



Poznań-Atlanta

**Working Papers
in Management, Finance
and Economics**

No. 1 (8)

**Comparative Analysis of
Economic Transformation in
Poland and Selected Central
European Countries**

by

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May 2009

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Cover design:

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Publisher:

MBA Poznań-Atlanta

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ISSN: 1895-5479

Printing:

Zakład Graficzny Uniwersytetu Ekonomicznego w Poznaniu

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COMPARATIVE ANALYSIS OF ECONOMIC TRANSFORMATION IN POLAND AND SELECTED CENTRAL EUROPEAN COUNTRIES*

Abstract

The aim of this study is an empirical evaluation and comparison of Poland's economic transformation in 1989-2008 against the background of the results achieved in the same period by Hungary, the Czech Republic, the Slovak Republic, Lithuania, and the Ukraine. I have focused on the most distinctive features of economic transformation. The background for the empirical analyses constituted the macroeconomic stabilization frameworks of the economies, the standard growth mechanisms and the conditions of the economies' competitiveness.

Keywords: convergence, divergence, transformation, competitiveness, transition economies

JEL codes: E65, O16, O47, O57, P52

* Translation: M. Dzikowska. The author would like to thank M. Dzikowska and A. Wojciechowska-Refermat for their research assistance and editing work.

1. Introduction

The year 2009 marks the 20th anniversary of the 1989 Round Table Talks and first, semi-free parliamentary election in Poland. As a result of those changes and in particular the Civic Committee's election victory, Poland was the first Central European country to start extensive institutional and economic reforms. The main aim of those reforms primarily was to provide macroeconomic stabilization and to re-establish a free market economy based on the private ownership.

Evaluations of Poland's economic transformation and its economic and social consequences are still controversial and disputable issues. This is mainly because the process, which was strongly determined by the initial economic situation, and the solutions applied in a relatively short period during the initial stage in terms of economic policy and its participants' expectations, lead to structural shifts and changes in the material and social situation noticeable to all citizens with no exceptions. Those impartial and inevitable circumstances were accompanied by deep changes within means of public communications bound up with the end of the monopoly of information and censorship. Quickly, goods, services, labor, and capital markets were established, and a characteristic and often chaotic idea concerning the new markets as well as an arena of rivalry for various political parties and organizations followed.

Unequivocal disputes concerning Poland's transformation, its effectiveness and sequence, the use of economic policy tools, and most of all, the scale of public costs concerning constitutional changes of the economy, were simply impossible to settle. Therefore, to make an objective evaluation of the last twenty years, it is worthwhile to make an attempt to compare and describe Poland's transformation against the background of similar processes in other Central European Countries. The selection of countries for this comparison is not difficult. First of all, this will be Hungary, which is a country that had been reforming and transforming its economy since the end of 60s. The analysis and examination of Hungary allows us to compare results of gradual reforms with the results of the radical alternative of the quick pro-market adjustment and adaptation used in the case of Poland¹. A comparison with Czechoslovakia², which is a country with considerably

higher economic development and a relatively good initial macroeconomic situation, where the reforms were introduced one year later than in Poland, should allow the evaluation of the conditions and the significance of initial structural differences and the specific premium resulting from the possibility of watching Polish pioneer experiences during the first months of transformation. Next to Hungary, the Czech Republic and the Slovak Republic, the paper takes into consideration Lithuania and the Ukraine. The reason for this choice was the considerably high structural similarity between both these countries and Poland (i.e. the high significance of agriculture to the economy, and the fact that the GDP level in the year 1990 in the Ukraine was the same as in Poland and higher in Lithuania). Moreover, taking into account Lithuania and the Ukraine, as post-soviet economies, should allow us to grasp the significance of the institutional setup as well as the devastation related to the institutional and cultural sphere of business resulting from the economic and political system imposed in these countries. Incorporation of these countries into the analysis allows the verification of whether these economies took advantage of a delay premium, since they had started their political emancipation process in August 1991 (the Ukraine) and in September 1991 (Lithuania³). As a result, Lithuania and the Ukraine had an opportunity to start their full market transformation as independent countries and to base their actions on the experiences of Hungary and Poland.

The aim of this study is an empirical evaluation and comparison of Poland's economic transformation against the background of the results achieved in the same period by Hungary, the Czech Republic, the Slovak Republic, Lithuania, and the Ukraine. The limited scope of the paper required focusing on selected economic aspects of the transformation. The background for the empirical analyses constituted the macroeconomic stabilization frameworks of the economies, the growth mechanisms and the conditionings of their competitiveness.

The structure of the article is the following: The first section presents briefly the theoretical background of transformation. The transformation process is divided into two phases: the phase of stabilization and implementation of fundamental institutional changes, and the phase of growth and

development. Subsequently, the paper presents the general framework of those phases, with special attention paid to macroeconomic context, the institutional setup, and the competitiveness determinants of the economies. The conceptual framework of the conventional production function and the methodology derived from Global Competitiveness Report complement one another. In this way, they create a context for international comparison of the operation of factors stimulating and inhibiting the transition process. Successive sections present an empirical comparative analysis of the transformation process. Therefore, the second section discusses the initial conditions of the transition in Poland and other countries under examination. Special attention is paid to structural and macroeconomic conditions on the threshold of transformation. The paper singles out and describes the main features of stabilization programs and the first responses of the economies to new impulses of the economic policy and the new institutional conditions. The third section is devoted to the analysis of selected growth factors and their limitations. It attempts to identify the reasons for differentiation between transition processes and their present results in the examined countries⁴. Special focus is paid to the identification of the source of these phenomena. The fourth section focuses on general outcomes of transformation in terms of GDP per capita and competitiveness of the analyzed economies. The analysis is concluded with final remarks.

1. Theoretical context of the comparative analysis of the transformation

Evaluation of the transition process of the years 1989-2008 and its economic consequences requires a coherent theoretical and methodological context. For this reason, in the paper, the transformation process is divided into two phases:

- A phase of stabilization and implementation of fundamental institutional changes; and,
- A phase of development and modification of solutions applied in the initial period of the transition, accordingly to the specific needs and challenges of a particular country.

It has been recognized that, in the first phase of transition, the initial macroeconomic conditions were of crucial importance, followed by the structural features of a particular economy, including therein the availability of resources and the structure of GDP creation. The phase can be investigated both in the context of macroeconomic analysis and in the context of microeconomic adjustments of companies and households to the new economic environment⁵. An important analytical context, useful for describing both phases, is provided by the new institutional economics⁶.

In the second phase of transition, qualitative factors started to prevail, for example, consistency and determination in pro-market reform continuation, the privatization of the economy, and the improvement of the business environment quality, innovation ability, or efficiency in introducing European Union's *acquis communautaire* aimed at joining this organization as soon as possible. Those varied factors, alongside objective structural limitation, have influenced the economic growth rate achieved at the time and the scale of the improvement of living standards. Due to the multiplicity of the factors and the complexity of the process itself, the transformation can also be analyzed in the context of the growth theory, as in the context of economy competitiveness mechanisms. In fact, both these approaches complement one another. They also allow us to identify and evaluate the factors facilitating growth and modernization, as the limitation of the analyzed process. One advantage of the established context is that it creates a useful framework for international comparisons.

1.1. *Macroeconomics and the institutional conditions of the stabilization phase*

At the end of 80s, there was no normative theory for the transformation of a centrally planned economy into the market-led economy based on private ownership. A suitable diagnosis of the sources of the inefficiency of the centrally planned system and its inability to fulfill social and consumption aspirations of the citizens can be found in the literature of this topic⁷. At the time, the source of inspiration could have been experiences referring to the successive failures of the stabilizing programs implemented under the auspices of the International Monetary Fund in the economies of South Ameri-

ca. They have been an incentive to hold the "Washington Consensus"⁸. For many years, J. Williamson's thesis on this issue has been a specific pattern of a sample of the necessary liberal market reforms. However, the document was developed in a different context (it considered the conditions of South American, market-oriented, and as a rule, non-democratic economies)⁹. Moreover, the concept was not widespread at the time (the second half of the year 1989) when the intensive works under the Polish stabilization program and institutional reforms were carried out¹⁰.

In Poland in the year 1989, the conviction of the necessity of deep institutional reform implementation was accompanied by the awareness of the geopolitical limitations of the time. The basic problem was designing a macroeconomic stabilization framework. The internal and external disequilibrium, the spread between the official and the market currency exchange rate, the flee from the zloty, the hyperinflation, the biased price structure, the entirely monetized budget deficit, practically the lack of commercial banking sector or the established "tradition" of the negative real interest rate, and the credit regulation, indicate the problem scale¹¹.

As already highlighted, the scale of the difficulties referring to determining the combination of the fiscal, monetary, and currency policies had been previously unprecedented in Poland. In case of each particular country, stabilizing and constitutional reforms required, on the one hand, designing and implementing a new institutional environment (qualitative policy) and selecting specific instruments and the scale of their usage (quantitative policy), while on the other hand, it demanded focusing attention on the specific initial conditions of the economy's structure and sociopolitical factors.

1.2. Transformation in the context of the growth theory

The second phase of the transformation can be described in the context of the growth theory¹². Due to the importance of broadly understood institutions for the efficient transformation to a market-led economy, the basic framework of the growth theory is enriched with institutional aspects and management quality issues¹³. In order to determine the general context for

the comparison of the growth phase in the countries under examination, the Cobb-Douglas production function scheme may be used¹⁴:

$$\frac{Y}{L} = A \left(\frac{H}{L} \right)^a \left(\frac{K}{L} \right)^b \left(\frac{N}{L} \right)^c,$$

where:

Y – production,

L – labor force,

H – social capital,

K – productive capital,

N – resources, therein land, natural resources, etc.,

A – parameter representing total productivity of production factor,

a, b, c – product elasticity of Y against H, K and N .

In the defined analysis environment, it is apparent that growth represented by changes in product per capita can be treated as a composition of four groups of factors: social capital per capita, productive capital per capita, natural resources per capita¹⁵, and broadly understood efficiency. In the present paper, it is assumed that the latter factor differentiated the course of the second phase of the transition from the centrally planned to market-led economy. The factor includes such features and conditions as the following: the institutional environment quality, the business environment and management quality, and the spill over resulting from participation of economies in international labor division (i.e. specialization and economies of scale resulting from the intra-industry trade). It should be underlined that the above mentioned features notably also define the conditions of the economy's competitiveness (see section 1.3. of the present paper).

1.3. Transformation vs. shifts in the competitiveness of economies

The aimed results of the macroeconomic stabilization, liberalization and institutional reforms, were the participation of the new market-led countries in the global economy, and most of all, a gained ability to achieve sustainable growth and meet the challenges of international competition. M. Porter brought and applied approach and instrumentation initially prepared for the

evaluation of a company's competitiveness to the macroeconomic level of the analysis¹⁶. Presently, in this commonly used framework, the competitive advantage of a particular economy is derived from advantages achieved at a company level and further at a sectoral level. Porter's approach allows the distinguishing four groups of national competitiveness determinants¹⁷: the resource supply, which is characteristic for particular economy demand factors, the sectoral cooperation network, and the factors and conditioning of the business environment. It should be noted that the transformation of the aforementioned potential determinants into an actual set defining a competitive advantage of a particular country requires the appearance of favorable but often only temporary exogenous conditions and an adequate economic policy aimed at the development of autonomic adjustment processes¹⁸.

For the needs of the development of the Global Competitiveness Report (GCR) the previously defined, general competitiveness concept has been made operational (see Table 1)¹⁹.

Table 1

Pillars of competitiveness and the main stages of economic development according to Global Competitiveness Reports

Basic requirements	
Institutions	Key for factor-driven economies
Infrastructure	
Macroeconomic stability	
Health and primary education	
Efficiency enhancers	
Higher education and training	Key for efficiency-driven economies
Goods market efficiency	
Labor market efficiency	
Financial market sophistication	
Technological readiness	
Market size	
Innovation and sophistication factors	
Business sophistication	Key for innovation-driven economies
Innovation	

Source: World Economic Forum (2007).

Besides referring directly to the presented competitive features context, the GCR also refers implicitly to the mechanisms and models of the contemporary international economics theory²⁰. By binding both approaches, the GCR singles out three main and two interim phases of development and competitiveness (see Table 1).

Using information presented in Table 1, it is concluded that the successive and repeatedly higher phases of development and the competitive position improvement is linked to launching existing conditions and factors favoring the modernity and the innovativeness or to creating such from the very beginning. The modernity and innovativeness of an economy represent its ability to generate a higher added value. The sequence of the development, presented in Table 1, will be instrumental in comparing the achievements of the countries under examination (see Section 4).

2. The first phase of the transformation process

2.1. *Initial conditions in Poland and in the selected countries of the region*

Referring to Section 1.1., it can be concluded that the initial political and social conditions in Poland were favorable for the reforms. The Round Table proceedings brought the compromise and paved the way to the parliamentary elections and to the election victory of the reforming group – the Civic Committee by Lech Wałęsa. In the initial period, the government of Tadeusz Mazowiecki, elected in the autumn, could count on the support of the Civic Parliamentary Club and on that of the other parties of the Sejm. Polish society demonstrated a relatively high level of self-organization achieved on the basis of the rise and evolution of NSZZ Solidarność during the years 1980-1981. In this area, the case of Poland and of the group that had seized the power as the result of the election was unique²¹. The characteristics of macroeconomic conditions on the threshold of the transition process are presented in Table 2. As shown by the data, the Czech Republic was in the best initial macroeconomic situation. This refers to its GDP growth dynamics and industrial production of the time and also to the inflation rate and the budget situation or public debt (see Table 2). The Czech Republic also had the lowest share of agriculture production in the GDP structure and

decidedly the highest GDP per capita. The macroeconomic conditions in the Slovak Republic, together with the Czech Republic, which constituted one country at the time (Czechoslovakia), were relatively favorable.

Table 2

Macroeconomic conditions in Poland, the Czech Republic, Hungary, the Slovak Republic, Lithuania and the Ukraine in 1989

Specification	Poland	Hungary	Czech Republic	Slovakia	Lithuania*	Ukraine*
GDP dynamics (%)	0.2	0.7	4.5	1.0	-5.0	-4.0
Industrial production dynamics (%)	-0.5	-2.1	1.7	-0.7	ND	-0.1
Unemployment rate (%)	0.0	0.5	0.0	0.0	0.0	0.0
Inflation rate (average annual %)	251.1	17	1.4	2.3	8.4	4.2
Budget balance (% GDP)	-3.0	-1.2	-1.2	-0.6	ND	ND
Currency reserves, excl. gold (USD bn)	2.31	1.25	5.74	ND	ND	ND
Foreign debt/GDP (%)	49.3	65.8	11.4	10.3	ND	ND
GDP per capita at PPP**	8038	12399	16211	12536	12537	8063
Share of industry in GDP (%)	44.1	43.7	ND	58.5	30.9	44.6
Share of agriculture in GDP (%)	11.8	15.6	6.3	9.4	27.8	25.6
Share of the private sector in GDP (%)	30	5	5	5	10	10

* Data for 1990

ND – no data

**PPP – Purchasing Power Parity (in USD of 2005)

Source: EBRD, WDI database and national databases.

Much more difficult conditions faced the remaining three countries. The worst macroeconomic situation was found in Poland, where the centrally planned economy ceased to operate, while the new mechanism, despite the highest share of private sector in the GDP creation, had not started to work properly. Poland was not able to service its foreign debt, and next to the galloping inflation, discontinuity of supply of consumption and investment goods appeared. According to the purchasing power parity, it also had the lowest GDP per capita²². The disadvantageous situation also occurred in the Ukraine and Lithuania, mainly because the links with other republics of the then Union of Soviet Socialist Republics and the disintegrating Russian Federation's economy, which were all falling into a deep economic crisis. However, the biggest problem for both those economies and societies was the

heritage of the soviet system, including destruction of social capital and the lack of traditions, experiences, and institutions, which were indispensable for the appropriate functioning of a market-led economy. As time has shown, the Ukraine, more accurately its political sector was not able to handle those problems.

2.2. Stabilization programs and the first reactions of the economies

The designed and implemented stabilizing programs were an answer to the specific situation of a particular country (Table 3). However, they all had some common features: the reestablishing of the monetary policy significance (as well in the sense of the nominal and real anchor) and targeting it at fighting down inflation, the initial and step devaluation of the currency exchange rates, the introduction of internal convertibility of currencies for the enterprises and the limited external convertibility and the implementation of the hard budget constraints in the state-owned firms and entities²³.

The program that had been implemented in Czechoslovakia since January 1991 was very similar to the one introduced in Poland a year earlier (see Table 3). The analyzed cases of transforming countries differ significantly in the degree of determination and the consistency of the authorities responsible for the shape and implementation of the stabilizing programs. An emphatic example can constitute the comparison of Poland's and the Ukraine's situations. In the latter case, the first attempts of reforms were made in the year 1992²⁴. However, the reforms were partial and the authority actions were missing consistency. As a result of the worsening economic situation in the Ukraine in the year 1994, another attempt at regulating the monetary, fiscal and exchange rate policies was made. Moreover, monetary reform was implemented in 1996²⁵. Those actions also turned out to be ineffective, and the Ukraine can be an example of a reform failure caused by the internal divisions and the inability of the political parties to work for the common good.

During the years 1990-1992, the implementations of stabilization programs were accompanied by unfavorable external conditions. The USSR's economy broke down, and as a result of the incorporation of the German Democratic Republic (GDR) into the economic organism of the Fed-

eral Republic of Germany (FRG), the trade bonds between Polish companies and their counterparts from the GDR totally collapsed²⁶.

Table 3

***Stabilization programs and major initial conditions
of the transformation in Poland, Hungary,
Czechoslovakia, Lithuania, and the Ukraine***

Specification	Poland	Czechoslovakia	Hungary	Lithuania	Ukraine
Launching the program	January 1990	January 1991	Continuum	June 1992	November 1994
Monetary policy	Restrictive	Restrictive	Adaptive	Expansive	Restrictive
Fiscal policy	Restrictive	Restrictive	Expansive	Adaptive	Restrictive
Incomes and wage rate policy	Restrictive	Restrictive	Moderate	Mild	Mild
Exchange rate policy	Devaluation	Devaluation	Crawling devaluation	Devaluation	Devaluation
Nominal anchor	Fixed exchange rate and wage control	Fixed exchange rate and wage control	Currency rate (periodically)	Managed floating rate	Managed floating rate
Real anchor	Interest rate	Money supply and interest rate	Money supply	Money supply and interest rate	Money supply and interest rate
Internal convertibility (for companies)	Yes	Yes	Yes	Yes	Yes
Internal convertibility (for households)	Yes	Restricted	Restricted	Restricted	Restricted
External convertibility	Restricted	Restricted	Restricted	Restricted	Very restricted
Main privatization method	Direct	Coupon	Direct	Coupon	Coupon
Date of starting privatization	1990	1992	1990	1991	1995
Launching the stock exchange	1991	1992	1989	1993	1991
Lowest level of GDP year	1991	1992-1993	1993	1994	1998
Scale of decrease (1989=100)	82.2	84.6-75.0	81.9	53.3	36.6

Source: The author's own list prepared using national data and Gros, Steinherr (2004), Hochreiter (1999), Bennett *et al.* (2003).

As a result of the first war in the Persian Gulf, oil price rose periodically. Moreover, in the cases of Poland, the Ukraine and Czechoslovakia, Iraq was an important consumer of armament and investment goods. The countries under examination had not only to stabilize their economies, but also to react to the new external negative supply shocks (the raise of the oil price) and demand shocks (a dramatic decline in effective demand for many exported goods). Those factors, next to the objective economic inertia in vast parts of the economy still controlled by state agencies, were responsible for the transformational recession (Table 3).

The course of the transformational recession differed in the particular countries. The Polish recession, measured as the decline in the GDP, and industrial production, was the mildest among all Central European countries, and the first growth was reported already in the year 1992. The most difficult situation took place in the post-soviet countries. In the Ukraine (see Table 3), the GDP compared to the level achieved in the year 1989 declined to 36.6%, while in Lithuania it declined to 53.3%. Gradually, in the course of the macroeconomic stabilization, the place of a prime problem, instead of inflation, was taken by the increase of structural unemployment (compare to the point 3.4.1.). This phenomenon had strongly influenced the social perception of the market and political transition and also contributed to an increase in the income and wealth diversification (see Section 3.4.3. of the paper).

3. The phase of economic growth

3.1. Changes in population, education and social capital

As a result of the influence exerted by the new economic environment and the new social and political conditions in the countries under examination, significant population changes occurred in the analyzed period (see Table 4 and Figure 1). According to the data presented in Table 4, during the years 1990-2005, all countries included in the analysis, besides Poland and the Slovak Republic, had a negative population growth.

Special attention should be paid to the case of Lithuania and the Ukraine, which showed the strongest negative dynamics of the population growth, amounting to minus 0.5 and minus 0.6 percentage, respectively.

These population trends, resulting from the decline in the birth rate dynamics and emigration, constituted a major challenge to economic policy²⁷. They also had an effect on the age structure of the region and the development of GDP per capita (the issue is further analyzed in Section 4). It is estimated that the direction of changes in the dynamics of population growth in the examined countries will be lasting (compare Table 4), and Poland and the Slovak Republic will also experience a negative population growth dynamics in the years 2005-2015.

Table 4

***Annual average population growth rate in 1990-2005
and the forecast for growth in 2005-2015***

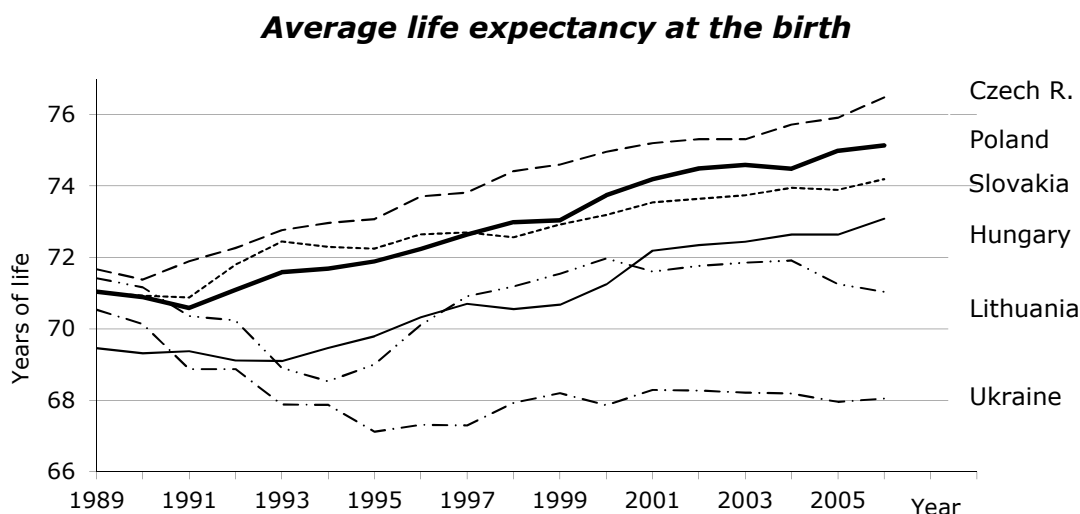
Country	1990-2005	2005-2015
Poland	0.0	-0.2
Hungary	-0.2	-0.3
Czech Republic	-0.1	-0.2
Slovakia	0.1	-0.1
Lithuania	-0.5	-0.5
Ukraine	-0.6	-1.1

Source: World Bank (2007).

According to the WDI data²⁸ the market and institutional transition had a negative impact on the average annual rate of the population growth in all the countries of the region with no exceptions²⁹. However, at the same time, in all examined countries (again, the Ukraine is an exception) the average life expectancy (compare Figure 1) increased when compared to the end of 1980s. As shown on the Figure 1, the biggest improvement in this important measure of the quality of life, and of public health operations, were reported in the Czech Republic (76.5 years) and Poland (75.1 years). It is also interesting that, during the transformation process, the diversification of the measure increased. In 1989, the lowest value was 69.5 (Hungary) and the highest was 71.7 (Czech Republic); thus, the difference between the six analyzed countries amounted to 2.2 years (Figure 1). After seventeen years of the transition, in the year 2006, those rates amounted to 68 (Ukraine) and 76.5 (the Czech Republic), so the difference increased to 8.5 years. Therefore, in this specific social rivalry, the Czech Republic

(increase in life expectancy by 4.8 years) and Poland (increase in life expectancy by 4.1 years) experienced the greatest improvement.

Figure 1



Source: The author's own calculations using data derived from the WDI database.

The analyzed countries were characterized by a relatively high level of primary school enrolment. This aspect of state spending and activity in the analyzed countries was not significantly negatively affected, even during the transformational recession. Secondary school education in Poland and Hungary was continued by 75.9% and 74.8%, respectively³⁰, in 1991. In the year 2006, pupils continued this level of education by 93.6% (Poland) and 89.5% (Hungary). Also, in Lithuania, a high percentage of young people continued their education at the secondary level (92.3%) in 2006³¹. The situation in the field of tertiary education in the analyzed countries was highly differentiated (compare Table 5). As presented in Table 5, the weakest initial conditions occurred in Hungary, the Slovak Republic, and the Czech Republic, where only 14%, 15% and 16%, respectively, of young people continued their education at the tertiary level. By the end of the analyzed period, (compare Table 5) Hungary's tertiary school enrolment ratio reached a high level of 69% (a spectacular increase of 55 percentage points compared to 1991), and Poland's ratio reached a level of 66% (improved by 44 percentage points).

The situation also improved significantly in the Czech Republic (50%) and in the Slovak Republic (45%). The highest school enrollment ratios at the tertiary level of education were achieved by Lithuania (76%) and the Ukraine (73%). It should be noted that the analyzed countries, in particular Poland, improved considerably the availability of this level of education, mainly through the development of private education, focusing on the humanities and social sciences, rather than technical ones.

Table 5***Net tertiary enrolment rate***

Country	1991	1999	2000	2001	2002	2003	2004	2005	2006
Poland	22	45	50	55	58	60	62	64	66
Hungary	14	33	37	40	45	52	60	65	69
Czech Republic	16	26	29	31	35	37	43	48	50
Slovakia	15*	26	29	30	32	34	36	41	45
Lithuania	33	44	50	57	62	68	73	76	76
Ukraine	47	47	49	52	57	61	65	69	73

* Estimated data.

Source: WDI database.

The tertiary school enrollment ratio achieved in 2006 in Poland and the remaining examined countries were more favorable than in countries with medium income levels. Moreover, in the cases of Hungary and Poland, the achieved level is similar to countries with the highest income per capita, and Lithuania and the Ukraine were even higher³². The presented quantitative data shows that the evolution of social capital and its general condition achieved by the end of the examined period in the countries under investigation was good. Human capital is an important element of the set of comparative advantages of the countries in transition.

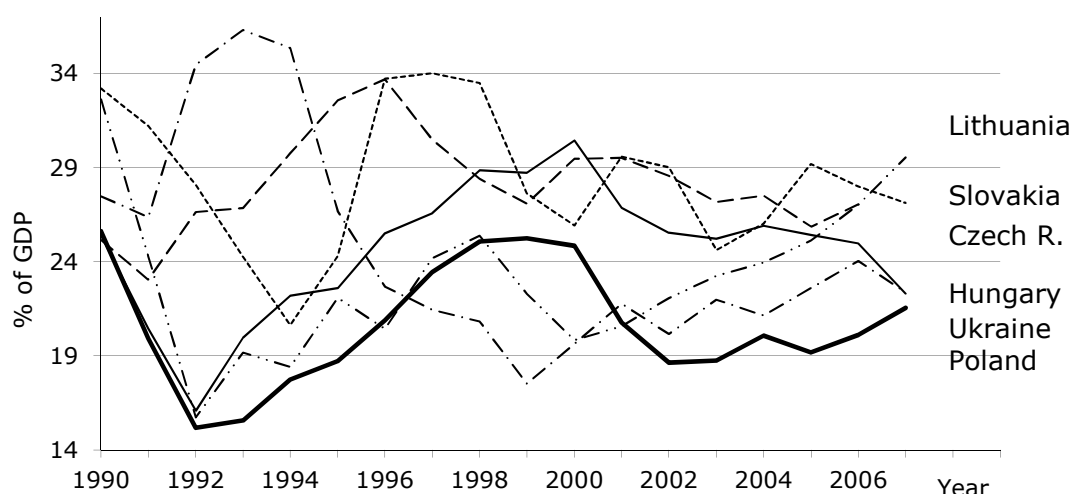
3.2. Investments and the supply of domestic savings

Investments, particularly in the fixed assets, are the main driving factor of the increase in capital per capita (see Section 1.2. of this paper). Figure 2 presents the share of total investment in GDP over the period 1990-2007. According to the data, during the first phase of the transition process, the share of total investment in the GDP had significantly fluctuated. At the end

of the examined period, throughout the group of the analyzed countries, a convergence of accumulation shares in the GDP was found. As shown in Figure 2, for most of the analyzed period, Poland had the lowest share of total investment in the GDP among the compared economies. This situation occurred in the years 1991-1996 and 2002-2007.

Figure 2

Total investment in 1990-2007 as percent of GDP



Source: As in Figure 1.

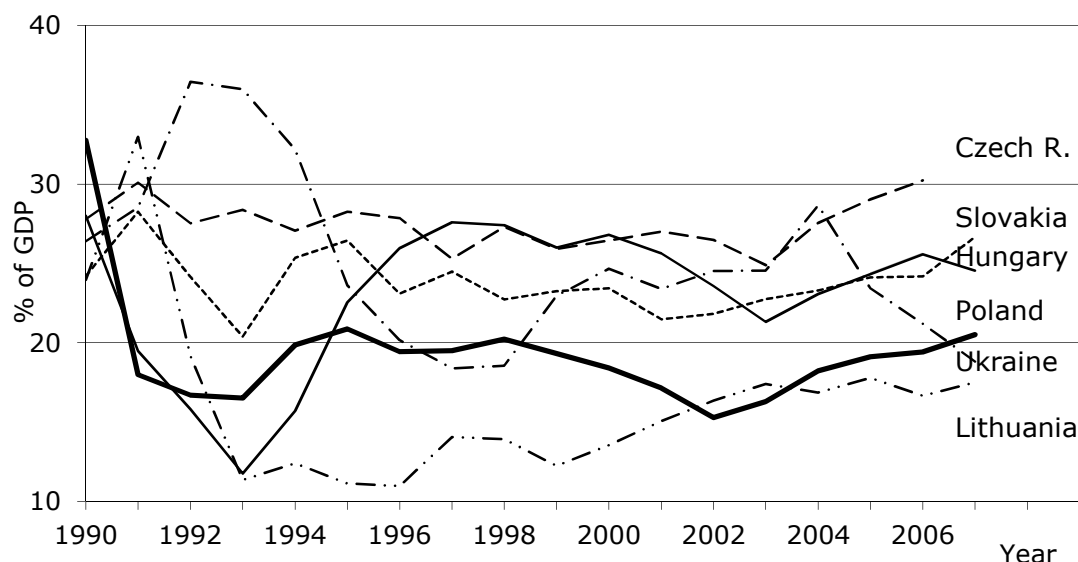
The relatively low share of accumulation also occurred in the Ukraine and Lithuania. However, in the latter country, the value of total investment in the GDP began to grow systematically from 2001, reaching the share of 29.5% of the GDP in 2007. During the entire analyzed period, the average rate of investment in Poland amounted to only 20.6% of the GDP, and it was the lowest among all of the countries included in the study (see Figure 2). This rate was higher by 4 percentage points in Hungary, while it was higher by 7.6 percent in the Czech Republic and the Slovak Republic.

The groundwork of investment and a precondition for a long-term sustainability of the macroeconomic equilibrium is an adequate supply of domestic savings (Figure 3). As is clear from the data given in the Figure 3, fluctuations of savings in the examined countries were also high. The average ratio of gross domestic savings to the GDP in Poland over the period amounted to only 19.3%, and it was higher than in Lithuania by a little

more than 3%, which was the lowest among the countries studied (Figure 3). In the other countries under examination, although with high levels of volatility, it exceeded 23%.

Figure 3

Gross domestic savings in 1990-2007 as a percentage of GDP



Source: As in Figure 1.

The highest average ratio of gross savings to the GDP in the analyzed period occurred in the Czech Republic and amounted to more than 27%.

Only in the Ukraine was the average savings rate slightly higher than the average investment rate. In the other countries of the region, the size of the investment exceeded the supply of domestic savings. This trend caused a structural current account deficit³³.

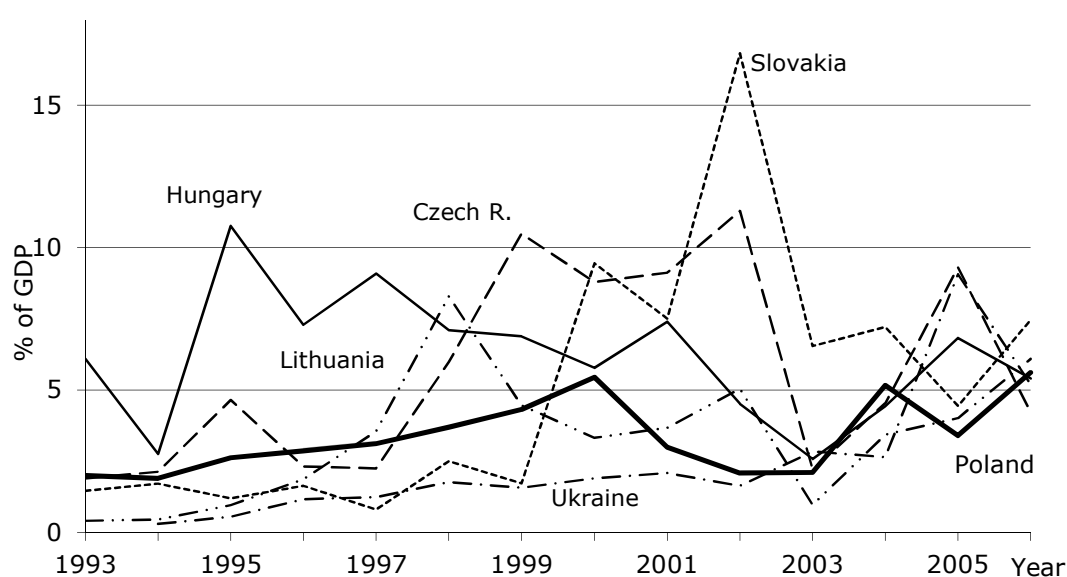
An important element in the reconstruction and modernization of the economies was the inflow of foreign direct investment (FDI). FDI supplemented the domestic capabilities to invest. Figure 4 presents the inflow of net foreign direct investment (net FDI) as a percentage of the GDP. The highest volatility of net FDI was registered in the Slovak Republic - the country with a significant inflow of large investments in the automotive industry. In the Slovak Republic, net FDI ranged from 0.8% of the GDP in 1997 to over 16.8% of the GDP in 2002 (see Figure 4).

Large fluctuations in net FDI also occurred in the Czech Republic (from 1.9% in 1993 to 11.3% in 2002) and Hungary (from more than

10.8% in 1995 to 2.6% in 2003). During the years 1993-2006³⁴, the average scale of net FDI in Poland amounted to 3.4% of GDP and was higher than in the Ukraine (2.5%) and in Lithuania (3.3%) but it was significantly lower than in Hungary (6.2%), the Czech Republic (5.7%), and the Slovak Republic (5.0%).

Figure 4

Net foreign direct investment in 1993-2006 as a percentage of GDP



Source: As in Figure 1.

The FDI inflow was a crucial element in the reintegration of the analyzed countries with the European and global market by affecting both the supply and demand sides of the transition economies.

3.3. Foreign trade liberalization

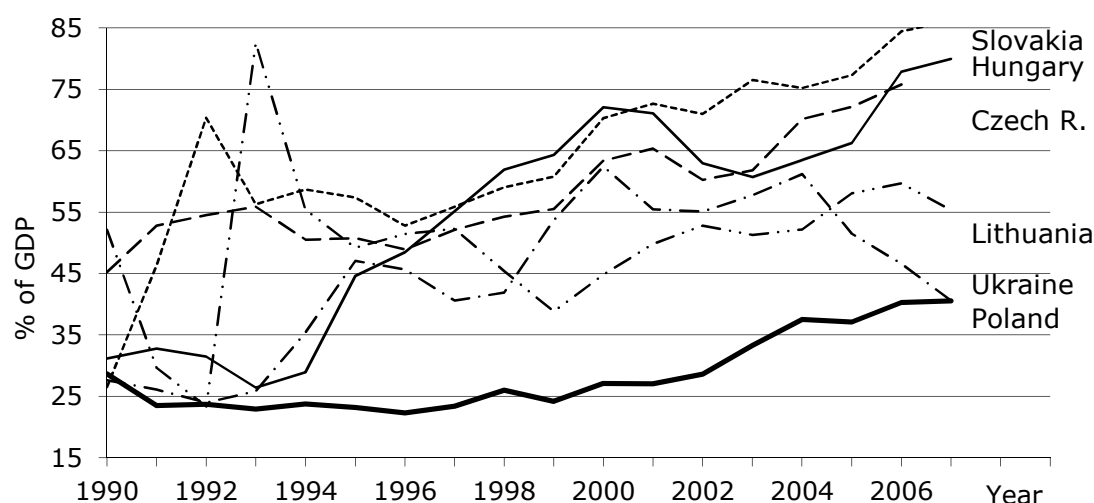
3.3.1. The scope of economies openness

As noted (see Sections 1.1 and 2.2), the liberalization of foreign trade was a common characteristic of stabilization programs implemented in all analyzed countries. Already on the threshold of a market transformation, the importance of exports and imports of goods and services was differentiated. Largely, it was a function of the domestic market size, the availability of resources, and the competitive capacity of exports. Gradually, the structure of the foreign trade altered, mainly under the influence of FDI (see 3.2).

The ratio of the export value of goods and services to the GDP is given in Figure 5. As the data indicates (Figure 5), in Poland, the Slovak Republic, and the Ukraine, the share of exports of goods and services in the GDP was at a similar in 1990, which was a relatively low level.

Figure 5

Exports of goods and services as a percentage of GDP



Source: As in Figure 1.

Exports were very important for such small economies as the Czech Republic (45.2%) and Lithuania (52.1%). The following years of the transition process were characterized by a very high volatility in the share of exports in the GDP. This was a result of both changes in the value of the exports and the volatility of GDP dynamics in the countries in transition. The highest variation appeared in Lithuania and the Ukraine (see Figure 5). It resulted from a strenuous search for diversification in the geographical structure of exports and the limitation of the dependence upon the market of the former Soviet Union.

In the case of Poland and the Czech Republic in 2004³⁵, the effect of trade creation appeared (an increase in the share of exports in the GDP amounted to 4.2 and 8.3 percentage points, respectively). In general, with the exception of Lithuania, all the studied countries significantly increased their ratio of exports to the GDP (the greatest was in Hungary, by approximately 40 percentage points.) The increase in export capacity can be,

without much error, interpreted as the ability of the analyzed countries to meet strong competition in the Single European Market³⁶.

3.3.2. Exports of high-technology products

The evaluation of development of the economies' competitiveness and exports requires the consideration of the effects of innovativeness on the change in the structure of exports, in particular, an analysis of the share of high-technology products in total exports (Table 6). The data given in Table 6 clearly indicates that the initial situation of Polish exports of high technology was disadvantageous.

Table 6

The share of high-technology products in total exports

Country	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005	2006
Poland	2.71	2.68	2.55	2.58	3.30	3.10	2.77	3.07	3.24	3.85	3.81
Hungary	5.47	6.82	18.01	22.57	26.42	24.09	24.81	25.65	28.92	25.69	23.99
Czech Republic	3.27	5.00	7.29	8.32	8.15	9.63	13.24	13.23	12.91	12.75	14.10
Slovakia	ND	3.79	3.77	4.48	4.8	4.18	3.15	3.71	5.36	7.28	6.21
Lithuania	ND	3.59	3.68	3.13	4.16	4.86	3.61	4.67	4.67	6.12	8.03
Ukraine	ND	ND	4.22	4.25	5.14	4.55	4.74	6.77	6.11	3.66	3.30

ND – no data.

Source: WDI database.

This was due to both the longstanding inattention and the relatively low spending on research and development and the predominant significance of the inter-industry trade, based on the relatively rich endowment of raw materials and labor resources. The low share of high technology products in total exports in the first half of 1990s was also characteristic for the other countries of the region (Table 6). Over time, as a result of FDI (see Section 3.2.), the first significant modernization of the export structure and an increase in the value of high-technology products in total exports took place in Hungary and the Czech Republic. The biggest success was achieved by Hungary with an increase from 5.47% to an average for the years 2003-2006 amounting to 26.10%. Against the example of Hungary and the Czech Republic, and to a lesser extent Lithuania and the Slovak Republic, Poland

attained a share of the high-technology products in the total exports that amounted to around 3.8%, which should be considered a failure. This opinion is all the more justified because the quality of human capital in Hungary (see Section 3.1) did not differ from that in Poland.

3. 4. Structural changes as a background and outcome of the economic growth

So far, based on the findings presented in Section 1 of the paper, the focus has been paid to the identification and assessment of the most important initial conditions and factors determining the course of the transition from a centrally planned to a market-led economy. On the background of the transformation processes in Poland, as in the other economies, important structural changes occurred. On the one hand, they were the result of these processes, on the other hand, they objectively hampered their dynamics. Due to the specific situation in Poland, unemployment is considered as a main side effect of the process in this paper. Moreover, in order to emphasize the features of the Polish transition, attention should be paid to the special role of agriculture in the employment structure. The unemployment, the very low employment rate and the specificity of Polish agriculture had a significant impact on the growth of income diversification and social inequality and the general assessment of Poland's achievements of the years 1989-2009.

3.4.1. Unemployment

Open unemployment was an unknown phenomenon in the centrally planned economies. The actual scale of the wasted labor resources in the form of over employment was high. The fact of being formally employed obfuscated the perception of majority of the citizenry of the actual status quo. Implementing the hard budget constraints at the firms' level, the liberalization of trade along market as an input verifier, led to emergence of unemployment. This phenomenon became the most socially severe side effect of the transition process³⁷. As clearly indicated by the data in Figure 6, considering the deferment of the stabilizing program implementation starting point, there was an increase in the unemployment rate in each analyzed country. How-

ever, the scale of the increase was different in each country (see Figure 6) and depended on structural and cyclical factors such as: the enterprises' speed and scope of adjustment to the market signals, the degree of work-force mobility, and its supply and demand structural mismatches. Important factors for the growth and durability of unemployment were the circumstantial solutions regarding the access to benefits for loss of employment and to provision of health care. The path and the scale of unemployment in Poland and in the Slovak Republic were similar (Figure 6). High double-digit unemployment rates also occurred in Lithuania. Without a doubt, in Poland, the Slovak Republic, and

Figure 6



Source: The author's own calculations, based on data derived from Transition Report (2008).

Lithuania, the unemployment rates were the highest, and thus constituted the most nagging side effect of the transformation process³⁸. At the end of the analyzed period, the unemployment rate in the countries most severely affected by this phenomenon began to decrease. This process was the result of a combination of favorable conditions: prosperity in the major EU economies and in the world, FDI's results and migration opportunities after May 1, 2004.

3.4.2. The role of agriculture

In the period directly preceding the reforms and the market transformation, the share of agriculture in the creation of GDP was the highest in Lithuania and the Ukraine, which amounted to 27.08% and 25.57%, respectively (Table 7).

The relatively high share of the sector in GDP formation also occurred in Hungary (14.54%). In Poland, the Czech Republic, and the Slovak Republic, agriculture accounted for less than 10% of their GDPs in 1990. As the years went by, strong tendencies to reduce the share of agriculture in GDP formation occurred. The process was particularly visible in the Ukraine and Lithuania, where the share of agriculture in the creation of GDP decreased by 21.8 and 18.2 percentage points (see Table 7). During the analyzed period, the significance of agriculture decreased in Poland and Hungary to a level of approximately 4% of their GDP, and in the Czech Republic and the Slovak Republic, to less than 3% of their GDP.

Table 7

The share of agriculture in the GDP formation

Country	1990	1991	1993	1995	1997	1999	2001	2002	2003	2004	2005	2006	2007
Poland	8.26	6.65	6.60	8.01	6.62	5.22	5.10	4.52	4.40	5.11	4.64	4.49	4.27
Hungary	14.54	8.91	6.83	7.06	6.09	4.99	5.22	4.63	4.30	4.79	4.33	4.17	4.20
Czech Republic	6.24	5.99	5.56	5.00	4.22	3.85	3.95	3.32	3.13	3.30	2.94	2.69	ND
Slovakia	7.41	5.69	5.57	5.27	4.75	4.24	4.24	4.56	4.09	4.02	3.85	3.91	2.86
Lithuania	25.57	22.78	21.67	15.40	14.41	14.28	16.37	14.62	12.10	11.90	10.40	8.62	7.40
Ukraine	27.08	16.72	14.95	11.39	11.36	8.29	7.01	6.95	6.34	5.77	5.60	5.08	5.25

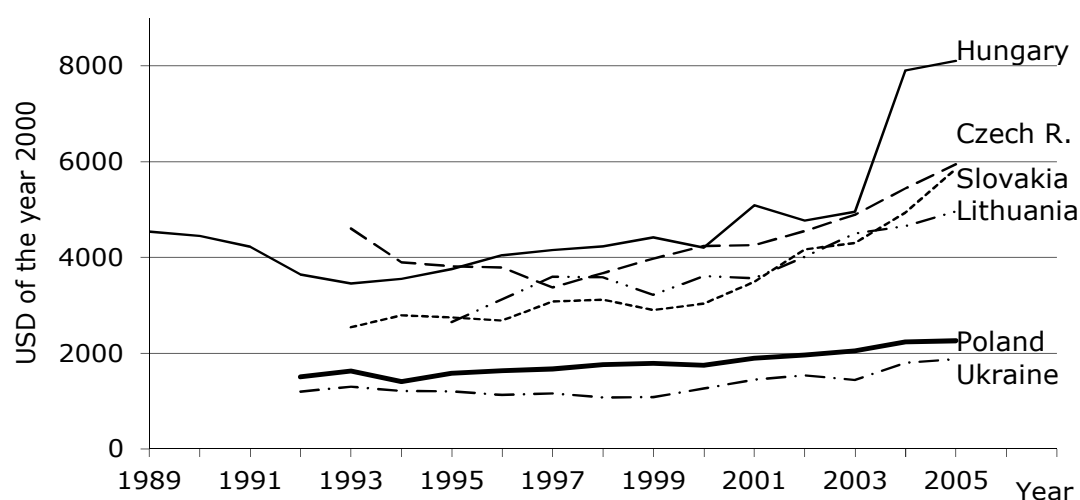
Source: WDI database.

During the transition process, the reduction in the share of agriculture in GDP was accompanied by a tendency towards a reduction in the share of agriculture in total employment. The reduction of employment in agriculture resulted from the rationalization of employment, caused by the withdrawal of subsidizing this sector of the economy by the governments. The highest share of employment in agriculture during the years 1989 and 1990 took place in Poland, the Ukraine, and Lithuania, and it amounted to more than 25%, over 19%, and about 18%, respectively³⁹. In 2005, despite the de-

cline in the above mentioned countries, the share was still relatively high and amounted to 17.4% in Poland, 19.4% in the Ukraine, and 14% in Lithuania. In the other countries, the shares were much lower and oscillated between 4% (the case of the Czech Republic) and 5% (Hungary)⁴⁰. The relatively slow decline in share of agriculture in the total employment, on the one hand, posted a protection against a substantial influx of often low-qualified workforce to the cities, on the other hand, it led to continuation of the low productivity of the workforce (Figure 7) in this sector⁴¹. As shown in the data presented in Figure 7, two clear regularities can be noted in the analyzed group of countries. The first one is the stable and low productivity in the Ukraine (from about 1100 to 1800 USD per employee) and in Poland (from about 1400 to 2200 USD). The second is the emergence of the group of the other countries, where the productivity of employment in agriculture is much higher and is characterized by higher growth dynamics.

Figure 7

Value added in agriculture per employee (in constant USD of 2000)



Source: As in Figure 1.

In particular, this was visible in the case of Hungary, where the value added per employee in agriculture was almost four times higher than in Poland during the years 2004 and 2005. This feature of agriculture in Poland, in considerable part, was the result of the agrarian structure, the production structure, and the overemployment in this sector of the economy. The ex-

cessive employment in agriculture was often a consequence of the lack of adequate job opportunities in urban areas located within the vicinity of the residences of agricultural workers. The low labor productivity in agriculture influences both the diversification of income in Poland and the relatively low level of GDP per capita (the issue is discussed in Sections 3.4.3 and 4).

3.4.3. Social disequilibrium

As was already stressed in Section 2 of this paper, one of the most important effects of re-establishing the market mechanism and the reallocation and realignment of the economic value of resources and the economic structure of the countries in transition was the demonstration of wealth inequalities, which were accrued over the years and often concealed. These processes were accompanied by the inevitable increase in diversity of current income⁴². Understood in this way, the increase in the social imbalance (see Table 8) resulted from a combination of numerous factors of a structural and short-term, transitory nature⁴³. The most important factors are primarily the effects of the stabilization package. These included the tightening of the budgetary expenditure policy and the introduction of the new forms of taxation and the liberalization of prices and thus inflation in the first transition phase (see Sections 1.2 and 2.1). Within the anti-inflationary policy, a differentiating impact was exerted by the inhibition of the excessive growth of wages in the public sector, the restructuring of the state enterprises, the increase in structural unemployment (see Section 3.4.1), and the growing importance of the private sector subjected to the hard budget constraint. The development of the private sector and the accompanying reconstruction of the capital market fostered the growth of the asset turnover and the appearance of growing property rent and capital gains. An important growth factor for the social imbalance was also the liberalization of foreign trade (see Section 3.3) and the related competitive pressure from the importers. The new and imported price structure, in view of the relatively limited internal mobility of production factors, led to significant changes in the relative rates of return on these factors, in accordance with the assumptions of the Heckscher-Ohlin model⁴⁴. The situation in agriculture and the related low labor productivity in this sector had a strong differential ef-

fect on incomes, especially in Poland (see Section 3.4.2). The trade liberalization and the liberalization of the capital flows accelerated technological changes. Further increase in income diversification stemmed from the importance of education and talents in the areas of management. It led to a rapid increase in the salaries of executives and highly qualified engineering and economic staff. As a rule, studies on changes in income diversification are based on the Gini Index. However, its value is strongly dependent on the quality and type of the initial data. Therefore, any comparison must be made with caution⁴⁵

Table 8***Gini Index, based on comparable per capita data on consumption***

Country	1988- -1992	1993- -1995	1996	1997	1998	1999	2000	2001	2002	2003	2005
Poland	0.235	0.264	0.268	0.277	0.296	0.302	0.305	0.307	0.320	ND	0.349*
Hungary	0.210	0.232	ND	ND	0.250	0.259	0.254	0.251	0.250	ND	ND
Lithuania	0.224	0.373	0.323	ND	0.303	0.304	0.306	0.305	0.305	0.325	ND
Ukraine	0.233	ND	0.325	ND	ND	0.285	0.293	0.303	0.274	0.268	0.282*

*Data derived from World Development Indicators 2008 database.

Source: Mitra, Yemtsov (2006, p. 10).

The data presented in Table 8 (except the year 2005) are based on data on consumption per capita⁴⁶. The average value of the Gini Index, during the years 1988-1992 in the analyzed countries, was similar and ranged from 0.210 (Hungary) to 0.234 (Poland)⁴⁷. Analyzing the data on the income diversification in Poland (Table 8), it should be noted that the differences arose throughout the whole period of transition and were the highest among the countries included in Table 8. According to the estimations presented in the WDI 2008, the income diversification in the Czech Republic and the Slovak Republic was lower and amounted to circa 0.254-0.258 in the mid-1990s. In the following years, the changes in the Gini Index for these countries were slight.

4. GDP per capita and the competitive position as the total measures of the transformation progress

While making an attempt to prepare the overall assessment of the course and the results of the transformation process, one should take into consideration the circumstances that accompanied this process. The outline and analysis of those conditions are presented above. As is clear from this analysis, some of them had a unique and specific nature, while some represented a set of common characteristics. Given the inheritance of centralized, totalitarian system (with its milder variant in Poland and Hungary) and the opportunities those countries could have used in the phase of growth, it should be objectively concluded that the comparative advantages, which Poland had on the threshold of the transition process, eroded relatively quickly⁴⁸. The evaluation of the Polish economic transformation requires objective measuring instruments. Moreover, they need to pertain to the results achieved by countries similar to Poland. A natural measure of the overall economic performance is thus gross domestic product⁴⁹.

While using GDP, it should be noted that Poland was rapidly developing during the first years of transition and was the first country to exceed the pre-transition level of the GDP, which was achieved in 1989. As indicated in the data presented in Table 9, Poland achieved the highest level of the real GDP in 2006 and 2007, compared with the situation in the year 1989⁵⁰. In the year 2006, Poland was the only country in the region that exceeded the average GDP level for the entire region, which at the time amounted to 142% of the GDP reached in 1989. The high growth rate in the Slovak Republic led to a significant increase in the GDP of the country in the year 2007. As a result, in 2007, the GDP amounted to 154% of that recorded in the Slovak Republic in 1989 (Table 9). Nevertheless, Poland reached the highest level of the GDP in 2007 when compared to the year 1989 (169%). At that point of time, the average for the region amounted to 151%⁵¹. The diversified situation in Lithuania and the Ukraine (see Table 9) is also worthy of attention. In the case of Lithuania, the GDP level was low and amounted to 106% and 116%, respectively, of the GDP recorded in the year 1989. However, the situation was even more difficult in the Ukraine. In 2006, its GDP accounted for only 63%, and in the year 2007 for 68% of the

GDP reached in 1989 (Table 9). This result is significantly lower than the average for the economies of the Commonwealth of Independent States, which amounted to 94% and 102%, respectively, of the GDP recorded in 1989⁵².

Table 9***Estimated level of the real GDP in 2006 and 2007 (1989=100)***

Country	2006	2007
Poland	158	169
Hungary	134	135
Czech Republic	129	139
Slovakia	137	154
Lithuania	106	116
Ukraine	63	68

Source: EBRD (2007 and 2008).

Table 10 presents data on the formation of GDP per capita⁵³, based on purchasing power parity. The defined measure takes into account the effects of the GDP growth, as well as the influence of the differences in price levels between countries and of changes in population (see Section 3.1.). In order to compare the transformation results achieved in Poland to the ones recorded in the selected countries of the region, Poland's GDP was calculated as a percentage of the GDP of the countries under examination.

Table 10***Poland's GDP per capita as a percentage of GDPs per capita of the analyzed countries***

Country	1990	1992	1994	1996	1998	2000	2002	2004	2005	2006	2007
Hungary	65	72	76	84	85	85	80	80	80	82	86
Czech Republic	50	53	57	58	66	69	68	69	67	67	68
Slovakia	50	77	82	82	84	91	87	87	85	83	80
Lithuania	64	82	86	120	116	123	110	101	96	95	92
Ukraine	100	115	188	265	308	313	276	243	243	239	236

Source: The author's own calculations based on data from WDI database.

As indicated by the data given in Table 10, the relative level of the Polish GDP per capita in 1990 was comparable to that in the Ukraine. However, it accounted for approximately 64-65% of the GDP per capita in Lithuania and Hungary, and it was only half of the GDP per capita in the Czech and the Slovak Republics. These values clearly show the size of the initial economic gap between Poland and Czechoslovakia, Hungary, and Lithuania.

During the first years of the transformation in Poland, the GDP per capita was growing faster than in the neighboring countries. In the year 2000, the gap in relation to Hungary and the Czech Republic decreased by about 20 percentage points against Slovakia and Lithuania by about 40% and 60%, respectively, and the Polish GDP per capita increased more than threefold (Table 10) compared to the Ukraine. After the years 1999-2000, the absolute and relative dynamics of the Polish GDP per capita deteriorated (i.e. the Slovak Republic and Lithuania started to develop much faster than Poland). Nevertheless, when comparing the relative levels of the measure achieved in Poland in 2007 with the initial values recorded in 1990, the scale of progress is clearly visible. However, the scale of structural constraints and unseized development opportunities is also visible, arising from the insufficient determination of the succeeding governments and the slow-down in reforms⁵⁴.

The analysis of the position and stage of the development of competitiveness, prepared within the Global Competitiveness Ranking (Section 1.3.), provides interesting conclusions. During the recent years, the Czech Republic achieved the best position. This is the only economy among the examined countries that was included in the third stage of the development of competitiveness within the GCR in years 2008-2009. This fact means that the Czech Republic was recognized as the innovation-driven economy. Hungary, the Slovak Republic, and starting from the years 2008-2009, Lithuania and Poland are classified as economies in transition between the stage of the efficiency-driven and the innovation-driven economies⁵⁵. The economy of the Ukraine has recorded a systematic progress during the recent three years and has been advanced from the factor-driven economy to a group of efficiency-driven economies⁵⁶. These processes are reflected by the changes in relative position of the compared countries in the GCR rankings. Table 11

summarizes changes in the competitive position of Poland in the group of the analyzed countries during the years 2001-2008.

As is shown in Table 11, Poland, between the years 2001-2008 (among the analyzed group of countries), recorded the highest position in the classification in the year 2001. This was also the highest international competitive position achieved by Poland (the 41st place in the total ranking of all countries covered by the GCR). At the same time, the recorded position was lower than that of Hungary (the 28th place), the Czech Republic, and the Slovak Republic.

Table 11

Relative position of Poland among the analyzed countries according to the GCR in 2001-2008

2001	2002	2003	2004	2005	2006	2007	2008
Hungary	Hungary	Hungary	Lithuania	Czech Republic	Czech Republic	Czech Republic	Czech Republic
Czech Republic	Lithuania	Czech Republic	Hungary	Hungary	Slovakia	Lithuania	Lithuania
Slovakia	Czech Republic	Lithuania	Czech Republic	Slovakia	Lithuania	Slovakia	Slovakia
Poland	Slovakia	Slovakia	Slovakia	Lithuania	Hungary	Hungary	Poland
Lithuania	Poland	Poland	Poland	Poland	Poland	Poland	Hungary
Ukraine	Ukraine	Ukraine	Ukraine	Ukraine	Ukraine	Ukraine	Ukraine

Source: The author's own calculations based on Global Competitiveness Reports.

Moreover, in the year 2001, the difference between Poland and the leader of the group (in this case Hungary) was the smallest but still amounted to 13 positions. During the following years, the competitive position of Poland, according to the GCR, was weaker, and the gap to the leader of the group ranged from 12 ranking positions (in 2003) to as much as 24 (in the year 2004). In 2008, the relative position of Poland within the group had improved (see Table 11); however, in the absolute classification, Poland fell from the 51st position in 2007 to the 53rd in 2008⁵⁷. Therefore, the relative competitive position of Poland after the year 2001, with the exception of the year 2008, was stable but low. The following is also worthy of attention: the stable and relatively high position of the Czech Republic, the improvement of the Slovak Republic and Lithuania, and the worsening position of Hungary

(Table 11). Hungary is an example of a country that had been a leader in implementing changes for many years, which lost this position, due to a lack of will and ability to solve the issues of the fiscal policy, the volatility of the economic policy and the deterioration in the quality of the institutional environment. Throughout the period, the Ukraine was ranked lowest among the analyzed countries, and its gap, compared to the leaders of the group was increasing. The Ukraine is a country that has not been able to seize the opportunities that opened for all the countries of the region after the Polish success of the year 1989⁵⁸. Competitiveness ratings are sometimes criticized for their diagrammatic view of the economies and simplifications. However, the above evaluations, derived from the GCR, are convergent with the general picture of the transition that emerges from this analysis. Moreover, they also shed further light on the course of the processes, simultaneously indicating the problematic areas that inhibit the process of catching-up with the economies of the more developed countries.

5. Conclusions

Public disputes and controversies concerning the transformation process and its economic performance are burdened with a high degree of subjectivity and ignorance of the specific initial conditions and the structural limitations accompanying the market reforms. In Poland, as in the other countries of the region, the most recent economic history continues to produce emotions. Moreover, it is instrumentally used, in particular by populist parties and organizations, to attack the authors of the reforms and those who took the risk of managing the process of the institutional and market reconstruction. In the light of the presented analysis, it can be claimed that Poland and Hungary were the best prepared for the transition from a centralized economy to a market-led economy in terms of social capital. In the case of Poland, that was a result of a strong tradition of the social self-organization and the existence, even in a period of dominance of a centralized system, of the alternative pathways of social capital development. However it is often forgotten or ignored that the initial economic situation of Poland was very unfavorable. This refers to the stagnation of the 1980s, and above all, to the structural characteristics of the Polish economy.

The relative abundance of natural resources and a centralized system of allocation for decades formed the structure of the production capacity. During the transition process, those rather constituted ballast than determined the comparative advantage of the economy. In addition, the low capacity to generate domestic savings, and as a consequence relatively low investment level, together with a high employment in agriculture, led to a low level of capital-labor ratio and, more generally, to low productivity. This feature of the Polish economy, combined with the lowest employment rate in Europe, hampered the realization of social aspirations.

Despite the limitations, mainly arising from the structural specificity of the Polish economy, in comparison to the other countries, the results achieved after the institutional breakthrough of the years 1989-1990 should be highly evaluated. In the light of the presented analysis, it is obvious that Poland has improved its position, measured by the most synthetic measure - the gross domestic product per capita, against all the analyzed countries of the region. Such a conclusion may be difficult to accept for some participants of the transition process, since some colloquial opinions about the high, excessive, social cost of the transition still linger. The surveys indicate that this cost measured, for example, by the rate of unemployment was significant; however, at the same time, it was not the highest, considering the starting conditions and the international comparisons. While highly evaluating Poland's transformation process, the analysis also shows how many opportunities of an even more rapid reduction of the social gap of development has not been seized. The most important of them are as follows: the lack of effective response (regarding quantitative and qualitative economic policy) to the lowest employment rate in Europe, the negligence of bringing the privatization process to a conclusion, reform fatigue and slowdown, which are the fiscal reforms that could facilitate the ability of the Polish economy to meet the requirements of euro area membership and allow Poland to improve its competitive position.

An important test for the durability of the achieved economic results and the adaptability of the analyzed countries will be the way they respond to the global financial crisis. The participation of Slovenia and the Slovak Republic in the euro area will allow one to compare both, their autonomous

adaptation and the reactions in terms of the fiscal policy, with those of other countries of the region that have not come into this area yet. In the case of Poland, next to the challenges stemming from the unfavorable conditions of the external environment, essential will also be the abilities to increase the domestic savings supply and investment rate, to increase the employment rate, the speed of changes regarding creation of the GDP, and setting in motion of efficiency and competitiveness reserves inherent in the improvement of the functioning of the widely understood institutional environment.

NOTES

- ¹ For more information on the classification of the transformation methods read, for example: Kowalski, Wihlborg, Vensel [2007, pp. 155-156].
- ² 1st January 1993 Czechoslovakia ceased to exist. In its place, came into being the Czech Republic and the Slovak Republic.
- ³ Lithuania announced regaining of its independence in March 1990. However, it was not widely recognized by other countries, including the USA, until September 1991.
- ⁴ In the paper, seeking to preserve the principle of uniform statistical sources, the data was derived from the *World Development Indicators*, and to a lesser extent from the *EBRD Transition Reports*.
- ⁵ See, for example: Gorynia, Jankowska [2005, pp. 223-237]; Gorynia [2007]; Kowalski, Janc [1999, pp. 74-79].
- ⁶ See, for example: Williamson [2000, pp. 595-613]; Paldam, Gundlach [2008, pp. 65-100].
- ⁷ Compare, for example: Kornai [1985]. See also: Balicki [1979]; Matysiak [1984]; Wilczynski [1985]; Wilczynski [1991].
- ⁸ Williamson [1990].
- ⁹ More on the controversy surrounding this concept can be read in: Wojtyna [2008].
- ¹⁰ At the time also existed a systematized knowledge about the experiences of Hungary referring to the implemented reforms, and about partial and unsuccessful attempts of reforming the functioning of the Polish economy during 1980s without changing the essence of the resource allocation mechanism and the foundations of economic and political system.
- ¹¹ At the end of 1989 the free market exchange rate (at the exchange office) was four times higher than the official rate of the NBP, and about 80% of household cash holdings was kept in the US dollars and German Marks. More on this issue can be read in: Kowalski, Stawarska [1999, pp. 351-374].

- 12 Compare: Campos, Coricelli [2002]; Malaga [2004]; Gylfason, Hochreiter [2009].
- 13 Compare: Wojtyna [2008]; Kowalski, Wihlborg, Vensel [2007, pp. 155-156]; Gylfason, Hochreiter [2009]; Rodrik [2007]; Dixit [2007].
- 14 Compare: Gylfason, Hochreiter [2009]. See also: Czerwiński [1972, pp. 352-359].
- 15 Given the relatively short time perspective of the analysis the set of growth determinants can be considered as constant, and reflecting the significant share of the initial structural conditions of the analyzed economies.
- 16 Porter [1990].
- 17 Compare: Gorynia [2007, p. 93 and the following].
- 18 Gorynia [2007, p. 93].
- 19 *Global Competitiveness Reports*, World Economic Forum, Geneva.
- 20 In particular this concerns, i.e.: regularities within rates of return on production factors (Hecksher-Ohlin model), conditions of inter-industry and intra-industry trade, and significance of innovations. See also: Rynarzewski, Zielińska-Głębocka [2006]; Krugman, Obstfeld [2006].
- 21 Polish democratic opposition, thanks to the broad social base and self-organization tradition, was the best prepared to exercise power. The situation looked differently in the other countries. For example, J. Urban, one of the leading dissidents in Czechoslovakia recalled in the *Lettre Internationale* in 1995 that, in the year 1989, the active opposition in the country amounted to about 60 people, and they could count on around 500 supporters. According to J. Urban, the existing opposition felt totally isolated and their contact with the society was very difficult.
- 22 In large part, this resulted from the structure of GDP formation (high share of agriculture) and the employment of more than 25% of the workforce in this sector. The issue is raised in Section 3.4.2 of this paper.
- 23 O.J. Blanchard, when analyzing the experience of the first years of the transformation, emphasizes the importance of general implementation of rigid budget constraint. Compare: Blanchard [1994, pp. 1169-1177].
- 24 The Ukraine regained its independence in 1991.
- 25 See more on this issue in: Barisitz [1999].
- 26 At the end of 1980s, the USSR was the most important trading partner for practically all analyzed countries. Poland's turnover with the GDR, at the time, represented about 8% of Polish foreign trade.
- 27 For example, Lithuania during the years 2004-2006 had the highest emigration rate (the number of emigrants per 1000 inhabitants) in the age group 25-39 years, which amounted to 10.6. In the other age groups, during the years 2004-2006, the country recorded an influx of population. Poland, during this period, was characterized by the outflow for each age category, ranging from 0.1 in the group 55-64 years to 0.7 in the group 15-24 years. For more information read: Schreiner [2008, p. 95].
- 28 It should be emphasized that, during the analyzed period (1990-2005), the average rate of population growth in the group of countries with medium income level oscillated between 1.1-0.8%. See World Bank [2007, pp. 40-42].
- 29 This phenomenon is interesting in itself, however, its analysis goes beyond the modest scope of the present study.

- 30 Compare: World Bank [2007].
- 31 World Bank [2007], *World Development Indicators*. WDI provide no comparable data for the Czech Republic and the Slovak Republic.
- 32 Data derived from the WDI. Very rapid growth in the student number and its concentration on the field of humanities and social studies raises doubt over the matching between qualification supply and the demand for workforce, and contemporary technological challenges.
- 33 This regularity is particularly visible in the case of Lithuania and Hungarian.
- 34 According to the WDI, during the years 1989-1992, the inflow of net FDI to Poland ranged from 0.1% of the GDP in 1989 to 0.8% in the year 1992. In Hungary, it was significantly higher and amounted to 0.6% in 1989 and 4.4% in 1991.
- 35 May 1, 2004 was the accession of 10 Central European countries (including Poland, Malta and Cyprus) into the European Union.
- 36 The analyzed countries (with the exception of the Ukraine) export over 65% of their goods and services exports to the market of the EU-27.
- 37 When examining the practice of stabilization programs (Sections 2.1 and 2.2), it is easy to notice that the main effort and attention was focused on fighting inflation, which undoubtedly, especially in Poland, jeopardized the base of the economy. However, it quickly became clear that structural unemployment was the biggest ballast of the transformation process.
- 38 The relatively mild course of the labor market adjustment process in the Ukraine is worthy of attention. It resulted from the long-term state dominance in the economy and the lack of genuine firms restructuring. The price of this status quo was a low, and sometimes negative, economic growth rate and the expanding gap between the Ukraine and the other analyzed countries in transition. The issue is mentioned in Section 4 of this paper.
- 39 Such a share (about 20% of the total employment) was recorded in France at the beginning of the 1950s.
- 40 The data concerning employment in agriculture is derived from the WDI 2008.
- 41 In Poland and Lithuania, the retention of employment in agriculture at a relatively high level prevented from formation of tensions in cities. Those tensions could have occurred, if the influx of people seeking employment in industry and services had gone together with the low dynamics of job creation in those areas.
- 42 The phenomenon of the increasing social unbalance became subjectively more noticeable after the ostentatious consumption had become a part of a new culture in some circles of the transforming societies.
- 43 Compare: Mitra, Yemtsov [2006, p. 11 and the following].
- 44 Compare: Salvatore [2007, pp. 121-171].
- 45 Most studies are based on official data on incomes. See, for example, *World Development Indicators*. Such data, particularly during the first years of transition, overestimated the actual scale of the income spread. Together with the improvement of statistical reporting, which resulted from the progressing unification to the EUROSTAT, the data becomes more comparable.
- 46 Compare: Mitra, Yemtsov [2006, p. 7 and the following].

- 47 In 1990, the diversity of income and wealth in the Ukraine and Lithuania (expressed by the Gini Index) was the lowest among all the republics of the former USSR. For more information see Kakwani [1995, p. 42].
- 48 The author means the social mobilization and the ability of the society to self-organize themselves (NSZZ "Solidarność"). Poland could benefit not only from the Commercial Code existing since the interwar period, but also from an established culture of entrepreneurship and experience of the relatively large private sector.
- 49 Calculated both, at constant prices and taking into account the purchasing power parity.
- 50 This reflects both the relatively high growth rate during the period of transition and the scale of the crisis in Poland during 1980s.
- 51 EBRD [2007] and [2008].
- 52 Ibidem.
- 53 GDP per capita is a combination of the three basic macroeconomic factors: the labor productivity, the number of working hours and the employment rate.
- 54 During the analyzed period, Poland had the lowest rate of employment among the EU-25. For more information read: Gorynia, Kowalski [2008, p. 73].
- 55 Compare: World Economic Forum [2008].
- 56 Ibidem.
- 57 Ibidem.
- 58 On this topic see more: Tiffin [2006].

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