very similar to our EC model. Differences are minimal. In our model, growth rates are approximated through the first logarithmic derivatives of GDP, and they were not taken from EBRD database as in the LF model, while GDP level was not adjusted through per capita format, as in the LF model, but its absolute level was kept. GDP was provided in dollar equivalent, so that a fraction of effects is probably due to exchange rate changes.

Evidently, our EC model also has a negative sign to coefficient of competition changes. However, this is of no particular interpretative value. Firstly, the estimated coefficient is not significant, and secondly, it does not affect calculation of long-term elasticity of the level of economic growth relative to competition policy. So, the key, unorthodox conclusion about relationship between transition and economic growth has been made completely relative in our EC model. To that end, we can confirm conclusions of those authors who see a positive connection between competition policy and economic growth.

Of course, countries in transition differ. Also, transition periods had different effects upon economic growth.

It is a well known fact that the initial period of transition is connected with a drop in GDP in nearly all countries in transition, while positive growth rates and return to the pre-transition levels of economic activity are attained later. This is why it is justified to estimate model (2) through fixed effects that capture both specific situations in countries in transition (cross-section or CS-effects), as well as time periods (time-series fixed period or P-effects). Further, the estimation statistics of the entire equation (2) is more superior under these conditions, as R^2 coefficients are much higher, as confirmed by LR (Likelihood Ratio) tests[5]. All of this is shown in the second and third column of Table 3.

LIBERALIZATION AND ECONOMIC GROWTH

Usually, transition is divided in two phases: the first, initial phase, and the second, mature phase of transition. During the first phase, countries in transition introduce privatization, liberalization and deregulation. During the second phase, emphasis is placed on institutional reforms and restructuring of economy. In economic terms, during the first phase growth rests upon free trade and price liberalization, while in the second phase it is driven by investments (as a rule, foreign direct investments). In the first phase, champions of transition are liberalization of trade and prices, while in the second phase the key change is related to development of competition and restructuring of enterprises.

With this in mind, it is to be expected that free trade, rather than intensifying of competition, contributed more to economic growth of countries in transition. However, out model does not confirm those expectations. If we re-estimate it concerning relationship between GDP growth and transition progress of trade and prices liberalization for all economies in Central and Southeast Europe, and republics of the former Soviet Union, we shall come to a conclusion that price liberalization in the domestic market was much more important for economic growth than liberalization of foreign trade. This is shown in Table 4. The estimated coefficient of long-term elasticity of economic growth relative to trade liberalization is not significant, except in case when time period cross-sections, specific to a country, are input into the model. On the other hand, long-term elasticity of economic growth is very high and significant relative to price liberalization (except in case of differentiated examination of each observed period).

5 General model of evaluating connected time series and time cross-sections has the following expression:

$$Y_{it} = \alpha + X_{0\,it}' \cdot \beta_0 + X_{1\,it}' \cdot \beta_{1i} + X_{2\,it}' \cdot \beta_{2t} + \delta_i + \gamma_t + \varepsilon_{it}$$

where i=1,...,N number of time cross-sections t=1,...,T number of time periods, Y_{it} is dependent variable, $X_{0\,it}'$ is matrix of common regressors, X_{1it} is a matrix of regressors specific to time cross-sections (dummy variable), and X_{2it} is a matrix of regressors specific to time periods (dummy variable).

Table 4: Effects of trade on GDP

	No cross section/ period effects	Cross section effects	Period effects		No cross section/ period effects	Cross section effects	Period effects
C	0.1637**	0.3821**	0.1856**	C	0.0222	0.3006**	0.1624*
	(0.0426)	(0.0648)	(0.0417)		(0.0727)	(0.0884)	(0.0873)
LOG(?_GDP(-1))	-0.030**	-0.238**	-0.022**	LOG(?_GDP(-1))	-0.0285*	-0.1963**	-0.021**
	(0.0089)	(0.0237)	(0.0082)		(0.0086)	(0.0226)	(0.008)
DLOG(?_TRADE)	-0.267**	-0.1039	-0.269**	DLOG(?_PRICE)	-0.3213*	-0.2942*	-0.308**
	(0.0767)	(0.0777)	(0.0718)		(0.09846)	(0.09617)	(0.100)
LOG(?_TRADE(-1))	0.0443	0.2837**	0.0078	LOG(?_PRICE(-1))	0.1424**	0.2356**	0.0186
	(0.0313)	(0.0446)	(0.0317)		(0.0532)	(0.0577)	(0.0663)
R2	0.0667	0.3024	0.2898	R2	0.1063	0.2864	0.2847
DW	1.6226	1.6499	1.9900	DW	1.5656	1.5632	1.9163
F-statistic	10.150	5.5664	8.3450	F-statistic	16.893	5.1539	8.1416
Prob(F-statistic)	0.000002	0.0000	0.0000	Prob(F-statistic)	0.0000	0.0000	0.0000
Cross-section F		4.8034	7.5576	Cross-section F		3.5883	6.0022
Cross-section Chi-square		125.1828	117.4658	Cross-section Chi-square		96.7917	95.7729

We conclude that trade liberalization was very important for economic development of a number of countries in transition, but not for all of them, although coefficients of changes have a negative sign. This is interpreted as a short-term elasticity that leads to adjustment to long-term equilibrium. On the other hand, price liberalization had a strong effect on economic development of all countries in transition. Abandoning instruments of administrative control over prices in domestic markets had greater effects for economic development than opening of those economies to international trade.

Price liberalization is also one of four key factors for creation of a competitive business environment. Market driven prices that reflect scarcity of products and levels of demand ensure an effective role of market demand in the process of creating incentives for manufacturers to make efficient use and allocation of scarce resources.

TRANSITION SYNERGY

Transition process has a certain synergy. Institutional changes and new policies in one area have a positive impact and accelerate changes in related areas. We were interested to see how this synergistic process affected development of competition policy. In order to arrive at an answer, we assumed that competition policy was a dependent value, while all other elements of transition process were assumed to be factors that can affect competition:

$$\Delta \mathbf{comp}_{i,t} = \alpha + \mathbf{comp}_{i,t-1} \cdot \boldsymbol{\beta}_0 + \Delta \mathbf{X}'_{i,t} \cdot \boldsymbol{\beta}_1 + \mathbf{X}'_{i,t} \cdot \boldsymbol{\beta}_2 + \mathbf{Z}_{1\,i,t}' \cdot \boldsymbol{\lambda}_{1i} + \mathbf{Z}_{2\,i,t}' \cdot \boldsymbol{\lambda}_{2t} + \boldsymbol{\eta}_i + \boldsymbol{\theta}_t + \boldsymbol{\varepsilon}_{i,t}$$

Vector $\mathbf{X}'_{i,t}$ contains independent variables [tender, auction, trade, price, enterprise, banking, securities, infra], while vectors $\mathbf{Z}_{1\,i,t}'$ and $\mathbf{Z}_{2\,i,t}'$ contain dummy variables. We have obtained a very interesting result, reported in Table 5. We arrived at the result in two steps. In the first step, we regressed all transitional indicators to rates of changes in competition policy. Those indicators that did not pass the significance test at level of confidence of 90% were excluded from regression equation in the second step. Obtained results are shown in Table 5.

Table 5: Transition synergy

	No cross section/period effects	Cross section effects	Period effects
C	0.0487	0.0781	0.0354
	(0.0110)	(0.0137)	(0.0131)
LOG(?_COMP(-1))	- 0.2360**	- 0.3785**	- 0.2328**
	(0.0277)	(0.0349)	(0.0276)
DLOG(?_ENTERPRISE)	0.1890**	0.1369**	0.1668**
	(0.0433)	(0.0448)	(0.0442)
LOG(?_ENTERPRISE)	0.1219**	0.1514**	0.1433**
	(0.0324)	(0.0398)	(0.0334)
DLOG(?_SECURITIES)	- 0.0414*	- 0.0534*	- 0.0556
	(0.0328)	(0.0458)	(0.0461)
LOG(?_SECURITIES)	0.1375**	0.1183**	0.1449**
	(0.0328)	(0.0428)	(0.0323)
DLOG(?_INFRA)	0.1221*	0.0844	0.1462*
	(0.0558)	(0.0556)	(0.0586)
LOG(?_INFRA)	- 0.0754**	0.0004	- 0.0838*
	(0.0296)	(0.0367)	(0.0327)
R2	0.2264	0.2985	0.2815
DW	2.0246	1.9589	2.0550
F-statistic	21.4888	5.9088	8.1131
Prob(F-statistic)	0.000	0.000	0.000
Cross-section F		1.7842	2.2419
Cross-section Chi-square		51.0770	38.5695

Competition policy is affected positively by enterprise restructuring (ENTERPRISE variable), financial markets development (SECURITIES variable), and negatively by changes in infrastructure (INFRA variable). Other indicators of transition do not have a significant influence on competition policy. This means that changes implemented in the second phase of transition yield a special synergistic effect to changes in competition protection mechanisms. Trade and price liberalization, dominating the first phase of transition, do not have any effect on the second phase of transition. Especially, we wish to emphasize that privatization did not contribute to a significant acceleration in the process of setting up competition protection mechanisms.

One of existing opinions in economic literature is that competition policy is complementary to foreign trade liberalization. However, EBRD data do not confirm that foreign trade liberalization has had a significant impact on competition policy. Its influence, and the influence of pri-

vatization, has not been of relevant significance to development of competition protection institutions.

SERBIA AND GENERAL PROGRESS IN TRANSITION

After two decades of changes, countries in transition overcame transitional crises and were on the path to economic growth. However, transitional changes were not a straight line process. Figure 1 shows general progress in transition, and progress in three separate areas of importance for development of competition: trade liberalization, price liberalization and competition policy. Black line represents the general indicator of transition. Its final value in 2007 was 3.07. Green bars represent the score of competition policy, which were barely 2.40 in 2007. Red bars represent liberalization score, which is clearly the best indicator of transition at 4.02 in 2007. Blue bars represent progress in transition of foreign trade and foreign exchange payments at the current maximum of 3.87.

Evidently, the rates of progress had been increasing since the season 1996/97, while later progress in transition exhibited lower rates of changes. After that point, transition was slowing down, not only during transfer from the first to the second phase of transition, which is assumingly more difficult and demanding, but it was also evident by indicators from the first phase of transition.

The strongest progress was made in price liberalization, and then in liberalization of foreign trade and system of foreign exchange payments. On the other hand, much less progress was made in enforcing competition policy and building adequate institutions for competition protection.

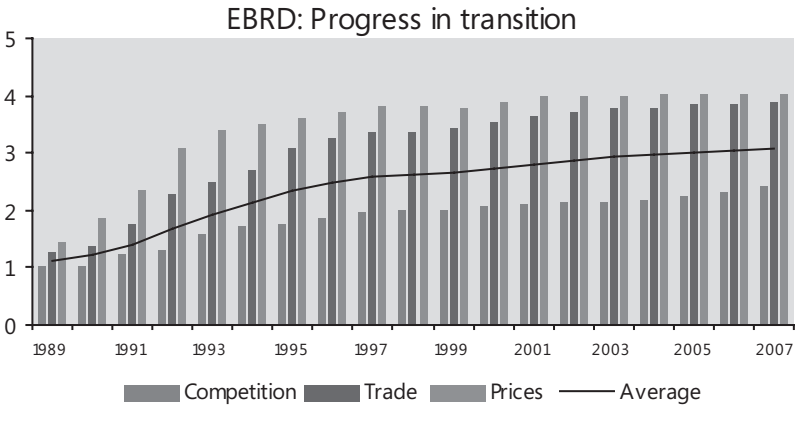

Figure 1

What is the reason for this? It is important to answer this question, not only for the sake of successful completion of transition, but also for understanding economic growth. As we have seen, successful competition policy has positive effects for long-term growth of GDP level.

It is claimed in economic literature that countries in transition can not substitute trade liberalization for effective competition policy, but only use it as a complementary element, L. Cernat [2004]. If they are, in fact, two complementary policies created by countries in transition, then why is there such an evident development lag between one and the other policy? This question requires a complex answer, and we broke it down to a series of causal factors given in Table 6.

Table 6: Comparative Analysis of Institutional Effects

	Trade	Competition
Institution	Adjusting	Establishing
Regulation	Improving	Adopting new
Implementation	Log of experience	No experience
Priorities	Privatization + Liberalization + Deregulation	Institution building + Repositioning
Market effects	Macro	Micro
State intervention	Reduction	Restructuring
Government role	Remaining	Disappearing

The key difference is that successful competition protection policy requires setting up new institutions that will have a friendly attitude towards market economy. On the other hand, foreign trade regulators exist already and it is only necessary to change their policies. Although sometimes it may seem that it is easier to create new institution than reform the existing, in this specific case it is not so. At least, in Serbian example, it turned out that new, effective government could bring customs administration in line very quickly, but that establishing of Competition Protection Commission was a far longer and complex process.

Further, abolishing non-tariff barriers to trade, administrative constraints to free foreign trade and lowering of customs duties can be implemented very quickly. On the other hand, adoption of a new law or competition protection system took much longer. The first dilemma was whether Serbia should apply USA or EU regulation. When

that issue was resolved, European Union regulation was not taken over in its entirety, leaving significant leaks.

The task of closing these legal leaks is a legislative activity that is yet to be accomplished during 2009. In the meantime, there were several cases of disputes that would certainly have been resolved much more easily had it not been for the leaks in regulations.

Human resources and knowledge are constraining factors for development of an effective system of competition protection. Such constraints did not exist in the customs and foreign exchange systems. Experience in enforcement of laws, even if they were suboptimal, produced a number of good experts who were able to adjust to changes quickly and introduce new policy effectively.

Transition priorities define the order of actions, as well as the allocation of administrative, staffing and financial resources required to implement new economic policies. Foreign technical and financial assistance has been available since 2001 when for example, the World Bank helped introduce and implement new privatization system. Foreign technical assistance from European Union, designed to enhance competition protection mechanisms, was made available in the beginning of 2008.

Differences in the characteristics of effects achieved by one or another transition policy are not unimportant. Liberalization had brought quick macroeconomic effects that were necessary to improve the macroeconomic position of Serbia after isolation and sanctions. On the other hand, effects of competition policy enforcement are at the microeconomic level, and they require much more specific measures than implied by macroeconomic changes.

Finally, although not the least important, transition is not only a change of institutions and economic policies. It also requires a change of mindset. The old system was built upon in infinite trust in the state's ability to handle all economic issues. This is why liberalization of foreign trade was a simpler task as it did not question the state's role, but only required fewer interventions in trading and foreign exchange transactions. On the other hand, competition policy calls for a change of philosophy of state interventions. It requires a partial deregulation, but relies much more on new regulations. Simultaneously, it requires setting up a new state body, independent from the government, which would protect competition. The political economy of this transformation does not always work one-way, as even many proponents of market reforms and transition were not enthusiastic about the government loosing this control function.

COMPARATIVE ANALYSIS OF CONCENTRATION

The history of competition protection is relatively short in Serbia. Consequently, the first annual report of Competition Protection Commission has only been made for 2007[6]. The report lists clearly all priorities of the Commission. The majority of cases involved control of concentration of business entities (130), investigating abuse of dominant market position (13), and finally, investigating collusion agreements (8). Although concentration control prevails in other transition economies too, there is no such a strong disproportion between those and other procedures for competition protection. According to the Commission, the reason behind this situation is that the threshold annual revenue of business participating in concentration has been set too low in the law that requires them to obtain adequate licenses. We feel that the market concentration situation is Serbian economy is not as alarming as implied by the volume of cases at the Competition Protection Commission.

We shall compare the concentration situation in Serbia to other transition economies. BEEPS provides the best comparable database on the basis of a 2002 survey, which covered 26 transition economies, while we researched the situation in Serbia and Montenegro. As the majority of surveyed companies were located in Serbia, in further text we shall refer to that survey as an analysis of Serbian market. The preceding survey had been carried out in 1999 and did not include our country. Consequently, we can not follow development of competition at the level of surveyed companies. The data are very useful as they allow comparisons with other similar countries. However, they are not sufficiently precise for more accurate conclusions. The issue is not in the fact that data had been collected through a survey, but that offered answers

6 RS Competition Protection Commission, *Annual Report of Competition Protection Commission for 2007*, Belgrade, February 2008.

were quite extensive and inadequate for a more sophisticated econometric analysis. But, even at face value, they give a snapshot of competition situation existing in Serbia prior to adoption of new laws and setting up of independent Competition Protection Commission.

The first question refers to the degree of market concentration, which is determined according to companies' share in total sales in the domestic market. The entire market is divided into deciles, while each company was surveyed according to the share of their dominant product in the relevant market. Companies come from different economic sectors, and size of the sample does not ensure full comparability of data between countries. Still, it is possible to identify a certain trend, which is shown in Figure 2.

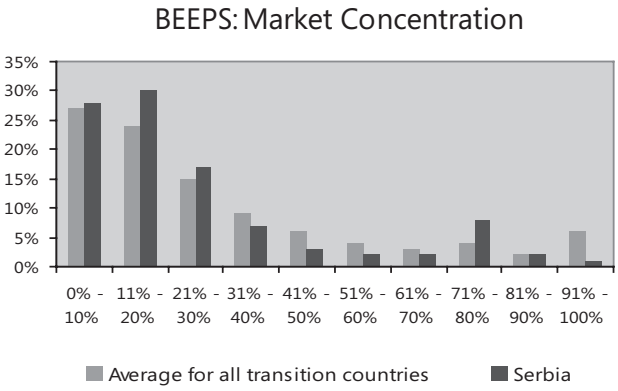

Figure 2

Transition economies in general, and Serbia, in particular, exhibit a prevailing trend of companies with 40% market share for their key product, which is a threshold for establishing of dominant position. In Serbia, 82% of companies do not have a dominant position, while the comparable percentage is less favourable in transition economies with an average of 75%. When considering the first four deciles, indicating the weakest competition, Serbia has higher percentage share in each of them (except in the fourth docile), relative to the average for transition economies. This explains the reason why Serbian market is less concentrated than in the majority of other transition economies.

Market concentration in Serbia is very similar to market situations in Albania, Macedonia, Ukraine and Latvia (with correlation coefficient above 0.95), while it is very different from market structures in Slovenia, Romania, Belarus, Azerbaijan, and Kyrgyzstan (with correlation coefficients below 0.80).

A similar conclusion about lower market concentration in Serbia is also a result of analyzing answers to the question about number of competitors for each surveyed company. The question has only three possible choices of answer, which somewhat reduces the value of this information. Firstly, a company does not have a serious competitor, which is a situation of perfect monopoly in the market. There were no such companies in the Serbian survey, while the average for countries in transition is below two percent. Secondly, a company may be facing an oligopoly in the market with up to three serious competitors. In Serbia, there were 14% of such companies, while for other transition economies the percentage was slightly above 17%. And thirdly, a market structure with more than three key competitors corresponds to perfect competition. This was the case with 86% of companies in Serbia, and 81% in other transition economies.

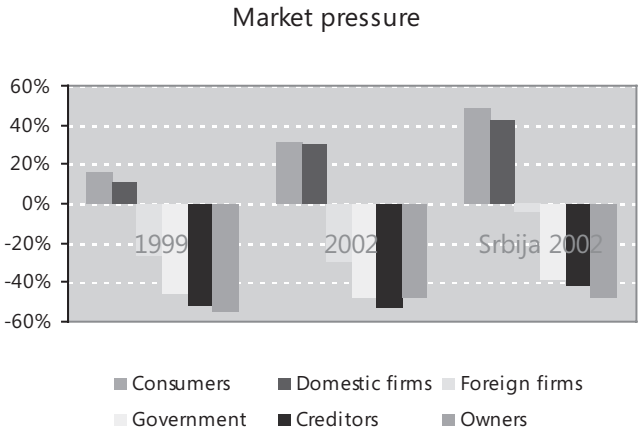

Figure 3

In Figure 3 we showed the key sources of market pressures as seen by companies, in terms of market incentives to cut costs and prices, innovate products, and better meet consumer tastes and needs. The answer to this question offered four choices: that pressure is not important at all, slightly important, significant, and very significant. We composed a net indicator of significance by deducting the first two from the final two answers[7]. Its positive

7 Thus, we applied a *de facto* weighing system assigning approximately equal weight to each answer.

value indicates a relevant market pressure, while a negative value signifies no market pressure.

Market pressure by consumers is the most important in Serbia and other transition economies. Then, it is followed by local competitors. The pressure was higher in 2002 than it had been three years earlier. Moreover, in Serbia, this pressure is higher than on the average in other transition economies. Also, foreign companies have a far greater influence in Serbia than in many other countries in transition. Contrary to this, the government, creditors and owners are putting very low pressure on companies to adjust to market conditions. In general terms, this also applies to the influence of foreign companies in the majority of transition economies.

When consumers have such an important influence, then it can rightly be assumed that many products exhibit high elasticity of demand in transition economies. BEEPS database does not allow a more specific evaluation. Still, however imprecise, it can be used to compose an indicator and provide a comparison of countries in transition. Under reasonable assumptions[8], elasticity of demand coefficient in Serbia was about -1,6, while an average elasticity of demand coefficient for all transition economies was about -2,5. Such high elasticity of demand coefficients is certainly overrated. However, it is important to not that the estimated elasticity of demand in Serbia was the lowest of all other countries in transition.

Relatively low elasticity of demand, compared to other transition economies, and does not correspond to the opinion that consumer pressure is the greatest in Serbia. Now, the question is whether our findings are similar in terms of relations between Serbian companies and their suppliers. In this aspect, elasticity of demand is among the lowest of all other transition economies. By using a weighted system as in the preceding example, in Serbia we have elasticity of demand for inputs of -4.1 while average elasticity is -5.2. Of course, these coefficients are overrated too. But, the ordering of countries is still important.

It is evident in both cases that surveyed enterprises overestimated realistic responses to changes in prices of inputs and final products. If the error in responses is the same in all countries, then Serbia exhibits considerably lower competitive pressure by consumers and domestic enterprises, than it is seen by enterprises themselves.

CONCLUSION

Transition economies in Europe and the former Soviet Union are converging towards developed market economies, both in terms of wealth and growth of market institutions. Still, one can not claim that institutional reforms are just following in the footsteps of development path taken by modern market economies. For example, it has been shown for a fact that development of free market competition mechanisms indicates negative correlation coefficients to GDP growth, when all countries in transition are analyzed as a group. At the same time, it is evident at microeconomic level that oligopolies are more efficient than systems with perfect competition. This has been a cause for doubt if competition is, indeed, a driver of economic growth, or an inevitable cost of transition.

With the data covering all transition economies over a period of 19 years, we have demonstrated a positive long-term elasticity of economic growth level relative to development of free competition institutions, although short-term effects are negative relative to economic growth. Still, transition process exhibits a synergy of institutional changes. Restructuring of enterprises, modernization of financial systems and infrastructure have a pronounced impact on development of competition mechanisms.

On the other hand, Serbia has recently introduced new regulations and competition protection institutions. The practices of competition protection focused on market concentration. However, the latest comparative data for all other transition economies indicate that the general level of market concentration was lower in Serbia than in other transition economies. Simultaneously, the consumer pressure on market behaviour of companies is greater than in those countries, which is an indirect confirmation of our finding that price liberalization in the domestic market was a more significant factor for economic growth than competition protection system. Having in mind that this is happening in the period before establishing of new competition protection institutions, it remains to be seen how

8 Net lower demand after 10% price increase, when competitors keep their prices unchanged, was rated as a 3% decrease, and a stronger decrease was rated as a 20% sales cut, and a mass switch to competitors was rated as a 65% drop in sales.

these outstanding issues will be resolved in the future. The experiences from other transition economies are encouraging, but also underscore the necessity of a coordinated action regarding all institutional changes in the second phase of transition.

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GROWTH, IMMIGRATION AND ETHNIC STRUCTURE CHANGE: WHAT IS THE FUTURE OF EUROPE'S LOW-FERTILITY SOCIETIES?

Abstract

Since the 1960s, fertility has fallen below replacement across the entire Europe, rendering the continent a large area of depressed fertility. As nearly no one expects fertility to recover to replacement or above in the decades ahead, the extant fertility depression is highly likely to continue to grow. Over time, the depression will occasion an autochthon working-age population decline and an autochthon labour contraction. The contraction will become a constraint on economic growth across Europe, a development that governments will likely seek to relax by resorting to foreign labour. Countries experiencing a large fertility depression and a large autochthon labour contraction will have a greater need for foreign labour and vice versa. Efforts at maintaining economic growth in such a situation will occasion immigration and an attendant change in the ethnic structure of the population. As public opinion in Europe is uniformly opposed to an increase in immigration, governments will have difficulties striking a balance between economic growth and the ethnic structure change. Serbia, with its long history of low fertility and a new episode of fertility reduction towards very low levels will share in the pan-Europe dilemma between growth and the ethnic structure change.

Key words: *low fertility, fertility depression, autochthon working-age population change, autochthon labour contraction, immigration, ethnic structure change, economic growth.*

During the last one-third of the twentieth century, a large majority of European countries has seen its fertility descend below replacement, a fertility level securing replacement of generations in a closed population. The remaining few countries have witnessed the trend during the 2000s. To date no European nation has experienced a fertility recovery to replacement or above and, consequently, the entire continent is a large area of depressed fertility (Frejka and Sobotka 2008). This development has set a stage for depopulation, a process that many expect to begin unfolding in many countries in the coming decades.[1] The onset of depopulation will be preceded by a decline in the number of people of the working age, a trend already under way in some large economies, such as Germany and Italy.

1 See, for example, results for the median total population size in Scherbov et al. (2008), which indicate that many European Union countries can expect their populations to begin shrinking before the middle of this century.

This development, in all but two EU25 countries is expected to bring about a shift towards a smaller labour force (Carone 2005). The labour force decline is charted despite the fact that the labour force participation rates underpinning the projections are assumed – where this is still feasible – to rise over time towards high levels, remaining constant thereafter. Moreover, the projected decline occurs regardless of the fact that these countries are assumed to experience positive net migration, which in the Carone study is particularly large in the case of Germany and Italy. Had these projections ruled out international migration, the decline, approximating in many instances the autochthon labour force fall would have been steeper, especially for these two countries.

In a capitalist economy, recourse to foreign labour is a spontaneous response to autochthon labour shortages. Thus, during the period 1950-73, which Maddison (2001) calls the "golden age" of the capitalist epoch, the shortages in a number of West European economies have been offset by means of the "guest worker" and similar foreign-labour recruitment programmes. More recently, the West European countries along the Mediterranean rim have been increasingly relying on foreign workers. The doors have been swung wide open to legally arriving foreign workers and dependents, while illegal migrants were treated with leniency and legalised through successive regularisation programmes.[2] If the past is a guide to the future, to the extent that the autochthon labour contraction is Europe's destiny, so are the foreign-labour recruitment and the attendant arrival of workers' dependants.

Where immigration is steady, it leads to a gradual replacement of the autochthon population of a country by foreign-origin people and a change in the ethnic structure of its population. The process can be marked where immigration is substantial and the autochthon population growth is slow or negative due to sub-replacement fertility, negative net migration or both. If immigrants come from remote geographic origins or with distinctive ethnic and racial ancestry, as is increasingly the case in Europe, the ancestry of the national population can be radically and permanently altered (Coleman 2006). The process is already under way in a number of West European countries. Whether it will continue will in part depend on immigration policy, a sovereign right of the state.

The chain of causality, starting with depressed fertility and ending with ethnic-structure and ancestry change, is not necessarily Europe's destiny. Much will depend on how strongly attached are its political and business elites to the economic growth ideal. If sustained growth is not seen as an end in itself, the autochthon labour contraction may lead to a retreat from growth and, in some countries, to a GDP decline. If, however, a vigorous pursuance of growth remains the norm, the dependence on foreign labour will rise, immigration will increase and the ethnic change will accelerate. The change will influence some countries more than others.

This paper consists of five sections. In the first, we consider the emergence of sub-replacement fertility since 1960 along with a fertility depression it created. In the second section, we examine a likely contraction of the autochthon working-age population through 2050 occasioned by the continuing depression. In the third, we look into implications of alternative future growth patterns for long-term immigration and ethnic structure change in France and Germany, nations with strikingly different fertility depressions and markedly different likely contraction of the autochthon working-age population. The fourth section considers some of key forces that may influence future choices between growth and ethnic structure change that countries with different fertility pasts and working-age population futures may face. The fifth section focuses on Serbia, seeking to explore briefly its likely future dilemmas stemming from the likely drop in its autochthon labour force.

Throughout the paper, Serbia is defined as comprising the territory of the country without Kosovo and Metohija. This province is not included, as relevant data have been of dubious quality or altogether lacking for some time. The fact that in this analysis Serbia consists of Central Serbia and Vojvodina, areas with one of the longest history of sub-replacement fertility in Europe brings into a sharp focus difficult choices that the country will face in the future.

2 The recent past abounds with instances of the recruitment of foreigners, legal as well as illegal by the employers in these countries. One of these is the recruitment of Chinese labourers by the garment industry in Tuscany, a region said to have hosted the largest percentage of Chinese residents anywhere in Italy in the early 2008 (Los Angeles Times 2008).

SUB-REPLACEMENT FERTILITY AND FERTILITY DEPRESSION

A number of West European countries witnessed an episode of sub-replacement fertility during the 1930s, a first ever observed in peacetime since fertility statistics are being collected. The hardship occasioned by the Great Depression made people postpone or forego births through much of the decade. The episode ended as the onset of the Second World War was approaching, turning into a fertility rise that stretched into the first half of the 1940s and beyond. Notably, this development took place only in countries – several of them – that were not affected by the wartime hostilities (Sardon and Calot 1997). This fertility recovery was followed by a fertility increase that began in other West European countries after the war ended. The confluence of these trends produced the Europe's baby boom, a phenomenon of post-war high fertility.

"Most [West] European countries reached the peak of the baby boom within a year of 1964, a remarkable coincidence in timing. Most of these countries fell below replacement level fertility (2.1) in about 1972" (Coleman 1966).[3] The decline started from the levels that differed across the countries. It proceeded at a varying pace and reached sub-replacement levels of different orders of magnitude. Thereafter, TFR often fluctuated around a gradual trend, which, depending on a country was upward, flat or downward. Only recently, after having reached, in some instances, the so-called lowest low fertility – TFRs below 1.3 children per woman – a number of countries saw their fertility recovering. Overall, the result is a widespread fertility depression in this part of Europe.

With the exception of the two Baltic countries – Estonia and Latvia, Eastern Europe did not experience sub-replacement fertility during the 1930s. Its post-war fertility recovery, everywhere except in these two countries, was moderate and relatively short-lived. It was a post-war fertility recuperation rather than a fertility surge comparable to the West European baby boom. During the 1950s, fertility decline was already under way in much of the region. A look into the past from the vantage point of the present-day countries reveals a development of below replacement fertility as of late 1950s (Macura and MacDonald 2003). The present-day Czech Republic and Hungary were the first to cross replacement in 1959, while among the countries for which information is available, Poland was the last – in 1979.[4] In the former Yugoslavia, Central Serbia and Vojvodina went below 2.1 children per woman in 1958, while Croatia followed suit in 1962 (Macura 1982). However, East European sub-replacement fertility did not become a norm, as TFRs occasionally recovered, staying above replacement even only for a few years.

As the socialist regimes began falling as of 1989, a sudden shift towards very low fertility levels occurred in this part of Europe. TFRs dropped precipitously in the early 1990s, at a pace that was faster than elsewhere in the post-war Europe (Macura and Mochizuki-Sternberg 1999). The "free fall" was replaced by a slowdown during the second half of the decade. The unprecedented East European descent has largely run its course by 1999. The levels attained through much of the region have been some of the lowest seen in Europe, rendering this part of the continent a largest contiguous area of grossly depressed fertility (Macura et al. 2000). Interestingly, the former Yugoslav republics did not take part in this spectacular development. Instead, their moderate downward trends of the 1980s continued unabated as the country underwent disintegration and the change of government.[5]

Scholars continue to argue as to what has occasioned the East European precipitous drop. Macura et al. (2000) suggested that the driving forces were the misery and uncertainty of the early phase of the transition to market economy and democracy. Some others, notably Van de Kaa (2003) maintained that the switch to a smaller family was a result of a swift adoption of the Western family values, attitudes and norms. Yet others, in particular Philipov (2003) argued that part of the explanation was anomy that had spread through the post-socialist countries in the years after the regimes fell.

Demographers anticipate a continuation of sub-

3 Note that in a low-mortality population it is conventional to approximate the replacement level by total fertility rate, TFR, of 2.1. TFR is the average number of children that would be borne per woman if all women lived to the end of their childbearing years and bore children according to a given set of age-specific fertility rates.

4 Albania, a country with incomplete information might have seen sub-replacement fertility in 2000 or thereafter.

5 This does not apply to Bosnia and Herzegovina, for which data are missing for several years in the 1990s.

replacement fertility across Europe – see, for example, Lesthaeghe and Willems (1999) regarding the issue as it pertains to the European Union. However, this does not mean that in some cases, such as France, fertility could not rebound to replacement or beyond.[6] In line with the widespread expectation that fertility recuperation to replacement or beyond will not materialise, possibly except in rare instance, authors of population projections make assumptions that future fertility will remain below 2.1. Thus, when making periodic revisions of national population projections through 2050, the United Nations demographers assume for the medium variant projections that fertility in low-fertility countries will move over time from the most recent levels, typically upward, towards 1.85 children per woman and then stabilise at that level. In particular, they assume for the countries currently having relatively high low fertility that 1.85 will be attained within the projection horizon, while for countries having comparatively low low fertility that this level will be reached after 2050 (United Nations 2005). Overall, for a large number of countries, the assumptions amount to an optimistic vision of future fertility change. In spite of this optimism, a continued build-up of the fertility depression is in the offing.

Recall that our interest in low fertility derives from the effect that it will have on the autochthon working-age population during 2005-2050, in particular on the decline in the size of this group during this period. This decline will be a function of low fertility over three-quarters of a century, i.e. 1940-2034. Linking the decline to a long time series would be, however, grossly impractical. Therefore, we will presently introduce a concept of fertility depression, which encapsulates prolonged low fertility. Then, in the next section, we will consider the autochthon working-age population decline and link it to the depression.

We distinguish three dimensions of the depression – duration, depth and magnitude. We define duration as the number of years during which TFR is below replacement. Since an intermittent occurrence of sub-replacement fertility matters, all the years in question need not be consecutive. Depth is defined as an arithmetic mean of downward deviations of TFR from replacement during the years when TFR is below this level. A deviation for a particular year equals 2.1 minus that year's TFR. Magnitude is defined as a sum of the deviations. It is equal to a product of duration and depth, i.e. the number of years and the mean deviation. Given these definitions, duration, depth and magnitude can be readily derived from national time series of annual TFRs.

Such time series are available from Council of Europe (2006) for the period 1960-2005 for nearly all European countries. The series are not complete for Albania, Bosnia and Herzegovina and Moldova and, therefore, these countries do not figure in the analysis. As no TFR information is available prior to 1960 on a Europe-wide basis, we cannot account for sub-replacement rates before this date. Consequently, the fertility depression in Estonia and Latvia is understated. It is also understated in the Czech Republic, Hungary and Serbia, but only slightly. In order to derive the depression measures through 2034, we have extended the Council of Europe series until this year by interpolating linearly between the TFRs pertaining to the various quinquennial periods during 2005-2040 that represent fertility assumptions formulated by United Nations (2005) for its medium variant population projections.[7]

The duration and depth measures for 1960-2034 are plotted in Figures 1 and 2 for the East and West European countries having one million or more inhabitants in 2005, all except the three countries mentioned earlier. Also shown in the scatters are contour lines, marked by the depression magnitude tags. These lines provide information, but not precise measures of the magnitude associated with the duration and depth obtained for each country. Note, for example, that the values of the depression magnitude for Serbia and Slovenia are, respectively, close to 26 and 38.

6 The French TFR recovered to two children per woman in 2006 from somewhat lower levels a few years earlier (Héran and Pison 2007).

7 Council of Europe (2006) and United Nations (2005) do not provide TFR data and assumptions for Serbia as defined in this paper. The TFR data for Serbia, i.e. for Central Serbia and Vojvodina combined came from the Statistical Office of Serbia, courtesy of Dr. Miladin Kovacevic, Deputy Director of the Office. The assumptions came from Penev (2007), who formulated them for his medium variant population projections.

Figure 1. Depression Duration versus Depression Depth; Eastern Europe

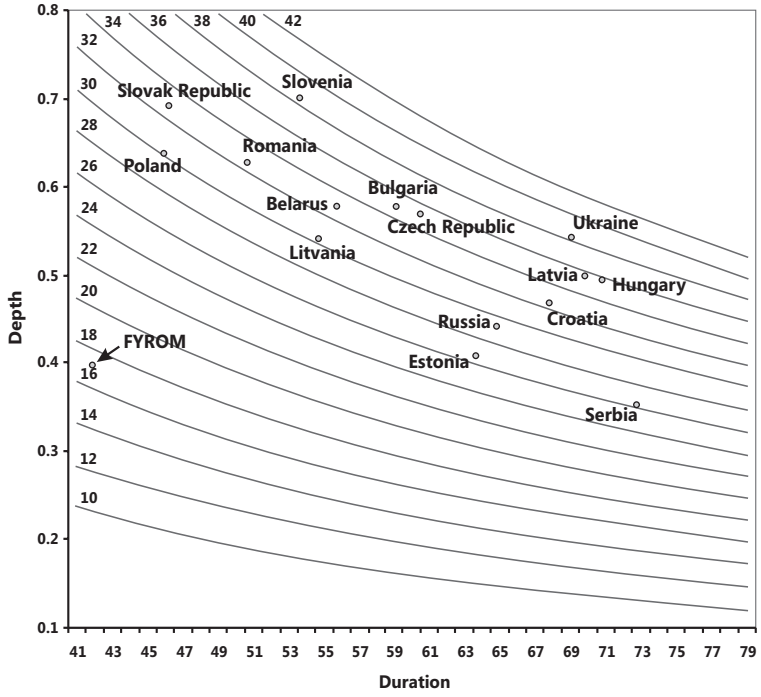
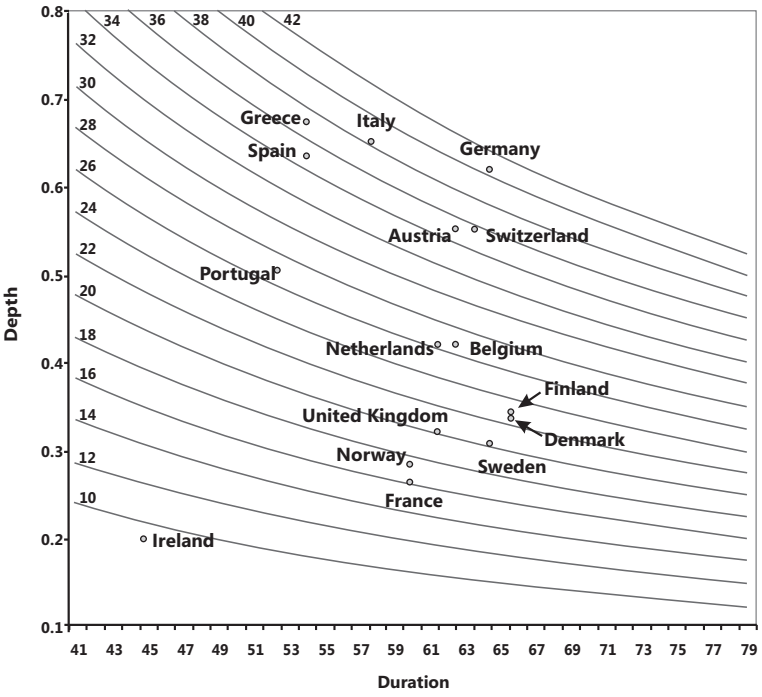


Figure 2. Depression Duration versus Depression Depth; Western Europe



two statistical outliers – the Former Yugoslav Republic of Macedonia, FYROM, and Ireland. The scatter for Eastern Europe does not reveal a distinct geographical pattern of duration.

In Western Europe, the depression will be in existence longest in Denmark and Finland (66 years each) and shortest in Portugal (53 years). Here, one can notice a clear-cut geographical pattern. The Scandinavian countries except Norway, the German-speaking nations and the Low Countries are the forerunners. Close behind them are France and the United Kingdom, plus Norway. Trailing them are the four Mediterranean countries of Western Europe, where Italy leads and Portugal lags behind the others.

The two statistical outliers aside, the upper boundary of the depression depth in both parts of Europe is around 0.7. The lower boundaries are somewhat above 0.25 and 0.35 for Western and Eastern Europe. Again, in Eastern Europe, no geographical pattern of depth is apparent. In this part of the continent, however, low depth tends to go hand in hand with long duration and vice versa. Note how these countries are spread along an arc-like band in the upper part of the area covered by the contour lines.

In Western Europe, such an association is less apparent. However, there is an orderly grouping of the countries. The country groups already mentioned appear stacked on top of each other. At the bottom are France, Norway and the UK. Then follow the remaining three Scandinavia countries, the Low Countries and the German-speaking countries, all in that order. The depth of the four West European Mediterranean countries is broadly similar to that observed in the German-speaking countries.

Everywhere but in a handful of countries, by 2035 the fertility depression will, according to our estimates, be in existence for at least five decades. It will be present longest in a mix of five East European countries led by Serbia (73 years) and shortest in two other countries of this same part of Europe – Poland and Slovakia (46 years each). Note that for the simplicity sake, we do not consider here the

The magnitude of the depression varies a great deal more in the West than the East. (This can be inferred from the position of the countries relative to the contour lines.) The greater variation in the West is to a large measure due to the fact that these countries have broadly similar depression duration, but vastly different depression

depth. Compare, for example, in this context, France and Germany. Ireland aside, these two countries will, respectively, experience by 2035 the smallest and the largest depressions. Note also that the three German-speaking countries and the three Mediterranean countries are in a league of their own, all with a very large depression magnitude. At the other end of the spectrum, the Scandinavian countries plus France and the UK will see much smaller depression magnitude.

Due to the negative association between duration and depth in Eastern Europe, these countries will make a more homogenous group with respect to depression magnitude. Many of them will have a magnitude similar to, yet on average somewhat smaller than that of the German-speaking countries and the three Mediterranean societies. FYROM aside, the results suggest that Estonia and Serbia will fare better than all the other countries in the region. Nevertheless, their magnitude will be approximately equal to the intermediate magnitude values in Western Europe, i.e. the Low Countries' values. Overall, the successors of the former socialist states will establish themselves as a group with consistently large fertility depression magnitude.

AUTOCHTHON WORKING-AGE POPULATION DECLINE

An inevitable concomitant of the continuing fertility depression build-up will be a fall of the autochthon working-age population. Below we focus on the fall during 2005-50, linking it to the depression magnitude through 2034. Before doing so, it is necessary to make a remark on demographic data on Europe's autochthon populations and two related points.

With exception of a handful of countries with a comparatively long tradition of population registers that contain ancestry data, demographic statistics for Europe's autochthon populations are practically non-existent. First, in view of this, we can only approximate rather than more accurately assess the fall in the autochthon working-age population. In particular, we take the decline in the national working-age population closed to international migration as an estimate of the autochthon working-age population drop. Second, in order to link the autochthon working-age population decline to a fertility depression among the autochthons, we need to approximate the autochthon fertility depression. We do so by accepting the national fertility depression magnitudes based on the national TFR time series through 2034 discussed above as a depression magnitudes among the autochthons. The question is how good are these approximations?

In Eastern Europe, immigrant populations, where they exist, are still relatively small. Consequently, for these countries, the approximations are solid. This is particularly true as regards the autochthon fertility depression. Many West Europe countries have experienced a growing presence of immigrant population groups over the last several decades. Especially where the groups originated from countries beyond Europe's borders, the immigrant populations, with fertility higher than that of the natives have tended to counter the trend toward sub-replacement fertility. Therefore, in these countries, the approximations are likely to be less solid. The declines in the autochthon working-age population and the autochthon fertility depressions are both likely to be understated. The larger the presence of the immigrant populations, the larger the understatements are likely to be.

Figure 3 and 4 show scatters of the estimates of the autochthon depression magnitude and the estimates of the percentage change in the size of the autochthon working-age population for the two parts of Europe. As just suggested, the former estimates are the national depression magnitudes discussed earlier. The latter estimates were calculated from the population projections made by United Nations (2005) for all the countries except Serbia and by Penev (2007) for Serbia. The UN and Penev projections belong to the so-called zero-migration variant, which in addition to the zero-migration assumptions utilise the fertility assumptions formulated for the medium variant projections and the mortality assumptions common to the projections of all the variants. The UN fertility assumptions for the medium variant projections are those commented upon above.[8]

8 The Penev projection for Serbia is not strictly comparable to the UN projections for the other countries. However, the non-comparability is minor. The Penev projection pertains to 2007-2052, while those made by the United Nations are for 2005-2050. Hence, the estimates of the change in the autochthon working-age population for all the countries but Serbia are for the 45-year period ending in 2050. The estimate for Serbia is for the period ending in 2052.

Figure 3. Depression Magnitude 1960-2034 versus Autochthon Working-age Population Change 2005-2050; Western Europe

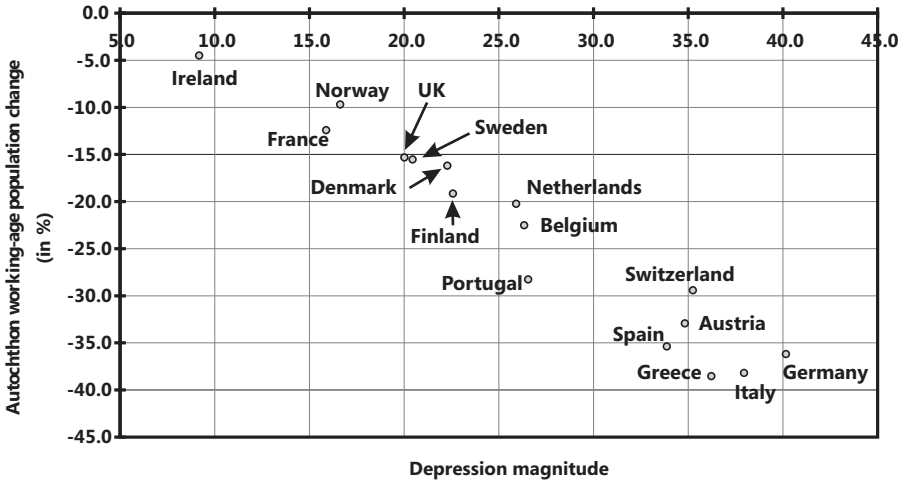
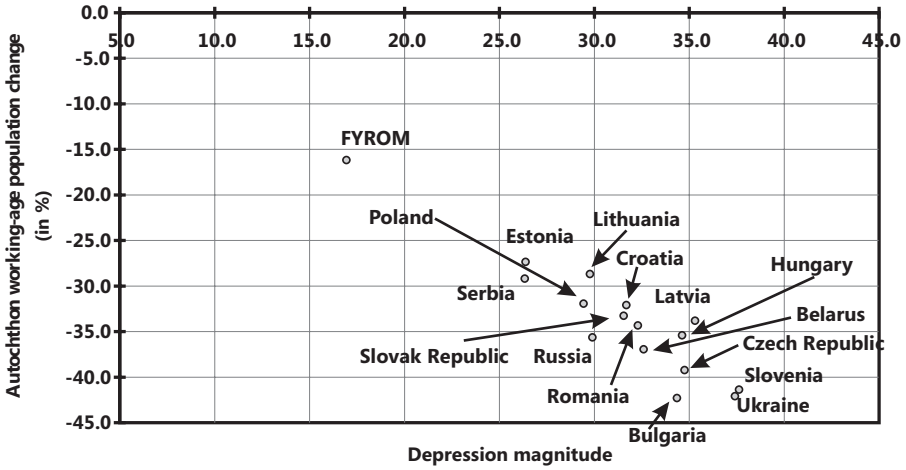


Figure 4. Depression Magnitude 1960-2034 versus Autochthon Working-age Population Change 2005-2050; Eastern Europe



The scatters suggest an autochthon working-age population decline across the board. In Western Europe, the fall varies from a trivial one in Ireland to a massive drop in Germany and all the Mediterranean countries but Portugal. The projected decline in the case of Greece and Italy approaches 40 per cent, while that for Spain and Germany exceeds 35 per cent. With respect to the magnitude of the decline, the West European countries are more or less ordered as in the fertility depression analysis. With respect to the magnitude of the decline, Ireland is at the bottom, after which come France, Norway and the UK, with the decline ranging between 10 and 15 per cent. Right next to them are the three Scandinavian countries, behind which are the Low Countries. The German-speaking and Mediterranean countries surpass the others. As argued above, for many of these countries, these might be underestimates of the future autochthon working-age population declines.

In the case of Eastern Europe, the declines everywhere except in FYROM – a statistical outlier again – are comparatively tightly grouped between 25 per cent and 45 per cent. On average, the projected declines are greater than those in Western Europe. FYROM aside, the entire Eastern Europe is projected to experience the declines of the magnitude that is on average somewhat greater than that of the German-speaking countries and the four Mediterranean countries. Serbia is projected to have one of the smallest declines during 2007-52. This, however, cannot serve as a consolation, as it may happen to be close to one-third of the initial size.

The scatters suggest a tight correlation between the fertility depression and the working-age population decline, especially in Western Europe. This justifies linking the decline to the depression. We are not just interested in the correlation itself, but in rank correlation. The Spearman rank correlation coefficient for Western Europe is remarkably high, i.e. 0.95, with the number of degrees of freedom equal to 14 and P = 2.28E-10. The coefficient for Eastern Europe equals 0.70; d.f. = 14 and P = 5.64E-5.

In sum, large areas of Europe, comprising the German-speaking countries, the West European Mediterranean countries and the entire Eastern Europe are set to see a contraction of the autochthon working-age population between 25 per cent and 45 per cent by the mid-century. These areas include some of the largest European economies – Italy, Germany and Russia – which are projected to see losses amounting to 35 per cent or more. France and the UK, the Scandinavian countries and the Low Countries seem destined to experience considerably smaller losses. Notably, the two of the largest economies – France and the UK – are projected to experience some of the smallest losses.

These trends are bound to result in a long-term contraction of autochthon labour force and employment. If we use as a guide the projections by Carone (2005), which allow for positive net migration, we can conclude with considerable confidence that the contraction, where it did not already begin, will materialise during the next decade in most EU25 countries. Among these countries are all the eight Central European and Baltic countries that joined the EU in 2004 that we included in Eastern Europe. As regards the remaining countries of this region, they have not been a subject of analyses, such as the one conducted for the EU25. So, little is known on how they will fare in the coming decades with respect to labour force and employment trends. As these countries, including Bulgaria and Romania have moved more slowly through the post-1989 transition, it is probable that they will experience a beginning of the contraction, especially of employment contraction later than the transition leaders. If anything, their backlog of the unemployed is likely to sustain a longer employment expansion.

A TALE OF TWO COUNTRIES: FRANCE AND GERMANY

In principle, no matter how soon the future autochthon labour contraction begins and how rapidly it develops, affected countries will be able to respond to it by resorting to foreign labour. This response would not be different from what a number of West European countries practiced during the "golden age" and the Mediterranean countries since the 1990s. In view of the fact that the autochthon labour contraction is likely to be a long-term process, possibly with no end in sight, the question is whether the reliance on foreign labour will be socially and politically sustainable. The answer to the question may depend on the magnitude of the contraction and, consequently, on the scale on foreign-labour dependency. In order to shed light on the issue, we turn next to alternative futures of France and Germany, countries with vastly different fertility depressions and projected autochthon working-age population declines.

The alternative futures are grounded in simulations performed by a simple model, which has been constructed and applied in order to explore long-term implications of alternative growth patterns for immigration and ethnic structure change (Macura 2008). As the model is deliberately simple, the results lend themselves to informed conclusions, but not predictions. Among others, the model has been applied to France and German, and, consequently, the discussion below draws on the cited work. As only limited space can be devoted here to a brief model description along with selected results and their interpretation, the reader interested in details is referred to the work itself.

The following is an outline of the model. It comprises a single-sector economy and a population composed of the autochthons and allochthons. The allochthons consist of foreign-origin persons, including migrant workers, dependents that arrived with or later joined them, and descendents of the workers and dependents borne in the country. The economy and the two population groups change according to their own rules. The economy grows at a set rate, as does average labour productivity. The two population groups change as a function of postulated group-specific mortality and fertility conditions. The members of the two groups do not have common offspring. The auto-

chthons are not affected by migration, whereas the allochthons may gain numbers through immigration. Immigration, if it occurs, comes in response to a need for foreign labour.

The way immigration is determined is central to the model. At any point in time, the economy requires a certain number of workers. This number is a product of aggregate output and average labour productivity. On the other hand, the combined population of the two groups can provide a particular number of workers. This number is a function of the age-sex distributions of the autochthons and allochthons and the rates of employment participation – employment rates – assumed for the two groups. If the number of required workers falls short of the number of available workers, then for the sake of simplicity, productivity is adjusted downward and immigration does not take place. This happens rarely in the simulations. If the number of required workers exceeds the number of available workers, foreign workers and their dependents are allowed into the country. The number of immigrants is just at the level that closes the gap between the two numbers.

The immigrants join the allochthons, augmenting their numbers. A share of the allochthons in the total population – the proportion allochthon – is a measure of the ethnic structure of the population.

In Macura (2008), we have postulated four pairs of GDP and productivity growth rates. Associated with each pair was an employment growth rate, i.e. the differences between the aggregate output and productivity growth rates. Here, we will use three of those pairs of annual percentage growth rates and will refer to them as three patterns of growth. The three patterns – A, B and C, shown below, stylise variations in the growth experiences of the majority of OECD countries during 1970-2005. Pattern A approximates the Canadian experience, pattern B comes close to the experience of five European countries, which include Greece, Spain and Portugal, while pattern C is an extreme rendition of the experience of a number of other West European countries and Japan. Each pattern underpins one of the three basic simulations made for the two countries.

Growth pattern	Growth rate		
	GDP	Productivity	Employment
A	3	1	2
B	3	2	1
C	2	2	0

The employment rates and the fertility and mortality conditions assumed for the autochthons and allochthons do not vary across the basic simulations. The employment rates are those identified by the European Union in order to set the Union's employment targets for 2010 and later monitor achievement of the targets.[9] Like the GDP and productivity growth rates, the employment rates are constant through the end of the simulation period. For the autochthons, they are set 5 percentage points higher than the levels chosen by the EU as the 2010 targets. For the allochthons, they are fixed 5 percentage points lower than the targets.[10] As regards fertility, the autochthon TFRs stay at the initial-year levels. The French allochthon TFR descends from a high initial-year level, while the relatively low German allochthon TFR stays constant at the initial-year value. Life expectancies by sex increase over time up to a point and thereafter stay fixed. They do not vary across the two groups.[11]

Using these inputs, the model generates three basic simulations over 50 years, each underpinned by a particular growth pattern.[12] Simulation results, inter alia, include immigration flows and the proportions allochthon. We shall pay particular attention to three indicators based on these results. The indicators are cumulated immigration and the increment in the proportion allochthon, both over the simulation period and the proportion allochthon at the end of the period.

Let us now consider selected basic simulation results (Table 1) Growth pattern A, being particularly labour reliant, entails the arrival of large numbers of immigrants. Cumulated immigration over the 50-year period equals

9 The rates are as follows: overall employment rate (persons aged 15-64), female employment rate (women aged 15-64) and young-old employment rate (persons aged 55-64).

10 The GDP and productivity growth rates and the employment rates are not equal to the assumed, constant values immediately as of the initial year. Rather, during the first five or ten years the rates move from the initial-year values to the assumed, fixed values.

11 See Annex in Macura (2008) for the inputs.

12 The 50-year period for the two countries differs slightly. The initial years for France and Germany are, respectively, 1999 and 2002.

64.4 millions for France and 112.4 millions for Germany. In either instance, it exceeds the initial-year national population size by a noticeable margin – by 10 per cent in France and 38 per cent in Germany. The French population increases by a factor of 2.5 and the German population by a factor that is a bit smaller. In addition to causing an immense population growth, immigration brings about a vast shift in the autochthon-allochthon mix of the population. The proportion allochthon at the end of the period approaches two-thirds in France and exceeds three-fourths in Germany. These values are far in excess of the initial-year values – 5.6 per cent in France and 8.7 per cent in Germany. Clearly, the Canadian growth experience cannot be a receipt for the two countries.

Table 1. Selected basic simulation results: France and Germany

Scenario	Country	Cumulated immigration* (thousands)	Proportion allochthon increment* (% points)	Proportion allochthon** (%)
A	France	64,379	58	64
	Germany	112,401	67	76
B	France	29,750	41	47
	Germany	56,704	53	62
C	France	7,569	16	22
	Germany	24,396	36	45

* During the 50-year period

** At the end of the 50-year period

In terms of employment growth, growth pattern B is half as labour dependent as pattern A. Consequently, cumulated immigration is smaller, roughly one-half of the inflow of the pattern-A simulation in Germany and less than that in France. Relative additions to the population are smaller than one-half of those seen before. As one would expect, the proportions allochthon at the end of the simulation period are lower, however, not by much. The reason is that the increments are substantial, equalling 71 per cent and 79 per cent for France and Germany of the pattern-A simulation increments. Clearly, cutting the labour dependence of growth by half does not result in halving the additions to the proportions allochthon. Moreover, the "downward stickiness" of the increments appears greater for Germany than for France. The proportions allochthon 50 years hence are 47 and 62 per cent.

Growth pattern C does not require employment increase, as the entire output growth is due to labour productivity improvements. Yet, the need for foreign workers remains. Cumulated immigration stands at 12 per cent of the pattern-A cumulated immigration in France, but is considerably higher in Germany – 22 per cent. The ratio of cumulated immigration to the initial-year population is 13 per cent in France and more than twice that figure in Germany. Population growth in both instances is modest. Due to higher fertility in France than in Germany, the French population growth is three times as large as the German – 14 per cent versus 5 per cent. In each case, the proportion allochthon after the five decades is higher than the original proportion – 22 per cent in France and 45 per cent in Germany. The large difference between the two is due to the fact hat the German proportion allochthon increment is more than twice the French increment.

Imagine now that both countries can resort to policies designed to lift allochthon employment and autochthon fertility. By the end of the first decade, the policies cause the allochthon employment rates to match the autochthon rates. Within the first fifteen years, the policies in France lift autochthon fertility to replacement and then keep it there. Within the same time span, the policies in German lead to a real feat, i.e. to an autochthon TFR of 2 children per woman – a rate that is 50 per cent higher than the initial-year rate – and keep it there. In time, the policies in both countries make allochthon fertility match the fertility of the autochthons. Thus, not only that the two countries can choose among the different growth patterns, they can also decide whether to make the allochthons as hard working as the autochthons and whether to lift overall fertility to replacement or just close to it.

By generating results anew after appropriately modifying inputs for the three basic simulations, we can examine separately the impact of the allochthon employment policies and of the fertility policies. Additionally, we can consider the impact of the two groups of policies jointly. These impacts on cumulated immigration (standardised by the initial-year population size) and the proportion allochthon increment are shown in Figure 5.[13] In that figure, we present the results obtained after modifying the inputs of the pattern-B and pattern-C basic simulations in order

13 In this figure, the ratio stands for cumulated immigration divided by the initial-year population size, multiplied by 100.

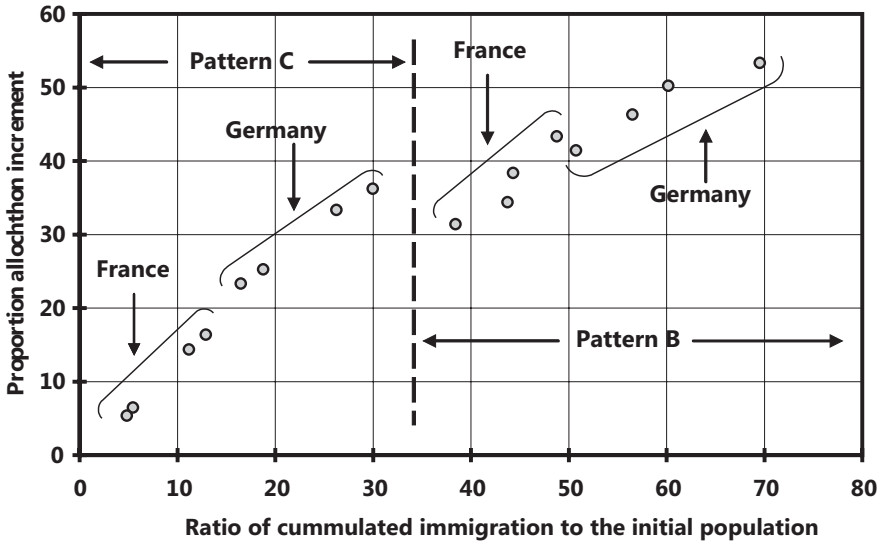
to allow for the effects of the policies. (Analogous results obtained after changing inputs of the pattern-A simulation are not of interest, as growth pattern A appears to be outside the range of practicable.) Also shown in the figure are the original pattern-B and pattern-C basic simulation results.

Irrespective of the growth pattern, as one would expect, high allochthon employment, high fertility and these two together place limits on cumulated immigration and the proportion allochthon increment. If we focus on the absolute changes in these outcome variables, the following emerges from the figure. First, the effects of high fertility on both outcome variables are larger than the effects of high allochthon employment. Second, the effects of high allochthon employment and high fertility are largely additive. Third, irrespective of growth pattern, the impacts of high allochthon employment, high fertility and of these two together are larger for Germany than for France. Forth, regardless of the pattern, Germany lags far behind France. How far apart the two countries are can be illustrated, for example, by the outcome variable values under pattern C that simultaneously allow for high allochthon employment and high fertility. For France, the ratio of cumulated immigration to the initial population size equals 5 per cent, while the proportion allochthon increment equals 5 percentage points. For Germany, the values are a few times higher – 16 per cent and 23 percentage points.

The results clearly show trade-offs between growth and ethnic structure change under low fertility conditions. Due to foreign-labour dependence, ceteris paribus, a swifter growth means giving up the initial small proportion allochthon faster, or accepting a more rapid ethnic structure change. They also suggest that a country with a higher rather than lower low fertility will face a milder rather than a harsher trade-off. If two countries facing different trade-offs were to move from a slower to faster growth in step, the one facing a harsher trade-off would see a faster ethnic structure change. The trade-offs, however, need not be fixed. They could be "softened", inter alia, by an autochthon fertility recovery.

What is morale of this tale? It is both basic and common sense. Ceteris paribus, a nation, where autochthons have fewer babies, nurtures smaller number of future own workers. A country raising fewer autochthon workers will be more dependent on workers from abroad. A country having a greater need for foreign labour may end up having more foreigners coming. A country having a larger

Figure 5. The Ratio of Cumulated Immigration to the Initial Population versus Proportion Allochthon Increment; France and Germany



Note: There is a set of four points for each country in the sections of the graph corresponding to Patterns B and C. Within each set, the points scattered from the northeastern to the southwestern position are respectively based on the results coming from the following simulation: 1) the basic simulation, 2) the basic simulation modified to allow for high allochthon employment, 3) the basic simulation changed to permit for high fertility and 4) the basic simulation modified to permit both for high allochthon employment and for high fertility.

immigration will witness a greater ethic structure change. Finally, we can add, a country experiencing a larger ethnic structure change will see less of its ancestry safeguarded. Nevertheless, the question arises as to whether this morale is relevant in the increasingly globalised world, a world witnessing not only ever-larger flows of products and capital, but also growing movements of people across national boarders. The answer, in the European context appears to be affirmative. In order to appreciate why this is so, a small detour is in order.

More than half a century has passed since the non-Europeans began arriving to help fuel the Western Europe's "golden age" economic boom. Some of them came in the wake of decolonisation, others expressly in order to man mines, factories and fields. As Italians, Spaniards, Portuguese, Greeks and later on Yugoslavs could not meet all the need for foreign labour, non-Europeans were welcome. They often came with limited skills and in the case of countries such as Germany with no knowledge of the language of the country of immigration. When their immediate dependants – spouses and children – later joined them, seeds were sawn for a rise of non-European-origin communities in many West European countries. Before long, family migration was complemented by marriage migration. As the receiving countries sought to tighten entry controls, the arrival of refugees, asylum seekers as well as illegal migrants added to the already complex picture. In time, descendants of the migrants – the so-called second generation – came into being, solidifying the communities. [14]

The integration of the members of many non-European-origin communities into the host societies left much to be desired. This was more the case in some countries than others. In part, the reason is that efforts at integrating non-Europeans were frequently half-hearted and sometimes misguided, in part possibly due to lack of experience. This provided a fertile ground for prejudices and more or less subtle forms of discrimination. Perhaps understandably, the members of these communities tended to stick together in many ways, helping reinforce their segregation – social, cultural, residential and the like. This tendency, however, cannot be only explained by benefits they derived from the community membership. Sometimes, it was also a consequence of the insistence on ethnic, cultural or religious separateness. In many instances, an undesirable consequence of all this was an emergence of parallel societies, which were occasionally on adversarial terms. All this suggests that in many European countries the presence of foreign-origin people, especially non-Europeans cannot be seen through the same glasses as the presence of foreign products and capital.

GROWTH AND ETHNIC STRUCTURE CHANGE: HOW MUCH OF EACH?

How to mix growth with ethnic structure change will be a question for each low fertility society to answer for itself. There are no known recipes, as we are outside range of experience. Given a country's trade-off, the balance that each country will strike between growth and ethnic structure change will depend on its pro-growth and anti-immigration forces. The picture is, however, more complex than just suggested. As the European Union continued to expand during the current decade, the European Commission intensified efforts to open up the EU countries to immigration. Since 2007, the push has been for a blue card for highly skilled immigrants and their dependents, a residence permit in part patterned on the American green card. After the unveiling of the plan for the EU blue card in October 2008 (BBC 2008), the future is likely to see a free movement of settled non-EU citizens across the EU space. Hence, "how much of each" may not entirely depend on national pros and cons.

As the third immigrant generation is beginning to emerge, the West European societies that have set into motion the process of ethnic diversification through immigration cannot still come to terms with the growing presence of non-European-origin people in their midst. Recent information collected for many industrialised countries clearly demonstrates that the Europeans are unfavourably

14 The West European Mediterranean countries have not taken part in this development until quite recently. When they began transforming themselves from countries of net emigration to societies of net immigration, they did not resort to foreign labour recruitment programmes. Instead, they have just allowed foreigners to keep arriving in ever-larger numbers, both legally and illegally, periodically regularising the illegals en masse. Because of this, countries such as Spin have some of the Europe's largest proportions of foreigners in the national population.

disposed toward a further increase in immigration.[15] The ISSP data that Facchini and Mayda (2008) present reveal that typically only less than 10 per cent of the citizens interviewed in 1995 and 2003 thought that the number of immigrants – foreigners who came to settle into a country – should increase a little or increase a lot.[16] Some of the lowest percentages are found in Eastern Europe, i.e. Hungary, Latvia and Russia. The rest of the interviewees were of the opinion that the number should be reduced either a lot or a little, or that it should remain the same. Significantly, about one-half of the German and British citizens thought that the number should be reduced a lot. Four in 10 of the French and Italian citizens held the same view. These were some of the largest percentages in favour of reducing the number of immigrants.

Facchini and Mayda (2008) find evidence that these anti-immigrant sentiments are main drivers of immigration policies. They conclude that "[p]ublic opinion is most likely the main political-economy force that reduces the current size of migration inflows". "… we find evidence that the cross-country pattern in voters' preferences is correlated with destination countries' migration outcomes. In particular, countries where the median voter is more opposed to migration tend to implement more restrictive policies. This suggests that politicians take voters' attitudes towards migrants into account as they formulate their policies." This is, however, only a part of the explanation. Given the intensity of the anti-immigration attitudes, "within a median-voter framework we would expect migration flows to be restricted to zero, while most countries in our sample are net receivers of non-negligible numbers of foreign workers." Activities of pro-immigration pressure groups, including employers, the authors suggest, may provide the answer for the gap between the individual opinions and actual policies/outcomes.[17] The fact that governments may not have full control over immigration is yet another explanation of the public opinion-migration policy/outcome gap.

According to these authors, the research of this type is in its infancy. Therefore, their findings appear in need of corroboration by further analyses. Nevertheless, it seems to us eminently reasonable to suppose that the public opinion in European countries will remain strongly opposed to continued immigration. The opposition may even harden, as the pool of East Europeans ready to move westward in search for better jobs and higher incomes and living standards shrinks. The shrinkage is almost certain to continue as a result of the contraction of the working-age population and the economic betterment occurring through most of the region, which is partly in response to the eastward expansion of the European Union. As this pool diminishes, non-Europeans will continue to provide ready substitutes and, we suspect, this may strengthen the hostility to immigration. If this materializes, governments will have no choice but to heed these sentiments when modifying and implementing immigration policies.

Unlike voters, businesses do not cast ballots at national election. Nevertheless, political parties – no matter whether they are in power or in opposition – are everywhere well advised to be responsive to interests of the business sector, including its labour requirements. True, companies can move their operations abroad in search of abundant and cheaper labour, however, there are many limitations to this. In a modern service economy, a multitude of goods and services must be produced domestically and governments cannot ignore this basic fact. Additionally, particularly in countries with a well-developed welfare state, governments must ensure that the various public sectors are properly staffed. In view of this, the public opinion will not be the only and, perhaps not the main, parameter in government's weighting of pros and cons

15 The information was collected through two rounds of the International Social Survey Programme, ISSP. In 1995, the data were gathered, among others, for the following European countries: Austria, Bulgaria, Czech Republic, Germany, Great Britain, Hungary, Ireland, Italy, Latvia, Netherlands, Norway, Poland, Russia, Slovak Republic, Slovenia, Spain and Sweden. In 2003, the data were collected for these same countries, but Italy, as well as for Denmark, Finland, France, Portugal and Switzerland.

16 Note that this is about people coming from any country, which in the case of Europe could have been another European country. The results are based on the answers of people who provided their opinion.

17 Drawing on American data, "[i]n particular, we found that the number of foreign workers of a given occupation/education category is positively affected by politically-organized native workers in *other* education/occupation categories. This suggests that, for example, politically-organized doctors will lobby the government and succeed in increasing the number of foreign nurses. In addition, another important factor, which will work to increase the number of immigrants in a given occupation/education category is politically-organized capital owners who will employ them (Facchini, Mayda and Mishra 2007)."

regarding immigration. In sum, there will continue to be two opposing forces at work, when it comes to whether to allow in foreign workers and their dependents.

This takes us to the title of this paper, i.e. the question on the future of low-fertility societies, in particular the European societies as regards growth, immigration and ethnic structure change. The question as to what that future may be is impossible to answer. What is clear, however, is that the Europeans, far more in some countries, such as Germany than in others, e.g. France will face a difficult choice, a choice between two undesirable developments – a shift in the ethnic structure in favour of allochthons and a turn toward slower growth, stagnation or economic decline. Which of the two will prove more acceptable will be decided, among others, by the relative strength of the anti-immigration and pro-growth forces.

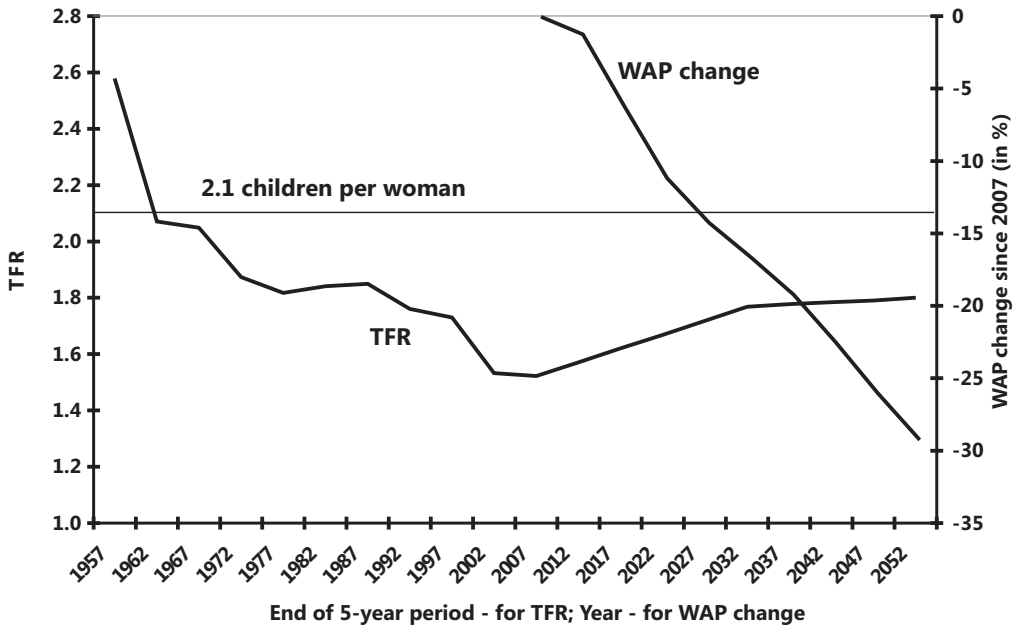
SERBIA IN FOCUS

With the exception of the biennium 1960-61, Serbia (without Kosovo and Metohija) has had low fertility ever since 1958. Its period of sub-replacement fertility since 1962 is the longest uninterrupted low fertility interval anywhere in Europe to date. Figure 6 shows the evolution of Serbia's TFR over successive five-year periods since 1952 to data.[18] Also shown is the TFR trend through the middle of the century based on the fertility assumptions Penev (2007) made for his medium variant population projection. As suggested earlier, the duration of Serbia's fertility depression by 2035 will be the longest in Europe. Save for FYROM, the magnitude of its depression by this future date, however, is likely to be the smallest in Eastern Europe. This will be due to the fact that the depth of its depression will be low, the lowest in Eastern Europe.

The Serbia's history of low fertility coupled with the assumed continuation of sub-replacement fertility through 2034 is certain to occasion a considerable drop in its autochthon working-age population. Using the zero-migration variant projection by Penev, we estimate that this population group will decline by 29.3 per cent during 2007-52. As shown in Figure 6, the percentage decline as of 2012 will take place along a steep trend. By the middle of the century, Serbia's decline is projected to be one of the smallest in Eastern Europe. According to the West European standards, Serbia's decline will be about average. As with the decline in other countries, Serbia's decline is certain to proceed beyond the mid-century.

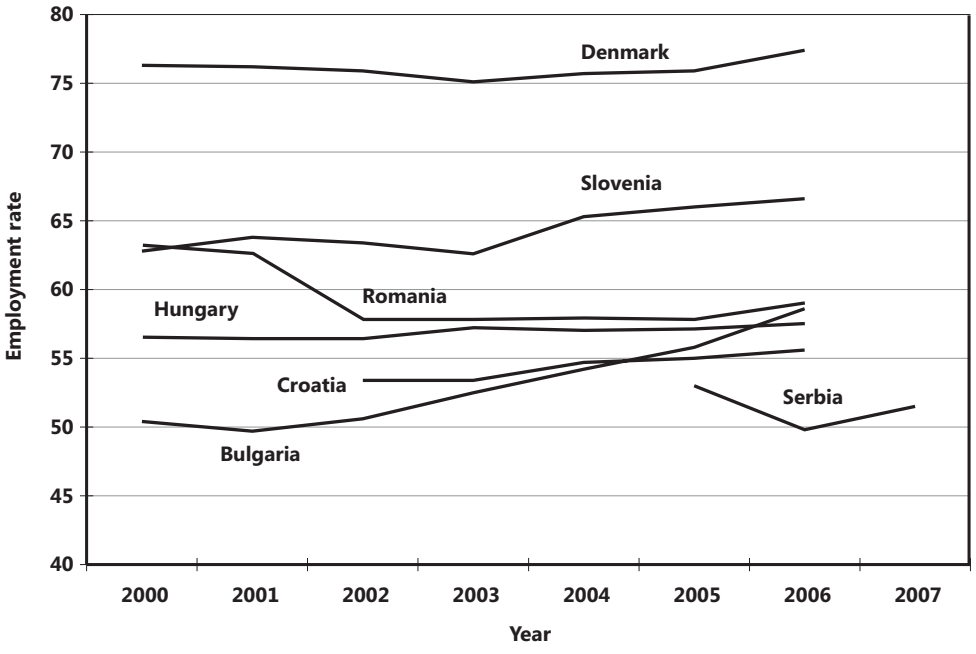
18 The TFR data shown in this figure and in Figure 8 below are from the Statistical Office of the Republic of Serbia.

Figure 6. Total Fertility Rate, TFR, and Autochthon Working-age Population, WAP; Serbia



The human resource utilisation in Serbia, expressed in terms of employment rate remains low (Figure 7).[19] In 2006, Serbia's employment rate stood at two-thirds of the Danish rate and a year later lagged 27 percentage points behind the Swiss rate (not shown), a highest rate in Europe. Serbia's rate is also lower than the rates in several neighbouring countries. The low human resource utilisation is occasioned by high unemployment and high economic inactivity. These, however, provide room for future employment growth in spite of the expected autochthon working-age population decline. How fast and how long that growth will prove to be before the autochthon labour constraint begins to hinder economic growth will depend on the capacity of the economy to tap the extant labour reserves among the unemployed and the inactive, including those among the young, women and the young-old persons. The greater the capacity of the economy in this respect, further into the future will be pushed effects of the oncoming autochthon labour constraint.

Figure 7. Employment Rate; Serbia and Selected Countries; 2000-07



Note that some countries, notably Italy appear incapable of mobilising the autochthon labour reserves. Consequently, they resort to foreign labour en masse in spite of the fact that the autochthon labour reserves remain plentiful. Serbia should avoid this trap.

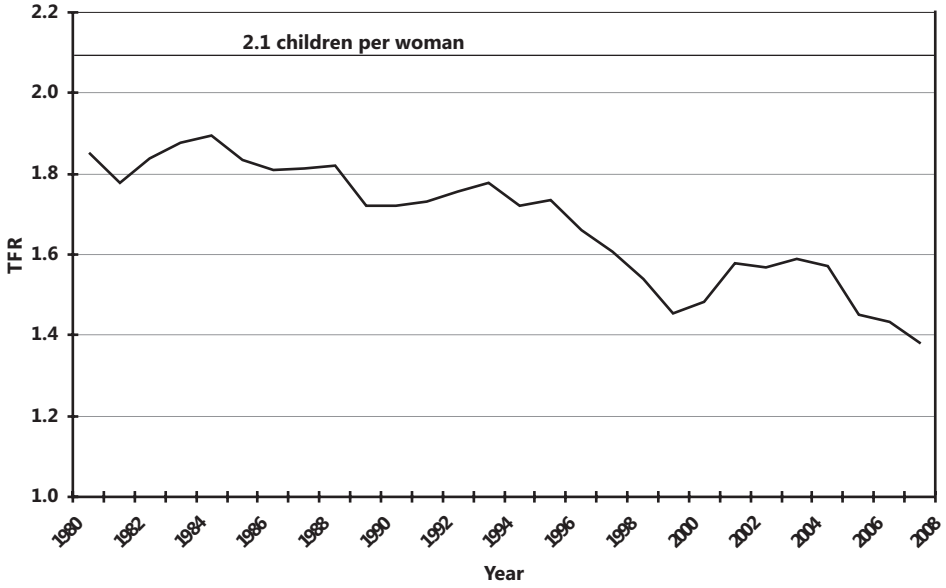
Like the rest of Europe, Serbia will not be spared the dilemma between economic growth, on one hand, and immigration and ethnic structure change, on the other. Facing the challenge will require answering thorny questions, including the following three. After the recent interethnic divisions and conflicts within and without, will Serbia have courage to embark on further multiethnic diversification that immigration driven by sustained rapid growth will eventually cause? After the deep cuts in its GDP and living standards in the early 1990s and its failure so far to reach the pre-transition levels, can Serbia refrain from rapid growth even thought that would entail, in the long-term, immigration, emergence of allochthon population groups and further ethnic diversification? After seeing a recent new phase of rapid fertility reduction, should Serbia stop ignoring the challenge of supporting the family and parenthood with the view to raising fertility and softening its trade-off?

Here, we shall touch upon the last of these questions, which leads to other questions, notably the following. Can the State reverse Serbia's long-term fertility decline, which after a short interruption that began in 2000, as shown in Figure 8, appears to be continuing on its downward course as rapidly as during the second half of the 1990s? There is no answer to this question, as the question, as far as this author knows has not been posed in all seriousness and subsequently addressed. Experiences from many low-fertility societies suggest that one should expect a negative answer. Nations that have attempted a policy of fertility recovery have often failed. However, the efforts have usually been half-hearted. There are cases, such as France and Norway, where a long-term sustained state support

19 The data shown in this figure for Serbia are from the various issues of the Statistical Yearbook of Serbia, while the data for the other countries are from Eurostat (2008).

for the family and parenthood have paid off. They show that success is possible under conditions that do not presuppose high incomes and living standards. Should Serbia seek a membership in this exclusive club of nations? In the opinion of this author, although there are no guarantees of success, it certainly should.

Figure 8. Total Fertility Rate, TFR; Serbia; 1980-2007



CONCLUSIONS

Between the 1960s, and in some instances earlier, and the 2000s, fertility has sunk below replacement in all European countries. Europe of today is a large area of low, depressed fertility. As fertility recovery to replacement or beyond is not in the offing – except perhaps in rare instances – this universal fertility depression is highly likely to grow bigger over time. Through the mid-2030s, we estimate, the magnitude of the depression will vary a great deal more in Western than in Eastern Europe. It will be particularly large in the German-speaking countries and the West European Mediterranean countries, all but Portugal. Many East European nations will have a magnitude similar, but on average somewhat smaller than the magnitude of these West European nations.

An inevitable concomitant of the continuing fertility depression build-up will be a fall of the autochthon working-age population. The estimates for the various European countries suggest a decline across the board. Large areas of the continent, comprising the German-speaking countries, the West European Mediterranean countries and the entire Eastern Europe are set to see a contraction of the autochthon working-age population between 25 per cent and 45 per cent by the mid-century. France and the UK along with the Scandinavian countries and the Low Countries seem destined to experience considerably smaller losses. These trends are bound to result in a long-term contraction of autochthon labour force and employment, an unprecedented development *par excellence*.

Long-term simulations performed for France and Germany, countries with vastly different autochthon working-age population decline prospects, clearly show trade-offs between growth and ethnic structure change under low fertility conditions. Due to foreign-labour dependence, all other things equal, a rapid growth means giving up the initial small proportion allochthon more quickly, or accepting a faster ethnic structure change. They also suggest that a country with a higher rather than lower low fertility will face a milder rather than a harsher trade-off. If two countries facing different trade-offs were to move from a slower to faster growth in step, the one facing a harsher trade-off would see a faster ethnic structure change. The trade-offs, however, need not be fixed. They could be "softened", inter alia, by an autochthon fertility recovery.

How to mix growth with ethnic structure change will be a question for each low fertility society to answer for itself. There are no known recipes, as we are outside range of experience. Given a country's trade-off, the balance that each country will strike between growth and ethnic structure change will in part depend on its anti-immigration and pro-growth forces. The former include a large segment of the autochthon population, which is against increases in the number of immigrants, a sentiment that is likely to harden as non-European-origin migrants increasingly

outnumber East Europeans from worse-off corners of the continent that continue to look for a better life away from home. The pro-growth forces are anchored in the business sector, which, as autochthon labour becomes scarce are likely to increase the pressure on governments to loosen up on immigration restrictions.

The Serbia's history of low fertility coupled with a continuation of sub-replacement fertility through the mid-2030s is likely to cause a drop in its autochthon working-age population approaching one-third. The current low human resource utilisation of the country will provide room for future employment growth in spite of this decline. How fast and how long that growth will prove to be before the autochthon labour constraint begins to hinder economic growth will depend on the capacity of the economy to mobilise the extant labour reserves. Eventually, however, like the rest of Europe, Serbia will face the dilemma between economic growth and ethnic structure change. Before that happens, however, Serbia should ask itself whether it should seek to soften its trade-off by embarking on fertility-raising policies rather than take the trade-off as given. Given long time – some 20 years – that it takes to translate rising fertility into larger cohorts entering the working age, addressing this question cannot wait much longer.

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DELOITTE CEE RATINGS

CENTRAL EUROPE TOP 500

Using its international experience and network of offices in the region, Deloitte experts compiled the CE Top 500 ranking[1], according to revenue, profit, employment and capitalisation. The Top 500 list of the largest companies in 17 countries in Central Europe (Albania, BiH, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, Macedonia and Ukraine), contains a modest number of Serbian companies. Out of seven Serbian companies listed, the best positioned company is NIS at 20th place, followed by EPS (79), Delta M (106), PTT Srbija (112), Telekom Srbija (155), US Steel (170) and Srbijagas (253).

Table 1. TOP 20 companies in Central Europe

2007	2006	Company name	Country	Industry	Revenues from sales	Net income	Number of employees
					2007	2007	2007
1	1	PKN Orlen	Poland	Energy and Resources	16,857.22	655.45	23,223
2	2	MOL	Hungary	Energy and Resources	10,321.67	1,044.14	14,500
3	3	Škoda Auto	Czech Republic	Manufacturing	7,997.83	575.86	29,141
4	-	PGE	Poland	Energy and Resources	7,487.03	534.38	38,839
5	5	ČEZ	Czech Republic	Energy and Resources	6,289.78	1,540.86	6,472
6	7	Audi Hungária	Hungary	Manufacturing	5,908.26	560.74	5,563
7	6	Volkswagen Slovakia	Slovakia	Manufacturing	5,725.11	225.16	8,495
8	26	Ukrgaz-Energo	Ukraine	Energy and Resources	5,043.03	132.67	N/A
9	9	Telekomunikacja Polska	Poland	Technology, Media and Telecommunications	4,820.95	601.17	31,789
10	11	PGNiG	Poland	Energy and Resources	4,400.31	242.07	30,325
11	-	Energorynok	Ukraine	Energy and Resources	4,370.16	129.22	N/A
12	14	Metro Group Polska	Poland	Consumer Business	4,332.89	N/A	26,200
13	8	Nokia	Hungary	Technology, Media and Telecommunications	N/A	N/A	N/A
14	27	ArcelorMittal	Poland	Manufacturing	3,868.34	741.58	23,581
15	18	KGHM	Poland	Energy and Resources	3,565.81	1,039.96	27,692
16	12	Petrom	Romania	Energy and Resources	3,537.91	503.85	40,067
17	16	INA Group	Croatia	Energy and Resources	3,523.44	118.73	25,978
18	19	Lotos	Poland	Energy and Resources	3,468.30	215.14	5,304
19	20	Slovnaft	Slovakia	Energy and Resources	3,392.79	224.45	3,671
20	22	NIS	Serbia	Energy and Resources	3,357.03	79.78	N/A

The ranking shows little change from the previous year with PKN Orlen, Poland's oil refiner and petroleum distributor, still at the top of the list with other energy companies including MOL of Hungary and CEZ of the Czech Republic close by. The list confirmed that energy companies have the largest revenues - 145 out of 500

1 **About the methodology:** Deloitte's ranking is based on company revenues. As much as possible, they have used consolidated reported revenue for the fiscal year ending in 2007. The information has been sourced from publicly available databases, data from the companies themselves and estimates based on our research. The revenue of subsidiaries of large groups has been reported as part of the consolidated revenue and shown separately for those subsidiaries. The gross written premium of insurance companies includes both premiums from life and non-life operations, despite the fact that in certain areas, these companies operate as a separate legal entities.

companies on the list belong to this sector. The other top slots are filled by automobile manufacturers led by the Volkswagen owned Skoda from the Czech Republic followed by Audi in Hungary and Volkswagen's own subsidiary in Slovakia. Manufacturing and consumer business and transportation are two other industries each represented with around 25% of the total number of companies on the list. TMT industry follows with almost 10% of the total number of companies and Telekomunikacja Polska, the telecommunications provider from Poland is the only non energy related, non auto company in the region's top ten. Out of the top 500 companies, almost 80% of companies comes from 4 countries: Poland (176), Ukraine (75), Czech Republic (70) and Hungary (60). As far as ownership structure goes, 25% of the largest companies in the Region is fully controlled by the state. The remaining companies are private or largely private companies.

The ranking of the companies from Adria region

Among ex-Yugoslav countries, commonly refered to as "Adria region", the best positioned is Slovenia. A total of 18 companies comes from this country (with Mercator on the 40th place being the best positioned company, followed by Petrol and Gorenje). 12 companies from Croatia are listed, with the best, 17th place, occupied by INA, followed by Agrokor at 32nd position. Macedonian OKTA is at 395th position. Not one company from Bosnia&Herzegovina and Montenegro is represented on the list.

Table 2. Companies from the Adria region ranked at the CE TOP 500

2007	2006	Company name	Country	Industry	Revenues from sales	Net income	Number of employees
17	16	INA Group	Croatia	Energy and Resources	3,523.44	118.73	25,978
20	22	NIS	Serbia	Energy and Resources	3,357.03	79.78	N/A
32	44	Agrokor	Croatia	Consumer Business	2,821.51	61.92	28,930
40	45	Skupina Mercator	Slovenia	Consumer Business	2,445.00	35.00	N/A
57	51	Skupina Petrol	Slovenia	Energy and Resources	2,109.40	53.30	2,944
79	107	EPS	Serbia	Energy and Resources	1,644.41	-1,245.49	35,609
103	95	Konzum	Croatia	Consumer Business	1,354.58	30.65	11,138
106	83	Delta M	Serbia	Consumer Business	1,340.19	57.38	18,000
111	119	Skupina Gorenje	Slovenia	Manufacturing	1,293.00	24.00	11
112	-	PTT Srbija	Serbia	Technology, Media and Telecommunications	1,291.90	159.46	N/A
113	84	HEP Group	Croatia	Energy and Resources	1,284.85	3.54	14,269
122	135	Revoz	Slovenia	Manufacturing	1,247.67	28.56	N/A
129	150	HT	Croatia	Technology, Media and Telecommunications	1,204.74	336.83	6,724
155	210	Telekom Srbija	Serbia	Technology, Media and Telecommunications	1,056.78	152.42	14,592
170	177	US Steel Srbija	Serbia	Manufacturing	980.86	37.93	N/A
183	171	HSE	Slovenia	Energy and Resources	921.18	12.41	N/A
184	138	Skupina Merkur	Slovenia	Consumer Business	913.65	30.61	N/A
215	232	Skupina Krka	Slovenia	Life Sciences and Health Care	781.00	133.00	6,777
216	209	Skupina Telekom Slovenije	Slovenia	Technology, Media and Telecommunications	780.08	88.37	N/A

Energy & Resources

In the Adria region, energy and utilities part of CE Top 500 listing is dominated by state-owned companies such as EPS, HEP, and HSE. The process of privatization and liberalization in the region has only just started, and it is proceeding slowly. Mixed results from other countries in the region which have privatized their energy monopolies and separated generation from transmission and distribution during the 1990's, are strengthening the forces which are advocating only minority privatization of energy and utility companies through IPO's. Oil and gas sector has been more competitive in the Adria region. Both INA and Petrol have been successfully listed on stock exchanges, and while Petrol already has only minority state ownership, INA is likely to be in the same position before the end of 2008. As for NIS, talks are under way for a negotiated majority sale to a Russian

state-owned company, which would be part of the deal including building part of a South Stream gas pipeline through Serbia in partnership with Srbijagas. In addition to these dominating local players, both OMV and MOL, through their 100%-owned local subsidiaries, have proved to be strong competitors in most Adria oil markets. European fears of over-dependency on Russia for gas supply are resulting in a number of new LNG projects being worked on – in Adria region, it seems likely that a consortium including RWE, E.ON, TOTAL, OMV, INA, and HEP will get final approval for construction of a major LNG terminal on the island of Krk in Croatia.

Manufacturing

The trends in Adria region (Croatia, Slovenia, BIH, Serbia) are following those recognized in Central Europe, with a time delay present more intensively as you go southward and eastward. Along with acquisitions and technological level raising, the companies are also focusing on internal processes and people . This includes well accepted introduction of quality, environmental and health&safety management systems, as well as initiatives aimed towards overall competitiveness and productivity improvement. As companies focus more on people development, Human capital management is the area where activities are gradually being intensified, with top companies taking the leading role. As a result of lack of skilled manufacturing employees in the region in coming years manufacturing companies will be focusing more and more on people retention and implementation of best global practices in HR management.

The Pharmaceutical Sector

Pharmaceutical sector in the Adria region has traditionally been dominated by local producers like Krka and Lek in Slovenia, Pliva, Belupo and Jadranski galenski laboratorij in Croatia, Bosnalijek in BIH, Hemofarm, Galenika, Zdravlje and Jugoremedia in Serbia and Alkaloid and Replek in Macedonia. Due to fragmented market only 3 of them, Krka, Lek and Pliva made it to the CE Top 500 list as they successfully expanded its sales reach both to the eastern and western markets. In the recent years, some strategic players have already entered Adria region through acquisitions like Novartis (Lek), Barr (Pliva), Stada (Hemofarm) and Actavis (Zdravlje). In line with a global trend, there is further consolidation expected in the sector in the region. None of the companies from the pharmaceutical distribution sector from Adria region made it to the CE Top 500 list which is also due to each company's concentration on local national market. Large strategic players like Celesio, Phoenix and Anzag have already acquired local companies in Slovenia and Croatia which further entrance of strategic players is expected in the other countries of the region.

Technology – Media - Telecoms (TMT)

As expected, Adria region is represented by 6 dominant incumbent and mostly state owned telecoms, which are in lower part of the list due to relatively small markets comparing to larger CE economies. Fixed telecom markets in Adria region are reaching mature phase with trend of decreasing traffic volumes. Still, with recent successful IPO of T-Hrvatski Telekom and other planned privatizations, like the one of Telekom Slovenije, further market expansion can be expected through collecting of new funds for continuous investment in Broadband, IP and Triple play services. Due to high saturation levels of mobile voice markets, mobile network operators in Adria region are focusing on increasing their revenues through new mobile broadband and other content and data services, as well as fixed to mobile substitutions. Eventhough Slovenia has aligned much of its telecommunications regulation with that of the EU and we have seen rise in competition on Croatian and Serbian markets, it can be expected that all Adria region telecom markets will be focusing on regulatory issues in future years enforced by Regulatory bodies in order to further continue with markets liberalization.

Banks and insurance

Deloitte experts have also ranked Central European banks and insurance companies by total assets and gross written premium, respectively. On the Top 100 banks the best positioned Serbian bank is Banca Intesa at 78th place, followed by Komercijalna banka (84), Raiffeisen bank (85) and Hypo Alpe-Adria bank (89). Two largest insurance companies from Serbia found their place among the 50 most successful: Dunav osiguranje (36) and DDOR Novi Sad (40).

The banking sector in the Adria region experienced asset growth, although in most cases, a slower one then before. Due to an increasingly restrictive monetary policy in Croatia, Croatian banks had lower growth rates, which resulted in the drop in the overall positions on the CE 100 list. Zagrebacka banka, part of Unicredit group, remains the market leader in front of Privredna banka Zagreb, part of Intesa Sanpaolo group. RBA and Erste bank, the previous year number three and four switched places this year, though The banking system in general is considered to be stable and competitive, with more then 95 per cent of the banks being part of foreign-based groups. Top six banks, which are present in the CE list have a combined market share in excess of 79 per cent.

Banks in Serbia are relatively smaller then their regional rivals, which is helped by the fact the population continues to keep an estimated USD 4 billion in foreign exchange "under the mattress". The corporate sector suffers from a lack of liquidity and high lending rates. However, the sector is converging fast as foreign banks enter the market and offer new financial products. The largest bank remains Banka Intesa, followed by Komercijalna banka and Raiffeisen bank.

Slovenian banks did well in 2007, with NLB group climbing one step to capture the number eight on the list, and Nova KBM holding on to its last year position. Nova Ljubljanska Banka, by far the largest member of the NLB group, managed to capture the number twelve sport on the list and holds over a third of the market. The banking system is relatively well developed and is considered to be sound and well capitalized, with a relatively low number of bad loans.

Table 3. TOP 20 banks in Central Europe

# TOP 100	Bank name		Country	Number of employees	Data from Profit&Loss statement - mln EUR	Data from balance sheet - mln EUR
	Short name	Full name		2007	2007	2007
1	ČSOB	Československá obchodní banka, a. s.	Czech Republic	8252	390.47	34764.24
2	Pekao	Bank Pekao S.A., GK	Poland	22926	571.43	34644.37
3	OTP	Országos Takarékpénztár és Kereskedelmi Bank Rt.	Hungary	33000	828.49	33399.94
4	Česká spořitelna	Česká spořitelna, a.s.	Czech Republic	10200	437.71	30583.21
5	PKO BP	Powszechna Kasa Oszczędności Bank Polski S.A., GK	Poland	30659	777.26	30309.52
6	Hansapank	Hansapank AS	Estonia	9574	483.50	25826.41
7	Komerční banka	Komerční banka, a.s.	Czech Republic	8534	403.12	24861.72
8	NLB Group	Skupina Nova ljubljanska banka	Slovenia	N/A	139.79	18308.14
9	BCR	BANCA COMERCIALA ROMANA	Romania	9697	262.06	17549.94
10	BRE	BRE Bank S.A., GK	Poland	5785	197.56	15628.97
11	ING	ING Bank Śląski S.A., GK	Poland	8074	168.28	14520.06
12	BZWBK	Bank Zachodni WBK S.A., GK	Poland	9206	293.50	11538.83
13	UniCredit Bank	UniCredit Bank Czech Republic, a.s.	Czech Republic	N/A	95.61	11287.53
14	Zagrebacka Banka	ZAGREBAČKA BANKA d.d.	Croatia	4517	151.17	10906.84
15	Handlowy	Bank Handlowy S.A., GK	Poland	5722	217.80	10862.08
16	BRD	BRD GROUP SOCIETE GENERALE	Romania	8534	259.89	10793.25
17	MKB	MKB Bank Nyrt.	Hungary	N/A	64.07	9716.87
18	K&H	Kereskedelmi és Hitelbank Rt.	Hungary	3962	145.43	9558.52
19	Slovenská sporiteľňa	Slovenská sporiteľňa	Slovakia	4812	123.35	9044.22
20	CIB	CIB Közép-Európai Nemzetközi Bank Zártkörűen Működő Rt.	Hungary	3070	113.87	8982.25

Table 4. Banks from the Adria region ranked at CE TOP 100 banks

# TOP 100	Bank name		Country	Number of employees	Data from Profit&Loss statement - mln EUR	Data from balance sheet - mln EUR
	Short name	Full name		2007	2007	2007
8	NLB Group	Skupina Nova ljubljanska banka	Slovenia	N/A	139.79	18308.14
14	Zagrebacka Banka	ZAGREBAČKA BANKA d.d.	Croatia	4517	151.17	10906.84
23	PBZ	PRIVREDNA BANKA ZAGREB d.d.	Croatia	3531	127.04	8290.77
38	ERSTE	ERSTE & STEIERMÄRKISCHE BANK d.d.	Croatia	1723	81.65	5512.26
41	RBA	RAIFFEISENBANK AUSTRIA d.d.	Croatia	2262	52.89	5282.64
42	Nova KBM	Nova KBM d.d.	Slovenia	1497	56.06	5097.52
60	Hypo Bank	HYPO ALPE-ADRIA-BANK d.d.	Croatia	1273	15.38	3611.55
65	STBA	SOCIÉTÉ GÉNÉRALE-SPLITSKA BANKA d.d.	Croatia	1372	39.26	3501.10
78	Banca Intesa	Banca Intesa ad Beograd	Serbia	2349	39.48	2457.94
84	Komercijalna Banka	Komercijalna Banka ad	Serbia	3249	40.21	1993.42
85	Raiffeisen	Raiffeisen banka ad Beograd	Serbia	2186	57.43	1983.15
89	Hypo Alpe-Adria	Hypo Alpe-Adria Bank ad Beograd	Serbia	817	17.80	1685.36
92	HYPO Leasing	HYPO-LEASING KROATIEN d.o.o. ZAGREB	Croatia	305	0.47	1410.07

Croatia Osiguranje, the state owned insurer dealing with life as well as non-life insurance, retained the first place on the Croatian market. The largest increase in gross written premium can be observed with the second placed Allianz, a part of the global Allianz insurance group. Euroherc and Jadransko osiguranje, which are also present in BiH, are both part of the privately owned Agram financial group. The primary source of gross written premiums continues to be motor third party insurance, with more sophisticated services, especially in life sector, emerging and gaining market share. There has also been an increase in offer of the private health insurance, with all the major players continuously increasing the level of services on offer.

Both Dunav insurance and DDOR insurance have been increasing their gross written premium in the past years. At the end of 2007, the majority stake in DDOR was sold to Italian based Fondaria SAI EUR 220 million. The sector is still undergoing consolidation and is likely to experience even higher growth as the economy progresses.

The largest insurance company in Slovenia is Zavarovalnica Triglav, in which the state indirectly holds a combined stake of more then 76 per cent through state-owned holdings. Its growth can mostly be attributed to its regional presence. The second ranked Adriatic Slovenica is expanding on the Serbian market and presents one of the best regional targets in the sector. Zavarovalnica Maribor is operating locally, and has growth opportunities mostly in the life sector. Vzajemna is working only in health insurance.

Table 5. Insurance companies from Adria region on TOP 50 list

Rank	Insurer name Short name	Country	Gross Written Premium	Gross Written Premium change %	Net income	Net icome change %	Number of employees
			2007		2007		2007
25	Adriatic Slovenica Zavarovalna Družba	Slovenia	251.2	35.7	26.9	N/A	1,098
29	Maribor	Slovenia	234.3	32.7	N/A	N/A	N/A
33	Vzajemna, zdravstvena zavarovalnica	Slovenia	226.1	2.6	6.1	60.2	270
36	Dunav Insurance	Serbia	172.7	11.4	4.8	19.4	2,049
40	DDOR	Serbia	157.7	17.5	2.0	-76.4	2,277
42	Allianz Zagreb	Croatia	145.0	21.5	4.8	-14.6	N/A
44	Euhcosig	Croatia	136.5	8.6	5.9	7.2	N/A

According to Deloitte analisys, Central Europe will maintain its impressive five per cent growth rates, which far outpace western Europe's economic performance, only if it completes free market reforms, first of all privatisation. Deloitte also warns, quoting exclusive interviews with CEOs from companies throughout the region, that Central Europe, will only continue to attract foreign direct investment if urgent changes in education systems are made which will bring new skills to the workplace.

TECHNOLOGY FAST 50

Deloitte Central Europe organized the 9th annual Central European ranking of the fifty fastest growing technology companies, based on their revenue growth in the past five years. This year, for the first time "**Technology Fast 50**" project included Serbia. In general, more than 150 companies applied for the ranking and Serbian Algotech ranked 28th on the this year's ranking.

For the third straight year, the top position on Deloitte's Central European Technology Fast 50 ranking goes to the Polish software developer and integrator Blue Media which generated stellar performance with 10,027 percent growth. This year's ranking consists of companies from nine countries: the Czech Republic, Hungary, Poland, Slovakia, Romania, Bulgaria, Croatia, Serbia and Estonia which is the most diverse in its history. On average, Fast 50 companies grew at the rate of 1,271 percent, the highest since the launch of the ranking.

Software companies continue to dominate the competition taking 24 spots on the overall ranking; however, we can expect that internet companies will close the gap next year as we see a lot of software applications being moved to the Internet and internet users are still significantly growing in Central Europe."

In order for a company to be considered for the ranking it had to apply for the competition and must meet a number of criteria[2], such as yearly revenues of at least EUR 50 thousand in each of the last five years (2003–2007), have headquarters in a Central European country, develop or manufacture proprietary technologies or spend a significant amount of capital on research & development, and have an ownership structure that excludes majority owned subsidiaries of strategic entities.

Table 6. The TOP 20 companies of the Central European Technology Fast 50

#	Company Name	Country	Type of Business	Growth
1	Blue Media Sp. z o.o.	Poland	Software	10027%
2	Agito S.A.	Poland	Internet	5201%
3	CROZ d.o.o.	Croatia	Software	4391%
4	Alerant Information Technology, Inc.	Hungary	Software	3677%
5	AROBS Transilvania Software	Romania	Software	2722%
6	Onlinet Ltd.	Hungary	Computers/Peripherals	2233%
7	TeamNet International S.A.	Romania	Software	2028%
8	INVIA.CZ, s.r.o.	Czech Republic	Internet	2001%
9	NETMEDIA S.A.	Poland	Internet	1925%
10	Interway, s r.o.	Slovakia	Software	1761%
11	KASA.cz s.r.o.	Czech Republic	Internet	1580%
12	AITIA International Inc.	Hungary	Software	1532%
13	eLeader Sp. z o.o.	Poland	Software	1492%
14	THEAM Communication Kft.	Hungary	Internet	1465%
15	UNIVERSAL K Ltd.	Bulgaria	Communications/Networking	1393%
16	ESET, spol. s r.o.	Slovakia	Software	1354%
17	o2.pl Sp. z o.o	Poland	Internet	1260%
18	Arkon Zrt.	Hungary	Internet	1198%
19	Grupa Pracuj Sp. z o.o.	Poland	Internet	1060%
20	MITON CZ, s.r.o.	Czech Republic	Internet	1035%
21	SOLVO Biotechnology	Hungary	Life Sciences	792%
22	eo Networks Sp. z o.o.	Poland	Software	789%
23	Webmedia Group	Estonia	Software	702%
24	kancellar.hu	Hungary	Communications/Networking	659%
25	Sedam IT d.o.o.	Croatia	Software	641%
26	TechnoLogica Ltd.	Bulgaria	Software	624%
27	Cleverlance Enterprise Solutions a.s.	Czech Republic	Software	599%
28	Algotech d.o.o.	Serbia	Communications/Networking	560%
29	Millennium 000, spol. s r. o.	Slovakia	Software	523%
30	INSIA a.s.	Czech Republic	Internet	514%

2 The eligibility criteria of the registered companies for the ranking are verified by Deloitte representatives through comparison of the companies' revenues disclosed in the financial statements, provided by the applying companies. Deloitte does not audit the companies, neither does it analyze their financial standing.

MILOCER ECONOMIC FORUM 2008

"Transition and Beyond in the Region of Former Yugoslavia"

Tuesday, September 16, 2008: Transition Strategy and Macroeconomic Policies

(09:20-09:30) **Opening session**
Welcoming remarks by **Stojan Dabić**

(09:30-10:30) **Keynote speakers**:
Veselin Vukotić, President, Montenegrin Economists Association
Dragan Đuričin, President, Serbian Economists Association
Ljubo Jurčić, President, Croatian Economists Association

(10:30-11:00) **Special guest**:
Miroslav Macura, Faculty of Economics and Social Sciences, University of Geneva
Michel Giannuzzi, CEO, Tarkett
Herman Rigelnik, General Director, ACH Ljubljana

(11:00-11:30) *Coffee break*

(11:30-13:00) **Introductory Papers:**
Mladen Ivanić, Vice President, House of Peoples of the Parliamentary Assembly of Bosnia and Herzegovina
Pavle Petrović, School of Economics Belgrade
Vladimir Čupić, Chairman of the Executive Board, Hypo Alpe Adria Bank
Petar Ivanović, CEO, Montenegrin Investment Promotion Agency

(13:00-13:15) *Coffee break*

(13:15-14:30) **Plenary session 1: Corporate governance**
Moderator: **Toplica Spasojević,** Chairman, ITM group
Rapporteur: **Dejan Malinić,** Member, Securities and Exchange Commission of Serbia
Panellists: **Nikola Pavičić,** Chairman, Sintelon
Kare Gustad, CEO, Promonte
Dragan Nikolić, Chairman, Tigar Corporation
Tomislav Čelebić, Chairman, Čelebić Company

(14:30-15:15) **Plenary session 2: The role of the new sector in transition**
Moderator: **Branislav Grujić,** Chairman, PSP Farman Holdings
Rapporteur: **Blagoje Paunović,** School of Economics Belgrade
Panellists: **Žarko Radulović,** Co-Owner & CEO, Splendid Hotel
Nenad Popović, Chairman, ABS Holdings
Dragan Filipović, CEO, Delta Maxi

(15:15-16:00) **Plenary session 3: Competition, monopolies and antimonopolies**
Moderator: **Miroljub Labus,** School of Law Belgrade
Rapporteurs: **Dragan Lončar,** School of Economics Belgrade
Maja Drakić, Vice Dean, Faculty for International Economics, Finance and Business, UDG
Panellists: **Milica Daković,** Institute for Strategic Studies and Prognoses

(16:00-19:00) *Communications*

(19:00-19:30) **Presentation Celebić Company**

(19:30-20:00) **Presentation Telenor Direct: Strategy of development**

Wednesday, September 17, 2008: Economics, Education and Regulation

(09:30-09:50) **Keynote speaker:**
Ljubomir Madžar, Montenegrin Economists Association

(09:50-11:15) **Plenary session 4: Economic science in transition**
Moderator: **Mlađan Šljivančanin,** »Mediteran« University
Rapporteurs: **Ante Babić,** School of Economics and Management, Zagreb
Janko Radulović, Rector, »Mediteran« University
Panellists: **Nevenka Glišević,** School of Economics, Podgorica
Ivana Stešević, Faculty for International Economics, Finance and Business, UDG

(11:15-11:45) *Coffee Break*

(11:45-12:45) **Plenary session 5: Economics and business management education in transition and financing private school education**
Moderator: **Goran Pitić**, Faculty of Economics, Finance and Administration
Rapporteur: **Milica Vukotić,** Dean, Faculty of information systems and technologies, UDG
Panellists: **Dragan Vukčević,** Dean, Faculty of Law, UDG
Novak Kondić, Dean, School of Economics Banja Luka
Dragana Gnjatović, »Megatrend« University
Mladen Vukčević, Dean, Faculty of Law, »Mediteran« University

(12:45-13:45) **Plenary session 6: New regulations and regulatory bodies**
Moderator: **Vida Uzelac,** President & CEO, Central Securities, Depository and Clearing House of Serbia
Rapporteur: **Zoran Djikanović**, President, Securities and Exchange Commission of the Republic of Montenegro
Panellists: **Dragan Lajović,** CEO, Development Fund of the Republic of Montenegro
Mirko Puljić, Deputy President, Securities and Exchange Commission of BH Federation
Neda Ivović, Securities and Exchange Commission of Montenegro

(13:45-14:45) **Plenary session 7: Capital market: expectations and disappointments**
Moderator: **Dragijana Radonjić Petrović,** President & CEO, M&V Investments
Rapporteurs: **Zoran Jeremić,** Faculty of Economics, Finance and Administration
Maja Baćović, President of the Managing Board, Montenegro Stock Exchange
Panellists: **Radisav Osmajlić,** Portfolio Manager, Delta Investments
Aleksandar Zinaić, Director, Hypo Alpe-Adria-Securities
Jelena Janušević, Member of the Managing Board, MV Broker

(14:45-19:00) *Communication*

(19:00-19:30) **Presentation Halcom EBB: Mobile payment system - a new banking solution**

(19:30-20:00) **Presentation Profile: The role of a company's top management in creating and implementing the winning brand strategy**

(20:00-21:15) *Dinner time*

(21:15-23:00) **Hypo Alpe Adria Bank - Jubilee Dance**

Thursday, September 18, 2008: Competitiveness of the Countries in the Region

(09:15-09:30) **Initiatives**

(09:30-10:00) **Keynote speaker:**
Dušan Vujović, Lead Economist, World Bank
Igor Lukšić, Minister of Finance in the Government of Montenegro

(10:00-10:40) **Introductory Papers:**
Nebojša Savić, Faculty of Economics, Finance and Administration
Edvard Jakopin, Director, Republic Development Bureau of Serbia
Ana Trbović, Faculty of Economics, Finance and Administration

(10:40-12:30) **Panel 8: The role of financial infrastructure in transition**
Moderator: **Boris Marović,** Serbian Economists Association
Rapporteur: **Predrag Mihajlović**, Deputy CEO, Komercijalna Banka
Panellists: **Matjaž Čadež,** Chairman, Halcom Group
Panagiotis Vlasiadis, President of the Executive Board, Alpha Bank
Boris Marović, Serbian Economists Association

(12:30-13:00) **Discussion and conclusions**

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