CROATIA'S EU CONVERGENCE REPORT: REACHING AND SUSTAINING HIGHER RATES OF ECONOMIC GROWTH,

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Review*

The causes behind achieving different economic growth rates have been a major focus of economic research for a long time now, the result of which are various growth theories: from the Harrod-Domar model based on the capital accumulation to the modern, endogenous theories that emphasize the role of technological progress (Romer, 1986, 1990) and human capital (Lucas, 1988). It is well known that generators of growth differ among countries, and that the strategies applied will depend on country's specific circumstances and constraints. Individual country potential in achieving higher rates of economic growth and development will primarily depend on its ability to improve the technology and capital used by workers: "Productivity isn't everything, but in the long run it is almost everything" (Krugman, 1994). Thus, it is not surprising that the report whose review follows specifies total factor productivity (TFP) as critical and hitherto hidden potential for reaching higher rates of economic growth in Croatia. In addition, another important subject within the research of economic growth and development is the issue of convergence, i.e. whether there is a tendency of narrowing the real per capita income gap between rich and poor countries over the long run. There are two aspects of convergence offered in the literature: absolute or *beta*, and conditional or *sigma* convergence. Empirical distinction between the two was introduced by Barro and Sala-i-Martin (1995). While the first one assumes that there is a negative relation between initial level and growth rate of per capita income (i.e. the presumption that poorer economies will grow faster than the richer ones), according to the conditional convergence hypothesis, countries converge on different growth paths determined by their own labor force growth and technological progress (Gärtner, 2003). The concept of conditional convergence and the neo-classical growth model are also in the background of the analysis applied in the "*Croatia's EU Convergence Report: Reaching and Sustaining Higher Rates of Economic Growth"*.

This report represents the latest study of the World Bank for Croatia published in two volumes on about two hundred pages. Volume I (*Overview*) summarizes the key findings

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of the report, while Volume II (*Full report*) offers a more detailed analysis of selected topics organized in six chapters. The report discusses the current growth model in Croatia, its strengths and weaknesses as well as different possibilities for its improvement. There are four strategies of economic policy in question: (1) increasing the labor contribution; (2) raising productivity; (3) deepening trade integration; and (4) fostering innovation. If we take into account that the study gathered a team of 28 experts and that the analysis of factors stimulating economic growth is based on a survey of 690 companies, the significance of this study for the research is unquestionable. Furthermore, analytical amplitude of the report is reflected in the methods applied, such as various diagnostic tools, analysis of investment climate for growth factors, diagnostics of current growth and its historical and potential levels, comparative analysis, basic and WorldScan general equilibrium model, etc.

It should be noted that despite the fact that issues discussed at the time of the development of the report were different than they would be today, the importance of the analysis remains unchanged. Actually, the analysis offers excellent diagnostics of performance and the basis for necessary changes. Moreover, the report primarily tries to identify the "hidden sources" of economic growth and the corresponding measures that would be needed to "unleash this growth potential". The main structure for this analysis is provided by the Solow growth model extended with the inclusion of international trade and innovation.

The full report is organized in following chapters: *Introduction, Economic growth in Croatia: What have we learned?*, *Increasing labor contribution: employment and human capital*, *Increasing total factor productivity*, *Trade and innovation*, and *Conclusions and policy recommendations*.

The report indicates that economic and social development achievements in Croatia during the last decade have been impressive (consolidation of macroeconomic stability, levels of economic growth close to 5 percent, reduced income gap with the EU, political economy…). However, we can expect a serious deterioration of the growth scenario because at the time of writing the report global financial disturbances have caused only limited negative effects on the Croatian economy. Croatia has been on a path of very slow convergence for a long time, so reaching the higher rates of economic growth represents the major challenge in the upcoming period. In fact, it would be very interesting to see how the economic crisis effects on the Croatian convergence path can be quantified, since along the fall in growth in 2009, the growth perspective for 2010 is also uncertain. If Croatia maintains the average growth rate from the period before the crisis, per capita income 50 years from now would correspond to only 60 percent of the U.S. level, a position that the EU-27 countries reached by 2000. But this period could be reduced to 12-17 years by increasing the annual growth rates by some 1-1.5 percentage points. More detailed growth diagnostics as well as a discussion on growth reserves and scenarios can be found in the second chapter of the report under the title *Economic growth in Croatia: What have we learned?*. If we take a look at the standard decomposition of economic growth on the share of capital, labor and total factor productivity; it is obvious that the labor and total productivity contributions to the growth in Croatia are not satisfying. Thus, the main constraints to economic growth in Croatia are low labor force participation and total factor productivity which encompasses everything that cannot be explained by the capital or labor con-

tribution (e.g. education, innovation, political economy, allocative efficiency…). Each of the mentioned factors is analyzed in self-contained chapters of the report.

The main driver of economic expansion in Croatia in the period 2001-2008 was domestic demand, which grew at more than six percent per year. In this period, the growth relied heavily on large inflows of cheap and available foreign capital, and the majority of investment was channeled into projects with low short-term yield. Meanwhile, since capital inflows have more than halved due to the global financial crisis, the key question that should be asked is whether Croatia can achieve higher growth rates, close the income gap and converge to the EU? If the current, early transition growth pattern remains, the answer is no. Therefore, it is necessary to activate hidden growth potentials with strong emphasis on raising productivity, exports and innovation. This report is also significant from the aspect of the empirical simulation of possible growth scenarios through the use of WorldScan model of general equilibrium as well as various growth regressions. In such a manner, the WorldScan model for the estimation of economic effects of the Lisbon goals estimates the cumulative effects of reaching all five goals (internal market for services, reduction of the administrative burden, improving human capital, increasing R&D expenditures and raising employment) at a 26.7 percent higher income in 2025. In addition, results obtained from RE-GLS[1] estimator show that a 10 percent improvement in each of the variables (innovation, trade, financial system, privatization and human capital) will give a statistically-significant boost to the per capita real GDP level. Finally, the basic dynamic general equilibrium model has been applied in order to estimate the impact of different TFP growth rates on economic convergence.

The third, and also the chapter that has caught the greatest media attention in Croatia (*Increasing labor contribution: employment and human capital*), discusses ways of increasing employment and human capital in order to raise the contribution of labor to economic growth. We can assume that the allegations published in the media in late August concerning the indolence of Croats resulted from the misinterpretation of the study results. The report shows that the contribution of labor to Croatia's economic growth is very low and that even in the period when the growth rate amounted to approximately 5 percent this contribution was less than 1 point. This is due to the employment rate of 57.1% (the lowest in the EU-27 countries) followed by the low participation rates and high unemployment levels. If Croatia could bring the employment rate to the 70%, the report estimates that it could increase its income level by 15.7 percent in 2025, and 22.9 percent in 2040. We must raise the following question: Why doesn't the labor contribute to higher growth in Croatia? The report points out that the existing social protection system discourages labor supply and that the major problem is the problem of early retirement encouraged by too lax policies. Furthermore, compared with other countries, Croatia is faced with the problem of high costs of labor and labor market rigidities. Another serious issue is also the shortage of workers with high and specialized skills, which has a negative direct and indirect (through raising wages and unit labor costs) effect on firm productivity and competitiveness. Moreover, there is a large mismatch between workers' skills and the needs of the economy, whereas the structure of Croatian students does not satisfy the mar-

[1] The Random Effects estimator (RE), Generalized Least Squares (GLS) estimator

ket labor demand. The report stresses that the implementation of labor market reforms would probably generate the highest returns in terms of raising and sustaining economic growth of any of the policy areas discussed in this study. However, with current economic environment, implementation of such reforms is subject to uncertainties and other institutional constraints.

The fourth chapter – *Increasing total factor productivity* – deals with the ways to enhance economic efficiency, thus raising the contribution to growth of total factor productivity (TFP). There are two approaches to this goal: advancing structural reforms to improve allocative efficiency, and reforming the investment climate to increase technical (average) efficiency. Decomposition of aggregate productivity shows the low contribution of allocative efficiency to aggregate productivity, pointing to a major untapped source of growth in Croatia. That means that more productive firms do not command a relatively larger share of output in Croatia, as would be expected. The contribution of allocative efficiency is much lower in Croatia than in some comparator countries, such as India and Brazil, and evidence suggests that this is caused by inadequacy of resource allocation. We can conclude from the report that the dynamism in economic processes (e.g. new products, new markets, production technologies, new forms of business process organization etc.) is low in Croatia, which implies that the creative destruction mechanism has yet to be unleashed. However, we must have in mind that strengthening the process of creative destruction creates both winners and losers, with a risk for the political feasibility of reforms. Two main factors hindering allocative efficiency are incomplete corporate restructuring and the large share of employment in agriculture. Corporative restructuring was less taking place during the last decade than in the 1990s while with the still strong state presence in the economy there is scope for continued restructuring. The only ones contributing to the net job creation were *de novo* private firms, while privatized enterprises were reducing their employment levels at roughly the same pace as state owned enterprises which is an indication of a lack of market discipline and appropriate enforcement of ownership and corporate governance. Regarding the second factor, i.e. employment in agriculture sector, the share of the workforce involved in that sector is more than twice the average for countries in Europe and Central Asia, and four times the EU-15 average. Although the agriculture plays an important part in the Croatian economy (in 2007 share of agriculture in GDP was over 7 percent), agricultural productivity in Croatia is lower than those of the OECD and EU-15 countries which is explained by highly fragmented land ownership and limited investment in capital.

Other two potential sources of growth may be found in Croatia's innovation performance and trade integration which is one of the most important generators of growth in the world in the last three decades. Moving Croatia's trade openness to a level equivalent to 75 percent of the way up, the current distribution of countries would be estimated to raise its real per capita income by 0.26-0.36 percent. Croatia's trade integration in nominal terms corresponds to 105 percent of GDP, while considering the measure of real openness, it declines by half. Croatia's export rate is consistently below that of other neighbors and represents a major barrier to economic growth. For example, Bulgaria and Romania exceeded Croatia's performance by 10 percentage points over the last few years. Furthermore, market diversification is lower in Croatia than in other CEE countries, while the

technological sophistication of exports follows the same pattern. Factors hindering export performance in Croatia are mostly microeconomic - access to finance, the judicial system, "trade regulations", etc. The main question that should be asked is how can Croatia achieve trade integration on a larger scale and better leverage the benefits of the global economy in terms of growth acceleration. There are two answers offered in the report: by attracting export-oriented FDI and by expanding the supply of exportable goods. Regarding Croatia's innovation performance, the low performance is due to the limited participation of the private sector in R&D activities. The report estimates that by increasing the R&D to GDP ratio to 3 percent, Croatia could increase its income by around 6 percent in 2025. Moreover, in Croatia, there is a lack of venture capital which could close the gap between research and industry, i.e. technology commercialization.

Measures and policy recommendations proposed in the sixth chapter of the report cannot be regarded as novelties, as most of them are already well known. Let us point out just few of them: enhancing labor market flexibility through reform of social protection system; a revision of the unemployment benefit policy in line with the "flexicurity" principle; reductions in hiring or firing costs; reforms of rigid regulations on product market; investment climate reforms; decreasing barriers to entrepreneurship; privatization; knowledge commercialization… Since all policy measures suggested in the report could have varying distributive impacts, policy-makers are challenged to take the coordinated and consistent policy decision. Furthermore, it should be noticed that the measures and recommendations of the World Bank are offered as a long-term way-out of problems, while Croatia is currently faced with short-term problems induced by the crisis, e.g. fall in employment, increasing unemployment rate, etc. In conclusion, World Bank specified a diagnosis of performance and recommended specific economic reforms. Now it is necessary to choose the best strategy for their implementation and although the report emphasizes social consensus, the first move is on the policy-makers.

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