Janusz Heller, Wioletta Wierzbicka

Some Macroeconomic Effects of the System Transformation in the Polish Economy between 1990–2007

Olsztyn Economic Journal 4/1, 1-13

2009

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.



DOI 10.2478/v10021-009-0001-7

SOME MACROECONOMIC EFFECTS OF THE SYSTEM TRANSFORMATION IN THE POLISH ECONOMY BETWEEN 1990–2007

Janusz Heller, Wioletta Wierzbicka

Department of Macroeconomics University of Warmia and Mazury in Olsztyn

Key words: system transformation, economic growth, unemployment, inflation.

Abstract

The aim of the research was to evaluate system transformation processes, i.e. market changes and European integration occurring in parallel. Both of these conditions have been the most significant influences on the economy of the countries of Central and Eastern Europe since 1990. The basis for this evaluation was an analysis of the changes in macroeconomic indicators specifying the level and the rate of GDP increase, inflation and unemployment in 1990–2007. It was established that the Polish economy developed faster in this period in comparison to the average level of 15 existing EU member states. Among the new members of the European Union (since 1 May 2004), Poland is one the most slowly developing states – with the highest unemployment rate, but also with relatively low inflation.

NIEKTÓRE MAKROEKONOMICZNE EFEKTY TRANSFORMACJI SYSTEMOWEJ W POLSKIEJ GOSPODARCE W LATACH 1990–2007

Janusz Heller, Wioletta Wierzbicka

Katedra Makroekonomii Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: transformacja systemowa, wzrost gospodarczy, bezrobocie, inflacja.

Abstrakt

Celem badań jest ocena procesów transformacji systemowej, czyli równolegle postępujących przemian rynkowych oraz integracji europejskiej. Obydwa te uwarunkowania wywierają najbardziej znaczący wpływ na gospodarki krajów Europy Środkowo-Wschodniej od roku 1990. Podstawą tej oceny była analiza kształtowania się makroekonomicznych wskaźników charakteryzujących poziom i tempo wzrostu PKB oraz inflację i bezrobocie w latach 1990–2007. Stwierdzono, że polska gospodarka rozwijała się w tym okresie szybciej od przeciętnego poziomu w 15 krajach tzw. dawnej UE. Wśród nowych członków UE (licząc od 1 maja 2004 r.) należymy do najwolniej rozwijających się, o najwyższym bezrobociu, ale też o stosunkowo niskiej inflacji.

Introduction and the aim of research

In the last decade of the previous century, Poland embarked on the path of system transformation. Most generally, the notion of system transformation processes in Poland can be described as the shift from a centrally planned economy, which functioned in a non-democratic state, to a market economy – common in democratic systems. In this context, we naturally talk only about the economical aspects of transformation processes, since only economic effects are subject of this study. However, it should be remembered that economic effects are influenced not only by economic conditions, but also by a wide range of other factors.

The definition of system transformation contains two constituent elements, i.e. political transformation (a change of political system) and economic transformation (actions aiming at creating market conditions for operations of business entities) (BAŁTOWSKI, MISZEWSKI 2006, pp. 23, 24). However, it appears that the definition quoted above does not exhaust the entire notion of the system transformation in Poland and in the other countries of Central and Eastern Europe. Since the beginning of those changes in Poland, parallel processes of economic integration with European Communities, as well as with other groupings and countries have been played a key role (HELLER 2003, p. 100).

Therefore, if we want to treat system transformation in the broadest possible aspect, then its definition should be modified and supplemented with aspects of international economic integration, and in perspective, perhaps also with political aspects. In this perspective, system transformation can be treated as a very general notion, consisting of three separate but closely interrelated and mutually conditioned processes. The first one consists of political transformations; the second one is the process of economic transformation, while the third one is the ongoing process of economic integration.

All of these processes have played an important role in influencing the Polish economy. Under these circumstances, it seems reasonable to examine these effects not only with reference to the Polish economy, but also to the other countries of Central and Eastern Europe who also joined the European Union on 1 May 2004. The aim of the research therefore became an assessment of selected macroeconomic effects of system transformation processes which had the most significant impact upon the economies of Central and Eastern Europe countries between 1990 and 2007.

Subject, scope of research and methods applied

The subject of the research consists of selected macroeconomic effects of system transformation processes in Poland. The study was carried out on the basis of an analysis of changes in macroeconomic indicators specifying the levels and rates of GDP increase, inflation and unemployment. The level and the rate of economical growth was measured with the value of GDP per inhabitant of the country along with the percentage increase of this indicator. Unemployment was measured using the unemployment rate indicator and the level of the general price increase rate was measured with the CPI inflation rate indicator.

The time scope of the study for Poland is the period from 1990 to 2007, whereas the comparative analysis of the results achieved by Poland with reference to the examined countries (due to the accessibility of data published by Eurostat) was carried out for the period of 1996/1997–2007.

The paper applies a comparative method, which means that the results obtained in Poland are compared to the countries that also joined the European Union on 1 May 2004, as well as to average indicators for the existing European Union member states. Thus, it has been assumed that the effects accompanying system transformation processes are a measure which objectively describes the whole period of these complex transformations.

Level and rate of economic growth

Poland, just like other countries which began their system transformation in the 1990s, was affected with the crisis at the beginning of this period. High inflation, production and investment breakdown and reduced employment initially accompanied the development of private enterprises and increasing exports to western countries.

Gross domestic product in 1990 was reduced by 8% in relation to 1989; and in the following year – by another 7% (Fig. 1). Due to a radical programme of changes carried out in 1989–1990, the Polish economy experienced positive tendencies as early as in 1992, when a growth of GDP (by 2.6%) was reported for the first time since 1989. However, the most significant improvement of the economic situation in Poland took place in 1994–1997, when an annual mean GDP increase amounted to 6.4%. The rate of growth of the Polish GDP was then the highest among all post-socialist states.

The main lever of the economic growth in this period was privatisation, bringing an increase in work efficiency, on one hand, and an increase in investments on the other. The intensification of investment processes was due to the activity of the private sector, mostly from enterprises with foreign capital. Therefore, it is not an exaggeration to state that Poland, which was the first state to embark down the path of system transformation, was regarded by many observers as a state that had achieved astonishing success as regards the economic transformations among the countries of the Central and Eastern Europe (RAPACKI 2001, p. 107).

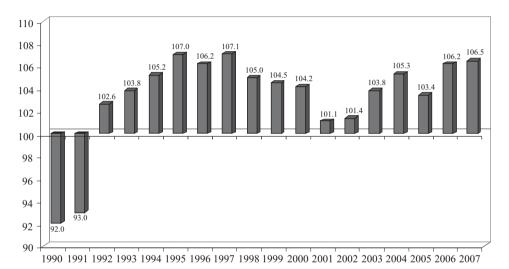


Fig. 1. Annualised real dynamics of GDP in Poland in the period of 1990–2007 (Previous year = 100) Source: Own work, on the basis of http://www.stat.gov.pl/cps/rde/xchg/gus. National Accounts, 2007 provisional estimation.

Subsequent years brought a clear decrease in economic dynamics. The mean annual GDP growth in 1999–2001 was reduced to 3.3%. The declining trend in the GDP volume was stopped in 2002–2004, when it amounted on average to 3.5% a year. Unfortunately, 2005 brought a further downturn in the GDP increase rate, while 2006 and 2007 were marked by an acceleration of the growth rate to 6.2% and 6.5%, respectively.

As mentioned earlier, the majority of the states of Central and Eastern Europe experienced a crisis, just like Poland, at the beginning of the transformation process. This crisis actually exposed the range of malfunctions of the previous economic system. In 1991 alone, the GDP growth rate decreased by 10.2%, whereas in the former Czechoslovakia – by 14.7%. In turn, after a deep crisis, most of the countries experienced rapid economic growth, lasting – depending on its dynamics – till 1994 (Hungary), 1995 (Czech Republic, Slovakia), 1997 (Poland), after which period, the majority of states again underwent

a slowdown in the domestic product growth ratio (BALCEROWICZ 1997, pp. 256–258). It is particularly visible for the Czech Republic in 1997–1998, Lithuania in 1999, Estonia in 1999 and Poland in 2001–2002 (Tab. 1).

Table 1

GDP growth rate in selected countries of the European Union (1996–2007, constant prices, in percentage in relation to the previous year)

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Czech Republic	4.2	-0.7	-0.8	1.3	3.6	2.5	1.9	3.6	4.5	6.4	6.4	6.5
Estonia	4.4	11.1	5.4	-0.1	9.6	7.7	8.0	7.2	8.3	10.2	11.2	7.1
Lithuania	4.7	8.5	7.5	-1.5	4.1	6.6	6.9	10.3	7.3	7.9	7.7	8.8
Latvia	3.8	8.4	4.7	3.3	6.9	8.0	6.5	7.2	8.7	10.6	12.2	10.3
Poland	3.8	7.1	5.0	4.5	4.2	1.1	1.4	3.8	5.3	3.4	6.2	6.5
Hungary	1.3	4.6	4.8	4.2	5.2	4.1	4.4	4.2	4.8	4.1	3.9	1.3
Slovenia	3.7	4.8	3.6	5.3	4.1	3.1	3.7	2.8	4.4	4.1	5.7	6.1
Slovakia	6.1	5.7	4.4	0.0	1.4	3.4	4.8	4.8	5.2	6.6	8.5	10.4
EU (15 states)	1.7	2.6	2.9	3.0	3.9	1.9	1.1	1.2	2.3	1.7	2.9	2.7

Source: Own work on the basis of Eurostat statistical data of 01.07.2008. – http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996.39140985&_dad=portal&_schema= PORTAL&screen=detailref&language=en&product=STRIND_ECOBAC&root=STRIND-ECOBAC/ecobac/eb012.

While analysing the data in Table 1, it can be noticed that after a period of economic revival, and more precisely, even since 1996, when Poland recorded the highest GDP growth rate of the states under examination, its situation began to deteriorate. In 2000, three out of the examined states (Estonia, Latvia and Hungary) achieved a higher GDP growth rate than Poland, while in 2001, when Poland experienced an economic breakdown, already seven countries were ahead of it. This situation slightly improved in 2003-2004, but in 2005 the Polish economy was again growing the slowest in comparison to other examined countries. 2006 brought another acceleration of the Polish GDP growth rate. It amounted to 6.2% and was higher than the growth rate of only two countries under analysis (Hungary and Slovenia), while the other countries developed faster: the growth rate for the Latvian economy amounted to 12.2%, and Estonia – 11.2%. 2007 was a continuation of a similar situation as regards Poland. Despite the increasing GDP growth rate, only two countries were still developing slower: namely Hungary and Slovenia. The Czech Republic developed at the same rate as Poland, while other examined countries developed faster.

The gap between Poland and the other examined countries of Central and Eastern Europe from the so-called "former;; European Union is particularly visible if we compare GDP per inhabitant based on PPP (Tab. 2). In 2007, it amounted in Poland to \in 13,300 and accounted for 48% of the average for existing EU member states, whereas in 1996 it amounted to \in 6,900 and accounted for 38.5% of the EU average. Therefore, in the period under examination, it grew by 92.7%, whereas in the same period, this indicator in Estonia grew by 214%, in Latvia – by 193.9%, and by 54.7% in the existing EU member states.

Table 2

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Czech Republic	11.4	11.0	12.0	12.4	13.0	13.9	14.4	15.2	16.3	17.2	18.5	20.3
Estonia	5.7	6.6	7.2	7.5	8.5	9.1	10.2	11.3	12.3	14.1	16.1	17.9
Lithuania	5.7	6.4	6.8	6.9	7.5	8.2	9.0	10.1	10.9	11.9	13.2	15.0
Latvia	4.9	5.7	6.0	6.4	7.0	7.7	8.4	9.0	9.9	11.2	12.6	14.4
Poland	6.9	7.6	8.1	8.6	9.2	9.4	9.9	10.1	11.0	11.5	12.3	13.3
Hungary	7.9	8.5	8.9	9.5	10.7	11.6	12.6	13.1	13.7	14.4	15.3	15.7
Slovenia	11.2	12.2	13.2	14.2	15.0	15.6	16.6	17.0	18.4	19.5	20.7	22.0
Slovakia	7.4	8.1	8.8	9.0	9.5	10.3	11.1	11.5	12.4	13.6	15.0	17.0
EU (15 states)	17.9	18.9	19.5	20.5	21.9	22.6	23.3	23.5	24.4	25.3	26.4	27.7

GDP per capita in selected European Union countries (1996–2007, in thousands of euros, in Purchasing Power Standards, constant prices)

Source: Own work on the basis of Eurostat statistical data of 01.07.2008. -

 $\label{eq:http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996.39140985\&_dad=portal&T30-schema=PORTAL&screen=detailref&language=en&product=Yearlies_new_economy&root=Yearlies_new_economy/B/B1/B11/daa10000.$

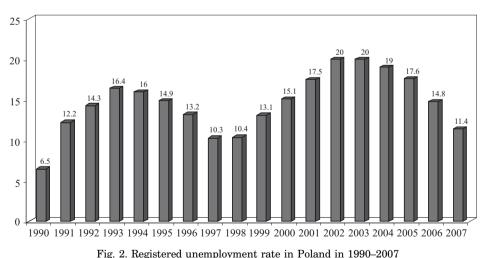
The average growth rate of the analysed indicator in the examined period in Estonia and Latvia was, respectively, 11% and 10.3% a year. The situation of the Czech Republic seems interesting, since due to the low growth rate of the analysed indicator (an annual mean of 5.4%), they lost their leading position, which it had recorded in 1996, as early as in 1997. The leadership was acquired by Slovenia and such a situation was maintained until the end of the period under examination. The Polish GDP per capita grew annually on average at the rate of 6.2%. It was faster than the GDP of the previously mentioned Czech Republic and the average mean of this indicator for "former" EU states, which amounted to 4.1%. Nevertheless, it was slower in relation to all the other countries under examination.

Unemployment

The Polish economy, at the beginning of the transformation period was burdened with a high level of hidden unemployment resulting from the principles of the command-and-quota system used. Additionally, the labour market was characterized by an ineffective structure, i.e. a very high percentage of agricultural employment and a low percentage of service sector employment.

System transformation created a labour market in Poland, which quickly revealed the phenomenon of over-employment, typical of a centrally managed economy. The rationalization of the labour market, mainly under the influence of privatisation, overlapped the slump in the economy and the acceleration of the retiring processes, which, finally, resulted in a drop of employment (KALIŃSKI, LANDAU 1999, p. 382).

In 1990-1991, the decrease in the value of the GDP was accompanied by an increase in registered unemployment, which in 1991 grew almost twofold in relation to 1990, amounting to 12.2% (Fig. 2). 1992-1993 saw an increase in GDP, although it was unsatisfactory from the perspective of creating new jobs, since this increase was accompanied with a further growth of registered unemployment from 14.3% to 16.4%, which resulted from the streamlining of employment and an increase in labour efficiency in some restructured enterprises.



Source: Own work on the basis of the data of the Central Statistical Office "Unemployment rate in 1990–2008 (registered unemployment)".

Subsequent years brought a deterioration in the economic situation, which resulted in a drop in the employment level and an increase in the registered unemployment rate to 20% in 2002 and 2003. Although the upward trend in the unemployment rate was stopped in 2003, the level of employment was still decreasing. It should be also mentioned here that tendencies of economic growth without employment occur in most transformation countries. They result, among others, from strong competition pressure on enterprises, which results in reduction of labour costs, implementing technical progress and development of modern fields of low human labour consumption (*W trosce o...* 2004, pp. 94–95).

This situation changed in 2004, when a recorded real increase in GDP at the level of 5.3% "translated" into a decrease in the registered unemployment to 19%. 2005–2007 brought a continuation of positive trends underway in the labour market. The registered unemployment rate decreased in this period, to the level of 17.6% (2005), 14.8% (2006) and 11.4% (2007), respectively. Nevertheless, it still remained at a high level, which can be attributed both to structural and institutional factors.

The structural character of problems in the labour market is the reason why their solutions cannot be expected only as a result of increasing the rate of economic growth. Even with a high economic growth, a significant reduction in unemployment would be possible only through structural reforms in the labour market and the improvement of human capital quality (HELLER et al. 2005, p. 93).

As in Poland, other countries of Central and Eastern Europe also experienced an increase in unemployment in the early 1990s, mostly as a consequence of revealing hidden unemployment as a result of liquidating state enterprises and agricultural farms. Differences in changes to the harmonized unemployment rate for Poland and for other countries under examination are presented in Table 3.

By 2006, Poland recorded the highest unemployment rate of the eight examined states of Central and Eastern Europe, amounting in 2006 to 13.9%, against the EU average (15 states) of 7.7%. However, what was positive was the fact that since 2003 this indicator showed a decreasing tendency, therefore Poland in 2007 recorded a lower employment rate than Slovakia. Nevertheless, the unemployment rate in Poland, Slovakia and Hungary was still higher than the EU average. At the end of 2007, other examined countries recorded a lower unemployment rate than the average value for the "former" EU states. Among those countries, the most stable situation in the labour market is presented by Slovenia, which is proven by a slight fluctuation in the harmonized unemployment rate for the period of 1997–2007. The difference between the highest and the lowest unemployment rate recorded in this period for the country is only

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Czech Republic	-	6.4	8.6	8.7	8.0	7.3	7.8	8.3	7.9	7.2	5.3
Estonia	9.6	9.2	11.3	12.8	12.4	10.3	10.0	9.7	7.9	5.9	4.7
Lithuania	-	13.2	13.7	16.4	16.5	13.5	12.5	11.4	8.3	5.6	4.3
Latvia	-	14.3	14.0	13.7	12.9	12.2	10.5	10.4	8.9	6.8	6.0
Poland	10.9	10.2	13.4	16.2	18.3	20.0	19.7	19.0	17.8	13.9	9.6
Hungary	9.0	8.4	6.9	6.4	5.7	5.8	5.9	6.1	7.2	7.5	7.4
Slovenia	6.9	7.4	7.3	6.7	6.2	6.3	6.7	6.3	6.5	6.0	4.9
Slovakia	-	12.6	16.4	18.8	19.3	18.7	17.6	18.2	16.3	13.4	11.1
EU (15 states)	9.8	9.3	8.6	7.7	7.2	7.6	7.9	8.1	8.1	7.7	7.0

Harmonized unemployment rate in selected EU countries

Source: Own work on the basis of Eurostat statistical data of 01.07.2008. -

 $\label{eq:http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996.39140985\&_dad=portal&_schema=PORTAL&screen=detailref&language=en&product=STRIND_EMPLOI&root=STRIND_STRIN$

2.5 percentage points as an absolute value, while the same value for Poland was as much as 10.4 percentage points. As has been mentioned earlier, the country with the highest harmonized unemployment rate in 2007 was Slovakia, where this indicator amounted to 11.1%. At the same time, as in Poland, a continued high unemployment rate resulted, to a large extent, from a significant drop in employment at the beginning of the transformation period. Such a situation was not observed for instance, in Hungary, since this country enjoyed a high level of business liberalization and private sector development before the beginning of the transformation.

The process of price growth rate stabilization

In addition to the economy growth rate and unemployment, inflation seems to be one of the main macroeconomic problems of countries undergoing transformation. Especially during the first years of transformation in Poland, suppression of rampant high inflation and maintaining it at an appropriately low level was the main purpose of the stabilization policy applied. As a result of actions undertaken, as early as in 1991, the annual inflation rate was at the level of 70.3% against an annual inflation rate in 1990 amounting to 585.8% (Fig. 3).

Subsequent years brought a further decrease in the inflation rate, even to 1% in 2006, while, as results from Figure 3, a drop in the inflation rate, which began in 1991, was quite dynamic. In 1993, the inflation rate was already half

Table 3

as much as in 1991 and amounted to 35.3%. In 1996 it was below 20%, while in 2000 it was 10.1% and reached the lowest level in the entire period of transformation of 0.8% in 2003. Subsequent years were marked with an increase in the consumer price index to the level of 3.5% in 2004 and 2.1% in 2005, which undoubtedly can be attributed to the Polish accession to the European Union, whereas 2006 again brought a lowering of the index to the level of 1%.

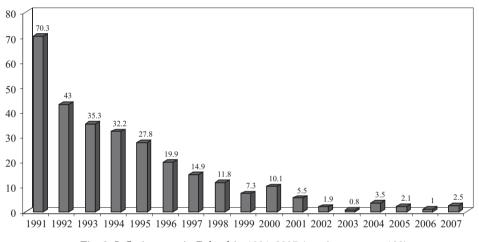


Fig. 3. Inflation rate in Poland in 1991–2007 (previous year = 100) Source: Own work on the basis of GUS study "Annual consumer price indexes in 1950–2007".

The problem of hyperinflation, which affected Poland, did not occur in all post-socialist countries. For instance, in Hungary, the mean annual consumer price index did not exceed 35%, and in the former Czechoslovakia, the highest inflation was recorded in 1991, when it grew to 56.6% on a year-to-year basis. While comparing the changes in harmonised index of consumer prices in Poland and in other examined countries of the Central and Eastern Europe in 1997–2006 (Tab. 4), it can be clearly seen that in this regard, in spite of difficult initial conditions, Poland has done relatively well.

In 2005, only one country recorded a lower inflation rate than Poland, namely the Czech Republic, in which this indicator amounted to 1.6% and was lower than the inflation rate in Poland by 0.6%. In 2006, the HICP index in Poland was the lowest of all the other countries under examination. Additionally, the average inflation rate in the countries of the "former" European Union was also higher than the inflation rate in Poland, the difference amounting to one percentage point. Therefore, Poland, as in 2005, met the

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Czech Republic	8.0	9.7	1.8	3.9	4.5	1.4	-0.1	2.6	1.6	2.1	3.0
Estonia	9.3	8.8	3.1	3.9	5.6	3.6	1.4	3.0	4.1	4.4	6.7
Lithuania	10.3	5.4	1.5	1.1	1.6	0.3	-1.1	1.2	2.7	3.8	5.8
Latvia	8.1	4.3	2.1	2.6	2.5	2.0	2.9	6.2	6.9	6.6	10.1
Poland	15.0	11.8	7.2	10.1	5.3	1.9	0.7	3.6	2.2	1.3	2.6
Hungary	18.5	14.2	10.0	10.0	9.1	5.2	4.7	6.8	3.5	4.0	7.9
Slovenia	8.3	7.9	6.1	8.9	8.6	7.5	5.7	3.7	2.5	2.5	3.8
Slovakia	6.0	6.7	10.4	12.2	7.2	3.5	8.4	7.5	2.8	4.3	1.9
EU (15 states)	1.9	1.6	1.4	2.6	2.8	2.6	2.3	1.9	2.2	2.3	2.2

Harmonised Index of Consumer Prices (HICP) in selected countries of the European Union in $1997\mathchar`-2007$

Source: Own work on the basis of Eurostat statistical data of 01.07.2008. -

 $\label{eq:http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996.39140985\&_dad=portal&_schema=PORTAL&screen=detailref&language=en&product=STRIND_ECOBAC&root=STRIND_ECOBAC&root=STRIND_ECOBAC/ecobac/eb040.$

convergence criterion of inflation, and its inflation rate was taken into consideration while calculating a reference value of this criterion. In 2006, the other countries – except for the Czech Republic and Slovenia – did not meet this criterion. Although 2007 brought an increase in the inflation rate in Poland, to the level of 2.6% in comparison to the other countries under examination, it is not the worst situation. Only one examined country recorded in 2007 an inflation rate which was lower than the rate for Poland and lower than the average for the "former" EU states – and this was Slovakia. The other countries under examination recorded their inflation rates at a significantly higher level than Poland. The HICP index of the Latvian economy, which in 2007 recorded the highest index of the entire group of countries under examination, was higher than the index for Poland by 7.5 percentage points.

Conclusions

1. The analysis of the level and the rate of economical growth presented above proves that the Polish economy considerably stands out only against the background of the existing European Union member states. While in 1996 the GDP per capita for Poland amounted to 38.5% of the level reached on average in 15 countries of the European Union, it amounted in 2007 to as much as 48%, and the dynamics of the GDP per capita in the period under examination was higher than the dynamics of this index in the EU15, which means that Poland developed at a rate that was faster than the average rate of economic growth in

Table 4

the EU states. However, taking into consideration the fact that all countries under examination developed faster than the average growth rate of the EU15, the Polish achievements do not seem so obviously spectacular.

2. While analysing the growth rate of GDP per capita in the examined countries of the Central and Eastern Europe, these countries can be divided into three groups. The first group would include the four countries with the highest economic growth rate, in which this index, calculated as the relation of 2007 GDP to 1996 GDP, exceeded 100%. These include Estonia – 214%, Latvia – 193.9%, Lithuania – 163.2% and Slovakia – 129.7%. The second group (including Poland), would consist of three countries in which the economic growth rate analysed was slightly below 100%. They include Hungary - 98.7%, Slovenia – 96.4% and Poland – 92.8%. The third group is made up of one country – the Czech Republic, with a 78.1% economic growth rate. However, taking into consideration not only the growth rate, but also the initial level of GDP per capita, the situation of individual countries at the end of 2007 can be described as follows: the highest level of GDP per capita was recorded by Slovenia and the Czech Republic, which recorded the highest level of the analysed indicator at the beginning of the period under examination. Due to their high growth rate, they "caught up" with Estonia and Slovakia. Poland has the lowest level of GDP per capita.

3. Relations and differences regarding the level of unemployment are equally complex. Up to 2006, Poland recorded the highest harmonized unemployment rate of the eight states of the Central and Eastern Europe under examination, amounting to 13.9% in 2006. In 2007, due to the downward trend in this index, a higher unemployment rate was recorded by Slovakia. However, the unemployment rate in Poland (9.6%), Slovakia (11.1%) and Hungary (7.4%) was higher than the average for the former EU15, amounting to 7%. The other countries under examination recorded unemployment rates below the EU average, whereas the lowest index of harmonized unemployment rate was recorded in 2007 in Estonia and Lithuania. However, in analysing the years of the transformation period, no clear explanation of causes of the consistently high unemployment in Poland emerges. Therefore, it seems that the origin of these causes should be searched for even earlier, i.e. in the situation of Poland in the 1980s.

4. Poland appears in a particularly favourable light against all the other countries as regards inflation. In 2006, the HICP index in Poland was the lowest of all the other examined CEE countries. Even the average inflation rate in the existing European Union member states was higher than the inflation rate in Poland. Thus, Poland met the convergence criterion of inflation. Although the inflation rate in Poland grew in 2007, yet lower inflation was recorded only in Slovakia. Despite the increase in the inflation rate, Poland still met the convergence criterion of the inflation rate. Nevertheless, there are grounds to fear that as a consequence of a further increase in inflation Poland may cease to meet this criterion. Moreover, it should be noted that another objective, namely sustainability and stabilization of the exchange rate, which is also one of the conditions for joining the monetary and economic union, still remains an issue under discussion.

Translated by JERZY GOZDEK

Accepted for print 3.10.2008

References

- BALCEROWICZ L. 1997. Socjalizm, kapitalizm, transformacja. Szkice z przełomu epok. Wydawnictwo Naukowe PWN, Warszawa.
- BAŁTOWSKI M., MISZEWSKI M. 2006. Transformacja gospodarcza w Polsce. Wydawnictwo Naukowe PWN, Warszawa.
- HELLER J., KAWIECKA W., KOTLIŃSKI K., WARŻAŁA R. 2005. Makroekonomiczne aspekty procesów przekształceń własnościowych. In: Raport o przekształceniach własnościowych w 2004 roku. Ministry of the State Treasury, Warszawa.
- HELLER J. 2003. Integracja Polski z Unią Europejską. Oficyna Wydawnicza Branta, Bydgoszcz-Olsztyn.
- KALIŃSKI J., LANDAU Z. 1999. Gospodarka Polski w XX wieku. Polskie Wydawnictwo Ekonomiczne, Warszawa.

Polska - Podstawowe tendencje (wskaźniki makroekonomiczne). Central Statistical Office, Warszawa.

- RAPACKI R. 2001. Economic performance 1989–1999 and prospects for the future. In: Poland into the New Millennium. Wydawnictwo Edward Elgor, Cheltenham.
- Roczne wskaźniki cen towarów i usług konsumpcyjnych w latach 1950–2007. Central Statistical Office, Warszawa.
- Statistical Yearbooks of the Republic of Poland of 1990, 1995, 1999, 2004. Central Statistical Office, Warszawa.

Stopa bezrobocia w latach 1990-2007 (bezrobocie rejestrowane). Central Statistical Office, Warszawa. W trosce o prace. Raport o Rozwoju Społecznym. Polska 2004. CASE and UNDP. Eurostat statistical data as of 1 July 2008:

- http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996.39140985&_dad=portal&_schema= PORTAL&screen=detailref&language=en&product=STRIND_ECOBAC&root=STRIND_ ECOBAC/ecobac/eb012
- $\label{eq:http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996.39140985\&_dad=portal\&_schema=PORTAL\&screen=detailref&language=en&product=Yearlies_new_economy&root=Yearlies_new_economy/B/B1/B11/daa10000.$
- http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996.39140985&_dad=portal&_schema= PORTAL&screen=detailref&language=en&product=STRIND_EMPLOI&root=STRIND_ EMPLOI/emploi/em071.
- $\label{eq:http://eppeurostat.ec.europa.eu/portal/page?_pageid=1996.39140985\&_dad=portal\&-schema=PORTAL\&screen=detailref\&language=en\&product=STRIND_ECOBAC\&root=STRIND_ECOBAC/ecobac/eb040.$