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The Hidden Growth Potential of EU Candidates

Central European countries have every opportunity to enjoy large-scale and steady economic growth in the first decades of the 21st century, assuming their economic integration with the European Union and a steady flow of foreign direct investment (FDI). Once the process of growth begins, continued growth and currency appreciation can be expected for at least 10 years, much like the experience of Spain and Portugal after joining the European Union.

Miscalculating Convergence

Economists who focus on EU enlargement are intensely debating when and how the per capita GDP of the highest income candidate countries (primarily the Czech Republic, Hungary, Poland, and Slovenia) will reach the lowest income membership countries in the European Union—Greece, Portugal, and Spain. According to some economists, there will be no convergence at all; what's more, the income gap is predicted to widen over time. Others believe it will take at least a generation for the East to catch up to the West.

There are some common defects in these calculations (tables 1 and 2):

● Central and Eastern European countries often are treated as one homogenous group, although some countries are converging while others are diverging.

● GDP, calculated as purchasing power parity (PPP), can lead to misplaced conclusions. (PPP means that the same goods sell for the same price in different countries if measured in a common currency—such as in dollars). For example, based on PPP, the 1995 GDP of the Czech Republic and Slovakia seemed extremely high because the currency of both countries was highly undervalued at the time.

● Post-socialist countries were hit by the transformation recession during the early 1990s, making it meaningless to discuss convergence based on data of that period.

● The applied growth models consider growth determinants such as the school enrollment rate, the population growth rate, and the rate of public investment compared to annual GDP. These rates are more or less similar in all European countries, including Central and Eastern Europe. But if the traditional growth models for convergence calculations ignore specific regional characteristics and factors that

might accelerate economic growth during the transformation process, the result can be misleading.

Revalued Economy and Currency

System transformation—if carried out correctly—mobilizes the huge economic potential of the people that couldnot surface under the political oppression of old regimes. Transformation brings about qualitative changes to economic activities and induces gradual appreciation of production factors—land, labor, and capital. Once the labor force is properly combined with capital, technologies, and business opportunities, production surges. The inflow of FDI plays an important role in revaluing production factors in transition economies. In the long run, FDI helps to close the income gap between transition economies and Western economies. Traditional approaches to convergence usually neglect the appreciation component, although it is one of the major sources of high economic growth in transition economies.

Another potential growth factor ignored by traditional convergence calculations is the possible future revaluation of postsocialist currencies. Since the communist era most of those currencies—never exposed to a market valuation system—have remained undervalued. Almost all post-socialist countries have recorded two- or even three-digit inflation rates during the past 10 years of transformation; accordingly, they have continuously devalued their currencies.

Thus devaluation in nominal terms and appreciation in real terms were typical in Central and Eastern European countries in the past decade. The rate of devaluation usually lagged behind the inflation rate so the real exchange rate appreciated in dollar terms—but most transition currencies remained undervalued. It seems certain that during the ongoing integration process, Central and Eastern European currencies will gradually further appreciate.

Compared to other emerging markets, real GDP growth rates of Central and Eastern European countries proved modest over the first 10 years of transformation. However, growth rates in dollar terms at market exchange rates (domestic currency converted into dollars at market exchange rates) show an entirely different picture. These growth rates have been surprisingly high in almost every year of the transformation period.

The discrepancy between the two growth rates—real GDP and dollar-denominated GDP—can be explained by the continuous appreciation of currencies in real terms. This, in turn, reflects the steady revaluation of production factors in Central and Eastern Europe. The high GDP growth rate in dollar terms rapidly reduces the GDP gap between the relatively low income EU countries and the relatively high-income Central and Eastern European countries. This tendency will accelerate once the candidates join the European Union. Thus the convergence period may be much shorter than suggested by traditional calculations.

Table 2 shows that convergence for the Czech Republic, Hungary, and Poland ("high East")—with 1998 as the start off year—would be accomplished around 2010–2015, assuming that the growth rate of these countries outperforms that of Greece, Portugal, and Spain ("low West") by 7 percent every year. That seems an ambitious target. But convergence can be examined in another way: GDP, on the production side, consists of compensation to employees, operating surpluses, net indirect taxes, and depreciation. For simplification, we assume that GDP consists of wages and profits and that wages increase in proportion to profits.

Subsequently, we can consider convergence in terms of the number of years necessary to close the wage difference between the "high East" and the "low West" countries. Even if wages rise 10 percent a year faster in the "high East" than in the "low West," it would take the three Central European countries about 15 years to catch up with the Western wage level. Thus the "low West" countries can maintain their competitive edge over this period, assuming a steady flow of FDI.

FDI Stimulates Growth

Data in most countries show that per capita GDP growth is closely related to per capita cumulative FDI. Hungary was once an exception. Until recently, Hungary received the most FDI among post-socialist countries (only lately has Poland overtaken it), but its GDP growth rate has hardly reflected the large FDI inflow. And despite the large inflow, the Hungarian forint barely appreciated in real terms. Several factors explain this unusual trend:

● Hungary inherited a heavy burden of external debt, and repayment of that debt has absorbed a large amount of external capital without causing appreciation of the currency.

● FDI has targeted privatized state companies, and so far much foreign capital has flown into infrastructure activities—such as banking and utilities—that have not yet contributed to expansion of production and increased value added.

● The level of capital accumulation is still low in Hungary. The domestic market is relatively small (with a population of 10 million people), and demand is limited due to the low income level (the wage level has not increased for 7–8 years in dollar terms, and the monthly average gross wage remains within the $300–350 range). FDI has contributed little to a deepening of the domestic market, which would boost the GDP growth rate.

These are the main reasons for the small real appreciation of the forint despite the large inflow of FDI. These same factors suggest that Hungary will experience a large takeoff in terms of real appreciation and GDP growth once the burden of external debt lessens and the leveling of the wage rate starts.

If History Repeats Itself . . .

How has convergence progressed for the current "low West" countries once they joined the European Union in the mid-1970s? A decade of slow growth pre-accession was followed by a decade of dynamic GDP growth in dollar terms at market exchange rates. This change can be attributed to the real appreciation of their currencies, which accounted for almost 80 percent of the GDP increase.

If history repeats itself, the emerging Central and Eastern European economies can look forward to 10 percent annual economic growth, measured in dollars at market rates, for at least 10 years after entry into the EU. If these assumptions are correct, the annual growth differential between the "low West" and the "high East" could be more than 7 percent, leading to rapid income convergence.

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Table 1. Calculations Based on Barro and Levine-Renelt Models

Country	Per Capita income in US$ (PPP based)	Projected per capita growth (%)	Barro Model government consumption = 10 percent (in percent of GDP) Number of years to converge to low-income EU levels	Levine-Renelt Model investment = 30 percent (in percent of GDP) Projected per capita growth (%)	Number of years to converge to low-income EU levels
Albania	538	7.10	63	6.28	75
Bulgaria	5,132	4.92	29	5.01	28
Croatia	4,142	5.38	32	5.48	31
Czech Rep.	8,173	5.44	11	4.40	15
Estonia	7,203	5.23	16	4.93	17
Hungary	6,211	5.28	20	5.02	22
Latvia	5,002	5.50	25	5.79	23
Lithuania	3,035	6.10	34	6.22	33
Macedonia, FYR	1,628	6.08	50	5.96	52
Poland	6,364	5.42	18	4.75	23
Romania	3,542	5.47	36	5.64	34
Slovakia	6,671	5.86	15	5.00	19
Slovenia	6,342	5.31	19	4.58	24
Average	4,922	5.62	28	5.31	31

Table 2. Convergence calculation based on neoclassical growth model

Countries	No. of years to converge

Per Capita GD	included	to half-way
Market rate		
1992-1995	24	∞
1992-1997	19	73
1993-1997	24	∞
1993-1997	19	69
PPP rate		
1993-1997	24	∞
1993-1997	19	44

Table 2A. Convergence time to the GDP level of Spain
(per capita GDP of 1998=US$13,950)

	Per Capita GDP in 1998 US$	Gap in GDP growth rate							
		3% years	4% years	5% years	6% years	7% years	8% years	9% years	10% years
Hungary	4710	38	28	23	19	17	15	13	12
Czech Rep.	5260	34	26	21	17	15	13	12	11
Poland	4075	43	32	26	22	19	16	15	13

Table 2B. Convergence time to the GDP level of Portugal
(per capita GDP of 1998=US$11,174)

	Per Capita GDP in 1998 US$	Gap in GDP growth rate							
		3% years	4% years	5% years	6% years	7% years	8% years	9% years	10% years
Hungary	4710	30	23	18	15	13	12	10	9
Czech Rep.	5260	26	20	16	13	11	10	9	8
Poland	4075	35	26	21	18	15	13	12	11

Table 2C. Convergence time to the GDP level of Greece
(per capita GDP of 1998=US$11,475)

	Per Capita GDP in 1998 US$	Gap in GDP growth rate							
		3% years	4% years	5% years	6% years	7% years	8% years	9% years	10% years
Hungary	4710	31	23	19	16	14	12	11	10
Czech Rep.	5260	27	20	16	14	12	10	9	8
Poland	4075	36	27	22	18	16	14	12	11

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